ADVANCES IN GLOBAL BUSINESS RESEARCH

Vol. 4, No. 1 ISSN 1549 - 9332

Edited by:

Shaista E. Khilji George Washington University

Mary B. Teagarden Thunderbird: The Garvin School of International Management

Daing Nasir Ibrahim Universiti Sains Malaysia

Tan Teck Meng Singapore Management University

Zafar U. Ahmed Texas A&M University at Commerce



Advances in Global Business Research Vol. 4, No. 1 ISSN 1549 - 9332

Proceedings of the 2007 Academy for Global Business Advancement (AGBA) Fourth World Congress Held at the Universiti Sains Malaysia on May 21—25, 2007.

Edited by Shaista E. Khilji, Mary B Teagarden, Daing Nasir Ibrahim, Tan Teck Meng, and Zafar U. Ahmed

These proceedings are prepared from material supplied by the authors. Manuscripts that were not sent to the editors in time for production may not appear in the proceedings. In accordance with editorial policy, some tables, graphs, figures, or references may have been edited or omitted. In the case of errors, or omissions, please contact the respective author(s) directly. Copyrights remain with the author(s) of each article.

Every effort has been made by the editors, publishers and printers of these proceedings to see that no inaccurate data, opinion, or statement appears in the proceedings, and the data and opinions appearing in the articles herein are the responsibility of the author(s). Accordingly, the publishers, printers, editors, and AGBA officials accept no liability whatsoever for the consequences of such inaccurate or misleading data, opinion or statement.

Welcome to 4th AGBA World Congress!

We would like to accord a warm welcome to all delegates attending 2007 AGBA World Congress in Malaysia! You are taking part in a wonderful program! The main theme of our conference is "Business and Entrepreneurship Development in a Globalized Era". Our conference will feature competitive papers and special sessions. We are surely going to offer something for everybody!

Our conference's primary goal is to provide a unique global platform and forum to facilitate the exchange of leading-edge ideas for effective advancement of knowledge in global business and global entrepreneurship. This will be achieved through multidisciplinary presentations and discussions of current business and development issues in emerging and developed countries. Your participation is helping us achieve these goals by creating a global community of scholars, practitioners, professionals, and entrepreneurs united with a common vision and mission to play a prominent role in the advancement of knowledge in the field of global business.

Thank you for coming to Malaysia and patronizing 4th AGBA World Congress!

Mary B. Teagarden
Daing Nasir Ibrahim
Tan Teck Meng
2007 AGBA World Congress Co-Chairs

AGBA Overview

AGBA – the Academy for Global Business Advancement – is a worldwide network of professionals committed to facilitate dissemination of scholarly research findings in the filed of global business and global entrepreneurship.

The main purpose of AGBA is to provide ongoing open forums to discuss and analyze global business and global entrepreneurship from different perspectives and viewpoints, and thus to improve understanding of the underlying forces that (1) have an impact on global business developments and (2) shape the destiny of emerging countries in the contemporary globalized economy. AGBA bridges geographic, cultural, disciplinary, and professional gaps by integrating the business disciplines while actively enhancing practitioner-academician interaction on a global basis.

The objectives of AGBA are to foster education and to advance professional knowledge and standards in various areas of global business and global entrepreneurship by:

- Serving as a global platform for the interaction of professionals hailing from emerging countries such as Malaysia and the developed countries such as the US,
- facilitating the exchange of information and ideas among educators and professionals, entrepreneurs, and bureaucrats, and between the business and academic fields:
- encouraging and assisting basic and applied research activities that advance knowledge of global business and entrepreneurship development and operations, and increase the available body of teaching materials;
- Facilitating the interdisciplinary dialogue concerning global business and global entrepreneurship issues as they relate to academic, business and government sectors.

Due to its innovative and integrative approach to research, education, and professional practice, we envision AGBA to be growing into one of the leading academic organizations investigating and analyzing contemporary global business

and global entrepreneurship challenges. For additional information, about AGBA, please contact:

Prof. Zafar U. Ahmed

BBA (New York), MBA (Texas), Ph.D., (Utah)
Professor of Marketing and International Business
President and CEO: Academy for Global Business Advancement (www.agba.us)
Editor-in-Chief: Journal for Global Business Advancement (www.inderscience.com/jgba)

Editor-in-Chief: Journal for International Business and Entrepreneurship Development

 $(\underline{www.inderscience.com/jibed})$

Department of Marketing and Management Texas A&M University at Commerce Commerce, Texas 75429-3011, USA Tel: (1-903)-886-5697, Fax:(1-903)-886-5702 E-Mail: Zafar Ahmed@tamu-commerce.edu

http://www.agba.us

Institutional Acknowledgement

- Texas A&M University at Commerce, Texas, USA
- The George Washington University, Washington, DC, USA
- Universiti Sains Malaysia, Penang, Malysia

Individual Acknowledgement

- Shaista E. Khilji, George Washington University, USA
- Mary B. Teagarden, Thunderbird: The Garvin School of International Management, Phoenix, Arizona, USA
- Daing Nasir Ibrahim, Universiti Sains Malaysia
- Tan Teck Meng, Singapore Management University, Singapore
- C. P. Rao, Kuwait University, Kuwait
- Klaus-Peter Wiedmann, Leibniz University Hannover, Germany
- Ishak Ismail, Universiti Sains Malaysia
- Shawn Carraher, Cameron University, Oklahoma, USA
- Donald Hendon, Hendon and Associates, Nevada
- Ichirou Shiobara, Waseda University, Japan
- Abdul-Rahman A. Arkadan, Hariri Canadian University, Lebanon
- Wolfgang Hinck, Louisiana State University in Shreveport, USA
- M. Sadiq Sohail, King Fahad University of Petroleum and Minerals, Saudi Arabia

4th AGBA World Congress Leadership

AGBA Chair	AGBA Deputy Chair	AGBA Conference Chair		Conference Co- Chair
Prof. C. P. Rao Kuwait University Kuwait	Prof. Klaus-Peter Wiedmann Leibniz University Hannover Germany	Prof. Mary B. Teagarden Editor: Thunderbird International Business Review, Thunderbird: The Garvin School of International Management, Glendale, Arizona, USA		Prof. Tan Teck Meng Professor of Accounting Singapore Management University Singapore
Conference C- Chair	Conference		Managing	Keynote Speaker
Prof. Daing Nasir Ibrahim Formerly Dean School of Management Director Advance Management Center Universiti Sains Malaysia Malaysia	Director Dr. Ishak Ismail President and CEO Asian Academy of Management, Malaysia	Director Dr. Wolfgang Hinck Louisiana State University in Shreveport, USA		Prof. Shawn Carraher President: South-West Academy of Management Cameron University, Oklahoma, USA
Guest Speaker	AGBA Presi	dent & C	EEO	Distinguished Guest
Prof. Donald Hendon President and CEO Hendon and Associates Nevada		Prof. Zafar U. Ahmed exas A&M University at Commerce, USA		Prof. Abdul-Rahman A. Arkadan President Hariri Canadian University Lebanon
	AGBA S	Sponsors		
Universiti Sains Malay. (USM) Penang, Malaysia		ny of	Texas A&M University at Comme Commerce, Texas, USA	

AGBA Patrons

Prof. Hal Langford	Prof. Dato' Daing Nasir Ibrahim	Prof. Said M. Elfakhani	Prof. Tan Teck Meng
Dean College of Business and Technology Texas AM University —Commerce Commerce, Texas, USA	Formerly Dean School of Management Director Advance Management Center Universiti Sains Malaysia	Associate Dean Suleiman Olayan School of Business American University of Beirut Lebanon	Professor of Accounting Singapore Management University Singapore
Prof. Dato'	Dr. Salem Al-	Dr. Abdulla S. Al-	Dr Adel A. Al-
Mohamad Shukri Ab Yajid	Ghamdi	Khulaifi	Wugayan
President University College of Technology and Management Malaysia	Associate Dean College of Industrial Management King Fahad University of Petroleum and Minerals Saudi Arabia	Former President University of Qatar Doha, Qatar	Vice Dean Collge of Business Admisnitration Kuwait University Kuwait
Prof Subhash Jain	Prof Ben Kedia	Prof Rajan	Prof Tan Teck
5.	5.	Vardarajn	Meng
Director	Director	a.	
CIBER	CIBER	Chair	Professor of
University of Connecticut	University of Memphis	Department of	Accounting
Connecticut, USA	Tennessee, USA	Marketing Texas A&M	Singapore
Connecticut, OSA	Tennessee, USA	University	Management University
		TX, USA	Singapore
	Prof Abdul-Rehi	·	Singapore

 ${\it Prof\,Abdul} ext{-}{\it Rehman\,A.\,Arkadan}$

President Hariri Canadian University Lebanon

AGBA Sponsors

- CIBER, University of Connecticut
- CIBER, University of Memphis
- Texas A&M University at Commerce
- University College of Technology and Management Malaysia
- Value-One Infotech (Pvt) Ltd.
- International University of Human Transformation, India

AGBA Executive Board

Chair	Deputy Chair	President and CEO	Managing Director
Prof. C. P. Rao Kuwait University Kuwait	Prof. Klaus-Peter Wiedmann Leibniz University Hannover Germany	Prof. Zafar U. Ahmed Texas A&M University at Commerce, Texas	Dr. Wolfgang Hinck Louisiana State University Shreveport, USA
Vice President for Global Conferences	Vice President for	Director for Global Communication	
Dr. Shaista E. Khilji The George Washington University, Wahsington DC, USA	Dr. M. Sadiq Sohail King Fahad University of Petroleum and Minerals, Saudi Arabia		Mr. Syed Arshad Raza King Fahad University of Petroleum and Minerals, Saudi Arabia

AGBA Journals Published by

Inderscience Publishing Co. of European Union (Switzerland and UK)



Journal for Global Business Advancement (JGBA) ISSN (Online): 1746-9678 - ISSN (Print): 1746-966X

http://www.indersciene.com/browse/index.php?journalCODE=jgba

Journal for International Business and Entrepreneurship Development (JIBED) ISSN (Online): 1747-6763 - ISSN (Print): 1549-9324

http://www.inderscience.com/browse/index.php?journalCODE=jibed

Journal for Global Business Advancement (JGBA) ISSN (Online): 1746-9678 - ISSN (Print): 1746-966X

Journal for Global Business Advancement (JGBA) is the official organ of the Academy for Global Business Advancement (AGBA) and is published two times in a year by the Inderscience Publishing Company of European Union (based in Switzerland and UK).

The aim of JGBA is the advancement of contemporary research in the field of global business from the standpoint of both western and emerging countries vigorously participating in the globalized world. JGBA is an international refereed journal dedicated to the advancement of the theory and practice of global business with an emphasis on developing countries attempting to assert themselves on the global stage.

Firms, institutions, governments, organizations, agencies, and individuals are participating in the globalization of world economy through a variety of forms, shapes, and styles, necessitating the initiation of an innovative dialogue between them with the goal of resolving conflicts, promoting world peace and harmonizing relations. JGBA wishes to act as a global platform for the pursuance of dialogue between different countries at dissimilar stages of economic development.

JGBA aims to inspire both new and expert researchers to submit their empirical, conceptual and applied papers and case studies for publication. Preference will be given to papers examining conflicts between western firms and developing countries' institutions, communities and firms, papers examining struggles confronted by new multinational firms emanating from developing countries and new scholars from emerging countries, as reflected by the accreditation of business programs across the world by the AACSB–International.

Appropriate topics for manuscripts include challenges being encountered by western firms in newly emerging countries, firms from developing countries trying to penetrate world markets and attempting to build their own brands, non-western scholars attempting to examine the applicability of western models in eastern, socialist and southern hemisphere countries. Collaborative manuscripts between scholars and entrepreneurs, between western and non-western scholars, and between scholars and professionals, are particularly favored.

JGBA invites and welcomes research papers encompassing all areas of global business studies, such as marketing, management, organizational behavior, finance, accounting, MIS, economics, and cultural anthropology. JGBA also welcomes research papers that transcend single countries, and single discipline. Accordingly, it has a special interest in the publication of multidisciplinary and multinational research emanating from innovative scholars and business schools accredited by the AACSB around the world.

You are invited to submit your manuscript to:

Editor-in-Chief IEL Editorial Office PO Box 735 Olney, Bucks MK46 5WB UK

E-mail: jgba@inderscience.com

Journal for International Business and Entrepreneurship Development (JIBED) ISSN (Online): 1747-6763 - ISSN (Print): 1549-9324

Journal for International Business and Entrepreneurship Development (JIBED) is sponsored by the Academy for Global Business Advancement (AGBA) and is published two times in a year by the Inderscience Publishing Company of European Union (based in Switzerland and UK).

The JIBED addresses the advancement of contemporary research in the field of international business and international entrepreneurship. JIBED is an internationally-competitive, peer-reviewed journal dedicated to the advancement of practice and theory of international business, international entrepreneurship and international franchising with an emphasis on developing countries attempting to assert them on the global stage.

Firms, institutions, governments, organizations, agencies and individuals are participating in the globalization of world economy through variety of forms, shapes, and styles, necessitating the initiation of new dialogue between them with the goal of resolving conflicts, promoting world peace and harmonizing relations. As a result, JIBED wishes to act as a global platform for the pursuance of dialogue between different countries at dissimilar stages of international development, entrepreneurship development, and franchising development.

JIBED aims to inspire a full range of scholars to submit their empirical, conceptual and applied papers and case studies for publication. Preference will be given to papers examining conflicts between western firms and host countries and between western institutions and host communities and firms, challenges being confronted by firms emanating from developing countries and penetrating other developing countries and by new scholars from newly emerging countries as reflected by the accreditation of business programs across the world by AACSB–International.

Appropriate topics for manuscripts include challenges being encountered by international entrepreneurs in newly emerging countries, international entrepreneurs from developing countries trying to penetrate world markets and attempting to build their own brands, non-western scholars attempting to examine the applicability of western models of entrepreneurship across Asian, African, East European, Middle Eastern, and South American countries. Collaborative manuscripts between scholars and entrepreneurs, between western and non-western scholars, and between scholars and professionals are particularly encouraged.

JIBED invites and welcomes research papers encompassing different dimensions of international entrepreneurship, such as venture capital formation, franchising, small business management, family business management, and technopreneurship. JIBED particularly welcomes research papers that transcend single countries and single disciplines. JIBED also has a special interest in research emanating from business schools accredited by the AACSB across the world.

Submit your manuscript to:

Editor-in-Chief IEL Editorial Office PO Box 735 Olney, Bucks MK46 5WB UK

E-mail: jibed@inderscience.com

Reviewers

- Jaime Ruiz-Gurtierre, Universidad de Los Andes, Bogot, Colombia
- Shaista E. Khilji, The George Washington University, Washington DC, USA
- Tigi Mersha, University of Baltimore, MD, USA
- Edward F. Murphy, Embry Riddle Aeronautical University, USA
- Jean-Marie Nkongolo-Bakenda, Regina University, Saskatchewan, Canada
- Aaron Nsakanada, Carleton University, Ottawa, Canada
- Arnel Onesimo, De La Salle University, Manilla, Philippines
- Ven Sriram, University of Baltimore, MD, USA
- Mark David Woodhull, Schreiner University, Texas, USA

^{*} AGBA's Executive Board wishes to express its thanks to all the reviewers who participated in refereeing these proceedings.

AGBA 4th World Congress Program

Day 1, May 21, 2007

Registration desk opens Conference inaugration Networking

Day 2 (May 22, 2007) – Day 5, (May 25, 2007)

Session 1: Internet and Online Experiences

Session Chair: Wolfgang Hinck, Louisiana State University in Shreveport, USA

- Adeline Chua Harn, *Blogging*
- Norazah Suki & Norabah Suki, Online shopping innovativeness: Effects of friends, family and media
- Ching Seng Yap & Yet Mee Lim, Responses to online advertising: A study of online consumers in Malaysia
- Adeline Chua Harn, To buy or not to buy
- Md. Shukri Ab Yajid, Ali Khatib, Amat Taap, Raju Sudha, *Internet banking and security concerns*
- A.M. Sherbini, C.P. Rao & M. Mohmeed, Bank customer behavior perspectives towards internet banking services in Kuwait

Session 2: HRM I

Session Chair:

- Bharath M. Josiam, Christy Crutsinger, Johnny Sue Reynolds, et. al., An empirical study of the work attitudes of generation y college students in the USA: The case of hospitality and merchandising undergraduate majors
- John Huu & Md. Zabid Rashid, Effect of organizational culture
- Azman Ismail, Yusof Ismail & Mohamed Sulaiman, Distributive justice, pay structure, and attitudes and behavior: A case of Malaysian public institutions of higher learning
- Stan Malos, Offshore staffing in the Asia-Pacific region: Financial, administrative, and regulatory impacts on location attractiveness

Session 3: Understanding Consumers Perceptions & Behavior I

Session Chair: Ahmad Jamal, Cardiff University, UK

• Noshaba Batool, Zaheer Butt & Zahid Mehmood, What makes advertising effective? A study of viewers' perceptions of cell phones in Pakistan

- Klau Peter Wiedmann, Nadine Hennings & Astrid Siebels, *Consumers' luxury perceptions:*An integrated conceptual framework
- Diah Natalisa, Herianto Puspowarsito, David Saerang, T. Ramayah, Customer perceptions on service quality and customer satisfaction levels of domestic airlines in Indonesia
- Ishak Ismail, M. Sadiq Sohail & Hasbalaila Alias, Consumer spending and credit card usage: Does it affect credit debt?
- Esmail Mohamed Elsayed & Al-Ghais, *Identifying green consumers in the marketplace*

Session 4: Entreprenurship I (Special Session)

Session Chair: Tigi Mersha & Ven Sriram, University of Baltimore, USA

- Abdelgadir Mohammed A. Abdalla, An exploratory study of women entrepreneurs in Qatar: Their motives, financing preferences and problems
- Ernest Cyril de Run, Nordiana binti Ahmad Nordin & Dr. Rabaah Tudin, Why entrepreneurship and not employment? An initial investigation
- Sserwanga Arthur & Orobia Laura, Entrepreneurial quality: A theoretical configuration
- Gido Mapunda, Entrepreneurial leadership and enterprise development in emerging markets

Session 5: Understanding Consumers Perceptions & Behavior II

Session Chair: Ong Fon Sim, University of Malaya, Malaysia

- Ahmad Jamal & Juwaidah Sharifuddin, *Ethnicity and consumer behavior: An empirical investigation of role of Halal food labelling in grocery markets*
- Zainalabidin Mohamed, Golnaz Rezai, Mad Nasir Shamsudin, Eddie Chiew Fook Chong & Ismail Abd Latif, The effectiveness of Jakim Halal logo on consumer confidence in Malaysia
- Mohd. Azwardi Md. Isa, Mohammad Basir Saud & Nurhaizal Azam Ariff, *Purchasing behavior of Malaysian customers towards national cars made via joint ventures*
- Ali Kahtibi & Goi Chee Lee, Perceptions on website development
- Ataollah Tafaghodi Jami & Fon Sim Ong, Consumption patterns of older consumers in Malaysia: What matters to them?
- Ahmad Jamal, Sajid Khan & Matoula Stamatia Tsesmetzi, Antecedents of customer loyalty in the UK cosmetic market

Session 6: Performance Issues

Session Chair: Daing Nasir Ibrahim, Universiti Sains Malaysia

- Noriza Mohd Saad & Khairul Anwar Zamani, Corporate governance compliance among BOD and the effects to the company's net profit margin in Malaysia
- Ayaz Mahmood & Qaiser Abbas, Intellectual capital and performance of an organization

- Muhammad Ishfaq, Integer programming methods to support decentralized primary health care resource allocations
- Junaid Shaikh & Shaharudin Jakpar, Measuring performance through ratio analysis in the banking sector
- Ching Seng Yap & Abdul Rashid, The relationship between competitive intelligence and organizational performance
- Anju Das, A study of the Indian economy in the globalized era*

Session 7: Knowledge, Innovation, and New Product Development

Session Chair: Tagi Sagafi-nejad, Texas A&M International University, USA

- Majharul Talukder, Howard Harris & Gido Mapunda, *Organizational innovation adoption: Developing and testing a model*
- Samar Mohammed Baqer, Co-marketing: Another marketing success factor in entrepreneurial firms
- Wei-Li Wu & Ryh-Song Yeh, Managing knowledge transfer: from MNCS in newly industrialized economies to subsidiaries in developing countries
- Sonny Zulhuda, Revisiting information as business asset in the globalized economy legal and judicial notes

Session 8: Entrepreneurship II (Special Session)

Session Chair: Tigi Mersha & Ven Sriram, University of Baltimore, USA

- Mohd Abdullah Jusoh & Hazianti Abdul Halim, *Technopreneur development framework in Malaysia*
- Tigineh Mersha & Ven Sriram, Strengthening entrepreneurship in Africa
- John C. McIntosh, Samia Islam & Gregory S. Winter, Entrepreneurship through an Islamic lens: The influence of Shari' a and Islamic institutions on female entrepreneurs in the Middle East
- Laura Orobia & Arthur Sserwanga, Business type and start-up capital: Exploring gender differences in Uganda through an international comparison
- Mohammad Basir Saud, Mohd. Azwardi Md. Isa & Nurhaizal Azam Ariff, *Tools and techniques considered in the product design process: A case study of Malaysian SMIs*

Session 9: E-Business

Session Chair: C. P. Rao, Kuwait University, Kuwait

- Firend A. Rasheed & Maha Al-Emadi, *Perception of electronic government utilization in State of Qatar*
- M.V. Shetty & Mohd Nor Ismail, *E-biz: A strategic tool to gain global competitive advantage for green field entrepreneurs*

- Diana Hassouneh & Mousa Alrifaiyeh, *Exploring virtual reality potential in enhancing consumers' shopping experience*
- Nur Haryati Hashim & Ainin Sulaiman, Information systems performance analysis

Session 10: Marketing

Session Chair: Ong Fon Sim, University of Malaya, Malaysia

- Peter A. Maresco, *Religious themed movies*
- Klaus-Peter Wiedmann, Sascha Langner & Nadine Hennig, Collaborated marketing Towards a multidimensional model of motivation in open source oriented marketing projects
- Rabaah Tudin, Integrating marketing activities: Case study in Malaysia
- Phillipe Coffre, *Distribution channels*
- Devashish Gupta, Senior citizens as shoppers
- Shahidin Shafie, Hall: The case of Colgate vs. Mumkin
- Zain Dahari, Price and health claims
- Snehal Mistry & Tanu Narang, Strategies for international marketing

Session 11: Culture 1

Session Chair: Philippe Coffre, Pôle Universitaire Léonard de Vinci, France

- Therese Joiner & Steve Bakalis, Managing across cultures: How effective is delegation among Greek managers
- Md. Bakhtiar Rana, Paradigm of national responsiveness & national cultural values in international business operation: Challenges for MNCS in South Asian emerging markets
- Shaista E. Khilji, Sanklap Chaturvedi, Regina A. Greenwood, et. al., *Generational values:* A cross-cultural empirical test
- Wolfgang Hinck, Cultural effects on innovative practices in education

Session 12: Tax, PF & Dividends

Session Chair: Ichirou Shiobara, Waseda University, Japan

- Martin Six, *Hybrid finance in the double tax treaties*
- Michael Petritz, International estate (tax) planning Risks and possibilities in a globalized world
- Margret Klostermann, Tax consequences of hybrid finance in thin capitalization situations: An analysis of the substantive scope of national thin capitalization rules with special emphasis on hybrid financial instruments
- L. Sarada, L.V.L.N. Sarma & Lellapalli V.Ramana, Growth, non-debt tax shields, agency conflict and corporate debt: A study of the Malaysian corporate sector

- Gerald Posautz, The proper taxation of public-private partnerships (PPP): An analysis of the treatment in tax structures of European countries
- Iqbal Khadaroo, Value for money in school private finance initiative (PFI) contracts in the UK: Empirical evidence from a survey
- Kok Lee Kuin & L.V.L.N. Sarma, Signaling power of cash dividends: A study of the Malaysian corporate sector

Session 13: International Trade

Session Chair: Mary B. Teagarden, Thunderbird: The Garvin School of International Management, USA

- Miaojie Yu, Trade globalization and political liberalization: A gravity approach
- Tuck Cheong Tang & Russell Smyth, Sustainability of external imbalances for 22 least developed countries: An empirical investigation
- Abdul Latif Salleh & Siow I. Rene, Export performances of China and ASEAN-5 in electronics products
- Mohammed Naim Chaker, *The future directions to develop the trade transactions among the GCC countries under the international economic changes*
- Amir Mahmood, Services Trade-Challenges

Session 14: Privatization and FDI

Session Chair:

- Abbas A. Al-Mejren, Challenges facing the Kuwaiti banking system in the globalization era
- Tagi Sagafi-nejad, United Nations galaxy as the ultimate born-global organization: Contributions to the study of FDI and TNCs
- P.R. Bhatt, Determinants of Foreign Direct Investment in ASEAN
- Rizwan Tahir, FDI, exports, and economic growth: A case of GCC countries

Session 15: Stock Market

Session Chair: L.V.L.N.Sarma, Multimedia University, Malaysia

- Khalifa H. Ghali, Stock market development and economic growth
- Babar Zaheer Butt, Kashif Ur Rehman & Muhammad Ashfaq, *The impact of Pak-India relationship news on stock market return-KSE 100 index*

Session 16: Culture II

Session Chair: Donald Hendon, President and CEO, Hendon and Associates, Nevada, USA

• Clare Chua & Peter Luk, An exploratory study of impulse buying

- Donald Hendon, Extent of how much 15 different Asian nationalities are liked, trusted and admired
- Ahmed A. Ahmed & Mona Al-Ghais, Control and performance in international channels: The Kuwaiti auto market
- Hamid Yeganeh, Pascale Marcotte & Laurent Bourdeau, *Bridging culture and consumer value: Toward an integrative framework*
- Arif Sikander, Strategic technology management issues across culturally diverse countries

Session 17: Management

Session Chair: Sameh El Namaki, United Arab Emirates

- Klaus-Peter Wiedmann, Nadine Hennigs & Barbara Gassmann, *The importance of corporate social capital for an integrated reputation management approach*
- Anjani Koomar, Managerial success A roadmap for new HRD paradigms
- Himanshu Rai, An exploratory study on the morphology and measurement of spirituality
- Jessica Ho Sze Yin, David Yong Gun Fie & Poon Wai Ching, *Preferred and perceived leadership styles: Adapting importance-performance analysis as a diagnostic tool for the managers and leaders.*
- Rafikul Islam, Nominal Group Technique outputs.

Session 18: HRM II

Session Chair: Demetris Vrontis, InterCollege University, Cyprus

- Quah Chee Heong & Muhammad Hafiz Yaakub, A hypotheses testing study on workplace romance among Malaysian office workers
- Harif Amali Rivai, An examination of turnover intent model: Evidence from hotel employees in Indonesia
- Shazia Akhtar & Zahid Mahmood, Upward influence tactics, career success and gender
- Belal Barhem & Hassan Younies, Employee motivation in the health care sector: A comparative study between private and public health care organizations in the UAE

Session 19: Ethics

Session Chair: Hameeda Jassim, University of Bahrain, Bahrain

- Mahmoud A. Elgamal, Governance by ethics: The role of organizational values, decision making guidelines, leadership and support for ethical practices
- Somphol Vantamay, The impact of ethical perceptions in advertising on consumers' behavioral and attitudinal responses: findings from Thai consumers

Session 20: Internationalization & international strategy/business

Session Chair: Salem Al-Ghamdi, King Fahad University of Petroleum and Minerals, Saudi Arabia

- Charles A. Rarick, Micro and macro level strategic repositioning for Southeast Asian firms in an era of intra-regional economic transformation
- Herwig Winkler & Bernd Kaluza, A network-based conceptual framework for value added management for implementing a multi-local hybrid competitive strategy
- Yasir Yasin, The formation process of global strategic alliances by firms in the United Arab Emirates
- Marwan N. Al Qur'an, The importance of the location decision factors in the selection of a profitable foreign country for international manufacturing operations
- S. Jayashree, A. Seetharaman, G. Marthandan & Mohammed Elfatih Abdelelah, *Global market expansion strategies in wireless telecommunication industry-A case study*
- Valentin H. Pashtenk, *International joint ventures: Strategies for managing ventures with state-sponsored foreign principals*

Session 21: Branding

Session Chair: Klaus-Peter Wiedmann, Leibniz University Hannover, Germany

- Namasivayam Karuppiah & Md. Zabid Abdul Rashid, The effects of self-congruity on brand personality among ethic groups in Malaysia
- Ahmad Jamal, M. Mirella Yani-de-Soriano & Adel Harhoush, *Fashion branding: An empirical investigation of consumer choice criteria in Qatar*
- Demetris Vrontis, Brand-building: The case of the wine industry in Cyprus
- John Hill, Manchester U global branding

Session 22: Economic Policies- Environment, Health, Fiscal

Session Chair:

- D. S. Sengar, Corporate environmental liability
- Mohammed Al Wosabi, *Investigating macro-economic variability using a vector auto*regression model
- Firend Al Rasheed & Adel H. Salih, Examination of the causes of IT project failures
- Mohammed Ishfaq, Methods for identifying primary health care needs
- T. K Jayaraman & Chee-Keong Choong, Nexus between external debt and growth in Fiji
- Johan Janssen, Annika Nordlund & Agneta Marell, *International market break-through* for flexible fuel cars

BLOGGING: AN EFFECTIVE ADVERTISING TOOL?

Adeline Chua Phaik Harn Multimedia University

Email: adeline.chua@mmu.edu.my

ABSTRACT

The Internet has revolutionized the way we live, do business and communicate, giving birth to one of the greatest rising online phenomenon: blogging. The online community has seen an increase in blogging activity since 2004, making the term "blog" to be one of the most searched-for definitions on several online dictionaries. A weblog, or also known as "weblog", has been around since the mid-90s but only existing as a forum of arena to discuss politics. Since then, it has beautifully evolved into focal business branding concept, spurring marketers to hop on the bandwagon of what is now known as "corporate blogging." Building on the concepts of communication and collectivity, corporate blogging serves to capture information for sharing (connecting with customers through public blogs) while facilitating collaboration (for internal company purposes). Those who have yet to adopt this concept and practice it on a frequent basis are chided as being close to an IT illiterate for failing to recognize the many benefits derived from this growing trend. Attracting an array of responses from curiosity to fear, from eagerness to apprehensiveness, one thing is for sure - blogging is here to stay. It is the marketer's job to ensure that its functionality is used to its optimum effect, especially in communicating its product brands to customers everywhere. Hence, the challenge here is to clearly understand and grasp the concept of blogging and its usefulness to the advertising community. This study aims to analyze and justify the growing popularity of the art of blogging as an online learning tool, while analyzing its impact and potential for word-of-mouth (WOM) advertising. In addition to that, this study also aims to examine the various variables such as information trustworthiness and reliability that may impact the use of blogging via a business branding perspective. Seeing that the topic of blogging is still a relatively new research area, it is not only practical but also a timely research focused on analyzing its impact and potential as an advertising tool in Asia.

INTRODUCTION

The Internet has revolutionized the way we live, do business and communicate, giving birth to one of the greatest rising online phenomenon: blogging. The online community has seen an increase in blogging activity since 2004, making the term "blog" to be one of the most searched-for definitions on several online dictionaries (Perlmutter & McDaniel, 2005). According to Rainie (2005), of the estimated 120 million U.S. online users, some seven percent even more popular blogs such as Power Line and Instapundit are receiving more daily traffic than any major newspapers or TV news programs (Perlmutter & McDaniel, 2005), making blogging the next possible online marketing phenomenon.

This study aims to analyze and justify the growing popularity of the art of blogging as an online learning tool, while analyzing its impact and potential for WOM advertising. In addition to that, this study also aims to examine the various variables such as information trustworthiness and reliability that may impact the use of blogging via a business branding perspective. Seeing that the topic of blogging is still a relatively new research area, it is not only practical but also a timely research focused on analyzing its impact and potential as an advertising tool in Asia.

LITERATURE REVIEW

There is a growing body of scholarships devoted to a reading of a new and increasingly popular Internet phenomenon: weblogs or blogs, as they are most commonly known (Rak, 2005), as evidenced in the following sections.

Blogging

The term "blogging" originally came from the term "Web log", coined by Jorn Barger, an editor of an online website called Robot Wisdom.com in December 1997. Basically, a Weblog is a Web page that is composed of individually posted items, usually arranged chronologically with the most recent ones on top (Thomsen, 2002). A "blog" is the irreverent contraction of "web log", a sophisticated enhancement of the World Wide Web (Orr, 2004). The term "blog" usually implies a page maintained using some specialized program which allows the blogger to post a new entry (with an automatically stamped date and time) and displaying only the most recent postings while transferring the older ones to archive pages. The blog interface is usually automatically created; using a template the blogger has selected or created him.

These days, blogs are more about recounting individual experiences and observations each day (Rak, 2005). Hundreds of thousands of blogs are being kept on the Internet, and the number continues to grow at an exponential rate (Bausch et. al., 2002). Forrester Research even associates blogs to social networking, terming it as an amalgamation of technology and services designed to create unique personal profiles, map out relationships and leverage the aforesaid connections to accomplish a task.

Blogging has flourished because of an instant rise in consumer demand for independent information rather than that generated by the mass media (Carter, 2006). However, blogging is not new in the world of brand-building. Many corporate organizations in the US and UK have set up blogs as a successful customer communication channel, such as Microsoft, CNBC, General Motors (GM) and MTV Networks UK.

Blogging Behavior and Trust

According to Rak (2005), most blogs function within a semiprivate environment, detailing private aspects of a person such as his habits, relationships, living arrangements and economic status. These details are being made public so that other members of the blog community will stay interested in the blog, thus building a strong bond of trust. This is seen as a consistent crossing between private experiences that can be revealed because the blogger is interacting with online people, hence highlighting the blogger's belief on the issue of trust as they share experiences and opinions together. Jarvis (2006) believes that blog networks, ad agencies or media companies will seek out high-quality blogs and vet them to create valued networks that can be tailored and sold to marketers. However, brand advertisers must protect their reputations and will require someone to know and trust the authors of these blogs.

As blogs become increasingly influential and power with speed being a prerequisite for information, the importance of how much the information source can be trusted will continue to grow. Blogs and traditional media can complement each other, hence blog sources should be reliable and trustworthy (Savage, 2006).

The Online Blogger

Rak (2005) believes that the individual blogger is assumed to be singular, unique and capable of being understood as a cohesive personality and a free agent who chooses content. Most importantly, bloggers are assumed to be telling the truth about themselves and their opinions. According to a study carried out by the Pew Internet and American life Project (2005), bloggers are more likely to be male, young (under the age of 30), well-educated, internet veterans (with at least six years of Internet usage experience) and financially well-off (with a household income over USD\$ 50 000).

An interesting target market to consider is the young consumers. Teenagers surf the Internet as an experiential, rather than as an economic activity, demonstrating that the aforesaid consumption is an active socialization process (Lee & Conroy, 2005). According to a study conducted by Spero and Stone (2004), teenagers have been nurtured by companies to cement loyalty so that they will be valuable customers later. Hence, this group is seen as a highly lucrative market that spends a lot of time online in their own right and creates their own rules of engagement and social behavior. This young market have made the online world their domain, developing personal relationships with others and getting closer to

those who they admire and respect, playing and learning new things in the process. Terming these young consumers as "agents of change", Spero and Stone believe that the digital world is the arena which a brand can communicate with its young consumer market.

The Decline of TV Advertising

Precision Marketing (2006) stated that a report conducted by Forrester Research concluded that TV advertising marketing budgets will decline rapidly in 2007, and that by 2015 – most TV advertising marketing budgets will be spent elsewhere. Commercial television has been dominating the advertising world since 1965, and has strongly defined everything brands do. However, this long-held dominance has been undone by the rise of SMS, blogs and online networks. According to Spero and Stone (2004), commercial TV viewing has witnessed a 36 percent drop, emphasizing the fact that pre-packaged solutions and singular marketing strategies do not attract the young consumer market anymore. Introducing an interesting term - the "always on" economy – it dictates that technology is omnipresent, instilling a sense of omniscience mindset of the young market. In other words, young adults expect and demand access to technology and information all the time, anywhere and in any format that suits their lifestyle. Here, the blogging phenomenon creates that desired "always on, always out there" public personae. Hence, marketers should make their services omnipresent in these young consumers' lives.

The Rise of Word-of-Mouth (WOM) Advertising

Word-of-mouth advertising – where companies encourage consumers to recommend products to one another – is currently among the "brightest stars in the advertising firmament", as quoted by Hoffman (2006). WOM advertising has become the perfect substitute for traditional TV advertising because of its indistinguishable appearance to the consumer (Mayzlin, 2006). Coupled with the weakening dominance held by traditional advertising agencies, practitioners from that world will be looking to adopt a new mode of advertising. Hence, WOM advertising has been touted as the next new brand asset which needs to be nurtured (Precision Marketing, 2006).

Taylor-Smith (2006) attributes blogs as sites where one can receive honest advice about retailers and shopping, with most posts originating from people in their thirties, married with children and most importantly – willing to share information. These people are very vocal about what they see and buy. Hence, Taylor-Smith emphasizes the fact that although WOM has always been a powerful form of advertising, there's a new wave of it forming on the Internet. Moreover, marketers also have incentives to supply promotional chat or reviews in order to influence the consumer's evaluation of their products. Firms have the power to manipulate their promotion under the guise of consumer recommendations, thanks to the anonymity accorded by online communities (Mayzlin, 2006).

Potential of Blogs and WOM Advertising

Blogging may be a good way for brands to sustain a dialogue with consumers, but marketers ought to be warned that any attempt to hijack or coerce bloggers toward becoming a brand blog may backfire as bloggers guard their freedom of independent information fiercely (Carter, 2006). Brands may set up their own blog or piggyback on existing blogs and message boards, but it must be done in a matter-of-fact way to avoid the risk of crass exploitation.

Blogs have a capacity to change how we do business, especially with the help of WOM advertising. The growth of blogs and the ability to post comments to be shared with bloggers have created a channel for online WOM between people who have never met. This information seeking and sharing behavior have led to the mention of marketing brands, thus possibly increasing the likelihood of, and influence of WOM advertising by marketers. This is further supported by a comparison study done by Fong and Burton (2006) on American and Chinese online discussion boards, stating that there were differences in the pattern of brand mentions and information seeking behavior across websites, thus increasing WOM opportunities across these websites. Jarvis (2006) has even proposed that an open advertising marketplace should be constructed in order to allow advertisers to find the best blogs, and bloggers to find the best advertising deals. The author outlined four important variables in ensuring this:

an open-source standard for measurement that tallies with the audience and media, an open-source code for placing ads from any advertiser or network on any participating site, an invaluable trust system and lastly, an auction system to automate rate negotiations.

Media research firm PQMedia (2006) has discovered that blogs, pod casts and RSS advertising are the fastest growing segments of the alternative media industry with an aggregate spending of USD\$20.4 million in 2005. Blog advertising alone accounted for USD\$16.6 million of total spending on user-generated media advertising in the same year. WOM is a very effective technique to infiltrate the nomarketing zones people have supposedly built around their lives, believing informal, unmediated communication through blogs and other social networking sites to be more effective that even the most polished advertisements (Hoffman, 2006). However, Hoffman is quick to remind that such informal and unmediated communication is only effective so long as people trust it.

The significance of WOM via blogs cannot be underestimated. A study done by Lee and Conroy (2005) showed that a majority of young consumers relied on WOM to learn about consumption through regular interaction with friends and other online virtual communities. Purchase choices were made based on recommendations obtained via the Internet and the strength of WOM is intensified by the nature of the Internet as a tool for rapid communication flow through a global community. Hence, while this may prove useful to the marketer if the recommendations are positive, it can be extremely damaging if negative WOM is channeled instead.

RESEARCH PROBLEM

There is currently very little blogging activity in the business arena of Asia, as most Asian blogs focus on personal and consumer issues, and lack the credibility to carry pertinent business and financial information. Hence, the increasing importance of the presence of blogs challenges business media owners, who have long depended on traditional but established business media. It is only a matter of time before this situation changes as the very nature of blogs provides interesting angles and strong albeit fresh personal opinions and perspectives (Savage, 2006).

Every blog is an atom and every ad campaign is a molecule that attracts the best (Jarvis, 2006). Many studies have attempted to create a productive bond between blogging and marketing, particularly advertising. Advertisers are eager to reach customers via influential blogs while bloggers are highly interested in getting paid for their efforts. Various blogs are becoming such environments, but marketers need not only a way to filter the appropriate places but also find cost-effective and measurable ways to do so (Jarvis, 2006). Hence, marketers are in a constant race to learn and try effective advertising in a customer-controlled world. Advertising in the mass of niches must be highly targeted from the advertiser's perspective and highly relevant from the customer's. There is a brand new medium out here owned by all customers that's just waiting to be acted upon.

The fact remains – blogs are here to stay and will continue to thrive because of their adaptability and innovation. Hence, marketers need to adopt a more serious outlook on how to manifest their brand through this blogging trend, by studying the bloggers' personal style, their technology, the use of openend sourcing and their ability to get information and speculation out quickly (Permutter & McDaniel, 2005).

Justification of the Study

Blogging is almost seen as an art form that seamlessly attaches itself as a part of the fabric of our everyday lives. Compared to expensive TV advertising, most of the content for blogs is subsidized by advertisements, thus making consumers more receptive towards the advertisements that are featured or mentioned in a blog. It reaches its height of distinction when the blogger himself promotes the product or service advertised in his blog content, contributing to the rise of blogging popularity. Unlike TV advertising where most of its content is lost, ignored or forgotten by its audience, the blogging community is made up of a more captivated, eager-to-learn and rapture audience.

Consumers tend to believe in WOM better, as evidenced in the literature review, hence if done properly; more consumers would adopt a stronger belief in brands features or mentioned through

blogging. There is a higher level of conviction and belief by reading what other bloggers say or do. It is only human nature to want to "mimic" or "ape" other people's lifestyle and product choices, if the latter is seen to own a more glamorous lifestyle. There is also an inane desire and strong curiosity in all of us to learn and find out what happens in other people's lives or what other's (candid) opinions hold about a certain issue. Hence, blogging has the capacity to be seen as an honest, non-intrusive advertising format and definitely influential marketing tool in a consumer's life. WOM advertising through blogging has also witnessed or predicted the many rises and falls of brands. Now that online purchasing adoption is rising coupled with growing online advertising penetration rates, advertisers should be taking a more serious look at blogging as a WOM advertising tool. The trick, of course, is to develop a range of online advertisements at the right time and right blog without alienating consumers – a tough balance to achieve, but one that holds great possibility. Although the number of business blogs is limited, business information can take many shapes and even materialize through the blog of an employee or an investor.

The need to inculcate a strong sense of awareness of this phenomenal tool is crucial. With the growing trend and popularity in maintaining and reading blogs, such an activity itself may be presented as a potential advertising channel. Furthermore, with the fall of traditional TV advertising, this calls for a more innovative approach to effectively market brands to consumers, via blogging. With the evergrowing interest in various online marketing areas such as e-branding, e-commerce and e-shopping, these areas may be enhanced by this new blogging phenomenon. Hence, the challenge to add advertising to the advertising content mix in a subtle but effective manner without alienating the consumer can be achieved through blogging. However, using blogs should be accompanied with much caution, in response to advertisers' being warned on being careful against a backlash by consumers regarding blog advertising if the advertisement encumbers the content or affects their reading/blogging experience may result in a negative WOM experience.

In conclusion, the benefits and advantages of using blogs as a WOM tool are plenty. The only challenge is that marketers ought to recognize and utilize blogs in their online marketing strategies with great effect.

REFERENCES

Bausch, P., Haughey, M. & Hourihan, M. 2002. *We blog: Publishing online with weblogs*. Indianapolis: Wiley.

Carter, B. 2006. Blogs in business marketing. London. Mar 1, 2006: 35

Fong, J. & Burton, S. 2006. Online word-of-mouth: A comparison of American and Chinese discussion boards. *Asia Pacific Journal of Marketing and Logistics*. 18 (2): 146.

Hoffman, M. 2006. Lies, damn lies and word of mouth. Inc. Boston, 28 (4): 25.

Jarvis, J. 2006. Power couple: How bloggers and advertisers can finally hook up. *Advertising age*. 77 (19): 42.

Lee, C.K.C & Conroy, D.M. 2005. Socialization through consumption: Teenagers and the internet. *Australasian Marketing Journal*. 13(1): 8.

Mayzlin, D. 2006. Promotional chat on the internet. *Marketing Science*. 25 (2): 155.

Orr, B. 2004. Blogging for profits. American Bankers Association (ABA) Journal. 96 (10): 106.

Permutter, D.D. & McDaniel, M. 2005. The ascent of blogging. Nieman Reports, 59 (3): 60.

Pew Internet and American life Project. 2005. *The state of blogging*. Available at http://www.pewinternet.org/pdfs/PIP_blogging_data.pdf

Precision Marketing. 2006. Opinion: Why word of mouth is direct territory. March edition: 14.

PQMedia. 2006. Alternative media research Series I: Blog, podcast and RSS advertising outlook. Available at http://www.pqmedia.com/blog-podcast-rss-advertising.html

Rak, J. 2005. The digital queer: Weblogs and internet identity. *Biography*. 28 (1): 166.

Savage, M. 2006. Blogging is the business. *Media Hong Kong*, Feb 24 2006: 5

Spero, I. & Stone, M. 2004. Agents of change: How young consumers are changing the world of marketing. *Qualitative Market Research*. 7(2): 153.

Taylor-Smith, C. 2006. Word of mouth.. *Infurniture*, 7(4): 8. Thomsen, E.B. 2002. Internet column: Blogging, anyone? *Collection Building*. 21(2): 76.

ONLINE SHOPPING INNOVATIVENESS: EFFECTS OF FRIENDS, FAMILY AND MEDIA

Dr. Norazah Mohd Suki Norbayah Mohd Suki

Universiti Industri Selangor, Malaysia Email: azahsuki@yahoo.com

ABSTRACT

This paper proposes a model using the Structural Equation Modeling technique to identify the effects of normative belief from friends, family and media on online shoppers' innovativeness in relation to adoption behavior of online shopping. A structured questionnaire was used to gather information from 554 respondents. Results from Structural Equation Modeling reveals that influence from friends was the most important determinant of online shoppers' innovativeness and decision to purchase products and services through an online retail store by Malaysian Internet users that online marketer need to emphasise further. Findings from this study would greatly help online marketing managers in developing successful targeting and positioning strategies to gain better insights about the purchase behavior of innovative online shoppers, and constitute a future research foundation area for a more thorough analysis by both Information Systems analysts and marketing researchers.

INTRODUCTION

Research study by Jupiter Research (2004) indicated that online retail sales in US will reach US\$ 65 billion in 2004 and are likely to reach US\$ 117 billion in 2008. In addition, 30 percent of Internet users in US buying online in 2004 and their average online spending are estimated at US\$ 585. However, through 2008, average spending per buyer growth shows steady increases and will be close to USD780 per buyer by 2008 (http://www.jupitermedia.com/corporate/release/04.01.20-newjupresearch.html). It has proved that there is an explosive and positive growth of online users and online shoppers which has led to dramatic shifts in the way of conducting purchase activities and transactions.

Online shopping, a recent form of retailing online available in the digital age represents an innovation to be adopted or rejected by online consumers globally. Innovativeness has change consumers paradigm from shopping at the brick and mortar store to shopping at the click and mortar store (electronic shopping), indicating that no reutilized buying activities/responses from an individual consumer's position. Thus, it has created a new experience to the consumers, particularly to an innovator in electronic shopping environment. Innovative online shopper possess special characteristics since they are those with a broader range of shopping environment and experiences that interest online retailers to learn how innovative their customers are. While extensive literature exists on consumer intention to adopt electronic commerce, particularly online shopping, very few studies have been concerned with studying consumers who already have purchased products and services via the Internet. This is unfortunate since it is well documented that intention-behavior inconsistencies often occur (Shim et al., 2001). Thus, this paper sets out empirically with the objective to propose a model using the Structural Equation Modeling technique to identify the impact of online shoppers' innovativeness in relation to adoption behavior particularly on Subjective Norm construct (the influence of friends, family and media).

LITERATURE REVIEW

Robertson (1967) defined three types of innovations based on the degree to which they represent technological advances and changes in consumer behavior.

- A discontinuous innovation is a major technological advance leading to new behavioral patterns among consumers adopting the product.
- A dynamically continuous innovation is a new product representing major technological advantages that do not basically change existing consumer behavior.

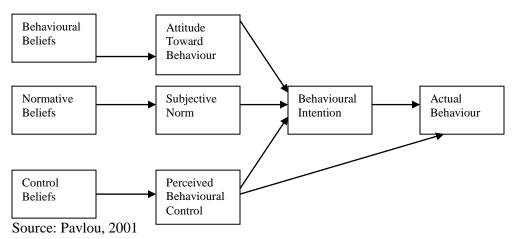
 A continuous innovation is a minor technological advance requiring no changes in existing consumer behavior.

Thus, online buying represents a discontinuous innovation as it includes technological advances as well as changes in consumer behavior. Chase and Fransson (2000) state that Internet shopping is no different from any other innovation. Shopping on the Internet is considered as an innovative behavior that is more likely to be adopted by innovators than non-innovators. Innovators are characterized as experimentalists who latch onto new ideas as soon as they appear. An innovator's interest lies primarily in the innovation itself, rather than with its application to significant problems. Early Adopters are visionaries who blend an interest in innovation with a concern for significant applications. They look for breakthrough in instructional methods of learning effectiveness that new innovations for technology enable. Early Majority are pragmatists who represent the first half of the mainstream. They adopt a "wait-and-see" attitude toward new applications of innovation, and require solid references and examples of successes before adopting. Late Majority are the conservative or skeptical latter half of the mainstream. They accept innovation late in the game, once the change has already become well-established among the majority. Laggards are the last group of potential adopters and most likely never adopt innovation at all. It is unlikely for them to employ innovations, and they may also be antagonistic to their uses by others (Geoghegan, 1994).

When consumers accept and use Internet for shopping, they are accepting and using technologies and innovation. Peterson et al. (1997) viewed that purchasing something on the Internet could be considered as adopting an innovation. Who buys online and why are crucial questions for e-commerce managers and consumer researchers if online sales are to continue to grow through increased purchases by current buyers and by converting those who have not yet purchased online (Donthu & Garcia, 1999; Modahl, 2000). In order to understand the diffusion of such innovations it is necessary to think of an adoption as the first step in the diffusion process. The adoption of an innovation, particularly online shopping, depends on various factors, which are related to the innovation itself and to the consumer, including subjective norm.

Subjective norm suggests that behavior is instigated by one's desire to act as important referent others (e.g., friends, family, or the society in general) think one should act or these others actually act (Bearden et al., 1986). Applied to the two focal behaviors, subjective norm reflects consumer perceptions (normative belief) of whether these two behaviors are accepted, encouraged, and implemented by the consumer's circle of influence. Subjective norm, one of the determinants of Theory of Planned Behavior (see Figure 1), has been widely shown to increase behavioral intentions toward system use (Karahanna, Straub, & Chervany, 1999; Venkatesh & Davis, 2000). Research dealing with social construction emphasizes the importance of social influence because system adoption is based on the social climate surrounding the system (Fulk, 1993). Consumers' innovative online shopping behavior is voluntary; the circle of influence to shop online may only have an impact through opinions and suggestions from family, friends, and peers. For example, friends, family and media may support consumers shopping online, and consumers would also value friends' opinions about how easy and useful it is to shop online. In other words, consumers may believe that they would favor a certain online behavior. The literature suggests a positive relationship between subjective norm and intended behavior, and empirical work has shown that subjective norm influences behavioral intentions toward system use (Karahanna et al., 1999). A significant relationship between subjective norm construct and online shopper innovativeness is thus expected.

Figure 1
The Theory of Planned Behavior (TPB)



After looking at the literatures, this research conjectures the following hypotheses and research model:

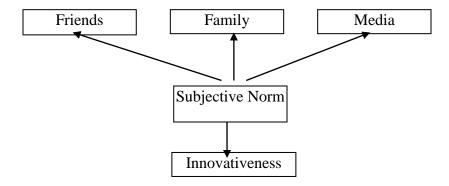
H1: Subjective norm toward online shopping has no significant influence from friends

H2: Subjective norm toward online shopping has no significant from family

H3: Subjective norm toward online shopping has no significant influence from media

H4: Subjective norm toward online shopping has no significant influence on consumer innovativeness.

Figure 2
Theoretical Framework



METHODOLOGY

By using self-administered questionnaire as the data collection method, a total 554 responses were received from a total of 800 targeted respondents located in Kuala Lumpur. They already have purchased any products and services through the Internet in the previous years. The distribution and collection of questionnaire from the respondents were conducted within two months time frame by using stratified random sampling technique. They were mostly male (56%), educated (54%) and had already established online shopping activities (Refer to Table 1).

Table 1 Sample Demographic Profile

Demographics	Levels	Frequency	Percent
Gender	Male	310	56.0
	Female	244	44.0
Age	< 20	42	7.6
	21-30	336	60.6
	31-40	141	25.5
	41-50	32	5.8
	> 51	3	0.5
Marital Status	Married	212	38.3
	Unmarried	342	61.7
Ethnicity	Malay	325	58.7
	Chinese	140	25.3
	Indian	75	13.5
	Others	14	2.5
Highest Level of	Certificate	41	7.4
Education Completed	Diploma	102	18.4
_	Bachelor's degree	300	54.2
	Master's Degree	104	18.8
	Doctoral Degree (PhD)	7	1.3
Monthly Income	< 3000	279	50.4
	3001-6000	212	38.3
	6001-9000	43	7.8
	9001-12000	14	2.5
	12001-15000	3	0.5
	> 15001	3	0.5
Occupation	Student	98	17.7
	Businessman	77	13.9
	Professional	225	40.6
	Government servant	73	13.2
	Others	81	14.6
Workplace	Kuala Lumpur 252		45.5
	Selangor	177	31.9
	Johor Bharu	37	6.7
	Penang	88	15.9

Data was analyzed using Structural Equation Modeling: a technique that allows separate relationships for each set of dependent variables. It aims to find the most optimal model or combination of the variables that fits well with the data on which it is built and serves as a purposeful representation of the reality from which the data has been extracted, and provides a parsimonious explanation of the data (Kline, 1998).

Measurement of Variables

The construct of friends, family and media were assessed using items reported in Limayem et al. (2000). These items were then revised to reflect the online shopping context. Innovativeness construct was assessed using Hurt, Joseph, and Cook (1977) innovativeness scale. A seven-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree) was used for all constructs. The reliability analysis was used to test the stability and consistency for the research instrument to measure the concept

as stated in the theoretical framework. The summary of the Cronbach's Alpha reliability coefficients readings and number of items for each variable were acceptable and within the range of 0.77 and 0.87.

The results of Cronbach's Alpha value range from 0.779 to 0.878. All the four variables recorded Cronbach's Alpha of more than 0.70 which indicates that the internal consistency reliability coefficient for all the independent measures of the study were statically consistent, valid and reliable. It should be noted that none of the items were deleted to improve the Cronbach's coefficient. Thus, it can be concluded that the measures for the variables are statistically reliable.

RESULTS

The Structural Equation Modeling (SEM) technique involves two fundamental stages of the overall model development: measurement model and structural model.

Measurement Model

The four hypotheses in the proposed model (Figure 2) were tested using the analysis of moment structures (AMOS) version 5.0. Correlations among construct measures were demonstrated in Table 2. All four research constructs were positively correlated with each other (< 0.05) and do not indicate any serious problem of multi-collinearity. Thus, the correlation values among each factor indicate support for the presence of convergent validity.

Table 2
Correlations among Construct

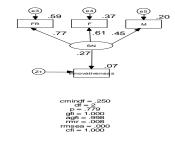
correlations among constituet						
Constructs	Media	Family	Friends	Innovativeness		
Media	1.000					
Family	.282	1.000				
Friends	.344	.471	1.000			
Innovativeness	.130	.144	.211	1.000		

A confirmatory factor analysis using AMOS 5.0 and the sample covariance matrix was conducted for the measurement model. The measurement model specifies how the observed variables (indicators) relate to unobserved variables (latent constructs) (Kline, 1998). Tables 3 and 4 both evinces the results of the measurement model, including standardized factor loadings, standard error (SE), critical ratio, *p*-values, and squared multiple correlations for each indicators. The confirmatory factor analysis of the measurement model on multi-item scales showed that each factor loadings of indicators in each construct were statistically significant and sufficiently high for structural model testing. In addition, the squared multiple correlations of four indicators in the measurement model were higher than 0.50, which revealed that the latent construct accounted for more than half of the explained variance in each indicator. Thus, the squared multiple correlations of indicators showed that the measurement model was reliable and valid to conduct subsequent structural equation model analysis and to test the proposed hypotheses.

Structured Model: Hypotheses Testing

The analysis of causal model was conducted using a maximum likelihood estimation, which has been commonly employed in the structural modeling (Hair et al., 1998). The overall fit indices for the proposed model revealed a chi-square of 501 (df = 2; p \leq 0.001), goodness-of-fit index (GFI) of 1.000, normed fit index (NFI) of 0.998, comparative fit index (CFI) of 1.000, and root mean square error of approximation (RMSEA) of 0.000 (see Figure 3). The result reports that all fit indices were at the above end of acceptable ranges (>0.90 for GFI, CFI, NFI; \leq 3 for χ^2/df ; and \leq 0.50 for RMSEA value) to indicate perfect model fit. Fit statistics above 0.90 for GFI, NFI, and CFI were used as an indicator of a good model fit to the data (Bagozzi & Yi, 1988; Hair et al., 1998). Following Bagozzi and Yi (1988), the chi-square statistic was not considered a good indicator for model fit because sample size was over 200 in this study. Therefore, the indices indicated that the proposed model fits the data well.

Figure 3
Proposed Research Model



SN - Subjective Norm; FR - Friends; F - Family; M - Media

Table 3
Standardized Regression Weights of the Measurement Model

	Estimate	S.E.	C.R.	P
A2.7.1 < FR	.689			
A2.7.2 < FR	.913	.056	18.728	.000
A2.7.3 < FR	.880	.052	18.464	.000
A2.7.4 < FR	.458	.060	9.513	.000
A2.7.5 <fr< td=""><td>.411</td><td>.057</td><td>8.863</td><td>.000</td></fr<>	.411	.057	8.863	.000
A2.8.1 <f< td=""><td>.917</td><td></td><td></td><td></td></f<>	.917			
A2.9.1 < M	.633			
A2.11.2< M	.460	.139	5.196	.000
A2.7.5 <f< td=""><td>.279</td><td>.043</td><td>6.368</td><td>.000</td></f<>	.279	.043	6.368	.000
A2.7.4 <f< td=""><td>.183</td><td>.044</td><td>4.136</td><td>.000</td></f<>	.183	.044	4.136	.000
A2.8.2 <f< td=""><td>.866</td><td>.049</td><td>17.910</td><td>.000</td></f<>	.866	.049	17.910	.000

Table 4
Squared Multiple Correlations

	Estimate
A2.11.2	.212
A2.9.1	.400
A2.8.2	.750
A2.8.1	.841
A2.7.5	.352
A2.7.4	.319
A2.7.3	.775
A2.7.2	.834
A2.7.1	.475

The default multiple structural model is recursive in nature in that it establishes unidirectional effects of all the causal relations of the variables and able to differentiate distinctly from the null or independence model. In other words, there are no two-way or loop back connections between any of the variables. Overall, the default structural model representing this study is reasonably acceptable to assess the results for the SEM technique. Figure 2 and Table 5 displays the final model with structural path

coefficients, standard errors, critical ratios, and *p*-values for each relationship as well as squared multiple correlations for each endogenous construct. The results indicated support for all proposed hypotheses.

Table 5
Standardized Regression Weights of the Measurement Model

Struct	ural Path	Standardized Path Coefficient	S.E.	C.R.	P	Hypothesis Testing
FR	< SN	.771				
F	< SN	.610	.130	7.715	.000	Supported
M	< SN	.452	.081	7.055	.000	Supported
INNOV	ATI <sn< td=""><td>.266</td><td>.071</td><td>4.913</td><td>.000</td><td>Supported</td></sn<>	.266	.071	4.913	.000	Supported

DISCUSSION AND CONCLUSION

The present study provides evident of the effect of normative belief from friends, family and media on online shoppers' innovativeness in relation to adoption behavior of online shopping. As expected, the results exhibited that consumer's normative belief toward online shopping innovativeness positively influenced by friends, family and media. All causal links specified by the model were supported. Overall, the research model demonstrated a good fit with the data collected in this study. This supports the previous literature (Karahanna et al., 1999) that found subjective norm influences behavioral intentions and adoption toward system use.

The model with Subjective Norm as the dependent variable had an R-square of 0.267. R-square figures show the percentage of variation in one variable that is accounted for by another variable. In this case, online shopper perception on Subjective Norm accounts for 26.7 percent of the total variation in online shopper innovativeness. It is estimated that the predictors of Subjective Norm explain 26.7 percent of its variance. In other words, the error variance of Subjective Norm is approximately 73.3 percent of the variance of Subjective Norm itself.

Examining the analogous effects of the subjective norm construct, all indicators exhibit strong contributions toward the Subjective Norm construct. The comparison of the effect showed that influence from friends was the most important determinant of online shoppers' innovativeness and decision to purchase products and services through an online retail store by Malaysian Internet users. When an online shopper has the resources, the knowledge and the ability to use the Internet for shopping, they would encourage others to conduct online shopping as they think that online shopping is easy to use. They also find online shopping fits well with the way they like to shop. They always find it fun, exciting and enjoyable to use the Internet for shopping and they trigger to shop online due to the entertainment and playful features available at the virtual stores websites. They encourage non-shoppers or potential shoppers to have an intention to purchase products via the Internet through newsgroup, web communities and Internet neighbourhood channels. They could receive meaningful exposure to the e-retailers products offering.

The second important factor was family - higher number of frequency in shopping products online was associated with more support and encouragement by family members (for example parents, spouse, and children). It was found that Malaysian parents encourage their children to shop for products online and made online payment by using their credit cards, to save their time to drive car to the physical store to buy the products. This could save his time searching for parking lot, queuing at counter to pay the products, face with poor sales personnel service and drive back to home without any hassle. Further examination revealed that, media had the smallest effect and influence among the three antecedents of Malaysian Internet user innovativeness to shop online. The usage of online advertisement (i.e. microsites, browser advertisements, banner advertisements, skyscrapers, and interstitials) by e-marketers to attract visitors to purchase products from their websites was found to have less impact on Malaysian Internet users' level of innovativeness on online shopping. Therefore, e-marketers should use other media

forms such as magazines to aggressively promote their products and websites to the Malaysian Internet users, thereafter could encourage online purchases and loyalty.

Overall, the current research findings support prior research study with regard to the influence of subjective norm on adopter innovative characteristics. Social interaction characteristics have historically been shown to be positively related to innovativeness. Early adopters (a) have more social participation, (b) have a higher degree of opinion leadership, (c) are more cosmopolitans, (d) have greater mass media communication channels, (e) deviate more from social system norms, (f) have more contact with change agents, and (g) have more interpersonal communications exposure than later adopters (Rogers, 1995; Turnbull & Meenaghan, 1980).

Implementation of the above reported strategies by e-marketers and e-retailers could significantly contribute to online shopper innovativeness and also customer satisfaction and more importantly, broaden the share of customer online spending. The future commercial success of online shopping depends largely on understanding how an existing online shopper perceives his shopping experiences. The reported strategies could greatly help online marketing managers in developing successful targeting and positioning strategies to gain better insights about the purchase behavior of innovative online shoppers, and constitute a future research foundation area for a more thorough analysis by both Information Systems analysts and marketing researchers.

The small sample size used in this study has provided an opportunity for future study to employ more respondents in order to have wider, generalizable and global perspective of findings which represent the whole population of Malaysia. Future study are encouraged to use Structural Equation Modeling technique (SEM) due to the benefit that it offers than other statistical techniques as it allows simultaneous relationship among endogenous and exogenous variables and serves as a purposeful representation of the reality from which the data has been extracted, and provides a parsimonious explanation of the data. More variables should be added in the current model by future researchers to strengthen the model conceptually.

REFERENCES

Bagozzi, R.P., & Yi, Y. 1988. On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1): 74-94.

Chase, R., & Fransson, M. 2000. Why they won't buy: An exploratory study of consumer attitudes toward online buying. *Paper presented at the Academy of Marketing Science*.

Donthu, N. & Garcia, A. 1999. The Internet shopper. *Journal of Advertising Research*, 39(3): 52–58. Geoghegan, W.H. 1994. What ever happened to instructional technology?' Paper presented at the 22nd *Annual Conference of the International Business Schools Computing Association*, Baltimore, Maryland.

Hair, J.F. Jr., Anderson, R.E., Tatham, R.L., & Black, W.C. 1998. *Multivariate data analysis*. Upper Saddle River, NJ: Prentice-Hall, Inc.

Hurt, H.T., Joseph, K., & Cook, C.D. 1977. Scale for the measurement of innovativeness. *Human Communication Research*, 4(Fall): 58-65.

Fulk, J. 1993. Social construction of communication technology. Academy of Management Journal, 36(5): 921-951.

Jupiter Research Market Forecast 2004. *U.S. Retail* 2004-2008. Available at http://www.jupitermedia.com/corporate/release/04.01.20-newjupresearch.html. (Accessed Feb 5, 2007).

Karahanna E., Straub D.W., & Chervany N.L. 1999. Information technology adoption across time: A cross-sectional comparison of pre-adoption and post-adoption beliefs. *MIS Quarterly*, 23(3): 183-213.

Kline, R.B. 1998. *Principles and practice of structural equation modeling*. NY: Guilford Press.

Limayem, M., Khalifa, M., & Frini, A. 2000. What makes consumers buy from Internet? A longitudinal study of online shopping. *IEEE Transactions on Systems, Man and Cybernetics A*, 30(4): 421-432.

Modahl, M. 2000. Now or never: How companies must change today to win the battle for Internet consumers. NY: HarperCollins.

Nunally J.C. 1978. *Psychometric theory*. Second Edition, NY: McGraw Hill.

Pavlou, P.A. 2001. Consumer intentions to adopt Electronic Commerce - Incorporating trust and risk in the technology acceptance model. *DIGIT Workshop, New Orleans, Louisiana*. Available at http://www.mis.temp.edu/digit/digit2001/files/consumerintentionstoadopt_digit2001.doc. (Accessed Oct 13, 2006).

Peterson R.A., Balasubramanian S. & Bronnenberg B.J. 1997. Exploring the implications of the Internet for consumer marketing. *Journal of the Academy Marketing Science*, 25(4): 329-346.

Robertson, T.S. 1967. The process of innovation and the diffusion of innovation. *Journal of Marketing*, 31: 14-19.

Rogers, E.M. 1995. *Diffusion of innovations*. Fourth Edition, NY: The Free Press.

Shim, S., Eastlick, M.A., Lotz, S.L., & Warrington, P. 2001. An online pre-purchase intentions model: The role of intention to search. *Journal of Retailing*, 77: 397-416.

Turnbull, P.W., & Meenaghan, A. 1980. Diffusion of innovation and opinion leadership. *European Journal of Marketing*, 14(1): 3-33.

Venkatesh, V., & Davis, F.D. 2000. A theoretical extension of the technology acceptance model: Four longitudinal studies. *Management Science*, 46(2): 186-204.

RESPONSES TO ONLINE ADVERTISING: A STUDY OF ONLINE CONSUMERS IN MALAYSIA

Ching Seng Yap

Email: yapcs@mail.utar.edu.my

Yet Mee Lim

Email: limym@mail.utar.edu.my

Universiti Tunku Abdul Rahman (UTAR), Malaysia

ABSTRACT

There has been an increased usage of the Internet among Malaysian consumers in recent years. This development calls for an understanding of how Malaysian people response to online advertising and its impact on online purchase. The present study examines Malaysian consumers' attitudes toward online advertising and beliefs about online advertising and their impacts on using online ads in making purchase decision. The analysis of a structural model shows that both attitudes toward and beliefs about online advertising significantly explain the frequency of clicking online ads, which in turn, significantly related to the use of online ads in making purchase decision. There is no gender difference in the overall response to online advertising. However, it has been found that male consumers find online ads to be more irritating and confusing than female consumers. Implications of the research findings and suggestions for future research are discussed.

INTRODUCTION

The Internet has grown tremendously in both its applications and number of users mainly due to its unique characteristics of flexibility, interactivity, and personalization. It has been a very useful tool for communication, entertainment, education, and electronic trade. The revolutionary change brought forth by the advancement in information technology has an important impact on our daily lives. On the business side, the Internet has transformed the way we do business. It allows retailers to offer unlimited range of products and services to all consumers from around the world at any point in time. It is deemed to be the most significant direct marketing channel for the global marketplace. According to the report by DoubleClick, a marketing service provider, spending on Internet advertising has grown at a rate of 31.5% between 2003 and 2004. It is predicted that the strong growth of online advertising is likely to continue for many years to come (The decade in online advertising, 2005).

On the consumer side, the Internet has given consumers more control in accessing information on products and services. Consumers pull for online content—they decide whether, when, where, what, and how much commercial content they wish to view. The Internet enables consumers to access an unlimited range of products and services from companies around the world, and it has reduced the time and effort consumers spend on shopping (Ko, Jung, Kim, & Shim, 2004). Consumers play a much more active role in searching for information online with some goal in mind, and that goal can influence individual responses to online information and advertisements (Smith, 2002).

Given the significant growth and optimistic outlook for the future of online shopping, it is important to examine consumers' online behaviors and responses to Internet advertising. It is crucial to track consumers' perceptions and attitudes toward online advertising as they would influence consumers' attention and likelihood to make future purchases. Consequently, the present study attempts to investigate whether a positive attitude toward online advertising would lead to buying online using a Malaysian sample.

LITERATURE REVIEW

Quite a number of studies have examined consumer responses to online advertising for the past few years. Based on a convenience sample of Internet users, Gordon and De Lima-Turner (1997) found that online advertising is more effective in developing a favorable brand attitude than it is for selling; and

that consumers prefer entertaining advertising on the Internet. Schlosser, Shavitt, and Kanfer (1999) surveyed a national sample of over 400 participants and found no majority opinion of online advertising—about a third of the participants liked, disliked, and felt neutrally toward online advertising respectively. The Internet users find online advertising informative but less entertaining, and it does not encourage them to make purchases even they do not perceive it to increase product prices.

Korgaonkar and Wolin (2002) examined the differences between heavy, medium, and light Internet users and concluded that "heavier users hold stronger beliefs about and attitudes toward online advertising which likely lead to stronger purchase intent" (p. 201). The heavy Internet users perceived that online advertising is a good thing, is essential and it reduces the cost of products. Hence, marketers should include online advertising in their promotion efforts. Similarly, Ducoffe (1996) found that online advertising is perceived to be informative, entertaining, useful, valuable, and important.

Using a convenience sample of 329 undergraduate students, Goldsmith and Lafferty (2002) assessed the effects of viewing Web sites on Internet advertising. The findings are both positive and negative for online advertisers. Visiting Web sites appear to increase the ability to recall brand names and to improve consumers' views of the brands. However, these young consumers perceive both advantages and disadvantages in online advertising. The advantages include providing privacy and more information and the disadvantages include cluttered and hard to read Web sites.

On the study of how young consumers perceive the Internet as an advertising medium in relation to other traditional media, Calisir (2003) found that the Internet is a less effective medium for communicating both brand and corporate image, although it is a more reliable source of information and less irritating than traditional media like radio, television, press, and magazine. The author suggested that web addresses should be included in outdoor ads to prompt young consumers to visit the websites to obtain more information on the products or services of their interest. In addition, Wolin and Korgaonkar (2003) examined the differences between males and females in consumer beliefs about and attitudes toward online advertising. They found a significant gender difference with males exhibiting more positive in both beliefs about and attitudes toward online advertising. Hence, the following two hypotheses on gender differences were formulated:

H1: Male consumers exhibit more positive attitudes toward online advertising than female consumers.

H2: Male consumers exhibit more positive beliefs toward online advertising than female consumers.

Several research studies have examined the consequences of attitude toward online advertising, i.e., the impacts it has on consumer behavior. It has been found that favorable attitude toward advertising has a positive relationship with the level of involvement with specific ads, information search, ads recall, buying interest, and most important of all, sales (Haley & Baldinger, 1991; Schlosser et al., 1999; Luo, 2002; Cho, 2003). Cho (2003) hypothesized that those who have an overall favorable attitude toward web advertising are more likely to click banner ads, and this hypothesis was supported in his research study. In addition, Schlosser et al. (1999) found that one-third of their national sample of over 400 participants used information from Internet advertising to help them make their purchase decisions. Based on this line of argument, it is clear that such a link exists: perceptions of online advertising \rightarrow clicking online ads \rightarrow use of online ads to make purchase decision. Consequently, the following three hypotheses were postulated:

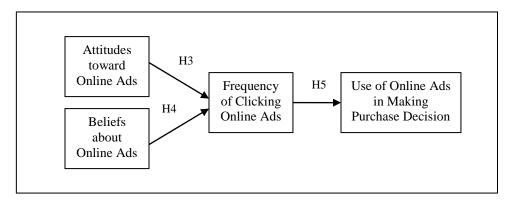
H3: Attitudes toward online ads is positively related to the frequency of clicking online ads.

H4: Beliefs about online ads is positively related to the frequency of clicking online ads.

H5: The frequency of clicking online ads is positively related to the use of online ads in making purchase decisions.

A structural model has been proposed to examine the relationships between belief about and attitude toward online ads and the frequency of clicking online ads (H3 and H4), and the relationship of the frequency of clicking online ads and the use of online ads in making purchase decisions (H5). Figure 1 below shows the structural model and the relationships depicted in the hypotheses.

Figure 1 A Model of the Use of Online Ads



RESEARCH METHODOLOGY

The data for this study were collected from 200 employees (office staff and lecturers) at a private university in Malaysia. Survey questionnaires were personally distributed and collected from the respective respondents. One hundred and fifty-three employees completed the questionnaires, yielding a response rate of 76.5%. Of the 153 respondent, we eliminated 19 respondents who had missing data on the main items in the survey, yielding the final 134 usable respondents. Most of the respondents were Chinese lecturers with an average age of 32 years old. They were considered highly-educated people with majority of them holding a master's degree. Table 1 below describes the characteristics of the sample more in details.

Table 1 Characteristics of Respondents

Characteristics of Respondents									
Gender	Race	Marital Status	Occupation	Monthly Income					
66%	72% Chinese	55% not married	82% lecturers	Ranged from					
females				RM1,000 to RM7,000					
34% males	15% Indians	44% married	18% office	81% between					
			employees	RM2,000 to RM4,000					
	11% Malays	1% unspecified							
	2% Others	_							

Measurements

Attitudes toward online advertising: Ten items were used to measure attitudes toward online advertising. They were taken from the studies by Korgaonkar and Wolin (2002), Wolin and Korgaonkar (2003) and Schlosser et al. (1999). Sample items are 'I like online advertising', 'Online advertising is essential', and 'I consider online advertising a good thing'. The respondents were asked to answer the questions based on a five-point scale, ranging from (1) "strongly disagree" to (5) "strongly agree". The Cronbach alpha for this 10-item measurement scale was 0.869.

Beliefs about online advertising: Beliefs about Internet Advertising was measured based on the evaluation framework proposed by Chen and Wells (1999). Three main factors comprised of 12 items were used to evaluate online advertisements namely entertainment, informativeness, and organization. Each item was measured using a 5-point bipolar rating scale. Bipolar adjective such as 'entertaining and not entertaining,' anchored the beginning and end of the scale. The following is the listing of adjectives used to measure beliefs about online advertising under each of the three factors. The Cronbach alpha for this 12-item scale was 0.851.

<u>Entertainment</u> <u>Informativeness</u> <u>Organization</u>

EntertainingInformativeConfusingCreativeUsefulIrritatingFunIntelligentMessy

Interesting Trustworthy Offensive

Frequency of clicking online ads: One item was used to measure the frequency of clicking online ads. It was measured in terms of the percentage of time they clicked on the online ads based on their exposure to the ads on the Internet. The percentage of time was in 10% interval ranging from 0% to 100% of the time. This approach of measuring frequency was adapted from Korgaonkar and Wolin's (2002) study in their assessment of beliefs about online advertising.

The use of online ads in making purchase decision: The use of online ads in making purchase decision was measured by a single question, in terms of the percentage of the time that it facilitates respondents in making decision to purchase online. The percentage of the time was in 10% interval ranging from 0% to 100% of the time. This approach of measuring frequency was adapted from Schlosser, Shavitt, and Kanfer (1999).

RESULTS

The proposed model and hypothesis testing was analyzed using partial least squares (PLS) method. Visual PLS version 1.04 was used to test the model. PLS statistically produces parameter estimates for a system of linear equations, which are regression coefficients for the paths of the model. These path coefficients are then used to examine the relationships among the latent variables. PLS is a robust technique as it is less sensitive to sample size considerations. It does not need a large sample size for data analysis. PLS is also appropriate to use for testing a structural model with single-item measurement scale; it does not require to fulfill the characteristics of good measurement to produce results (Hair, Black, Babin, Anderson & Tatham, 2006).

A PLS model is analyzed and interpreted in two stages: the assessment of the reliability and validity of the constructs in the measurement model and the assessment of the structural model. Specifically, the measurement model assesses and ensures the convergent and discriminate validity of the instrument before attempting to draw conclusion regarding relationship among construct in the structural model. For the evaluation of the structural model, the bootstrap resampling procedure was applied to test the significance of the path coefficients (Chin et al., 2003).

PLS was used to measure hypotheses H3 to H5 as postulated in the structural model. As for the testing of the gender differences as stated in the hypotheses H1 and H2, independent sample *t*-test of differences was used.

Descriptive Analysis

Internet usage: The respondents were found to access the Internet at an average of three hours per day, with a minimum of one hour and a maximum of 10 hours. Table 2 below shows that about 80% of the respondents indicated that they were online for less than five hours per day on the average, with the average of three hours per day. According to the categorization by Korgaonkar and Wolin (2002), spending about three hours per day online is considered a medium usage of the Internet. Hence, Malaysian consumers can be classified as medium users of the Internet.

Table 2 Internet Usage

Average Hour Per Day	Number of Respondents	Percentage $(N = 134)$
1	24	17.9%
2	34	25.4%
3	23	17.2%
4	26	19.4%
5	9	6.7%
6	10	7.5%
8	5	3.7%
9	1	0.7%
10	2	1.5%
Total	134	100%

Average = 3 hours / day

Attitudes toward online advertising: Table 3 shows the means and standard deviations for the seven items measuring attitudes toward online advertising. Three of the 10 items used to measure attitudes toward online advertising were dropped due low loading scores as a result of PLS analysis. As seen in Table 3, the mean of the seven items is 2.756, representing a moderately favorable attitude toward online advertising.

Beliefs about online advertising: Table 3 presents the means and standard deviations for the eleven items measuring beliefs about online advertising. The respondents found that online ads are especially creative, informative, and interesting. Overall, the respondents seemed to have a moderately favorable belief about online advertising.

Table 3
Means, Standard Deviation and Loading for Each Variable

Item	Mean	Std. Dev.	Loading
Attitude (CR=0.892)			
I look at most of the online ads	2.381	1.017	0.728
Online ads is a good thing	3.172	0.880	0.730
Online ads is essential	3.291	0.874	0.641
I like online ads	2.739	0.941	0.837
I have interest in online ads	2.731	0.951	0.763
I trust online ads	2.351	0.825	0.705
I am confident in using online ads	2.627	0.907	0.743
Overall Attitude	2.756	0.673	n.a.
Belief (CR=0.896)			
Entertaining	3.157	0.848	0.586
Creative	3.634	0.761	0.561
Fun	3.179	0.848	0.669
Interesting	3.261	0.917	0.673
Informative	3.388	0.917	0.779
Useful	3.187	1.035	0.778
Intelligent	3.119	0.841	0.631
Trustworthy	2.754	0.862	0.750
Not confusing	3.127	0.913	0.631
Not irritating	2.582	1.133	0.624
Not messy	2.903	0.965	0.597
Overall Belief	3.119	0.608	n.a.

Measurement Model

The assessment of the measurement model includes estimation of the coefficient and the examination of reliability, convergent and discriminant validity of the survey instruments.

Reliability was assessed using internal consistency scores, calculated by the construct reliability scores. Internal consistencies of all the items are considered good as they exceed 0.80, signifying high reliability. Convergent and discriminant validity were assessed by comparing the own factor loadings and cross factor loadings, and the square root of each construct's average variance extracted (AVE) and its correlations with other constructs (Fornell and Bokstein, 1982). As shown in Table 3, majority of the items loaded well on their respective factors, which are much higher than all cross loadings. Four items, namely offensiveness (from belief construct), reduced cost perception, misleading and insufficient information (from attitude construct) were dropped from the analysis as their loading scores were below 0.50. All retained items had loadings of at least 0.55. As shown in Table 4, all the square roots of AVE were above 0.60, which were much higher than all the cross-correlations. These tests suggested that all measures have adequate convergent and discriminate validity. In sum, the measurement model demonstrated adequate reliability, convergent validity and discriminate validity, indicating sufficient conditions for the assessment of the structural model as proceeded in the study.

Table 4
Square Root of AVE and Correlations among the Constructs

	F1	F2	F3	F4
Attitude toward online ads (F1)	0.738			
Belief about online ads (F2)	0.488*	0.666		
Clicking on online ads (F3)	0.483*	0.380*	n.a.	
Use of online ads in making purchase decision (F4)	0.561*	0.335*	0.587*	n.a.

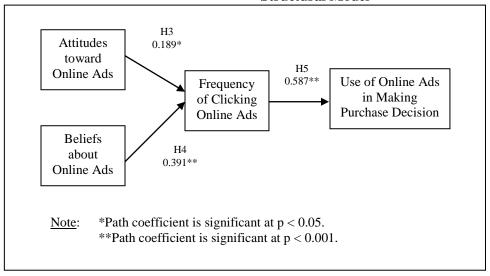
^{*} Significant at p < 0.001.

Diagonal values are the square root of AVE and off-diagonal values are the correlations among constructs.

Structural Model

The assessment of structural model includes the path coefficients and their significance levels. The path coefficients in the PLS model represent standardized regression coefficients. The suggested lower limit of substantive significance for path coefficients is 0.10. As shown in Figure 2, all three path coefficients are over 0.10. Hypotheses H3 and H4 were both supported in which attitudes and beliefs about online advertising had a significant effect on the frequency of clicking online ads. All together they accounted for 26% of the variance in clicking online ads with attitudes toward online advertising (β =0.39; p<0.001) contributing more to the frequency of clicking online ads than beliefs about online advertising (β = 0.19; p<0.05). In addition, the path coefficient (β =0.59; p<0.001) supported the relationship hypothesized between the frequency of clicking online ads and percentage of using online ads in making online purchase decision. (H5). The model also did a good job of explaining variance in the percentage of using online ads in making purchase decisions (R²=34%).

Figure 2 Structural Model



Tests of Gender Differences

As presented in Table 5, the analysis of *t*-tests showed that there was no statistically significant difference between male and female respondents in their attitudes towards and beliefs about online advertising. Therefore, H1 and H2 were not supported. However, when the construct of beliefs about online advertising was decomposed for further analysis, a significant gender difference was found in two items, namely confusing and irritating. Male respondents were found to perceive online ads as more confusing and irritating than female respondents.

Table 5
Comparison of Means of Beliefs about Online Advertising between Male and Female Respondents
Relief Item Mean of Male Mean of Female Significance Level

Mean of Male	Mean of Female	Significance Level
Group (N=45)	Group (N=89)	
3.11	3.18	p < 0.66
3.58	3.66	p < 0.54
3.04	3.25	p < 0.19
3.27	3.26	p < 0.96
3.24	3.46	p < 0.20
3.09	3.24	p < 0.44
3.11	3.16	p < 0.77
2.62	2.82	p < 0.21
2.91	3.24	p < 0.05
2.24	2.75	p < 0.01
2.73	2.99	p < 0.15
2.99	3.18	p < 0.09
	Group (N=45) 3.11 3.58 3.04 3.27 3.24 3.09 3.11 2.62 2.91 2.24 2.73	Group (N=45) Group (N=89) 3.11 3.18 3.58 3.66 3.04 3.25 3.27 3.26 3.24 3.46 3.09 3.24 3.11 3.16 2.62 2.82 2.91 3.24 2.24 2.75 2.73 2.99

Table 6 shows the frequency for both the male and female groups in terms of their percentage of clicking online ads. About one fifth of them did not click on online ads at all. Majority of the respondents (77%) clicked on online ads 10% to 50% of the time to search for products and services information. No statistically significant gender difference was found in the percentage of clicking online ads.

Table 6
Comparison of Percentage of Clicking Online Ads between Male and Female Respondents

comparison of 1 cre	O	O		-
Percentage of	Male	Percentage	Female	Percentage
using online ads	respondents		respondents	
0%	9	20.0%	16	18.0%
10%	15	33.3%	13	14.6%
20%	8	17.8%	14	15.7%
30%	3	6.7%	21	23.6%
40%	5	11.1%	7	7.9%
50%	3	6.7%	14	15.7%
60%	2	4.4%	1	1.1%
70%	0	0.0%	2	2.2%
80%	0	0.0%	1	1.1%
Total	45	100.0%	89	100.0%

Table 7 shows the frequency for both male and female groups in terms of their percentage of using online ads in making their purchase decisions. Twenty eight percent of the respondents indicated that they did not use online advertising to help in making their online purchase decisions. About 62% of the respondents indicated that they used online ads in making online purchase decision. Again, no statistically significant difference was found between males and females in using online ads to make online purchase decisions.

Table 7
Comparison of Percentage of Using Online Advertising in Making Purchase Decisions between
Male and Female Respondents

	viale and I chiale Respondents									
Percentage of	Male	Percentage	Female	Percentage						
using online ads	respondents		respondents							
0%	16	35.6%	22	24.7%						
10%	3	6.7%	14	15.7%						
20%	6	13.3%	11	12.4%						
30%	6	13.3%	13	14.6%						
40%	5	11.1%	8	9.0%						
50%	4	8.9%	13	14.6%						
60%	3	6.7%	3	3.4%						
70%	1	2.2%	0	0.0%						
80%	3	6.7%	4	4.5%						
90%	1	2.2%	2	2.2%						
Total	45	100.0%	89	100.0%						

DISCUSSION AND CONCLUSIONS

The focus of this study is to examine the impact of consumer perception of online advertising on searching and buying via online ads. The results of the present study indicate that:

- (1) Malaysian online consumers have demonstrated a moderate favorable response toward online advertising.
- (2) Both attitudes toward and beliefs about online advertising are significant predictors of clicking online ads, which in turn, leads to the use of online ads in making purchase decision.
- (3) Overall, there are no gender differences in the attitudes toward and beliefs about online advertising. However, upon further analysis, male consumers find online advertising to be more confusing and irritating than female consumers.

The research findings of the present study imply that marketers should include online advertising in their advertising media mix as online advertising promotes online buying or online shopping. Online marketers and retailers should place more attention on the design of online ads as a rather favorable

response toward online ads will encourage online consumers search for product and service information through online ads. But improvements are needed to make online ads less irritating and confusing to appeal to the male consumers. The findings suggest that online advertising may be a powerful marketing tool in the context of online environment.

E-marketers should place ads that appear to be interesting and attractive to create consumers' curiosity and to draw their attention. Consumers are exposed to various forms of online ads (such as banners, pop-up windows, and text-based hyperlinks) when they spend considerable amount of time online. They may click on the ads if they are stimulating visually. Generally, consumers would do aimless browsing for something interesting (Rowley, 2000), and aimless or general browsing is a variation of ongoing search which may lead to impulse buying (Bloch, Sherrell & Ridgway, 1986).

The research findings of the present study may only be generalized to university employees especially the academic staff. However, the findings of the study must be used with caution as the sample size is relatively small in understanding perceptions of online consumer behavior. Furthermore, the sample consisted of mainly Chinese in the education industry, which is not representative of the general Malaysian population. Future research in the Malaysian market should include other races of Malays and Indians as well as students in the sample for comparison purpose. Online behavior in relation to demographics may also be needed to produce profiles of typical Malaysian online shoppers or browsers. In addition, it is important to examine other antecedents to online purchases apart from the impacts of online ads.

Nevertheless, the present study has contributed to our understanding of online consumer behaviours in relation to the impact of beliefs about and attitudes toward online ads, which has profound implications for organizations promoting business via online ads. It helps online retailers better address the needs and wants of their consumers and devise their online ads strategies. Data on online advertising and online buying behavior are much needed in lieu of the gaining importance of online retailing in the global market. More studies on cross-cultural comparisons of responses toward online advertising and online purchase behavior are also much needed. E-commerce is going international and the understanding of online consumer behavior in various countries has profound implications for international vendors.

REFERENCES

Bloch, P.H., Sherrell, D.L., & Ridgway, N.M. 1986. Consumer search: An extended framework. *Journal of Consumer Research*, 13(1) 119-126.

Calisir, F. 2003. Web advertising vs. other media: young consumers' view. Journal of Internet Research: Electronic Networking Applications and Policy, 13(5): 356-363.

Chen, Q., & Wells, W.D. 1999. Attitude toward the site. *Journal of Advertising Research*, 39(5): 27-37.

Chin, W.W., Marcolin, B.L., & Newsted, P.R. 2003. A Partial Least Squares latent variable modeling approach for measuring interaction effects: Results from a Monte

Carlo simulation study and an electronic mail emotion/adoption study. *Information Systems Research*, 14(2): 189–217.

Cho, C.H. 2003. Factors influencing clicking of banner ads on the WWW. *Cyber Psychology & Behavior*, 6(2): 201-215.

Ducoffe, R.H. 1996. Advertising value and advertising on the Web. *Journal of Advertising Research*, 36(5): 21-35.

Fornell, C., Bookstein, F.L. 1982. Two structural equation models: LISREL and PLS applied to consumer exit-voice theory. *Journal of Marketing Research*, 19(4): 440-452.

Goldsmith, R.E. & Lafferty, B.A. 2002. Consumer response to Web site and their influence on advertising effectiveness. *Journal of Internet Research: Electronic Networking Applications and Policy*, 12(4): 318-328.

Gordon, M. E., &d De Lima-Turner, K. 1997. Consumer attitudes towards Internet advertising. *International Marketing Review*, 14(5): 362-375.

Hair, J.F., Jr., Black, W.C., Babin, B.J., Anderson, R.E., & Tatham, R.L. 2006. *Multivariate data analysis* (6th ed.). New Jersey: Prentice Hall.

Haley, R.I., & Baldinger, A.L. 1991. The ARF copy research validity project. *Journal of Advertising*, 31(2): 11-32.

Ko, H., Jung, J., Kim, J.Y., & Shim, S.W. 2004. Cross-cultural differences in perceived risk of online shopping. *Journal of Interactive Advertising*, 4(2). Available at http://www.jiad.org/vol4/no2/ko (Accessed June 21, 2005).

Korgaonkar, P. & Wolin, L.D. 2002. Web usage, advertising, and shopping: relationship patterns. *Internet Research: Electronic Networking Applications and Policy*, 12(2): 191-204.

Luo, X. 2002. Uses and gratifications theory and e-consumer behaviors: A structural equation modeling study. *Journal of Interactive Advertising*, 2(2): 44-54.

Rowley, J. 2000. Product search in e-shopping: A review and research propositions. *Journal of Consumer Marketing*, 17(1): 20-35.

Schlosser, A.E., Shavitt, S., & Kanfer, A. 1999. Survey of Internet users' attitudes towards Internet. *Journal of Interactive Marketing*, 13(3): 34-54.

Smith, S.M. 2002. *Electronic commerce issues for consumers and marketers: A literature review*. Available at http://www.arches.uga.edu/~saysmith/ecommerce.html (Accessed January 20, 2007).

The decade in online advertising 1994-2004. 2005. Available at http://www.doubleclick.com/us/knowledge_central/documents/RESEARCH/dc_decaderinonline_0504.pd f (Accessed January 15, 2007).

Wolin L.D., & Korgaonkar, P. 2003. Web advertising: gender differences in beliefs, attitudes, and behavior. *Journal of Internet Research: Electronic Networking Applications and Policy*, 13(5): 375-385.

TO BUY OR NOT TO BUY: MALAYSIANS' WEB NAVIGATION BEHAVIOR

Adeline Chua Phaik Harn Multimedia University

Email: adeline.chua@mmu.edu.my

ABSTRACT

The Internet has redefined the global nature of shopping and communications, touting itself as the perfect vehicle for online shopping. The dramatic influence of online shopping on consumers and businesses is slowly, albeit surely being accepted in Malaysia as an alternative shopping mode rather than visiting bricks-and-mortar stores. Numerous studies have been carried out to ascertain the roles of the Web as an information and communications medium, while other studies have examined factors that may influence or hinder shopping on the Internet. However, much of the latter research is primarily conceptual in nature. Very little empirical research exists on issues relating to shopping orientations on the Internet. Results of the study indicated that online shoppers were more likely to be well educated with at least a bachelor's degree, aged between 19 to 34 years of age, unmarried, holding an executive or managerial-level job and earning a minimal salary of RM1501 a month. Armed with more than four years of Internet experience, the online shopper usually accessed the Internet from work and regards the Internet as a great source for detailed product information. They were somewhat comfortable and satisfied with their Internet usage comfort and skills, seeking for information online with a frequency of at least once a month. However (among a varied number of reasons), slow downloading rate of web pages seem to be the most dissatisfying online experience held by almost all of the respondents surveyed in this study. Other findings and implications are discussed.

INTRODUCTION

The cyber world has no borders or boundaries. The Internet, with the capacity of sending unlimited quantity of information across national borders, has often been touted as one of the pillars of global communication. In this virtual cyberspace, users from all corners of the world are connected with the Internet; they are given the opportunity to freely communicate, exchange information, and engage in almost any online activity that one can possibly imagine. In its current phenomenal form, the Internet is increasingly considered as a vehicle for commercial transactions, thus serving as a robust platform for effective e-commerce transactions.

As proof that the Internet phenomenon is catching up in Asia especially in China, personal computer sales are growing at 60 percent per year from 1993 to 1999 in China alone (Huang & Bayuk, 1998). It is expected that 25 percent of the households will own at least one computer by the year 2010 in China, and that it is predicted to grow if China's Internet infrastructure delivers the content and services that make e-commerce popular across the world (US Embassy Beijing, 1998). As for Internet subscribers, data from 1998 quoted that China has about 2.1 million Internet subscribers and this figure is predicted to reach 6 million in 1999 (BDA, 1999).

In Malaysia, since the introduction of the first Internet Service Provider (ISP) JARING back in 1990, and later TMNET in 1996, the growth of Internet usage in Malaysia has been steadily growing. From a mere number of 90 Internet users in 1992, the Internet craze to get connected increased to a vigorous 50,176 in 1996, then 100, 103 at the end of 1997 (Hassan, 1997), and later at a staggering 2 million (out of Malaysia's population of 22.2 million people) in March 2002 (Nua, 2002). According to Nua (2001), twenty-five percent of the Malaysian population will have Internet access by 2005. The increase in the Malaysian Internet population will be driven by the spread of the National PC Ownership campaign, and the Internet Desa program, which involves the establishment of cyber centers in rural areas. A report carried out by IDC Malaysia (2002) also reported that it expects Internet users in Malaysia to reach 6.7 million by 2005. A clear depiction of the growth in the number of Malaysian online users can be seen in Figure 1.

Introduction:
Malaysia's Online Population

1992 1996 1997 2002 2005
10.04 mil c

2 mil b

100,103 a

* Source: Adapted from Hassan, H., Utusan Malaysia – Utusan Megabait. Available: http://www.jun.gov.my/JTM/isp.htm [1997. October]

b Source: Adapted from Nua Internet Surveys. Available: http://www.nua.ie/surveys/index.cgi

LITERATURE REVIEW

ıthor: Adeline Chua, MMU Malaysia

[2002, September]

^c Source: Adapted from ClickZ Network. Available: http://www.clickz.com/showPage.html?page=stats/web_worldwide [2005, December)

The Internet as a Shopping Medium

90 a

These days, it is hard to imagine life without the Internet. The Internet has become so ingrained in our lives to the extent of being our shopping haven through an electronic system known as "e-commerce". E-commerce introduces a new relationship between traders and consumers through electronic media by mediating complete retail transactions. One of the most stunning aspects of the past few years has been the speed at which e-commerce has expanded and matured. According to Pyle (1996), e-commerce is even well received by the business community and consumers, stating that "its global connectivity opens up new avenues for business in a manner that traditional commerce conduits cannot match." Coincidentally, according to Yang et. al. (2003), the outlook for e-commerce remains positive.

The emergence of e-commerce and online shopping represents a significant change in the shopping environment. However, there is a need for a "better understanding of the Web user" and e-shopping (Korgaonkar & Wolin, 1999). Since the Internet has been well adopted as a medium of communication, people willingly go online to make purchases. In addition to that, consumers are also spending more time looking for product and service information (Joines, Scherer & Scheufele, 2003). CyberAtlas (2000a, b) reported that 58 % of households who use the Internet spend time online searching for information on products and services. Another study conducted by E-Marketer (2000), found that 23.7 % of the Internet users' spent their total online activities learning about products and services.

Growth of Online Shopping in Malaysia

Today the highest growth of Internet users is taking place in Asia. Asia Pacific will become the largest region with a prediction of 242 million Internet users in 2005. A survey carried out by Taylor Nelson Sofres (TNS) Interactive (2002) showed that only 3 % of Malaysian Internet users have shopped online in May 2002, a dip of 1 % compared to 4 % in 2001 (Global E-commerce Report Malaysia, 2002). Reasons cited were reluctance to shop across borders, mistrust of new dot com brands and most importantly security issues. However, a higher Internet usage incidence was noted, thus paving the way for possible opportunities of the Internet. This suggests a positive outlook for overall Asia Pacific e-commerce retailers.

As online retailers scramble to fight for online presence on the Internet - Cyberspace's virtual global shopping paradise, consumers (Internet users) are dumbfounded with even more choices to make. It is every online retailer's dream to not only own and reap benefits from a booming Internet-based business, but also to influence repeat customers whilst building a strong virtual recognition over the Net. However, the ultimate purchasing power is in the consumer's hands, naturally.

Further findings that show 7 % of current Malaysian Internet users plan to shop online within the next 6 months suggests that consumers are open to the idea of extending their shopping behaviour to online patronage (Global E-commerce Report Malaysia, 2002). Thus, it is the retailer's duty to influence the consumer's shopping orientation while sustaining their confidence in the Net. At the end of the day, both parties are in for a win-win situation; the retailer achieving positive sales results, while the consumer's needs are fulfilled.

Malaysian's Web Navigation Behavior

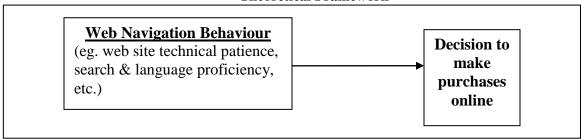
How well an Internet user navigates his or her way through the Internet may play an important role in predicting a consumer's online buying behavior. Certain factors such as patience in waiting for a web page to load may test his behavior towards online shopping. Information search and language proficiency are also contributing variables to his or her web navigation ability as a whole. Navigating and evaluating information online can be quite daunting. However, Ward and Lee (2000) noted that consumers should become more proficient at searching for information online as they gain more experience with it. For example, while searching for information from search engines, directories and portals are skills developed with use. Hoffman and Novak (1996) added that a certain amount of experience is needed before one developed the proper skills to flow in an intermediated environment such as the Internet. Thus, increased proficiency decreases the cost of gathering and evaluating information, specifically product information. Consequently, reliance on brand names should likewise decrease. However, consumers can still reply on well-known brand names as shortcuts when evaluating the credibility of different products. Nevertheless, increased Internet experience would not make consumers more proficient at surmising the quality of a product from brand names. Thus, Ward and Lee (2000) adds that the "price" of searching, relative to using brands, falls with increasing Internet experience – and if substitutes exist – more experienced consumers should rely on brands even less.

Rowley and Slack (1998) suggests that there are two groups of user profile. Treating the Internet as a public access information system, the authors go on to explain that this system exhibits different types of challenges in respect of both the user profile and task. The first category of users is those who have a wide range of different educational backgrounds and levels of experience with the system. These users range from being subject domain novices and computer novices all the way to subject experts and computer experts. However, a large proportion of the population of users is naïve, and new users who need to be able to adapt quickly to different systems. Many of these users are also subject novices and their system use is constrained by their inability to appreciate what the system can be expected to contain.

Theoretical Framework

Several researchers have attempted to build numerous models to explain the driving factors influencing purchasing over the Internet as an issue which is particularly relevant in the context of predictions regarding electronic shopping in the future. The most fundamental exchange model viewed the exchange process as a social influence process (Bagozzi, 1974). Social influence, social characteristics of actors and third party effects are critical antecedents of the characteristics identified in the social exchange model. In other words, the characteristics of the consumers and online sellers affect the propensity to engage in an online transaction. This paper's theoretical framework is shown in Figure 2 below:

Figure 2
Theoretical Framework



RESEARCH METHODOLOGY

Results of the study are based on a sample collection of 215 respondents. The demographic profile indicates that the respondents were predominantly male (51.2 %), Chinese (71.6%), unmarried (77.2 %), fairly young (74.9 % in the age bracket of 19-29 years). Most of the respondents are also relatively highly educated (81 %), white-collared workers (78.6 %) with an average income bracket of RM1501-RM3000(42.8 %). A majority of the respondents (79.5 %) have at least 4 years of Internet experience or more, concurrent with the inception of the World Wide Web in the mid nineties in Malaysia, just as the Internet was starting to become more popular. This also indicates that respondents of this study are fairly experienced users of the Internet. In addition to that 53 % of the respondents primarily access the Internet from the office, followed by a 37.7 % access from home. This is no surprise, as most of the respondents from the study are white-collared employees, thus having more opportunity to access the Internet from their offices. Nearly nine in every ten (86.5 %) of the people surveyed have personal e-mail accounts or addresses.

RESULTS AND DISCUSSION

Table 1 shows several statements that examine the various web navigation behaviors that respondents may have when surfing the Internet for product information. Respondents were allowed to select more than one option. Hence, percentages may sum up to more than 100 %. The statements were organized in descending order starting with the statement in which the respondents feel most strongly about.

Approximately 83 % of the respondents of the study strongly agreed that the Internet was a faster source of getting product information, compared to other channels of information, such as television or newspapers. Perhaps the Internet garners such strong support as a foremost information hub as it not only combines several mediums together (print, audio, motion), but offers up-to-date information and interactivity as well (Schenkman & Jonsson, 2000; Kim & Lee, 2002). Thus, it is not surprising that a strong 81.4 % of the respondents liked browsing the Internet because of its 24-hours online availability. In a similar vein, more than three-quarters (76.7 %) of the respondent enjoy accessing the Internet for the latest news and information. Thus, it can be said that the Internet is enjoyed mostly because of its speed, convenience and up-to-date information.

Table 1
Web Navigation Behavior Statements

Web Navigation Behavior			
	A little	Neutral	Much
Total respondents (n=215; %=100)	(%)	(%)	(%)
The Internet is a faster source of getting product information	1.9	14.9	83.2
I like browsing the Internet because of its 24-hours online	3.3	15.3	81.4
availability, everyday			
I like to access the internet for latest news and information	4.7	18.1	76.7
Working my way around the Internet with a computer is fun	7	26	67
I experience no restriction in browsing the Internet	13	26	60.9
When it comes to the Internet, I believe I really do know a lot	18.1	35.8	46
Compared with most other people, I know pretty much about	23.7	40.5	35.8
the Internet than them			
I have enough knowledge of digital signatures to qualify me	37.2	37.7	25.1
to make a safe online purchase			
Among my circle of friends, I can be considered as one of	37.2	38.6	24.1
the "experts" or "gurus" weaving my way around the Internet			

Respondents were neutral about their knowledge of the Internet, if compared to other people (40.5 %). Perhaps Malaysians are moderately humble when asked to rate their knowledge regarding their computer or Internet skills, even if they do know a lot in reality. Nevertheless, this correlates with the majority 37.2 % of the respondents who disagree that they may be considered as one of the "experts" or "gurus" among their circle of friends when it comes to weaving their way around the Internet. The same percentage of respondents (37.2 %) also strongly disagrees that they have enough knowledge of digital signatures to qualify them to carry out a safe purchase online. However, this contradicts the 37.7 % of people whose feelings about the same statement were neutral. This can only mean that although Malaysians have sufficient knowledge of the Internet, they may too humble to admit it. However, they may feel otherwise when the more detailed aspects of the Internet functions are pointed out to them, such as digital signatures.

Information Search Behavior

When asked about their information search behavior in more detail, a majority of the respondents (33.5 %) felt somewhat comfortable with their level of Internet usage. This is a very positive sign, seeing that the Internet boom just started in the late nineties in Malaysia, but the trend of getting online and learning to be comfortable with the existence of a new media is sweeping like fire. In particular, a 24.7 % of the respondents are very confident with their level of Internet usage comfort. This further proves that Malaysian consumers are not left out of the progressive online market and may finally be accepting the fact that the Internet is already playing a major role in their lives.

Regarding the respondents' satisfaction with their Internet skills, more than half (63.7 %) of them claim to be somewhat satisfied with it. They strongly feel that their current skills are enough to allow them to carry out most of the tasks that they want to do online. This indicates that most Malaysians are confident with their Internet- maneuvering skills, and are not afraid to admit so. This is a good sign for online marketers, as they are assured of a promising group of consumers who are already Internet-literate, thus paving a wider avenue to attract them to shop online. When asked about the respondents' frequency of searching for product information online, a majority 36.3 % of the respondents profess that they do it

monthly. However, almost 24 % of them do not even bother searching for product information online. In contrast, only 11.2 % of the respondents make it a routine to search for product information online two or three times a week, while 4.2 % of them habitually do so everyday. This may mean that although most of the respondents have access to the Internet everyday, they might be using it for other purposes, such as checking e-mails, chat or accessing daily news (Udo, 2001). Only a small percentage of them take advantage of the Internet to search and read up information regarding the products that they want to buy.

Time Taken for First Information Search

Table 2 clearly depicts the time respondents take to search before they find the first useful information online. The table reports a cross tabulation for the amount of time respondents take in finding the first useful product information with their Internet experience. Past researches have theorized that more experienced Internet users should be more proficient at seeking product information, adding that there is a general trend towards less time taken for more experienced Internet users (Ward et. al, 2000).

Looking at table 2, a majority of the respondents (33 %) take between five to fifteen minutes to reach the first useful information, with most of them being respondents who have more than four years Internet experience (35.7 %). Co-incidentally, a majority of respondents from this category (more than 4 years Internet experience) also take the same amount of time to find the first useful information (5-15 minutes). For respondents with at least three to four year Internet experience, a majority of them only managed to find the first useful information after 15 to 30 minutes (40.91 %). Further, for respondents with at least two to three years Internet experience, most of them find the first useful information after 30 to 60 minutes (disregarding the six respondents in the "Don't Know" category). These results suggest that search proficiency increases with experience. Respondents who have more Internet years of experience are more likely to find the first useful information in the quickest possible time. This is in line with a study carried out by Ward et. al (2000), which revealed that there is a general trend towards both more success and quicker searches for more Internet experienced users.

Table 2
Time Taken to Search for 1st Useful Information

Time to search	Internet Experience								
1st useful info	< 1 year 1-2 yrs 2-3 yr		2-3 yrs	3-4 yrs	> 4 yrs	Total			
Less than 5 minutes	0	0	0	1	19	20			
	0.00 %	0.00 %	0.00 %	4.55 %	11.11 %	9.30 %			
5-15mins	1	2	2	5	61	71			
	50.00 %	66.67 %	11.76 %	22.73 %	35.67 %	33.02 %			
15-30mins	0	0	3	9	42	54			
	0.00 %	0.00 %	17.65 %	40.91 %	24.56 %	25.12 %			
30-60mins	0	1	5	4	23	33			
	0.00 %	33.33 %	29.41 %	18.18 %	13.45 %	15.35 %			
More than 60 minutes	0	0	1	1	6	8			
	0.00 %	0.00 %	5.88 %	4.55 %	3.51 %	3.72 %			
Don't Know	1	0	6	2	20	29			
	50.00 %	0.00 %	35.29 %	9.09 %	11.70 %	13.49 %			
Total	2	3	17	22	171	215			
	100 %	100 %	100 %	100 %	100 %	100 %			

Online shopping success rate

Table 3 reports a cross tabulation for the respondents' claim of online shopping success rate in finding the product or service information they are looking for with Internet experience. It is assumed that more experienced Internet users will encounter a higher rate of success in their search for the particular product information (Ward et. al, 2000). Looking at the table below, the percentage of people who are successful in their online shopping success rate more than half the time (combining the "Most" and "All" categories) rises from 17.7 % for those with two to three years' Internet experience to 27.3 % for respondents with three to four years' Internet experience to finally, a whopping 31.6 % for respondents with over four years' Internet experience.

The notion that the online shopping success rate increases with experiences is further strengthened with the following derived results from the table below. A strong majority (32.8 %) of the respondents with over four years' Internet experience encounter a 50 % online shopping success rate, compared to a majority (41 %) of the respondents with three to four years' Internet experience encountering a mere success rate of only 25 % of the time.

Table 3
Online Shopping Success Rate

% success	Internet Experience							
	< 1 year	1-2 yrs	2-3 yrs	3-4 yrs	> 4 yrs	Total		
None	0	0	1	1	2	4		
(0 % of the time)	0.00 %	0.00 %	0.00 %	4.55 %	1.17 %	1.86 %		
Few	0	3	5	9	44	61		
(25 % of the time)	0.00 %	100 %	29.41 %	40.91 %	25.73 %	28.37 %		
Half	0	0	5	4	56	65		
(50 % of the time)	0.00 %	0.00 %	29.41 %	18.18 %	32.75 %	30.23 %		
Most	0	0	3	6	49	58		
(75 % of the time)	0.00 %	0.00 %	17.65 %	27.27 %	28.65 %	26.98 %		
All	0	0	0	0	5	5		
(100 % of the time)	0.00 %	0.00 %	0.00 %	0.00 %	2.92 %	2.33 %		
Don't Know	2	0	3	2	15	22		
	100.00 %	0.00 %	17.65 %	9.09 %	8.77 %	10.23 %		
Total	2	3	17	22	171	215		
	100 %	100 %	100 %	100 %	100 %	100 %		

Time taken to give up search

Table 4 basically tests the patience of the respondents of this study, by cross tabulating the time before a respondent gives up the product or service search with his or her Internet experience. Here, the theory that search proficiency increases with experience may have uncertain implications pertaining to the results of the table. Although it is theorized that an experience Internet user would give up faster if they expect more results quickly, they may also be willing to search longer if they are confident of a sure success, as indicated in the study carried out by Ward et. al (2000). However, after looking at the results below, the results indicate a statistical significant difference across respondents with different levels of Internet experience. The percentage of respondents with three to four years' Internet experience giving up within 30 minutes dropped from 27.3 % to 25.2 % for those with over four years' Internet experience. Thus, this means that the more experienced or proficient Internet users are willing to spend more time searching for information, if they are sure of an eventual success. Generally, most of the respondents

irregardless of their years of Internet experience tucked underneath their belt - tend to give up their search after 15 to 30 minutes of not being able to find any useful information.

Table 4
Time Taken to Give up Search

Time to give up search			Internet E			
	< 1 year	1-2 yrs	2-3 yrs	3-4 yrs	> 4 yrs	Total
<5mins	0	0	0	2	3	5
	0.00 %	0.00 %	0.00 %	9.09 %	1.75 %	2.33 %
5-15mins	0	1	1	1	33	36
	0.00 %	33.33 %	5.88 %	4.55 %	19.30 %	16.74 %
15-30mins	1	1	7	6	43	58
	50.00 %	33.33 %	41.18 %	27.27 %	25.15 %	26.98 %
30-60mins	0	1	2	3	39	45
	0.00 %	33.33 %	11.76 %	13.64 %	22.81 %	20.93 %
>60mins	0	0	2	3	30	35
	0.00 %	0.00 %	11.76 %	13.64 %	17.54 %	16.28 %
Don't Know	0	0	2	6	15	23
	0.00 %	0.00 %	11.76 %	27.27 %	8.77 %	10.70 %
NA	1	0	3	1	8	13
	50.00 %	0.00 %	17.65 %	4.55 %	4.68 %	6.05 %
Total	2	3	17	22	171	215
	100 %	100 %	100 %	100 %	100 %	100 %

Type of Product Information Sought After

The majority of the respondents (80.5 %) chose "detailed product information" as their most important option. This shows that they value comprehensive product information, thus seeing it as a prerequisite to their decision whether to purchase online or not. Price comparisons ranked second (72.6 %) after product information, thus indicating that respondents saw price as rather significant in their decision making process. More than half of the respondents (56.3 %) went online to ascertain the availability of a particular product or service was available online or not. Lastly, 42.3 % of the respondents went online to look up for the location of the nearest store to them; in order to purchase the products that they wanted.

These results indicate that respondents know how to maneuver their way to search the desired information online, paying particular attention to information concerning the product itself, for example the styles, designs, models or functions offered. Perhaps going online to search for such information is a better way for the respondent to make an informed decision, since they can take as much time as they want at their own leisure and comfort to browse through the product offerings. This cannot be done at a physical retail outlet, as one would be intimidated by annoying sales people who would tell you untruthful or useless information, or be affected by the store's aesthetics like glaring bright lights, non-functioning air conditioners and unfriendly operating hours. In addition to that, one would also be store-averse, if it is a crowded store (Kaufman & Lane, 1996; Burton, 1999).

Respondents seem to be rather affected by prices (72.6 %), thus preferring to search for price comparisons across online web sites that offer the similar product. It is easier to evaluate prices online, rather than physically move about from actual store to store itself, as it may be tiring and unsuccessful.

Doing it all online saves the consumer time and cost, offering convenience and anonymity instead as evidence in a study carried out by Parsons (2002) and Swaminathan et. al (1999). Parson (2002) noted that a total of 7 % of the consumers interviewed were delighted with the anonymity offered by the Internet, as it allowed them to pursue online shopping that traditionally would not be their role, e.g. shopping for children's clothes by fathers.

Dissatisfying Online Experiences Encountered

One of the most common unpleasant experiences encountered was the slow downloading of web sites (46 %). This is in line with a Singaporean study conducted by Yang et. al. (2003) that concluded that one of the most important factor for consumers to take into consideration when evaluating a web site was downloading time. Long download times increase frustration levels, cause consumer dissatisfaction while contributing to negative attitudes and perception of the web site among consumers (Yang et. al., 2003). The next major concern was the disorganized or confusing web site features (32.1 %) respondents face when surfing online. Nearly 30 % of the respondents felt that their online experience was dissatisfying because they failed to find what they were looking for. Other notable bad experiences were web pages in a foreign language (24.7 %), obnoxious/ annoying/ outdated web sites (23.7 %), incomplete/ misleading product information (22.3 %), unreasonable price/ misleading product information (20 %) and poorly designed web pages (19.1 %). Interestingly, only 29.3 % of the respondents claimed to not have encountered any dissatisfying experience during their online experience.

The top two dissatisfying experiences encountered by respondents involve the technical aspect of the whole online experience. Thus, this indicates that online sellers should pay more attention to the technical functions when designing their web sites, in order to ensure that the consumer enjoys a smooth and problem-free experience. Important aspects such as web site features, functions and speed of downloading should be taken into serious consideration when designing a web site (White & Manning, 1998). This is because if a consumer is assured of a comfortable and enjoyable web site-surfing experience, the chances of persuading them to buy something online would be higher (Kim et. al, 2002).

Frequency of Visiting Web Sites of Actual Existing Stores

Surprisingly a majority of the respondents of this study (33 %) rarely visit the online presence of physical retail outlets normally visited. Only 23.3 % of them visit the web sites of physical stores sometimes, while merely 6 % of the respondents visit the web sites often. Interestingly, 8.4 % of the respondents did not know that there were web sites for the physical retail outlets they usually visit, while 6.5 % of the respondents were aware that they favorite stores did not have web sites for them to visit. This could have indicated that some of the respondents would have liked to visit the web sites of their strongly frequented actual stores, if it exists. Thus, this is a clear sign for online marketers do critically consider the option of building an online presence for their physical existing stores, in order to enhance the consumer's whole shopping experience.

CONCLUSIONS

This study has also successfully proven that web navigation behavior is important in determining the probability of someone purchasing online, as it does significantly affect the respondents' decision to purchase online. An IDC report in 2002 stated that it was relatively expensive to gain access to the Internet, thus causing a huge social demographic gap between the urban and rural areas in Malaysia. However, with the Malaysian government's intervention, it is relatively becoming cheaper to get online and surf the Internet. With a handful of Internet Service Providers players in the market such as TmNet, Jaring, Time and Nasion.com, these companies should focus on how to further induce sales by promoting even more attractive and affordable Internet packages to further encourage consumers to get online.

Furthermore, with the advent of wireless technology providing online access "hot spots" like TmStreamyx, AirZed, Timezone and Webbit, online surfing has been brought to a completely different level, enabling consumers to surf the World Wide Web not only from their homes and offices, but anytime and anywhere. In addition to that, with the advent of broadband services in Malaysia (Telekom

Streamyx, Jaring Netcelerator, Time Homenet are such examples), Internet users can now easily access the Internet for as long as they desire by paying a flat rate each month, with improved speed and connectivity. Thus, consumers are getting fussier as they are made aware of such technologies available and enhanced services that come with it for a reasonable price.

This group of surfers is seen to be better informed, sophisticated and skilled. As a result, they are more demanding for better service from their Internet Service Providers (ISP) for the price paid, and would easily voice their discontent if the service given does not meet the expected level. Furthermore, these consumers may just refrain from voicing their displeasure and quietly abandon their commitment to the current ISP, effortlessly switching to another ISP competitor. Consequently, as seen from the results of the study, the slow downloading of web pages seems to be the strongest issue in the list of dissatisfying Internet experiences. Thus, Internet access speeds have to be also improved to a level fast enough to meet or exceed the consumers' expectations. Online marketers should realize that it is important that web pages take as little time as possible to download. Online users are not willing to tolerate delays associated with delivering the intended graphics, audio, animation, video and text. If the web page takes too long to download, this may irritate the users to the point of abandoning the website.

Marketers should also carefully select the web designing company who will create their web page for them. They should bear in mind that the level of hits produced, and subsequently potential sales received does depend on the whole outlook of a web page and the functions provided.

Web pages should not follow a typical paper catalogue format. Thus, some of the ways to help improve the outlook and features of a web site would be to make it as user-friendly as possible by clearly exhibiting the functions available on the page. Color co-ordination is also crucial, as some surfers do get put off by loud glaring or mismatched colors of a web site, automatically making their surfing experience at that particular site an uncomfortable one.

The layout of the whole web page is also important, such as displaying clear and proper headings, controlling the amount of animation as not to clutter the page, as well as establishing proper links or include a site map to make sure that the user does not get "lost" when he or she clicks the links provided at the web page. More interactive and reactive components like customized recommendations for customers based on their purchase history, or the opportunity for customers to review products and make recommendations to other customers visiting the site should be considered as well. Research has proven that the more interactive the web site is compared to competitors, the more likely that site would be included in Lycos' "top five percent site hits" (Yang, et. al, 2003; Ghose & Dou, 1998). Furthermore, consumers would be more encouraged to revisit a web site they can interact with (Kolsar & Galbraith, 2000).

Other additional features that the web designer should consider is including an FAQ (Frequently Asked Questions) section to provide rapid answers to questions by users, especially information regarding security of transactions, return procedures, payment and credit policies, shipping and handling costs, guarantees and quality assurance (Kim, et. al, 2002; Yang, et. al., 2003). Moreover, essential information such as reachable telephone numbers, fax digits and e-mail addresses should not be forgotten to provide ease of communication. Marketers should also periodically gather feedback via surveys on customer satisfaction (Joines, et. al., 2003).

Other ways that may also help popularize a web page is by procuring top placement in the results of search engine queries by manipulating content of web pages. Marketers should also consider supplementing web advertising of their line of products with traditional advertising (publications) in daily newspapers and magazines. There are plenty if ways to improve the marketability of a web site. The bottom line is to continuously improve the Internet channel and to have a sense of willingness to innovate while maintaining a clear focus on what delivers value to customers.

The findings of the study have also provided some insight on certain information that should be incorporated when designing a web site to market products. Functions such as toolbars for easy navigation, attractive but user friendly web site layout and faster downloading time should be taken into consideration when designing web sites.

A few words of caution should be in order. The present findings of this study are mainly exploratory in nature, thus making it inappropriate to generalize too far from a single study. This study merely provides some preliminary results regarding a set of variables that may affect the adoption of online purchasing culture in Malaysia, while displaying the differences between the current online shoppers and non-online shoppers in Malaysia, in an attempt to identify potential target groups among Malaysian Internet users. Secondly, a selection bias may have affected the findings of this study. Only respondents who owned at least one e-mail address were selected to participate in the study. Thus, a selection bias may limit the generalizability of the findings.

REFERENCES

Bagozzi, R.P. 1974. Marketing as an organized behavioural system of exchange. *Journal of Marketing*, 38 (October): 77-81.

Burton, D. 1999. Postmodernism, social relations and remote shopping. *European Journal of Marketing*, 36 (7/8): 792-810.

Cyber Atlas. 2000a. Half of US households use PCs. Available at: http://cyberatlas.internet.com/big_pictu . . . raphics/print.html

Cyber Atlas. 2000b. Increase seen in internet shopping. Available at: http://cyberatlas.internet.com/big_picture/demographics/article.html

E-Marketer. 2000. E-marketer study reports on Web diversity. Available at: www.emarketer.com/estats/022800 over.html

Ghose, S. & Dou, W. 1998. Interactive functions and their impacts on the appeal of Internet presence sites. *Journal of Advertising Research*, 38 (2): 47-59.

Hamilton, A. 2000. Meet the new surfer girls. *Time*, 21 August: 67.

Hassan, H. 1997. *Utusan Malaysia – Utusan Megabait*. Available at: http://www.jtm.gov.my/JTM/isp.htm

Hoffman, D. & Novak, T. 1996. Marketing in hypermedia computer-mediated environment; conceptual foundations. *Journal of Marketing*, 60: 50-68.

International Data Corporation. 2002. IDC: Widening gap in Malaysian internet use. Available at: http://www.idc.com.my

Joines, J.L, Scherer, C.W. & Scheufele, D.A. 2003. Exploring motivations for consumer web use and their implications for e-commerce. *Journal of Consumer Marketing*, 20 (2): 90-108.

Kaufman, C.K. & Lane, P.M. 1996. A new look at one-stop shopping: a TIMES model approach to matching store hours and shopper schedules. *Journal of Consumer Marketing*, 13 (1): 4-25.

Kim, J.W & Lee, J.W. 2002. Critical design factors for successful e-commerce systems. *Behaviour & Information Technology*, 21(3): 185-199.

Kolesar, M.B. & Galbraith, R.W. 2000. A services-marketing perspective on e-retailing: implications for e-retailers and directions for further research. *Internet Research: Electronic Networking Applications and Policy*, Vol. 10 (5), pp. 424-38.

Korgaonkar, P.K. & Wolin, L.D. 1999. A multivariate analysis of web page usage. *Journal of Advertising Research*, 39 (2): 53-68

Nua. 2002. Nua internet how many online. Available at

:http://www.nua.ie/surveys/how many online/index.html

Nua. 2001. Global internet audience increases. Available at

http://www.nua.ie/surveys/index.cgi?f=VS&art_id=905357762&rel=true

Nua. 2001. A quarter of Malaysia online by 2005. Available at: http://www.nua.ie/surveys/index.cgi?f=VS&art_id=905357198&rel=true

Parsons, A.G. 2002. Non-functional motives for online shoppers: Why we click? *Journal of Consumer Marketing*, 19 (5): 380-392.

Pyle, R. 1996. Electronic commerce and the Internet. Communications of the ACM, 39 (6): 22-24.

Rowley, F. & Slack, F. 1998. Designing public access systems, Gower: Aldershot.

Schenkman, B.O & Jonsson, F.U. 2000. Aesthetics and preferences of web pages. *Behavior and Information Technology*, 19(5): 367-377.

Swaminathan, V., Lepkowska-White, E. & Rao, B.P. 1999. Browsers or buyers in cyberspace? An investigation of factors influencing electronic exchange. *Journal of Computer Mediated Communication*, 5 (2).

Taylor, N., & Sofres, I. 2002. *Global e-commerce report Malaysia 2002*. Available at :http://www.tnsofres.com/ger2002/keycountry/malaysia.cfm

Udo, G.J. 2001. Privacy and security concerns as major barriers for ecommerce: a survey study. *Information Management & Computer Security*, 9(4): 165 – 174.

Ward, M.R & Lee, M..J. 2000. Internet shopping, consumer search and product branding. *Journal of Product and Brand Management*, 9 (1): 6-20.

White, G.K. & Manning, B.J. 1998. Commercial WWW site appeal: How does it affect online food and drink consumers' purchasing behavior. *British Food Journal*, 100 (9): 413-418.

Yang, X., Ahmed, Z.U., Ghingold, M., Goh, S.B., Tham, S.M. & Lim, L.H. 2003. Consumer preferences for commercial web site design: an Asia-Pacific perspective. *Journal of Consumer Marketing*, 20 (1): 10-27.

BANK CUSTOMER BEHAVIOR PERSPECTIVES TOWARDS INTERNET BANKING SERVICES IN KUWAIT

A.M. El-Sherbini C.P.Rao M. Mohmeed Adel Wugayan Kuwait University, Kuwait E-mail: cprao@cba.edu.kw

ABSTRACT

As banking industry is getting competitive, banks all over the world are forced in adopting a competitive place in the market, in the form of communications and information technology. Internet banking, ATMs (Automatic Teller Machines), telephone banking and PC (personal computer) banking are all in major use now. But, the final success or failure as a strategic management tool depends upon the customer perspectives. This research paper mainly focuses the customer perspectives on internet banking, their perceived importance for it, usage patterns and problems arising on its utilization. The paper also discusses the strategic implications of the research findings as the banks in Kuwait use internet banking as a competitive tool. Internet banking, which is a major part of E-commerce is fast growing, since it is facilitated by the ever increasing number of Internet users world wide. The internet banking phenomenon is expected to grow at an accelerated rate for the foreseeable future. The internet banking growth rate in Kuwait is consistent with the global trend pf increased usage of internet banking. The internet banking phenomenon is expected to substantially change the business model of banking industry globally and locally.

INTRODUCTION

As a consequence of globalization, privatization and liberalization forces shaping world economies, all industries including the banking industry are forced to adopt the emerging communication and information technologies to be competitive in the market place. With ever intensifying competitive pressures, both domestic and international, banks all over the world are forced to be in the forefront of adopting the communication and information technologies to gain competitive advantage. One such phenomenon, which becoming pervasive all over the world in the banking industry is the adoption of internet banking by banks in many countries. Banks are accustomed to introducing innovative distribution systems over the past two decades in the form of ATMs (Automatic Teller Machines), telephone banking and PC (personal computer) banking. In recent years internet banking has emerged as a new distribution system of banking services. According to the 1999 Morgan Stanley Dean Witter report consumer financial services on the Internet are expected to grow at a compound annual growth rate of 34 percent over the next four years. Many banks in many parts of the world including the banks in Kuwait are getting on this bandwagon of Internet banking services at considerable cost. However, ultimately the success or failure of the use of Internet banking as a strategic marketing tool to gain competitive advantage depends upon the perspectives of consumers and their reactions to such Internet banking services. There is limited research dealing with consumer perspectives on Internet banking in general and practically none in GCC (Gulf Cooperation Council) countries including in Kuwait. The major purpose of this research is to empirically investigate the Kuwait bank customer perspectives on internet banking in terms of their perceived importance, usage patterns, and problems perceived in utilizing Internet banking services. In addition, the paper discusses the strategic implications of the research findings for the Kuwait banks for effectively using internet

banking as a competitive model.

LITERATURE REVIEW

E-commerce of which Internet banking is a part is growing very fast. According to a United Nations Conference on Trade and Development (UNCTAD) 2002 report on E-commerce, the worldwide

E-commerce is expected to grow from 2.3 trillion US dollars in 2002 to 12.8 trillion US dollars by 2006. Such phenomenal growth in E-commerce is facilitated by ever increasing number of Internet users world wide. One of the key components of fast growing E-commerce is Internet banking. According to UNCTAD 2002 report on E-commerce, Internet banking is defined as below: Internet banking refers to the deployment over the Internet of retail and wholesale banking services It involves individual and corporate clients, and includes bank transfers, payments and settlements, documentary collections and credits, corporate and household lending, card business and some others" (134).

The Internet banking phenomenon is expected to grow at an accelerated rate for the foreseeable future (UNCTAD, 2002). However, the consumer Internet banking is estimated to be between 5 to 10 percent both in the USA and Europe (UNCTAD, 2002). The rate of current adoption of Internet banking in other parts of the world may be less than that of in USA and Europe. But the same accelerating rating of growth is expected with increased access and usage of Internet by populations in different countries. The trend in Kuwait in this respect is consistent with the global trend of increasing use of Internet banking. On the issue of Internet banking, the executives of National bank of Kuwait (NBK), the leading bank in Kuwait expressed the following opinion in 1998 at a conference on Information Technology (IT).

"In brief, we at NBK view the internet as a strategic delivery channel for our service offerings. Currently, using the internet as a delivery channel serves a niche market given the profile of the average Internet user. Consequently, products and services delivered over this channel will target that niche segment. However, as we look to the future, it is quite evident that with the rapid advances taking place in Web TVs, mobile phones, Net PCs etc., access to the Internet will be open to everyone. It will become as ubiquitous as the telephone is today. As a consequence, the Internet, as a delivery channel will grow in importance over time."(p. 11)

Given such high growth potentials for Internet banking on a global scale considerable research studies have been published dealing with various aspects of Internet banking. The internet banking phenomenon is expected to substantially change the business model of banking industry globally. Morgan Stanley Dean Witter (1999) visualizes three waves of adoption of financial services on the internet: advertising and distribution (first wave), sales and servicing (second wave), and ecommerce (third wave). Some researchers strongly believe that once customers move to full-service Internet banking they are likely to be very loyal to the financial institution (Shesbunoff 2000). In spite of such great potential for building customer loyalty through internet banking, the research studies so far have not paid much attention to consumer behavior issues related to IB related issues. Technological aspects dominate the research stream emerging on lB. Several authors discussed the changing business models of banks by emphasizing how I B is enabling banks to provide a variety of financial services more efficiently and cost effectively. Besides, in prior research it was emphasized that IB enabled banks to customize their products and services to suit each customer thereby engage in micro-marketing practices (Lerew 1999). Other authors (Furash 1999) alerted banks about the pitfalls of slow adoption of IB and not addressing the inherent technical problems in making IB more satisfactory to customers. Several industry organizations conducted general purpose surveys to identify the key demographic characteristics of IB users (GVU-User Survey, 1997), piracy and security issues (Statistical Research 2001). A survey of by the American Bankermagazine (2000) found that both use and satisfaction with IB increased in 2000 compared to 1999. Recently some cross-cultural and global research studies dealing with profiles of Internet buyers in different countries were published (Lynch and Beck 2001, Globerman, Roehl and Standifird, 2001).

In 2001, internet users in the Arab region were estimated at 3.54 million (Ajeeb.com, 2001). The same source estimated 165,000 Internet users in Kuwait. According to insights Research.com (May 2000) the Internet penetration is more than fifteen time higher in GCC (Gulf Cooperation Council) countries than in the rest of Arab region. Thus, the Internet use and hence the potential for TB use in fast expanding in GCC countries including in Kuwait. Responding to such emerging business opportunity and to keep up with competitive trends several banks and financial institutions in Kuwait have started offering IB services. However, in the Arab region in general and in the GCC countries in particularly, there is no systematic research dealing with the key consumer behavior aspects of IB. This paper attempts to fill this gap and attempted to empirically investigate the salient consumer behavior dimensions in relation IB in

Kuwait and point out the implications for developing an effective TB strategy by banks in Kuwait. Given the similarities among the GCC countries in terms of socio-economic conditions, the research findings and their implications for banks' IB strategies in Kuwait can be generalized for the entire GCC region. Given the paucity of research dealing with IB related consumer behavior in the literature, the research findings of this research study will be significant to banking industry in other parts of the world.

Research Objectives

Given the nascent stage of the development of lB in practice and very limited on the subject matter, an exploratory research study dealing with consumer behavior aspects of lB was undertaken in Kuwait banking business context in 2002. At the time of the research investigation several banks and other financial institutions in the country have started offering TB services to their household customers. In view of the introductory stage of lB services and limited penetration of Internet usage in the country, research investigated consumer behavior aspects of those customers who are currently using TB services as well as those who intend to use lB services in future. Research investigated consumer behavior aspects in relation to twenty different types of banking services for which customer can potentially utilize the lB services. Specifically the following are the research objectives of the empirical investigation in Kuwait.

- 1. To investigate extent of use of diverse banking services through TB by current users of IB and future users of IB.
 - 2. To determine the perceived importance of diverse banking services that can utilize lB format.
- 3. To investigate the "gap" between the usage and importance perceived for the diverse Banking services for which IB format can be utilized.
- 4. To determine the intensity of concern in relation to various aspects of using TB services as perceived by customers.
- 5. To investigate bank customers' level of expectation as to the role of Kuwait banks in overcoming IB problems.

RESEARCH METHODOLOGY

Empirical data to achieve the research objectives were gathered from bank customers in Kuwait. As mentioned earlier, several banks in Kuwait started offering lB services facility to their customers. However, given the possibility that some bank customers may be currently using lB services whereas others may be planning to use such services in future, for purposes of this research investigation all bank customers in Kuwait were considered as population of research interest. Research data were gathered by utilizing a structured questionnaire from a representative sample of 750 bank customers in Kuwait. The sample respondents were selected at random times at computer shops, Internet cafes or clubs, shops that sell Internet cards and computers, shopping centers, stock market, Kuwait banks, government offices, professional services etc.

Based on extensive background secondary source research a structured questionnaire was prepared to achieve the research objectives as stated above. The English version of the questionnaire was translated into Arabic language and back translated to ensure the authenticity of the translation process. The questionnaire was pre-tested with a small sample of potential respondents, who are bank customers in Kuwait. Some very minor adjustments were made to over come some semantic problems from the perspectives of respondents. The final questionnaire was utilized to gather empirical data from 750 bank customers in Kuwait. Of the 750 responses, 620 were found to be usable in terms of the completeness of the information provided by the respondents. The data were gathered by using personal interviews conducted by trained interviewers in different geographic locations of Kuwait so that a representative sample can be obtained.

The data were gathered utilizing Likert type scales for the substantive questions. In addition data were gathered about the pertinent demographic characteristics of respondents.

RESULTS AND DISCUSSION

Perceived Importance of Internet Banking (IB) Services

The first research objective refers to the perceived importance of IB services to bank customers in Kuwait. The respondents were provided an exhaustive list of twenty banking services were provided for which they can potentially use TB as a mode of conducting their banking transactions. In relation to these twenty banking services, the respondents were asked to indicate the degree of importance they attach in using IB as a mode of conducing banking transactions for each of the banking services. The respondents were provided with a five point Likert type importance scale ranging from very important to very unimportant. The relevant data both in terms of frequencies and mean values for the twenty banking services were presented in Table 1 (Refer to end of this paper). In terms of mean values, the following are the top five banking services which the respondents considered relative important for using IB format for transacting banking business.

- 1. Review account balance (4.65)
- 2. Obtain detailed transaction histories (4.62)
- 3. Open accounts (4.43)
- 4. Pay bills (4.18)
- 5. Transfer funds between own accounts (3.81)

From the above list of top five banking services which are considered important for IB mode by bank customers in Kuwait, it is significant to note that bank customers are willing to use IB mode of transacting for a variety of banking transactions. However, the top two important bank services are related to merely checking information about customer's accounts. However, it is interesting to note that more than 80 percent of the respondents consider that TB mode is important for opening accounts and paying bills. Similarly, 80 percent of the respondents consider TB mode important for transfer funds between their own accounts. From the diversity of bank transactions for which bank customers consider IB mode important, one may conclude that convenience aspect of TB mode seem to be appealing to both users and potential users TB services.

The following five banking services are considered by the respondents as unimportant in making use of IB mode of transacting banking business.

- 1. Buying insurance (2.56)
- 2. E-trade (buying and selling shares, stocks, mutual funds etc., (3.15)
- 3. Apply for loans (3.23)
- 4. Re-Charging of Smart cards (3.24)
- 5. To issue stop payment requests (3.43)

For the above five banking services which the respondents considered that TB mode as less important, it can be assume that for these types of transactions, they prefer dealing with bank personnel directly rather than using the lB mode of transactions business. Such hesitancy of using lB for these types of banking transactions may be that bank customers either see some problems or perceive high risk in using lB mode. For the other services included in the list of twenty banking services to be evaluated by the respondents for lB mode, more than fifty percent of the respondents considered TB mode is important. This clearly indicates that a significant segment of bank customers are likely to use TB mode of transacting banking business.

Current and Potential Use of IB Services in Kuwait

Given the nascent stage of TB services offered in Kuwait, data were gathered from respondents whether they currently use TB services as well as their intentions to use TB services in future. Detailed for both current use and intended future use were gathered for the twenty banking services for which TB mode can be used by customers. The detailed data on these aspects are presented in Table 2.

Table 2
Current and Potential Use of lB Services in Kuwait

	Now Using Future Use						
Internet Banking Services	No	%	No	High %	Moderate %	Low	Mean
Review the account balance	182	93.8	436	98	1.5	0.5	*473
Obtain detailed transaction histories	167	86.0	453	96.7	2.4	0.9k	4.64
Transfer Funds between own accounts	127	65.5	491	67.7	15.0	17.3	3.73
Transfer Funds to other person's accounts	61	31 .4	557	54.8	22.2	23	3.44
Transfer Funds to other accounts outside Kuwait	78	40.2	538	53.3	21.7	25	3.39
Pay bills	108	55.7	509	69.2	17.3	13.5	3.84
Apply for Loans	5	2.6	611	40.1	21.4	38.5	2.49
Apply for Credit Cards	31	16	585	52.8	16.2	31	3.22
Re-order cheques	46	23.7	572	48.0	26.0	26.0	3.27
Issue stop payment requests	18	9.3	600	47.0	23.0	30.0	3.23
Open accounts	120	61.8	498	89.6	7.8	2.6	4.36
Obtain information about bank services	25	13.0	593	47.5	32.3	20.2	3.36
Issue standing orders (for regular payments)	34	17.5	582	45.4	31.6	23.0	3.3
Issue drafts	15	7.7	601	43.2	31.1	25.7	3.25
Making payments using credit cards	60	31.0	558	59.0	18.0	23.0	3.45
Review credit card transactions	80	41.2	537	65.6	16.0	18.4	3.69
E-Trade (Buying and selling shares and stocks, mutual funds, etc)	35	18	582	31.4	26.4	42.2	2.69
Buying insurance	4	2.0	613	14.5	24.5	61.0	2.23
Electronic Commerce	62	32	552	49.1	20.3	30.6	3.24
Re-charging of Smart Cards	18	9.3	597	41.2	21.0	37.8	9.3
Total	194	100					

^{*} On a scale Ranging from (5) Very High potential use to (1) very low potential use the mean value for the potential use is 4.73.

The data for future intentions to use TB services were gathered by using a five point Likert type scale. Overall 32 percent of the respondents reported currently using the TB services. However, the intensity of use of lB services by bank customers varied across the twenty banking services included for investigation. The following are the top five banking services for which the respondents reported that are currently using TB mode.

- 1. Review the account balance (93.8%)
- 2. Obtain detailed transaction histories (86.0)
- 3. Transfer of funds between own accounts (65.5%)
- 4. Open accounts (61.8%)
- 5. Pay bills (5 5.7%)

The top three services for which TB mode is being used by current users deal with routine and simple types of banking transactions. However, it is worth noting that more than 50 percent of the respondents reported saying that they currently use TB mode for 'opening accounts' and for 'paying bills'

The following five banking services represent the least used lB services in terms of the percentage of respondents reporting such usage.

- 1. Buying insurance (2%)
- 2. Apply for loans (2.6)
- 3. Issue drafts 7.7%)
- 4. Recharging smart cards (9.3%)
- 5. Issue stop payment (9.3%)

For the above types of banking services only less than ten percent of those who are currently using TB mode are utilizing the mode. For many other types of banking services also, the usage rates of lB mode are much lower. From the data presented in Table 2 about the current usage of TB mode, except for routine informational and bill payment purposes, the usage of TB for a number of banking services is still very limited. Such low levels of usage of TB mode clearly indicate that Banks in Kuwait may have to educate their customers to increase the usage rates of the TB services made available. This can be accomplished by addressing the critical concerns of bank customers which are inhibiting the use of TB mode. Table 2 also presents data on respondents' intentions to use TB mode in future for the twenty types of banking services included in the survey research instruments. From the data presented in Table 2, the following are the top five banking services for which the respondents indicated that they use lB mode in future. For measuring the potential use a Likert type five point scale ranting from 'very high potential use' to 'very low potential use' has been used.

- 1. Review the account balance (4.73)
- 2. Obtain detailed transaction histories (4.64)
- 3. Open accounts (4.36)
- 4. Pay bills (3.84)
- 5. Transfer between own accounts (3.73)

It is evident that the intended usage of TB mode as indicated by the top five banking services listed above, that the future intentions of the respondents are in line with the importance attached to banking services for TB mode usage. From correspondence between the importance attached and the future intended usage, one may conclude that TB mode is likely to be used for these services to a greater extent than for other services. Since TB mode can be used for a wide variety of banking services, to fully utilize its potential as a medium of banking transactions, banks have to develop and implement carefully planned marketing strategies to increase the utilization of TB mode among their customers.

The bottom five banking services for which the respondents are less likely to use TB mode are as below.

- 1. Buying insurance (2.23)
- 2. Apply for loans (2.49)
- 3. E-Trade (buying and selling shares, stocks mutual funds etc., (2.69)
- 4. Re-charging Smart Cards (3.0)
- 5. Issue stop payment requests (3.23)

Again interesting one can see correspondence between the least important five banking services and the above five banking services with low potential future use of lB mode. From such correspondence, one may conclude that lB mode may not be used for these types of banking services by bank customers.

IB Mode Importance, Usage and Future Usage

A comparison of the top five banking services in terms of customer perceived importance, actual usage and potential future usage will provide useful insights. From this perspective a comparative profile of the top five banking services is presented below.

Bank Service	Importance		Usage	_	Future Usage
	%		%	-	%
Review Account balance	97.6		93.8		98,0
Obtain detailed transaction histor	ies 96.9		86.0		96.7
Open accounts	88.8	61.8		89.6	
Pay bills	81.2		55.7		69.2
Transfer funds between own acco	ounts 80.0		65.5		67.7

From the above comparison, it is interesting to note that overall a higher percentage of respondents assigned importance than the corresponding percentages under usage and future usage with the exception of banking services 'review account balance' and 'open accounts'. Interestingly current usage of IB mode for the last three banking services — open accounts, pay bills and transfer funds between own accounts: the difference between the corresponding percentages under importance and usage is substantial. This research finding indicates that while the bank customers consider that Ib mode is important for certain banking services they are not yet using the IB mode. This may be due to technical problems or psychological hesitancy on the part of bank customers, to use IB mode. Interestingly this trend can be observed with regard to the last two banking services — pay bills and transfer funds between own accounts — between importance and future usage percentages. Thus, the discrepancy between importance of IB mode and its current and future use deserves further research investigation so that banks can design programs to facilitate the use of IB mode to the mutual benefit of customers and themselves.

On the same lines as for the top five banking services, comparative data are presented below for the bottom six banking services in terms of bank customers' perceived importance, current usage and future usage.

Bank Service	Importance		<u>Usage</u>	Future	Usage	
	%	%		%		
Buying Insurance	14.5		29,7	2.0		
Apply for loans	48.0	2.6		40.1		
Issue drafts	26,8		7.7	43.2		
Re-charging Smart cards	23.8		9.3	41.2		
Issue stop payment requests	53.0		9.3	47.0		
E-trade (shares, stocks etc.,)	40.4		18.0	31.0		

From the data presented above, it can be observed for the low importance banking services for using TB mode, importance and future use percentages are much higher than the corresponding current use percentages. This research finding denotes that for these relatively less important banking services currently levels of usage are woefully low. The problems inhibiting the customer usage of IB mode for these services need to be systematically addressed by the banks.

Across all the twenty banking services included for IB mode of use, generally the importance percentages are higher than the corresponding current use and future use percentages. This general findings indicates that while bank customers feel that IB mode is important, they are not using nor plan to use in future to the same extent. The reasons for such discrepancy between the importance and use patterns, both current and future, need to be further investigated and banks take the necessary remedial measures to increase the IB mode usage.

Problems Perceived by Bank Customers in using IB

As discussed in the previous two sections and revealed by the data presented in Tables 1 and 2, it is evident that while bank customers in Kuwait attach more important to a variety of banking services in terms of IB mode use, their actual usage or future intended usage are lagging behind. Such discrepancy between the bank customer desire to use TB mode as reflected in the importance ratings and their actual usage or future intended usage indicates that there may be some potential problems in using the TB mode for banking services. For the banks to develop and implement appropriate TB facilitating programs, it is necessary such problems in using TB mode be investigated from the perspectives of bank customers. In order to achieve this research objective, the respondents were asked to express their degree of concern with thirteen potential IB usage problems. The relevant data are presented in Table 3. From the data presented in Table 3, the following are the top five TB mode usage problems for which the respondents expressed high concern.

Table 3
Problems of Using Internet Banking From Banks Customers'
Perspective

	Le	7.5		
Problems of IB Use	High Concern	Un - decided	Low Concern	Mean
Easiness of the lB to use	73.4	10.8	15.8	* 3.89
Cost of internet connection	65.7	14.5	19.8	3.73
Quality of Internet connection	90.0	6.7	3.3	4.39
Cost of Internet banking charges	75.4	14.3	10.3	4.05
Time consumed in finalizing the transaction by lB	86.7	8.7	4.6	4.32
Security/safety of money (due to fraud, theft, etc).	91.9	5.7	2.4	4.64
Privacy protection	92.1	4.5	3.4	4.60
Need of the computer to be continuously upgraded.	65.6	19.8	14.6	3.76
Losing personal contact with bank employees	54.7	21.3	24.0	3.44
Losing interest in lB in the future	37.4	29.4	33.2	3.08
No real differences from current modes of providing bank services	44.4	30.3	25.3	3.28
Spread of computer viruses	58.3	23.6	18.1	3.67

^{*}On a scale Ranging from (5) Very High concern to (1) very low for the level of concern is 3.89

Problems of lB Usage Level of Concern		Hi Co	<u>ncern</u>	% Mean
Privacy protection Security/safety of money (due to fraud etc.,) Quality of Internet connection	90.0	92.1 91.9	4.39	4.6 4.64
Time consumed in finalizing the transaction				
By lB Cost of Internet banking charges		86.7 75.4		4.32 4.05

The above five concerns of bank customers in TB mode may decrease over time as they become more familiar with its use and the high levels of concern expressed maybe due to the nascent stage of the IB mode of transacting banking business. Especially the first two concerns dealing with privacy and security are likely to reduce in their intensity as the bank customers becomes more familiar with IB mode of transacting and find that there is no need for such concern. These two concerns which ranked one and two can be addressed by the banks in assuring the bank customers that their privacy and security will be protected and thereby their psychological hesitancies can be overcome by the banks. Programs may be designed to assure the bank customers on these two aspects each time IB mode transaction takes place with each customer. Given the versatility of Internet such continuous assurance programs may not be costly. On the other hand such programs will substantially increase the usage rates of TB mode.

The third concern related to quality of net connection is more a technical problems. It is within the purview of banks when they set first up TB mode of transacting business. If the internet connection proves to be unsatisfactory it could do lot of damage in terms of customer enthusiasm to utilize the mode. Hence, it behooves the banks to develop and implement foolproof IB user-friendly system. The fourth concern is related to the issue of convenience in terms of time taken in performing TB transactions. One of the main advantages claimed for TB mode is that it will be more convenient than transacting banking business in traditional ways. This concern may be due to unfamiliarity in using the technology. As in the case of the first two concerned, this concern on the part of customers may reduce with the passage of time and greater familiarity of using the TB mode. But, on the other hand, the technical problems and delays which may result in customers spending more time in transacting through IB mode may have a discouraging effect on the use of IB mode. The fifth ranked customer concern is related to apprehension about the cost of Internet banking charges. Given the fact that TB mode is more cost effective for banks, this should not be a concern for customers. Some educational programs showing that lB mode saves bank charges than the traditional mode of transacting will reduce this concern and increase the usage of TB mode. The above five major concerns and some other concerns for which more than fifty percent of the respondents expressed high concern should be addressed by banks through appropriate IB mode facilitating programs.

CONCLUSIONS

The new communications and information technologies are providing tools to improve customer convenience and at the same time control the costs of operations, especially in service industries including the banking industry. Internet banking one such mode of delivering banking services to customers at low cost and high convenience. While Internet banking is coming into vogue and some research of the related problems are being address, such research is mainly limited to industrially advanced countries. However, Internet banking services are being provided in development countries as well. Internet banking mode of transacting banking business in developing countries is still in its nascent stage. Hence, this exploratory research study investigated the bank customer behavior perspectives towards TB mode in Kuwait.

For a variety of banking services, bank customers in Kuwait indicated a high level of interest to use IB mode as reflected in the importance attached to such use. However, the actual usage levels of IB

more are far below the importance levels indicated by bank customers in Kuwait. At the same time, bank customers in Kuwait indicated higher levels of future intentions to use IB mode. Still the importance attached to IB mode is higher than even the levels of future intention to use TB mode. Such discrepancy between importance of TB mode for banking transactions as perceived by bank customers and the levels of current and future usage of IB mode, it behooves the banks to undertake systematic programs to facilitate the use IB mode.

The research also identified the major concerns of bank customers in utilizing IB mode. Some of the major concerns are related privacy, security, quality of technology, convenience and cost of IB transactions Some of these concerns and hesitancies may be substantially reduced as the bank customers gain experience with IB use. However, to expedite the use of TB mode for which banks invest heavily, it is necessary the banks devise appropriate educational and other promotional programs to reduce bank customer concerns in using IB mode.

REFERENCES

Ajeeb.com. 2001. *Number of Internet subscribers and users in the Region*, March, 2001, Available at: http://eit.ajeeb.com

American Banker. 2000. *Internet banking's popularity increases*, September, 2000. Available at <a href="http://https:

CypertAtlas. 2001. *Online banking leads to higher customer satisfaction*, May, 2001. Available at http://www.ecrmguide.com

Furash, E. 1999. Internet strategy: Why banks may be getting it wrong and how to get it right. *Journal of Retail Banking Services*, Summer: 37-42.

Witter, D. 1997. *The Internet Retailing Report*, May. Available at

http://www.rnorganstanely.com.techresearch.

Nua Internet Surveys. 2001. Arab net population passes 3.5 million. March, 2001Available at: http://www.nua.com. surveys

OECD. 1999. The economic and social impacts of e-commerce. February. Available at:

http://www.oecd.org/subi ect/e-cornmerce

Shesbunoff, A. 2000. Internet-banking: An update from frontlines. *ABA Banking Journal*, (January): 51-53.

Simon, C. & Dashti, R. 1998. Electronic commerce; A Kuwaiti bank's perspective. Paper presented at the *Kuwait Conference on the Information Highway, March 16-18, Kuwait*.

The Economist. 2000. The hollow promise of the internet banking, November 11.

UNCTAD. 2002. E-commerce and development report-2002. Geneva: UNCTAD

Table 1

Perceived Degree of Importance of Internet Banking Services

Internet Banking Services	Importance Degree				Mean
	Important (%)	Neutral (%)	Un important (%)	No	
Review the account balance	97.6	1.6	0.8	619	4.65
Obtain detailed transaction histories	96.9	2.6	0.5	619	4.62
Transfer Funds: Between own accounts	80.0	8.6	11.4	619	4.07
Transfer Funds: To other person's accounts within Kuwait	68.5	16.7	14.8	616	3.81
Transfer Funds: To other accounts outside Kuwait	67.1	17.6	15.3	619	3.81
Pay bills	81.2	11.6	7.2	619	4.18
Apply for Loans	48.0	22.3	29.7	617	3.23
Apply for Credit Cards	61.7	17.6	20.7	618	3.56
Re-order cheques	58	22.5	19.5	619	3.53
Issue stop payment requests	53	23.8	23.2	618	3.43
Open accounts	88.8	8.7	2.4	618	4.43
Obtain information about bank services	60.8	24.9	14.3	619	3.68
Issue standing orders (for regular payments)	61.5	22.8	15.7	618	3.65
Issue drafts	54.3	26.8	18.9	619	3.56
Making payments using credit cards	66.6	16.3	17.1	619	3.74
Review credit card transactions	73.1	11.3	14.6	619	3.96
E-Trade (Buying and selling shares and stocks, mutual funds, etc)	40.4	30.7	28.9	619	3.15
Buying insurance	22.3	29.7	48.0	619	2.56
Electronic Commerce(e.g. buying books, goods etc)	59.8	19.6	20.6	618	3.56
Re-charging of Smart Cards	46.4	23.8	29.8	617	3,24

On a scale raging from (5) very important to (1) very Un important the mean value for the degree of importance is 4.65.

WHAT MAKES ADVERTISING EFFECTIVE: A STUDY ON VIEWER'S PERCEPTION OF PAKISTAN CELLULAR PHONE ADVERTISEMENTS

Noshaba Batool
Federal Urdu University of AS&T, Islamabad, Pakistan
Babar Zaheer Butt
Foundation University
New Lalazar, Rawalpindi, Pakistan
Zahid Mehmood
Federal Urdu University of AS&T, Islamabad, Pakistan

Email: noshabasyed@gmail.com

ABSTRACT

Advertisement is one of the most popular mediums for marketing all over the world. Companies allocate and spend huge amount on advertisement to inform and attract customers. The role of advertisement becomes more vital in highly competitive cellular phone industry. This study attempts to find out different features that makes an advertisement effective according to viewers perception and may influence them while selecting a cellular service. For this purpose, a sample of 250 mobile users was selected that includes students, employees, businessmen and housewives. Four advertisements of four leading Cellular Companies in Pakistan were selected i.e. Mobilink, Ufone, Telenor and Warid. A questionnaire was developed to know the different factors in the advertisement that make an advertisement attractive or effective i.e. jingles, personality, message, product, package, brand logo and overall presentation of the advertisement. The data collected then analyzed using different statistical techniques. The results show that according to customer perception the most attractive and effective features of advertisement are product, package and presentation. Therefore, cellular phone companies must pay attention towards these factors while promoting their offerings.

INTRODUCTION

Advertising is probably the most evident activity of the business today. Though companies allocate and spend huge amount on advertisement to inform and attract customers, little research has been conducted to find out what attracts consumers in an advertisement. This research attempts to find out different factors that contribute towards overall attractiveness and effectiveness of advertisement on consumer perception while using a cellular service. Companies use several features to appeal the consumer's attraction. These advertising appeals refer to the approach used to attract the attention of the consumer (Belch and Belch, 2001). Because of the same target market, the consumer may even be exposed to these ads on the same media vehicles. Thus the companies try to create differentiation on the basis of the advertising execution, which is the way the advertising appeal is presented. This message execution can be decisive for the products that are highly similar in nature. Effectiveness of advertising can be measured in terms of communication impact such as exposure to a message, awareness of a product, attention, and involvement. Most responses can be categorized as perception (seeing), learning (thinking), persuasion (feeling), or behavior (doing).

For last few years mobile phone sector has grown tremendously in Pakistan. Mobile phone connections are one of the most turbulent market environments today due to increased competition and change. Thus it is of growing concern to look at consumer buying decision process and cast light on the factors that finally determine consumer choice between different mobile phone connections. In recent years the adoption of mobile connections has been exceptionally rapid in many parts of the world and especially in Pakistan where cellular phones are now a days almost as common as wristwatches. The most effective tool to attract the customer to your connections is the advertisements. In Pakistan cellular companies have very large advertising budgets. Now a day's company announces different offers to attract customers and to give information to the customer, advertising is the best medium. Kahle and

Homer (1985) found that when the celebrity and product match up we would expect the positive impact on product advertisement affect consumer memory. Marketers also claim that celebrities affect the credibility of the claims made, increase the memorability of the message, and may provide a positive effect that could be generalized to the brand (Cooper, 1984).

An advertising message can be presented in numerous ways; by telling consumers the factual message or information about product, provision of scientific/technical evidences, using personality symbols, musical messages (jingles), fantasy or the ad might be executed as a combination of all tactics. These features of ads have different impact on the memory, perception and buying behavior of the consumers. The current research is focused only on jingle, message, package, advertising product, brand logo, personality and overall presentation of the advertisement.

LITERATURE REVIEW

Mostly companies spent huge budgets on presenting ads, and much less are spent on post evaluating their effects. Researches on the topic revealed that advertising layout and execution affects the consumer's perception of the product image and the way consumers subsequently learn from their product experiences. But it becomes difficult to distinguish the clear preference for a particular feature of ad when it is for the same product and by different brands as Burke and Thomas (1988) examined that retrieved intrusion caused by exposure to advertisements for competing brand creates overlapping effect and this overlap can inhibit retrieval of distinctive ad information when sought elements become inaccessible or are confused with other information in adjacent storage. Increasing the number of ad repetitions increases the recall of the brand names mentioned in the ads. Singh and Rothschild (1983) described that increasing the number of television commercial exposures from one to two to four increases recognition of brand names, product claims, and product packages. In general, ad repetition enhances memory for information contained in the ad, shaping the favorable perception of the product. The researches also provide a notion that the frequency and details about the products shown in the advertisement creates a positive image of the product and its perceived quality.

In addition to the content of the ads, personality shown in the advertisement plays a vital role on viewer's perception. Becker and Murphy (1993) found the use of a properly matched product endorser in advertisements could have a significant impact on consumer's tastes and preferences, by influencing the consumer's perception of product performance and quality. Winer (1999), Cook and Kover (1997), Wells (1993) and Stewart (1992) proposed that when an endorser is used in an ad, the indirect information inferred by the consumer becomes more credible and more relevant. The result is that the consumer has the perception of a higher quality for the advertised product. Since consumers prefer high quality to low quality, the endorsed product is more likely to be purchased. This addresses the questions of why and how consumer behavior is affected by using the right personality in the ads. Advertising showing the old personalities was also viewed as seriously misleading by 45 percent of the sample, and advertising directed at young and middle-aged adults was viewed as only slightly less misleading (Schutz and Casey 1981). Agrawal and Kamakura (1995) estimate that approximately 20% of all advertisements use some form of celebrity endorsement to inform and persuade customers. The cost incurred on celebrity is justified in the fact that theses endorsements act as a vehicle to dramatic communication and amplify the signals aimed at customers.

Apart from the features of the ads, the frequency at which the ad is being shown also influences the perception of the consumers. Viewers perceive heavily advertised product as more quality oriented and capable of fulfilling their needs. Thus frequent provision of information in ads about the product also affects the consumer's perception. Advertising of established products can be a signal of quality, but it should not be considered as a sole or perfect indicator of the quality, rather it may carry uncertainties that can affect consumer's perception and buying behavior (Horstmann & McDonald, 1994). Advertisement should be a source of information for the consumer who can final make a decision to spend their precious money. Subject to the type of product, the rational consumer will seek information about the quality and performance prior to purchase. Much of this information comes from advertising. Thus, consumers want

informative advertisements, which do not just forward, claims to them, but facilitate them in buying decision (Davis, Kay & Star, 1991).

RESEARCH METHODOLOGY

This paper highlights different factors that make an advertisement effective and may influence viewers' decision while selecting a mobile phone service. For this purpose, mobile user responses were collected; the sample size consisted of 250 mobile users from different fields of life. This includes students, employees, businessmen and housewives. The sample was divided in two broad categories that are male and female and further divided into their age groups. The most recent and famous advertisements of four leading mobile companies in Pakistan i.e. Mobilink, Ufone, Telenor and Warid were used in the research.

A questionnaire was developed to collect the information from the respondents. This questionnaire was consisted of different attributes of advertisement like effectiveness of jingles, message, product, brand logo, personality and presentation of the advertisement etc. Respondents were asked to indicate how attractive and effective each advertisement attribute is to them using 5-point Likert scale anchored by "Most Effective (1)", "Much Effective (2)", "Effective (3)", "Less Effective (4)" and "Least Effective (5)".

The questionnaires were distributed among 300 mobile users randomly out of which 250 responded and it took around 40 days to get the entire questionnaire filled. Four advertisements of selected cellular companies were shown to consumers and also attached with the questionnaire. Before the questionnaire was filled by the respondent the purpose of the questionnaire was explained to each of the respondent. Proper instructions were written on the questionnaire but further instructions were given to the respondents in order to fill the questionnaire properly. In order to perform analysis, descriptive statistics were done and for this purpose SPSS was used.

RESULTS AND DISCUSSION

The basic purpose of this study is to analyze different factors or features that viewers perceive make an advertisement effective and might influence their decision making while selecting a cellular service. For this purpose various factors like jingles, message, product, brand logo, personality, package and presentation of advertisement were analyzed using descriptive statistics. Comparison was also made between male and female respondents and results were summarized in following tables.

Table 1
Effectiveness of Jingles in Advertisement (N=250, Min=1, Max=5)

	Me	ean	Std De	viation		Frequency Distribution %		
Company	Male	Female	Male	Female	(7-toiled)	effective	Less & Least Effective	
						to effective	Effective	
Mobilink	3.1205	2.8929	1.3830	1.3264	.214	58.4	41.6	
Ufone	3.1265	3.1071	1.3626	1.3886	.916	53.6	46.4	
Telenor	3.1265	3.0833	1.4488	1.3902	.822	52.4	47.6	
Warid	3.3012	3.0833	1.3187	1.3462	.222	50.8	49.2	

Table 1 shows the results of customers' perception of effectiveness and attractiveness of jingle in advertisement and it is evident from table that more than 50% of respondents consider it effective and important. The mean of female respondents is slightly less than male respondents but there is no significant difference between perception of male and female respondents.

Table 2
Effectiveness of Message in Advertisement (N=250, Min=1, Max=5)

	Me	ean	Std De	Deviation		Frequency Distribution %		
Company	Male	Female	Male	Female	(2-tailed)	effective	Less & Least	
					1	to effective	Effective	
Mobilink	2.9277	3.0833	1.4166	1.3462	.405	60.8	39.2	
Ufone	2.9639	3.1429	1.4137	1.3634	.340	58.4	41.6	
Telenor	2.9157	2.6786	1.4117	1.4409	.214	62.4	37.6	
Warid	3.3012	2.8333	1.1882	1.4042	.010	52.4	47.6	

The above table shows the results of customers' perception of effectiveness and attractiveness of message in advertisement and it is clear from table that more respondents consider message an important factor that makes an advertisement effective. The mean of female respondents is quite similar to male respondents except for Warid where there is a significant difference between the two groups perception as p<.05. According to research findings, people consider message in Mobilink and Telenor advertisement more attractive and effective than other cellular services.

Table 3
Effectiveness of Product in Advertisement (N=250, Min=1, Max=5)

	Mean		Std Deviation			Frequency Distribution %		
Company	Male	Female	Male	Female	Sig (2-tailed)	Most effective to effective	Less & Least Effective	
Mobilink	2.3012	2.5357	1.2527	1.4265	.184	79.2	20.8	
Ufone	2.4940	2.7381	1.1947	1.3091	.141	78	22	
Telenor	2.7108	2.5119	1.2361	1.1973	.226	73.6	26.4	
Warid	2.8133	2.8923	1.3376	1.3799	.660	67.2	32.8	

Table 3 reveals the results of customers' perception of effectiveness and attractiveness of product in advertisement and it is evident from table that majority of respondents perceive product being offered by the company as an important factor that makes the advertisement effective (As 67% to 79% respondents for different services, consider it most effective to effective). The mean of female respondents is almost similar to male respondents and there is no significant difference between perception of male and female groups.

Table 4
Effectiveness of Brand logo in Advertisement (N=250, Min=1, Max=5)

	Mean		Std Deviation			Frequency Distribution %	
Company	Male	Female	Male	Female	(2-tailed)	effective	Less & Least Effective
N. J. 11 1	2.5004	0.5000	4 2042	4 5000			
Mobilink	2.5904	2.5833	1.3842	1.5226	.971	69.2	30.8
Ufone	2.9458	3.0119	1.2023	1.2466	.685	61.6	38.4
Telenor	2.7590	2.8810	1.4819	1.4922	.540	63.6	36.4
Warid	3.3494	3.2024	1.1953	1.3424	.379	54.4	45.6

Table 4 summarizes the results of customers' perception of effectiveness and attractiveness of brand logo in advertisement and it is clear from table that more respondents perceive brand logo used by the company as an important factor that makes the advertisement effective. The mean of female respondents is almost similar to male respondents and there is no significant difference between perception of male and female groups. Among all the brands, people consider brand logo of Mobilink more attractive and effective than other cellular services.

Table 5
Effectiveness of Personality in Advertisement (N=250, Min=1, Max=5)

	Mean		Std Deviation			Frequency Distribution %	
Company	Male	Female	Male	Female	(2-tailed)	effective	Less & Least
				i		to effective	Effective
Mobilink	3.2651	3.3333	1.4020	1.4507	.720	47.2	52.8
Ufone	3.4518	3.3929	1.2138	1.0868	.708	46.8	53.2
Telenor	3.6386	3.1786	1.4020	1.4409	.016	38.8	61.2
Warid	3.7410	3.4881	1.3254	1.4184	.165	31.6	68.4

Table 5 shows the results of customers' perception of effectiveness and attractiveness of personality in advertisement and it is obvious from table that majority of respondents do not consider personality appeared in the advertisement of the companies as effective as other factors in the advertisements. The means of female respondents is quite similar to male respondents other than Telenor where there is significant difference between perception of male and female groups as p value is less than .05. Personalities appeared in Mobilink advertisements are perceived to be more effective than other competitors as their mean is less and having higher percentage of respondents in most effective-to-effective range.

Table 6
Effectiveness of Package in Advertisement (N=250, Min=1, Max=5)

	Mean		Std Deviation			Frequency Distribution %	
Company	Male	Female	Male	Female	Sig (2-tailed)	effective	Less & Least Effective
Mobilink	2.3554	2.2134	1.2061	1.0305	.336	84.4	15.6
Ufone	2.3554	2.1786	1.2061	1.0547	.255	84	16
Telenor	2.4036	2.2976	1.2648	1.1170	.499	81.2	18.8
							1

Warid The above table revealed resulting customs perception of effectiveness and attractiveness of package offered in advertisement and it is obvious from table that majority of respondents perceive package offered by the companies an important factor that makes the advertisements effective (As 76% to 85% of the respondents consider it most effective-effective). The means of female respondents are almost similar to male respondents and there is no significant difference between perception of male and female groups as all p value are greater than .05. People consider package offered by Mobilink and Ufone in their advertisement more effective than other cellular companies.

Table 7
Effectiveness of Presentation of Advertisement (N=250, Min=1, Max=5)

	Mean		Std Deviation			Frequency Distribution %	
Company	Male	Female	Male	Female	(2-tailed)	effective	Less & Least Effective
						to circuive	Litective
Mobilink	2.5964	2.2857	1.4184	1.3224	.096	77.6	22.4
Ufone	2.6928	2.7619	1.3514	1.0712	.660	72	28
Telenor	2.5000	2.3690	1.4678	1.2780	.468	73.2	26.8
Warid	2.7711	2.8452	1.2823	1.3398	.671	66.8	33.2

The above table describes the results of customers' perception of effectiveness and attractiveness of presentation of advertisement and it is evident from table that majority of respondents perceive presentation an important factor that makes the advertisements effective (As 66% to 78% of the respondents consider it most effective-effective). The means of female respondents are almost similar to male respondents and there is no significant difference between perception of male and female groups as all p value are greater than .05. People consider presentation of Mobilink advertisement more effective than other cellular companies.

From above results it is very much clear that people perception about effectiveness of different factors of advertisement vary considerably. They perceive message, product, package and presentation of advertisement more important features that make an advertisement effective (As means of these factors are less and majority of respondents in the range of most effective to effective). Substantial number of people also consider jingles, brand logo and personality as an effective factors but not as important as the other four. It is also obvious from results that people perceive Mobilink advertisement more effective than other competitors. Moreover, there is no significant difference between male and female respondents as in most of results means of female respondents are close to male respondents except on one or two points.

CONCLUSION AND RECOMMENDATIONS

In this paper different factors were analyzed which make an advertisement effective and attractive and may influence customer decision while selecting a cellular phone service. The analyzed factors were message, jingles, product, brand logo, personality, package and presentation of the advertisement. From above results it can be concluded that message, product, package and presentation of the advertisement are the factors, which mobile users perceive more effective and attractive. The above results also suggested that Mobilink advertisement is considered more effective by the customers than other cellular companies in the industry. These results also support the claim of Mobilink Company as the largest and popular cellular company of the Pakistan.

The results of this study are not only beneficial for the cellular companies operating in Pakistan but in other countries as well. As we have found that people consider message, product and package in the advertisements as an important factor, so it is recommended that cellular companies not only present their advertisements effectively, they should also offer attractive product and package to the customers because customers perceive product and package offered by the companies an integral part of their promotional program. A good presentation and attractive message, product and package will make an advertisement effective.

We studied different factors or attributes that make an advertisement effective and made a comparison between male and female respondents by focusing on cellular phone companies in Pakistan. In future some other factors can be considered to measure the advertisement effectiveness and some other statistical tools can be used to analyze advertisement effectiveness.

Limitations of the study

The scope of the study is limited to the advertisements of cellular phone companies only. Thus the results may not be generalized on advertisement of different other products. The sample was taken from only one geographic area. The viewers of other geographic areas may consider various other elements of advertisement more effective. However, the results of research can be generalized if a cross industrial or multi products advertisements are taken into considerations. Therefore, it is recommended that the future researchers should apply this research on other industries so that the results can be generalized confidently.

REFERENCES

Agraval, J. & Kamakura, W. A. 1995. The economic worth of celebrity endorsers: An event study analysis. *Journal of Marketing*, 59: 56-68.

Becker, S. G. & Murphy, M. K. 1993. A simple theory of advertising as a good or a bad. *Quarterly Journal of Economics*: 941-964.

Belch G. E. & Belch M. A. 2001. Advertising and promotion: An integrated marketing communication perspectives. NY: McGraw-Hill.

Burke, R. & Thomas, K. S. 1988. Competitive interference and consumer memory for advertising. *Journal of Consumer Research*, 15:55-68.

Cook, W. A., & Kover J. A. 1997. Research and the meaning of advertising effectiveness: Mutual misunderstandings. In Wells, W., (Ed.), *Measuring advertising effectiveness*, Lawrence Erlbaum.

Cooper, M. 1984. Can celebrities really sell products? *Marketing and Media Decisions*, 19: 6465.

Davis E., Kay, J. & Star, J. 1991. Is advertising rational? Business Strategy Review, 2 (3):1.

Horstmann J. I. & MacDonald M. G. 1994. When advertising a signal of product quality? *Journal of Economics & Management Strategy*, 3 (3): 561.

Kahle, L. R. & Homer M. P. 1985. Physical attractiveness of the celebrity endorser: A social adaptation perspective. *Journal of Consumer Research*, 11, 954-961.

Schutz H. G. & Casey M. 1981. Consumer perceptions of advertising as misleading. *Journal of Consumer Affairs*, 15 (2): 340.

Singh, S. N. & Rothschild, M. L. 1983. Recognition as a measure of learning from television commercials. *Journal of Marketing Research*, 20, 235-248.

Stewart, D. W. 1992. Speculations on the future of advertising research. *Journal of Advertising*, 21: 1-46. Wells, W. 1993. Discovery-oriented consumer research. *Journal of Consumer Research*, 19, 489-504.

Winer, R. S. 1999. Experimentation in the 21st century: The importance of external validity. *Journal of the Academy of Marketing Science*, 27: 349-58.

CONSUMERS' LUXURY PERCEPTION: AN INTEGRATED CONCEPTUAL FRAMEWORK

Klaus-Peter Wiedmann Nadine Hennigs Astrid Siebels

Leibniz University of Hanover, Germany Email: wiedmann@m2. uni-hannover. de

ABSTRACT

The main contribution of the present paper is to develop an integrated conceptual framework of consumers' luxury perception for researchers and marketers of luxury goods who may wish to measure the dimensions of individual luxury perception as a general base for marketing strategies to improve purchase value for different segments of consumers. The model illustrates that individual and social as well as financial and functional dimensions significantly impact the consumer's luxury perception and consumption. Keywords: Luxury Concept, Consumers' Luxury Perception.

INTRODUCTION

With the dynamic growth in the global market for luxury products and services, which is expected to reach 100 billion US Dollars by 2008 (Unity Marketing 2006; Merrill Lynch/Cap Gemini 2005), and luxury marketers offering less luxurious product lines (e.g., T-shirts, accessories, perfume) at more affordable prices, availability of luxury goods has expanded to a wider range of consumers than ever before. A paradigm shift - the "democratization of luxuries" (Tsai 2005; Gardyn 2002; Lipovetsky & Roux 1996) - is transforming the luxury market from its traditional conspicuous consumption model to a new experiential luxury sensibility marked by a change in the way consumers define luxury: While "old luxury" was about the attributes, qualities and features of the product and remains focused on the traditional status and prestige ideal of luxury, "new luxury" defines the category from the consumers' point-of-view and is about the experience of luxury embodied in the goods and services they buy, not in ownership or possession itself (Unity Marketing 2006). Against this background, it is critically important for luxury researchers and marketers to understand the underlying reasons why consumers buy luxury, what they believe luxury is and how their perception of luxury impacts their buying behavior.

Past research efforts on the luxury product market have analyzed the consumption behavior of the affluent consumers (e.g., Veblen 1899; Stanley 1988, 1989; Hirschman 1988), the luxury brands (e.g., Dubois & Duquesne 1993a; Andrus et al. 1986), the determinants of the acquisition of the luxury products (e.g., Mason 1993; Dubois & Laurent 1993; Dubois & Duquesne 1993b), the cross-cultural comparison of attitudes toward the luxury concept (Dubois & Laurent 1996; Dubois & Paternault 1997), and the comparison of motivations between Asian and Western societies (Wong & Ahuvia 1998). However, there is currently little agreement about the dimensions that constitute luxury in the customer's perception. With regard to the motives why consumers buy luxuries, it has to be stated, that the notion of "buying to impress

others", still more or less serves as strategic principle for the marketing management of luxury brands (Berry 1994; Dittmar 1994; Corneo & Jeanne 1997; Vigneron & Johnson 1999, 2004; O'Cass & Frost 2002). According to the theory of impression management, consumers are highly affected by the internal drive to create a favorable social image from the outcome of their purchase behavior (Eagly & Chaiken 1993; Mandrik 1996; Sallot 2002). However, following a broader perspective in exploring the customer's perception of and the motives for purchasing luxury, it is not sufficient to explain the whole picture of consumption in the luxury market with socially oriented consumers' motives (e.g., Hansen 1998; Wong & Ahuvia 1998; Vigneron & Johnson 1999, 2004; Wong et al. 1999; Gentry et al. 2001; Puntoni 2001; Roth 2001; Miquel et al. 2002; Coulter et al. 2003). Apart from the socially oriented luxury brand consumption and the human desire 'to impress others', a personally oriented type of consumption should be considered in the marketing management of luxury brands. Nevertheless, a review of the existing literature on luxury shows that, in comparison with personal aspects, social and interpersonal orientation dominates luxury-related research. A comprehensive model, which includes all relevant dimensions - psychological and functional needs - that constitute the luxury value of products in the customer's perception, is still lacking. Considering all different aspects that constitute a customer's perception of and willingness to buy luxury products, it is important to combine a set of luxury value dimensions into one single framework, rather than treating each perceived value of luxury separately, as it has been characteristic in the luxury research literature.

Against this background, incorporating relevant theoretical and empirical findings, this paper is focused on understanding what is in the consumers perspective meant by 'luxury'. By developing a multi-dimensional conceptualization, which encompasses financial, functional, individual, and social value components, it aims at identifying and conceptualizing the dimensions which influence the consumers' individual perception of luxury as a basis for further research in identifying and segmenting different types of luxury consumer. The model and propositions are also discussed with reference to their managerial and research implications.

LITERATURE REVIEW

The term "luxury" is routinely used in our everyday life to refer to products, services or a certain lifestyle, however, often without a clear understanding of the luxury concept as it takes on many different forms for different people and is dependent on the mood and experience of the consumer: "Luxury is particularly slippery to define. A strong element of human involvement, very limited supply and the recognition of value by others are key components" (Cornell 2002, p. 47). The word luxury "defines beauty; it is art applied to functional items. Like light, luxury is enlightening. [. . .] Luxury items provide extra pleasure and flatter all senses at once . . . Luxury is the appendage of the ruling classes" (Kapferer 1997, p. 253). Whereas necessities are utilitarian objects that relieve an unpleasant state of discomfort, luxuries are characterized as objects of desire that provide pleasure (Berry 1994), as "non-essential items or services that contribute

to luxurious living; an indulgence or convenience beyond the indispensable minimum" (Webster's Third New International Dictionary 2002).

Defined as goods for which the simple use or display of a particular branded product brings esteem on the owner, luxury goods enable consumers to satisfy psychological and functional needs. Especially these psychological benefits can be regarded as the main factor distinguishing luxury from non-luxury products or counterfeits (Arghavan & Zaichkowsky 2000). In the literature on luxury, a concept of exclusivity or rarity is well documented (Pantzalis 1995). Luxury brands can be defined as those whose price and quality ratios are the highest of the market (McKinsey 1990) and even though the ratio of functionality to price might be low with regard to certain luxury goods, the ratio of intangible and situational utility to price is comparatively high (Nueno & Quelch 1998). Therefore, luxury brands compete on the ability to evoke exclusivity, brand identity, brand awareness and perceived quality in the consumers' perspective (Phau & Prendergast 2000). Thus, a definition of luxury should not follow a narrow but rather an integrative understanding of the luxury concept, as luxury is a subjective and multidimensional construct.

With regard to the motives for consumption of luxury brands, existing research demonstrated that behavior varies between different people depending on their susceptibility to interpersonal influence (Bourne 1957; Mason 1981; Bearden & Etzel 1982; Horiuchi 1984; Bushman 1993; Pantzalis 1995). To explain consumers' behavior in relation to luxury brands, apart from interpersonal aspects like snobbery and

demonstrated that behavior varies between different people depending on their susceptibility to interpersonal influence (Bourne 1957; Mason 1981; Bearden & Etzel 1982; Horiuchi 1984; Bushman 1993; Pantzalis 1995). To explain consumers' behavior in relation to luxury brands, apart from interpersonal aspects like snobbery and conspicuousness (Leibenstein 1950; Mason 1992), personal aspects such as hedonist and perfectionist motives (Dubois & Laurent 1994) as well as situational conditions economic, societal, political factors, etc.) have to be taken into consideration (Vigneron & Johnson 1999, 2004). While the consumption of prestige or status products involves purchasing a higher-priced product to embellish one's ego (Eastman et al. 1999), the term "luxury" encompasses personal and interpersonal aspects: The consumption of luxury goods involves purchasing a product that represents value to both, to the individual and significant others. Referring to personal and interpersonal oriented perceptions of luxury, it is expected that different sets of consumers would have different perceptions of the luxury value for the same brands, and that the overall luxury value of a brand would integrate these perceptions from different perspectives.

Dimensions of Luxury Perception

Following a comprehensive understanding of the luxury construct, all relevant actual and potential value sources of the consumer's luxury perception should be integrated into one single model. Generally, values can be regarded as beliefs that guide the selection or evaluation of desirable behavior or end states (Schultz & Zelenzy 1999). With regard to consumption values, which directly explain why consumers choose to buy or avoid particular products (Sheth et al. 1991), different types of values influence consumers' purchase choices: A customer's luxury value perception and the motives for luxury-brand consumption are not simply tied to a set of social aspects of displaying status, success and distinction and the human desire to impress other people, but instead also depend on the nature of the financial, functional and individual utilities of the certain luxury brand. Pointing to the fact

that luxury value lies in sociality and individuality as well as in functionality and financial aspects, it is important to synthesize all relevant cognitive and emotional value dimensions in a multidimensional model. Thus, for the purposes of this paper, regarding all prospective and directly attributable value sources, luxury value can be - according to existing luxury research literature as well as Bourdieu's (1986) capital theory proposing economic, cultural and social capital - segmented into four highly interrelated components of luxury perception: financial, functional, individual, and social dimension.

Financial Dimension of Luxury Perception: The financial dimension addresses direct monetary aspects such as price, resale price, discount, investment etc. It refers to the value of the product expressed in dollars and cents, to what is given up or sacrificed to obtain a product (e.g., Ahtola 1984; Chapman 1986; Mazumdar 1986; Monroe & Krishnan 1985).

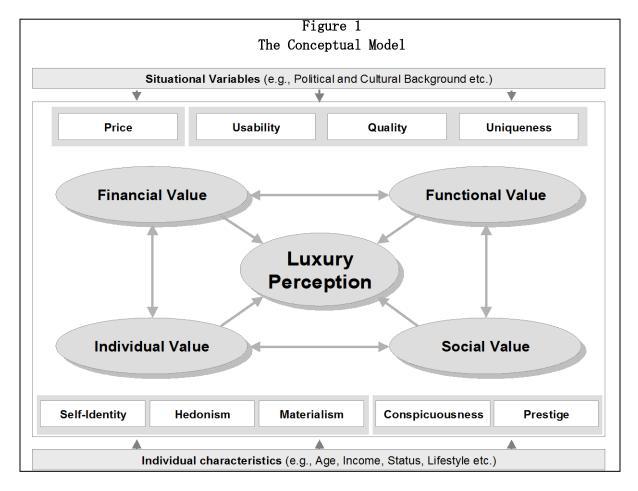
Functional Dimension of Luxury Perception: The functional dimension of luxury refers to the core benefit and basic utilities that drive the consumer based luxury value such as e.g. the quality, the uniqueness, the usability, the reliability, and durability of the product (Sheth et al. 1991).

Individual Dimension of Luxury Perception: The individual dimension focuses a customer's personal orientation towards luxury consumption and addresses personal matters such as materialism (e.g., Richins & Dawson 1992), hedonistic and self-identity value (e.g., Vigneron & Johnson 2004; Hirschman & Holbrook 1982)

Social Dimension of Luxury Perception: The consumption of luxury goods appears to have a strong social function, and therefore, social dimension refers to the perceived utility individuals acquire by consuming products or services recognized within their own social group(s) such as conspicuousness and prestige value may be significantly affecting the evaluation and the propensity to purchase or consume luxury brands (Vigneron & Johnson 1999; Bearden, & Etzel 1982; Brinberg & Plimpton 1986; Kim 1998).

Conceptualization and Propositions

A luxury value model: Starting from our integral consumers' luxury perception concept encompassing financial, functional, individual, and social aspects, Figure 1 shows the proposed conceptual model to investigate the strongly correlated but not identical dimensions of a customer's luxury brand perception. Although these dimensions operate independently, they can interact with each other and have different influences on the individual consumers' luxury perception. This can be used as the basis for further identification and segmentation of different types of luxury consumers. As sketched in our model, several influencing variables and value drivers may be related to the four key dimensions of luxury perception (e.g., price, quality, conspicuousness etc). For the purposes of this paper, we will - based on theoretical and empirical research - analyze selected variables in view of possible links to the financial, functional, individual, and social dimensions as well as their associated influence on the individual's overall luxury perception.



The impact of different variables

Price: Referring to luxury goods, many authors have shown and demonstrated that the price of a product may have a positive role in determining the perception of high quality (Erickson & Johansson 1995; Lichtenstein et al. 1988; Tellis & Gaeth 1990). Often used as evidence for judging quality, status-conscious consumers tend to use a price cue also as a surrogate indicator of prestige (e.g., Berkowitz et al. 1992, Groth & McDaniel 1993). Thus, prestige pricing - setting a rather high price to suggest high quality and/or high status (McCarthy & Perreault 1987) - may even make certain products or services more desirable (Groth & McDaniel 1993). Falling back on the results of first focus group interviews, we presume that the reasons for a given desirability are multifaceted, and may show connections to all of our four components of luxury perception sketched in figure 1. Besides the functional dimension, closely interlinked with the perception of highest quality, and the social dimension, associated with prestige indication, we can also presume relationships to the financial and individual dimension. For instance, expensive luxury goods may gain financial relevance because of their investment value and can also be influenced by exclusiveness or a uniqueness value (i.e., paintings from outstanding artists, veteran cars, but also advice by the best lawyer, investment broker etc.). Furthermore, the relevancy for supporting the perception of high individual value might have its roots in the chance of rewarding oneself, creating self-esteem and/or

'getting a kick' out of the feeling of being extremely affluent and able to afford everything. From here we can also draw connections to different variables discussed more in detail later on (i.e., self-identity, hedonic, and materialistic values).

In sum, price seems to be an important, but also extremely complex and differentiated driver of luxury perception, highly interlinked with many other variables. These multifaceted links to other variables are critical because they establish deviant luxury perception patterns which might help to distinguish different types of consumers — in general or along different categories of products and services. In this context it is also important to realize that luxury consumers, who can readily afford to pay full price, want to make sure they pay a good price. According to the American Express Platinum Luxury Survey, the majority of luxury consumers of all ages and income levels respond to bargains and make their luxury goods purchases on sale or at a discount (American Express 2005). Thus, consumers can and do distinguish between objective price (i.e., the actual price of a product or service) and perceived price (i.e., the price as judged by the consumer, respectively the relevant others) (Jacoby & Olson 1977). The individual perception of a good price/value relationship depends on what is important to the individual consumer and if a given value is worth the investment. This leads us to our first proposition,

P₁: The (expected) price/value relationship acts as an important indicator concerning a consumer's overall luxury perception, but price is highly interlinked with other variables and establishes deviant luxury value patterns reflecting differing centers of gravity along the proposed factor structure which highlights the financial as well as the functional, individual, and social evaluation of luxury items.

Usability: In general, a product or a service is designed to perform a particular function: the core benefit, which can be seen in the usability of a product to achieve the goal to satisfy consumer needs. The concept of usability has been examined and understood in terms of ease of use and can be defined by the physical-chemical-technical, concrete or abstract product/service dimensions (e.g., Park et al. 1986). It has to be stated, that usability is based on both, the product properties and the consumers needs. Hence, one has to differentiate between an objective and subjective judgment of usability which depends on individual evaluation and the specific purpose of use. With regard to basic usage, consumers expect the item they buy to work right, to look good, to last a long time, and to perform as expected and as promised (e.g., Fennel 1978) - these expectations increase in view of luxury items to a maximum. Thus,

P₂: The expected and perceived superior product or service usability as a basic functional value feature causes the individual perception of a luxury item. Additionally, an increasing of the subjective usability leads to an increasing of the overall luxury perception and has a positive relationship with the others dimensions.

Quality: Gentry et al. (2001) found that one reason why consumers buy luxury brands is because of the superior quality reflected by the brand name. This is congruent

with the assumption in the field of perceived quality that luxury brands offer a greater product quality and performance than non-luxury brands (e.g., Garfein 1989; Roux 1995; Quelch 1987; Garfein 1989; Nia & Zaichkowsky 2000; O' Cass & Frost 2002; Vigneron & Johnson 2004). Thus, on account of this, consumers may associate luxury products with a superior brand quality and reassurance so that they perceive more value from it (Aaker 1991). The literature on luxury consumption often underlines this importance of quality to ensure the perception and therefore the value of luxury (Quelch 1987; Rao & Monroe1989; Garfein 1989; Groth & McDaniel 1993; Roux 1995). In addition, high quality is being seen as a fundamental character of a luxury product in terms of a sine qua non (Quelch 1987; Garfein 1989; Roux 1995). Therefore, we propose that, from a consumer perspective,

P₃: A high or excellent perceived level of quality as a fundamental character of luxury items will ensure and increase the consumer's overall evaluation of a certain luxury brand.

Uniqueness: Uniqueness is based on the assumption and demonstrated in research that the perceived exclusivity and rareness of the product enhances the consumers desire or preference for a brand (Verhallen 1982; Lynn 1991; Pantzalis 1995). Furthermore, this desire even increases when the brand is also perceived as expensive (Groth & McDaniel 1993; Verhallen & Robben 1994) - which can be related to the financial evaluation of the luxury item. Therefore, the more unique a brand is being perceived and the more expansive it is compared to normal standards, the more valuable the brand becomes (Verhallen & Robben 1994). In addition, the functional value of uniqueness also strengthens the individual's need for uniqueness (Snyder & Fromkin 1977), the wish of the consumers for differentiation and exclusivity which can only be fulfilled when the consumption and use of a certain brand is only be given to a certain group (Leibenstein 1950; Vigneron & Johnson 1999, 2004). Consequently, the following proposition emerges,

P₄: An increasing level of perceived uniqueness and exclusivity of a luxury item and its consumption will increase a consumer luxury perception and may be linked to all luxury dimensions and acts as a supportive factor of a consumer's luxury perception.

Self-identity: In contrast to the external (social) facet of someone's self, self-identity refers to the internal (private) facet of someone's self in view of the way the individual perceives him/herself (Mehta 1999; Sirgy & Johar 1999; Jamal & Goode 2003). In addition, it is widely accepted within the theory of consumer behavior that the self-image congruity advocates the relationship between one's self-image and one's image of a product or service (Belk 1988; Mick 1986). The theory also proposed the impact of a consumer's self-concept to consumers purchasing behavior in a self-image or product-image congruity model (Sirgy 1982). Concerning luxury brands, Puntoni (2001) confirmed the significant impact of self-congruity on luxury-brand purchase. From this point of view, consumer may use luxury items to integrate the symbolic meaning into their own identity (Holt 1995; Vigneron & Johnson 2004) or they

use the luxury brands to support and develop ones own identity (Douglas & Isherwood 1979; Hirshman 1988; Dittmar 1994). This leads us to,

 P_5 : Congruity with the luxury brand image and one's self-image or intended self-image integrates symbolic meaning into a consumer's self-identity and is positively related towards the individual and overall luxury perception.

Hedonism: Certain products and services possess emotional value in addition to their functional utility (Hirschman & Holbrook 1982; Sheth et al. 1991, Westbrook & Oliver 1991). Studies in the field of luxury consumption have shown that luxury products are likely to provide such subjective intangible benefits (Dubois & Laurent 1994). Additionally, research concerning the concept of luxury has repeatedly identified the emotional responses associated with the luxury consumption, such as sensory pleasure, aesthetic beauty, or excitement (Alleres 1990; Benarrosh-Dahan 1991; Fauchois & Krieg 1991; Roux & Floch 1996; Vigneron & Johnson 2004). Hence, hedonism describes the perceived subjective utility and intrinsically pleasing properties acquired from the purchase and consumption of a luxury brand to arouse feelings and affective states, received from the personal rewards and fulfillment (Sheth et al.1991; Westbrook & Oliver 1991). In sum,

P₆: An increasing level of Hedonism in terms of sensory pleasure, aesthetic beauty, or excitement that luxury goods and experiences provide to the consumer, may be supportive of his individual luxury perception.

Materialism: In the area of consumer behavior, the topic of materialism has been widely researched since the late 1950s. But as researchers have interpreted materialism from different perspectives, theorists have not yet agreed on a single definition (Richins & Dawson 1992). Nevertheless, possession and their acquisition play a central role in the materialism definitions (Daunt 1983; Redeemer & Campbell 1960; Walkman et al. 1972; Heilbroner 1956; Rassuli & Hollander 1986; Du Bois 1955). More specifically materialism can be described as the degree that individuals principally find possessions to be involving and play a central role in one's life. The more highly materialistic a consumer is, the more likely he is to be acquisitive, has positive attitudes related to acquisition and to place a high priority on material possessions. Highly materialistic individuals may, in a general sense, find possessions to be involving and tend to devote more time and energy to product related activities (Belk 1985). Additionally, research has found that materialistic orientated consumers heavily rely on external cues, favoring those possessions that are worn or consumed in public places (Richins & Dawson 1992; O' Cass & Thomas Muller 1999). This can be associated with the understanding of (materialistic) individuals that possessions serve them as a signal or source of communication to others for portraying and managing impressions of who he or she is and what their status or position is (Douglas & Isherwood 1979; Belk 1985). Thus, we propose,

P₇: A consumer's individual materialistic orientation and the desire to use possessions as a social status signal will positive affect his consumption and individual evaluation of luxury products and services.

Conspicuousness: In the early 1980s, a number of researchers carried out studies based on the original work of Bourne (1957), which focused on the influence of reference groups on the consumption of luxury brands (Mason 1981 & 1992; Bearden & Etzel 1982). Findings of this studies revealed that conspicuousness of a product was positively related to its susceptibility to reference-group. For example, Bearden & Etzel (1982) concluded that in public consumed luxury goods were more likely to be conspicuous goods than privately consumed luxury goods and still, conspicuous consumption plays a significant part in shaping preferences for many products which are purchased or consumed in public contexts (Braun & Wicklund 1989; Hong & Zinkhan 1995; Bagwell & Bernheim 1996; Corneo & Jeanne 1997; Vigneron & Johnson 2004). Thus, luxury brands may be important to individuals in search of social status and representation and particular means that the ranking in a society associated with a brand plays an important factor in conspicuous consumption. Consequently,

P₈: Referring to luxury goods which are purchased or consumed in public, an increasing perceived conspicuousness will have an increasing affect on the status-oriented consumer's individual and social perception of luxury.

Prestige in social networks: Much of the existing research has emphasized the role of status that takes place in communicating information about their possessors and social relationships (Hyman 1942; Barkow 1975; Douglas & Isherwood 1979; Dittmar 1994). This goes along with research which originally has demonstrated that people tended to conform to the majority opinion of their membership groups when forming attitudes (Festinger 1954). Hence, a person may use a prestige brand during the week, to conform with their professional position, and use a modest brand during the weekend, to match social standards of his/her neighborhood. Thus, as luxury brands and products often enclose prestigious values, social referencing and construction of one's self appears to be determent in luxury consumption. people's desire to possess luxury brands will serve them as a symbolic sign of group membership. This bandwagon effect influences an individual to conform with affluent lifestyles and/or to be distinguished from non-affluent lifestyles (French & Raven 1959; Sirgy 1982; Midgley 1983; Solomon 1983; Mick 1986; McCracken 1986; Belk 1988; Dittmar 1994). In conclusion, the contribution of reference theory in the analysis of luxury consumer behavior appears to be important in the motivation underlining luxury consumption. This reasoning leads us to our last proposition,

P₉: Superior prestige, which is provided by certain luxury items as a symbolic sign of membership to relevant others, will positively affect the individual and social luxury perception of status-orientated consumers.

Even though we have just made a very first step to conceptualize luxury in view of identifying the dimensions of consumers' perception of luxury brands, our integrative framework sketched in figure 1 seems to be worth focusing in further research as well as in managerial practice.

DISCUSSION AND IMPLICATIONS

The primary goal of this paper was to establish a multidimensional luxury framework, which specifies the dimensions of consumers' orientation towards luxury-

brand consumption, further confirming the view that luxury-brand perception and purchase value is apart from socially oriented motives of 'buying to impress others' also affected by financial, functional, and individual aspects. Focusing on the dimensions of luxury perception, in this paper we have examined the different value sources that impact the luxury perception and consumption. We suggest that the overall customers luxury perception is rooted in the financial, functional, personal, and social dimensions a certain product or brand offers.

Of course, our model is only a first step and should be further developed in different ways. First, the different propositions sketched above as well as the proposed factor structure will have to be elaborated more into depth. Therefore, we are actually going to conduct an inter-sectoral study measuring the luxury perception of different types of consumers. The results of the multi-stage factor analysis, including both exploratory and confirmatory factor analyses, will be used for clustering sectoral as well as inter-sectoral groups according to their primary perceived values of luxury brands. Second, we should as well emphasize the interplay between the different variables and value dimensions. This will have to lead to a proper causal modeling of effects between the dimensions of luxury value and their impact on luxury perception as well as the consumption of luxury goods. As important the generation of such an extended model might be, we believe that first of all, we should try to empirically find out the relevancy of different variables measuring financial, functional, personal, and social value to portray high luxury value in a more aggregated sense. Against this background, we might concentrate a more advanced causal modeling on important variables. Such a procedure seems to be important insofar as the amount of variables and relationships between them is so high that one would run the risk "getting lost in complexity".

Preparing the empirical test of our model, the antecedents, dimensions, and consequences of luxury perception need to be operationalized. In some cases we can fall back on already existing and somewhat tested measures, in other cases we will have to start from scratch. Especially in view of the different dimensions of luxury perception it might be worth starting with exploratory interviews, with respondents being asked what benefits they associate with certain luxury goods, are likely to yield further items. Further steps of the empirical work have, of course, to meet the state of the art of the use of sophisticated multivariate methods. For example, it might be useful to compare different approaches of formative and reflexive construct development and testing (Diamantopoulos & Winklhofer 2001; Jarvis et al. 2003), and, due to the fact that we cannot assume linear relationships between the different variables, we should also draw on nonlinear causal modeling (cf. also using neural networks).

Despite the limitations and necessary steps in future research, the primary contribution of our framework lies in developing and explaining a comprehensive model of consumers' perception of luxury integrating the dimensions of financial, functional, individual, and social value.

Knowledge of all relevant aspects of consumers' luxury perception and more robust measures of luxury value is of course as well a key for managerial practice. In view of our propositions concerning the impact of financial, functional, individual, and social dimensions, marketers might be able to base marketing strategies on our conceptualization and empirically verified principles to improve purchase value for different segments of consumers, who may differ in their luxury orientations and prefer that a certain luxury brand satisfies either their cognitive or emotional needs. To some, the social dimensions such as the conspicuousness, popularity or exclusivity of the luxury brand might be of particularly importance as they are signaling wealth, power and status, and strengthening membership of peer groups. To others, luxury goods might serve as a financial investment or have to meet their individual-based standards of superior quality. Another segment might aim its luxury-brand consumption at hedonistic or materialistic motives that express their individual self. Overall, our framework synthesizes cognitive and emotional dimensions and already might lead to the opportunity of a better understanding of the conditions and drivers of luxury product perception and to come to a broadened view of luxury value which lies in sociality, individuality, functionality, and financial aspects. This is both useful from a market segmentation point of view and from a market positioning point of view and will of course enlarge the efficiency of marketing efforts for luxuries, which should consider and address simultaneously or separately the financial, functional, individual as well as the social needs of the luxury consumer. In contrast to former studies exploring the customer's perception of and the motives for purchasing luxury, at least theoretically, we are able to identify a broader variety of potential luxury value drivers.

REFERENCES

American Express 2005. *The Second Annual American Express Platinum Luxury Survey*, 2005.

Andrus, D. M. & Silver E./Johnson D. E. 1986. Status Brand Management and Gift Purchase: A Discriminant Analysis, *Journal of Consumer Marketing*, 3, 1, 5-13.

Arghavan, N. & Zaichkowsky, J. L. 2000. Do counterfeits devalue the ownership of luxury brands? *Journal of Product and Brand Management*, 9, 7, 485-497.

Bagwell, L. S. & Bernheim B. D. 1996. Veblen Effects in a Theory of Conspicuous Consumption, *American Economic Review*, 86, 3, 349-373.

Bearden, W. O. & Etzel, M. J. 1982. Reference group influence on product and brand purchase decisions, *Journal of Consumer Research*, 9, 2, 183-194.

Berry, C. J. 1994. *The Idea of Luxury. A Conceptual and Historical Investigation*. Cambridge: Cambridge University Press.

Belk, R. W. 1988. Possessions and the Extended Self. *Journal of Consumer Research*, 15, 2, 139-168.

Benarrosh-Dahan, E. 1991. Le Contexte Lexicologique du Luxe, *Revue Française du Marketing*, 132/133, 2-3, 45-54.

Bourdieu, P. 1984. *Distinction: A Social Judgment of Taste*, Nice, R. (trans), Harvard University Press, Cambridge, MA.

Bourne, F. S. 1957. Group influence in marketing and public relations', in: *Some Applications of Behavioral Research*, Likert, R. and Hayes, S. P. (eds.), UNESCO, Paris, France.

Braun, O. L. & Wicklund R. A. 1989. Psychological Antecedents of Conspicuous Consumption, *Journal of Economic Psychology*, 10, 2, 161-186.

Bredemeier, H. C. & Campbell, D. T. 1960. *Social problems in America: Costs and casualties in an acquisitive society.* Wiley, New York, NY.

Brinberg, D. & Plimpton, L. 1986. Self-Monitoring and Product Conspicuousness on Reference Group Influence. In *Advances in Consumer Research*, 13, Lutz, R. J. (ed.), Provo, UT.: Association for Consumer Research.

Bushman, B. J. 1993. What is in a name? The moderating role of public self-consciousness on the relation between brand label and brand preference, *Journal of Applied Psychology*, 78, 5, 857-861.

Cornell, A. 2002. Cult of luxury: The new opiate of the masses. *Australian Financial Review*, 27th April, 47.

Corneo, G. & Jeanne, O. 1997. Conspicuous consumption, snobbism and conformism, *Journal of Public Economics*, 66, 1, 55–71.

Coulter, R.A., Price, L.L., & Feick, L. 2003. Rethinking the origins of involvement and brand commitment. *Journal of Consumer Research*, 30, 2, 151-182.

Daun, A. 1983. The materialistic life-style: Some socio-psychological aspects. In *Consumer behavior and environmental quality*, Uusitalo, L. (ed.), St Martins, New York, NY, 6-16.

Diamantopoulos, A. & Winklhoffer, H. M. 2001. Index construction with formative indicators: An alternative to scale development. *Journal of Marketing Research*, 38, 2, 269-277.

Dittmar, H. 1994. Material possessions as stereotypes: Material images of different socio-economic groups. *Journal of Economic Psychology*, 15, 4, 561-585.

Douglas, M. & Isherwood, B. 1979. The World of Goods, Basic, New York, NY.

Du Bois, C. 1955. The dominant value profile of American culture. *American Anthropologist*, 57, 6, 1232-1239.

Dubois, B. & Duquesne, P. 1993a. Polarization maps: A new approach to identifying and assessing competitive position — The case of luxury brands. *Marketing and Research Today*, 21, May, 115–123.

Dubois, B. & Duquesne, P. 1993b. The market for luxury goods: Income versus culture. *European Journal of Marketing*, 27, 1, 35-44.

Dubois, B./Laurent, G. (1993): Is there a Euro-Consumer for Luxury Goods?, in: European Advances in Consumer Research, Van Raaij, F. and Bamosy, G. (eds.), 1, Provo, UT: Association for Consumer Research, 58-69.

Dubois, B., & Laurent, G. 1994. Attitudes Toward the Concept of Luxury: An Exploratory Analysis. In *Asia-Pacific Advances in Consumer Research*, Leong, S.M. and Cote, J. A. (eds.), Singapore, 1, 2, 273-278.

Dubois, B., & Laurent, G. 1996. Le luxe par-dela les frontieres: Une etude exploratoire dans douze pays. *Decisions Marketing*, 9, September-December, 35-43.

Dubois, B. & Paternault, C. 1997. Does luxury have a home country?, An investigation of country images in Europe. *Marketing and Research Today*, 25, May, 79-85.

Eagly, A., & Chaiken, S. 1993. *The Psychology of Attitudes*. New York, Harcourt Brace Jovanovich.

Eastman, J., Fredenberger, B., Campbell, D. & Calvert, S. 1997. The relationship between status consumption and materialism: cross-cultural comparison of Chinese, Mexican, and American students. *Journal of Marketing Theory and Practice*, 5, 1, 52-65.

Erickson, G. M., & Johansson, J.K. 1985. The Role of Price in Multi-Attribute Product Evaluations. *Journal of Consumer Research*, 12, 2, 195-199.

Fauchois, A. & Krieg A. 1991. Le Discours du Luxe, *Revue Française du Marketing*, 132/133, 2-3, 23-39.

Fennell, G. G. 1978. Perceptions of the Product-in-use Situation, *Journal of Marketing*, 42, 2, 39-47.

Festinger, L. 1954. A Theory of Social Comparison Process, *Human Relations*, 7, 1, 117-140.

French, J. R., Jr., & Raven, B. H. 1959. The bases of social power. In *Studies in Social Power, Cartwright*, D. (ed.), Institute for Social Research, Ann Arbor, MI, 150-167.

Gardyn, R. 2002. Oh, the good life. American Demographics, 24, Nov 1, 30-36.

Garfein, R. T. 1989. Cross-Cultural Perspectives on the Dynamics of Prestige, *Journal* of

Services Marketing, 3, 3, 17-24.

Gentry, J.W., Putrevu, S., Shultz, C., & Commuri, S. 2001. How now Ralph Lauren? The separation of brand and product in a counterfeit culture, *Advances in Consumer Research*, 28, 258-265.

Groth, J. C., & McDaniel, S. W. 1993. The exclusive value principle: The basis for prestige pricing, *Journal of Consumer Marketing*, 10, 1, 10–16.

Hansen, F. 1998. From lifestyle to value systems to simplicity. *Advances in Consumer Research*, 25, 181-195.

Heilbroner, R. L. 1956. *The quest for wealth: A study of acquisitive man*, Simon and Schuster, New York, NY.

Holt, D. B. 1995. How consumers consume: A typology of consumption practices. *Journal* of *Consumer Research*, 22, 1, 1-16.

Hong, J. W., & Zinkhan, G. M. 1995. Self-Concept and Advertising Effectiveness: The Influence of Congruency, Conspicuousness, and Response Mode. *Psychology and Marketing*, 12, 1, 53-77.

Hirschman, E. C./Holbrook, M. B. 1982. Hedonic Consumption: Emerging Concepts, Methods and Propositions. *Journal of Marketing*, 46, 3, 92-101.

Hirschman, E. 1988. Upper Class Wasps as Consumers: A Humanistic Inquiry. In *Research in Consumer Behavior*, 3, Hirschman, E. C. (ed.), Greenwich, CT: JAI Press, 115-148 Horiuchi, Y. 1984. A systems anomaly: Consumer decision-making process for luxury goods. *Unpublished doctoral dissertation, University of Pennsylvania, Philadelphia, PA*.

Hyman, H. H. 1942. Psychology of Status. Archives of Psychology, 269, 5-28.

Jacoby, J., & Olson, J. C. 1977. Consumer Response to Price: An Attitudinal Information Processing

Perspective. In *Moving Ahead in Attitude Research*, Wind, Y. and Greenberg, M. (ed.), Chicago, IL: American Marketing Association.

Jamal, A., & Goode, M. 2003. A study of the impact of self-image congruence on brand preference and satisfaction. *Marketing Intelligence and Planning*, 19, 6/7, 482-492.

Jarvis, C. B., MacKenzie, S. B., & Podsakoff, P. M 2003. A critical review of construct indicators and measurement model misspecification. *Journal of Consumer Research*, 30, 2, 199-218.

Kapferer, J.-N. 1997. Managing luxury brands. *Journal of Brand Management*, 4, 4, 251-260.

Kim, J.S. 1998. Assessing the causal relationships among materialism, reference group, and conspicuous consumption of Korean adolescents. *Consumer Interests Annual*, 44, 155.

Leibenstein, H. 1950. Bandwagon, Snob, and Veblen Effects in the Theory of Consumers' Demand. *Quarterly Journal of Economics*, 64, May, 183-207.

Lichtenstein, D. R., Bloch, P. H., & Black, W. C. 1988. Correlates of Price Acceptability. *Journal of Consumer Research*, 15, 2, 243-252.

Lipovetsky, G., & Roux, E. 2003. *Le Luxe Éternel: De 1' Âge du Sacré au Temps des Marques.* Gallimard, Paris, France.

Lynn, M. 1991. Scarcity Effects on Value: A Quantitative Review of the Commodity Theory Literature. *Psychology and Marketing*, 8, 1, 45-57.

Mandrik, C.A. 1996. Consumer heuristics: the tradeoff between processing effort and brand value choice. *Advances in Consumer Research*, 23, 301-307.

Mason, R. M. 1981. *Conspicuous consumption: A study of exceptional consumer behavior*. Gower Publishing Company, Farnborough, UK.

Mason, R. S. 1992. Modelling the demand for status goods. Working paper, Department of Business and Management Studies, University of Salford, UK.

Mason, R. 1993. Cross-Cultural Influences on the Demand for Status Goods, in: European Advances. In *Consumer Research*, Van Raaij, F. and Bamossy, G. (eds.), 1, Provo, UT: Association for Consumer Research, 46-51.

McCarthy, E. J., & Perreault Jr., W. D. 1987. *Basic Marketing: A Managerial Approach* (9th ed.). Homewood, IL.: Irwin.

McCracken, G. 1986. Culture and consumption: A theoretical account of the structure and movement of the cultural meaning of consumer goods. *Journal of Consumer Research*, 13, 1, 71-84.

McKinsey. 1990. The Luxury Industry: An Asset for France, Paris: McKinsey.

Merrill Lynch & Cap Gemini. 2005. World Wealth Report 2005.

Mehta, A. 1999. Using self-concept to assess advertising effectiveness. *Journal of Advertising Research*, 39, 1, 81-89.

Mick, D. G. 1986. Consumer Research and Semiotics: Exploring the Morphology of Signs, Symbols, and Significance. *Journal of Consumer Research*, 13, 2, 196-213.

Midgley, D. F. 1983. Patterns of Interpersonal Information Seeking for the Purchase of a Symbolic Product. *Journal of Marketing Research*, 20, 1, 74-83.

Miquel, S., Caplliurer, E.M., & Aldas-Manzano, J. 2002. The effect of personal involvement to buy store brands. *Journal of Product and Brand Management*, 11, 1, 6-18.

- Nia, A., & Zaichkowsky, J.L. 2000. Do counterfeits devalue the ownership of luxury brands. *Journal of Product and Brand Management*, 9, 7, 485-501.
- Nueno, J. L. & Quelch, J. A. 1998. The mass marketing of luxury. *Business Horizons*, 41, 6, 61–68.
- O' Cass, A. & Frost, H. 2002. Status brands: examining the effects of non-product brand associations on status and conspicuous consumption. *Journal of Product and Brand Management*, 11, 2, 67-88.
- O' Cass, A., & Thomas Muller, T. 1999. A study of Australian materialistic values, product involvement and self-image/product-image congruency relationships for fashion clothing, *Proceedings of The Ninth Biennial World Marketing Congress, Academy of Marketing Science*.
- Pantzalis, I. 1995. Exclusivity strategies in pricing and brand extension. *Unpublished doctoral dissertation, University of Arizona, Tucson, AZ.*
- Park, C. W., Jaworski, B. J., & McInnis, D. J. 1986. Strategic brand concept-image management. *Journal of Marketing*, 50, 3, 135-145.
- Rao, A. R. & Monroe, K. B. 1989. The effect of price, brand name, and store name on buyers' perceptions of product quality: An integrative review. *Journal of Marketing Research*, 26, 351-357.
- Roth, W. E. 2001. Consuming to achieve affective goals: a framework for analysis with application. *Advances in Consumer Research*, 28, 217-226.
- Roux, E. 1995. Consumer evaluation of luxury brand extensions. *EMAC Conference, May, ESSEC, Paris, France*.
- Sallot, L.M. 2002. What the public thinks about public relations: an impression management experiment. *Journalism and Mass Communication Quarterly*, 79, 1, 150-172. Stanley, T. J. 1989. *Selling to the Affluent*, Homewood, IL: Irwin.
- Tellis, G. J., & Gaeth, G. J. 1990. Best Value, Price-Seeking, and Price Aversion: The Impact of Information and Learning on Consumer Choices. *Journal of Marketing*, 54, 2, 34-45.
- Veblen, T. B. 1899. *The Theory of the Leisure Class*, Houghton Mifflin, Boston, MA. Verhallen, T. M., & Robben, H. S. 1994. Scarcity and preference: An experiment on unavailability and product evaluation. *Journal of Economic Psychology*, 15, June, 315-331.
- Vigneron, F., & Johnson, L. W. 2004. Measuring perceptions of brand luxury. *Journal* of *Brand Management*, 11, 6, 484-506.
- Wackman, D. B., Reale, G., & Ward, S. 1972. Racial differences in responses to advertising among adolescents. *In Television in day to day life*, US Department of Health, Education and
- Welfare, Rockville, MD, 543-551.
- Wong, A, Chung, Y. & Zaichkowsky, J.L. 1999. Understanding luxury brands in Hong Kong. *European Advances in Consumer Research*, 4, pp. 310-316.

CUSTOMER'S PERCEPTIONS ON SERVICE QUALITYAND CUSTOMER SATISFACTION LEVEL OF DOMESTIC AIRLINES IN INDONESIA

Diah Natalisa Herianto Puspowarsito University of Sriwijaya, Indonesia Email: diah_natalisa@yahoo.com

David PE Saerang
University of Sam Ratulangi, Indonesia
Email: d_saerang@lycos.com

T. Ramayah Universiti Sains Malaysia, Malaysia

Email: ramayah@gmail.com

ABSTRACT

The market conditions for Indonesia's domestic airlines are very competitive. The deregulation policies of the Indonesian government since 1990 have resulted in an oversupply in the domestic airline industry, which in turn induced even tighter competition. This paper studies the effect of customers' perceptions of service quality and satisfaction level of the passengers of domestic airlines in Indonesia. Data was collected from 887 passengers of the domestic airline companies who were waiting to board at the departure lounges at Cengkareng Airport, Jakarta. Customers' perception of service quality has positive effect on the level of customer satisfaction. Out of the five dimensions of service quality, the dimension of assurance has the greatest effects on the level of customers' satisfaction. Assurance of flight safety, airline company image, professionalism of personnel, and friendliness of the front liners, are the additional values influencing the level of customer satisfaction.

INTRODUCTION

The service industry is a unique phenomenon in the national development of a country. Since the 1980s, the service industry has developed into an extremely important element in the development of many countries especially the developing and advanced countries. At present, the service industry has become the dominant element, ranging from 45 per cent of the total GNP of a country like Indonesia, to 80 per cent in a country like Singapore. The most important component is infrastructure, such as transportation and telecommunication. Before the gradual deregulation in the airline service industry by the Indonesian government, all regular customers of commercial flights for the domestic market must use the Garuda Indonesia airline service. PT Garuda Indonesia, as a state-owned company and the first national airline in Indonesia, has dominated the existing demand of customers of commercial flight services.

Along with the demand for national economic developments, technological advancements, and other aspects of community life, as well as effects of globalization, there had been changes in the business climate of commercial flight services in Indonesia. The changes in the business climate, characterized by the government deregulation in the air transport industry, had created the emergence of new competitors for the Garuda Indonesia Airways. Each of the new airlines would be competing in the existing market. The competition is indeed escalating. Some airline companies use market gimmicks to draw customers, from offering special discounts and refunds. All these efforts are to provide better services to customers of domestic airline.

Certain customers' directed orientations in the context of modern marketing are highly relevant at present. These approaches are necessary due to the increasingly tight competition among companies, rapid technological advancements, and the growing global marketing activities. The key to keeping the customer is the customer satisfaction. In service industries, customer satisfaction is always influenced by the quality of interaction between customers and the personnel involved in the contact services (Kotler, 2003). In the last decade, the movements towards quality had started to spread from the manufacturing sector to the service sector. The focus of quality is the basis for the service business to survive the competition, get acceptance from society, and be able to achieve its missions.

In principle, the two main things closely related to services are namely, expected quality and experienced or perceived quality. The first is the customers' expectation of service quality and the latter is the customers' perceptions of service quality. The customers will always assess the services they experienced by comparing them with whatever they expected or wished to receive. Identifying the expectations of airline service users is one way to find out the customers' satisfaction or dissatisfaction. Empirical data of readers' complaints indicated that the domestic airline companies may be considered as not yet satisfying their customers (Pambagio, 1996). In marketing terminology, the conclusion was that

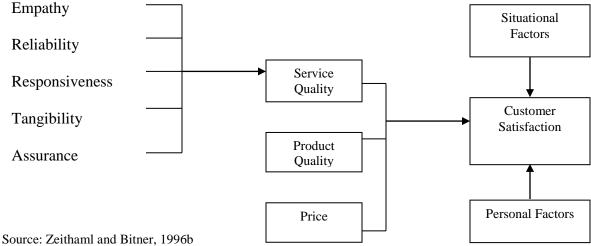
the marketing activities of domestic airline companies were still not oriented to customers' needs. This was because the companies still considered the customers as objects, and not as subjects. Preliminary research findings carried by Natalisa (1996) revealed that customers' expected improved domestic flight services. These included on time departure, safety, better service, cheaper airfares, easy booking, and more varied flight schedules.

Management commitment to service quality plays a very important role in satisfying the customers' needs and wishes. Most service providers believe that they already have commitments to service quality; however, their commitments are in general, based on the companies' own internal and technical perspectives. When, viewed from the customers' side, the service provider is found lacking. The services providers have to use their resources for other organizational objectives, such as sales, profits, or maintaining market shares. In other words, a service provider that does not set their own initiatives to its internal quality will result in lower company performances. The objective of the research is to study the effect of service quality on customers' satisfaction level of the passengers of domestic airlines in Indonesia.

LITERATURE REVIEW

According to the model of customer's satisfaction by Zeithaml and Bitner (1996b), quality service is the focus of assessments reflecting the customers' perceptions on the five dimensions of services, namely: 1) empathy, 2) reliability, 3) responsiveness, 4) tangibility, and 5) assurance. On the other hand, the concept of satisfaction is more inclusive than the concept of service quality. Customer satisfaction is influenced by five variables, namely: 1) service quality, 2) product quality, 3) price, 4) situation, and 5) personal factors.

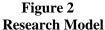
Figure 1
Customer Perceptions of Quality and Customer Satisfaction

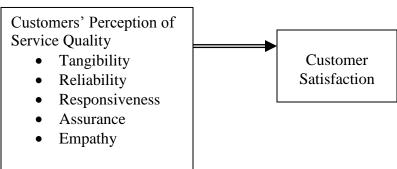


Research Framework

In this research, we made several modifications to the Zeithaml and Bitner model (1996b). First, combining the variables of product quality and service quality into variable of service quality (in this research, the term used is *customers' perception of service quality*, as the customers have already compared their expectations and the delivered service (Day and Taylor, 1992). Besides, combining the variables of product quality and service quality is also based on the nature of the airline service product itself, where it is difficult to differentiate product from service.

Therefore, this research will study the effect of customers' perceptions on service quality to the customers' satisfaction level of the passengers of domestic airlines in Indonesia as shown in Figure 2 below.





Based on the above research model, the following hypotheses were formulated:

H1: The higher the tangibility the higher the satisfaction

H2: The higher the reliability the higher the satisfaction

H3: The higher the responsiveness the higher the satisfaction

H4: The higher the assurance the higher the satisfaction

H5: The higher the empathy the higher the satisfaction

RESEARCH METHODOLOGY

The design used in this research is conclusive research design, using survey as the primary method. As this research is to explain the relationship among the variables through the hypotheses testing, this study is an explanatory research by nature. Population in this research refers to the services provided by domestic airline companies, in this case, it is focused on customers of domestic airline companies, namely A, B, C, and D.

Purposive sampling method was used in this study. The respondents were passengers of the domestic airline companies who were waiting to board at the departure lounges at each terminal of the companies in Cengkareng Airport, Jakarta. The respondents were requested to fill in the questionnaires in accordance to their previous experiences (no longer than the past three months) of using the domestic airline company's services.

Table 1
Sample Size of Customers by Airlines

No	Company	Average number of passengers/day	Obtained Number of Samples
1	A	551	119
2	В	3637	365
3	С	1195	147

4	D	1938	256
		Total	887

Note: the plan for sample size is at least 10 per cent of the average number of passengers leaving Cengkareng Airport per day

Instruments

The instruments used in this study were modified from the SERVQUAL instrument by Parasuraman, Berry and Zeithaml (1990), which was used universally to some service industries, such as telephone, credit card, bank, and car repairs. The customers' perception of service quality was measured by comparing between the performance and the expectation of customers to the best domestic airline in Indonesia. This kind of direct measurement (the combination of expectation and perception) supported research done by Babakus and Boller (1992), Cronin and Taylor (1992), Brown, Churchill, and Peter (1993), which stated that the direct measurement to *performance* was more efficient than that of *SERVQUAL* by Parasuraman et al. (1990). This modification is also in line with the research done by Silverman and Grover (1995).

The original 23 items adopted from Parasuraman et al. (1996). However, for the purpose of this study, which is focused on the airline industry in Indonesia, the items were developed became 27 items. Likert's scale for evaluating customers' perception of service quality giving six alternatives of choices ranging from 1 (far below my expectation) to 6 (far above my expectation); whereas customers' satisfaction was adopted from Parasuraman et al. (1996) using six alternatives of choices ranging from 1 (very dissatisfied) to 6 (very satisfied).

RESULTS AND DISCUSSION

Before the data was analyzed, several tests were made. First, the data was tested for reliability using the Cronbach' alpha. The alphas for the instruments are all above 0.6 which is accepted as being reliable. Table 2 shows the result of regression analysis pertaining to the effect of customers' perception of service quality to the customer satisfaction level according to the 5 dimensions of SERVQUAL.

Table 2
Regression Analysis Results: Effects of Customers' Perceptions of Service Quality on Customer Satisfaction Level, According to SERVQUAL Dimensions

Variables	В	t	Sig
Tangibility (X_1)	0.559	9.863	0.001
Reliability (X ₂)	0.380	4.025	0.001
Responsiveness (X ₃)	0.569	1.108	0.268
Assurance (X ₄)	0.725	4.319	0.001
Empathy (X ₅)	0.551	4.947	0.001

The R^2 shows a value of 0.534, indicating 53.4% of the variation in satisfaction can be explained by all the five variables. Assurance (β = 0.725, p< 0.01), tangibility (β = 0.559, p< 0.01), empathy (β = 0.551, p< 0.01) and reliability (β = 0.725, p< 0.01) were positively related to satisfaction thus H1, H2, H4 and H5 were supported. The one dimension which has no effect on the customer satisfaction level was the responsiveness dimension which does not support H3. The non significant effect of the responsiveness may be due to the many delays at the period of the research performed. In addition, it was also found that the assurance dimension has dominant effect on the customer satisfaction level. This means that customers placed higher concern on the assurance dimension, which consists of the items namely: flight safety, employees' behavior, hospitality of the front liners, and the employee capability to handle the customers' problems. These finding supported the previous research done by Churchill and Suprenant (1982), Oliver and DeSarbo (1988), Cronin and Taylor (1992), and Zeithaml and Bitner (1996).

Table 3 Summary of Mean for SERVQUAL Dimensions

SERVQUAL Dimensions	Mean
Tangibility	3.81
Reliability	3.88
Responsiveness	4.04
Assurance	4.07
Empathy	3.92

Note: All items measured on a 1 to 6 Likert Scale

Table 3 shows that the assurance dimension has the highest mean at 4.07. This means that customers are more concerned with the safety compared to other four dimensions. The finding of this study was different from the other previous studies on other services industries. Zeithaml et al. (1990) studied on four kinds of services industries in United States, particularly in credit card, telephone, bank, and car repairs. They found that the dimension of reliability posited the dominant dimension affecting customer satisfaction. While Tetra (1998) studied on bank in Indonesia also found the same result as the study done by Zeithaml. Other research done by Zaitun (1996) on hospital industry found that the tangibility dimension was the dominant dimension affecting the customers' satisfaction level. This study concludes that the domination of service quality dimensions cannot be generalized for different services industries,

CONCLUSIONS

Customers' perceptions of service quality have positive effect on the level of customer satisfaction. Out of the five dimensions of service quality, the dimension of assurance has the greatest effects on the level of customers' satisfaction. Assurance of flight safety, airline company image, professionalism of personal, and friendliness of the front liners, are the additional values influencing the level of customer satisfaction.

This study employed a cross-sectional research design where the data were collected at a single point in time. This approach was adequate to gather a large amount of data within a limited time. Though it could provide several insights through a snapshot of the view points, it did not address the continual process that occurred in the business environment predict ability and did not detect causal effects of variables. A longitudinal study would provide a clearer picture how services industries provide the service quality that fulfills the customers' expectation. Future research could be done simultaneously involving the perceptions from the both sides of the services transactions (customers and marketers' point of views).

REFERENCES

Banfe, C.F. 1992. Airline Management. Englewood Cliffs, NJ: Prentice-Hall.

Bitner, M.J. 1990. Evaluating service encounters: The effects of physical surroundings and employee responses. *Journal of Marketing*, 54: 69-82.

Bitner, M.J. 1995. Building service relationships: It's all about promises. *Journal of the Academy of Marketing Science*, 23: 246-251.

Bolton, R.N., & Drew, J.H. 1991. A longitudinal analysis of the impact of service changes on customer attitudes. *Journal of Marketing*, 55: 1-9.

Bolton, R.N., & Drew, J.H. 1994. Linking customer satisfaction to service operations and outcomes. In R. Rust and R. Oliver (Eds.), *Service quality: New directions in theory and practice*: 173-200. Newbury Park, CA: Sage Publication.

Bruzzese, A. 1993. Happy employees make happy customers. *Positive Impact*, 4: 8-9.

Cathcart, J. 1994. Fill the needs of employees to better serve customers. *Positive Impact*, 5: 7-8.

Churchill, G.A., Ford, N.M., Hartley, S.W., & Walter Jr., O.C. 1985. The determinants of salesperson performance: A meta-analysis. *Journal of Marketing Research*, 22: 103-118.

Clemmer E.C., & Schneider, B. 1989. Toward understanding and controlling customer dissatisfaction with waiting. *Working Paper, Marketing Science Institute*, Cambridge MA.

Cronin J.J., & Taylor S.A. 1992. Measuring service quality: A reexamination and extension. *Journal of Marketing*, 56: 55-68.

Dube-Rioux, L., Schmitt, B.H., & Leclerc, F. 1988. Consumer's reactions to waiting: When delays affect the perception of service quality. In T. Srull (Eds.), *Advances in consumer research*: 59-63. Provo, UT: Association for Consumer Research.

Fatehi, K. 1996. *International management: A cross cultural approach*. London: Prentice Hall International.

Geist, W. 1984. They're hiring others to stand in line. *The New York Times*: June 6.

George, W.R. 1990. Internal marketing and organizational behavior: A partnership in developing customer-conscious employees at every level. *Journal of Business Research*, 20: 63-70.

Gronroos, C. 1990. Service management and marketing. Lexington, MA: Lexington Books.

Gronroos, C. 1993. Strategic management and marketing in the service sector. *Marketing Science Institute Working Paper Series*, Report No: 83-104. Marketing Science Institute, Cambridge, MA.

Hartline M.D., & Ferrell, O.C. 1996. The management of customer-contact service employees: An empirical investigation. *Journal of Marketing*, 60: 52-70.

Katz, K., Larson, B., & Larson, R. 1991. Prescription for the waiting in Line Blues: Entertain, Enlighten and Engage. *Sloan Management Review*, Winter: 44-53.

Kotler P. 1994. *Marketing management: Analysis, planning, implementation, and control*. Englewood Cliffs, NJ: Prentice Hall International.

Kotter, J. P., & Heskett, H.L. 1992. Corporate culture and performance. New York: The Free Press.

Lawson, P. 1992. Studies link customer-employee satisfaction. *Positive Impact*, 3: 11-12.

Locke, E.A., & Latham, G.P. 1990. Work motivation and satisfaction: Light at the end of the tunnel. *Psychological Science*, 1: 240-246.

Maister, D. 1985. The psychology of waiting lines. In J. Czepiel, M, Solomon, & C. Suprenant (Eds.), *The Service encounter*: 113-123. Lexington, MA: Lexington Books.

Natalisa, D. 1996. *Penelitian pendahuluan, tidak dipublikasikan*. University of Sriwijaya, Indonesia

Natalisa, D. 1998. *Kualitas Layanan Jasa Penerbangan Domestik* (Studi Kasus Maskapai Penerbangan Merpati Nusantara: Sudut Pandang Pengguna Jasa). Lemlit Universitas Sriwijaya, Palembang.

Natalisa, D. 1999. Perbaikan Kualitas Layanan Sebagai Upaya Peningkatan Kepuasan Pelanggan Maskapai Domestik: Sudut Pandang Pelanggan. Dirjen Dikti, Proyek HEDS, Jakarta.

Pambagio A. 1996. *Perusahaan Penerbangan Yang Belum Berorientasi Konsumen*. Kompas, 17 Oktober 1996.

Schlesinger, L.A., & Zornitsky, J. 1991. Job satisfaction, service capability, and Ccstomer satisfaction: An examination of linkages and management implications. *Human Resource Planning*, 14: 146-149.

Schneider, B. 1980. The service organization: Climate is crucial. *Organizational Dynamics*, 9: 52-65.

Schneider, B., & Bowen, D.E. 1985. Employee and customer perceptions of service in banks: Replication and extension. *Journal of Applied Psychology*, 70: 423-433.

Scotland, R. 1991. Customer service: A waiting game. *Marketing*, 1: 1-3.

Shaw, S. 1993. Airline marketing and management. Malabar, FL: Krieger Publishing Company.

Subroto, B., & Pujiyono, J. 1997. *Persaingan Maskapai Penerbangan Domestik dan Perkembangannya*. Kelola, 1: 50-61.

Weatherly, K.A., & Tansik, D.A. 1993. Managing multiple demands: A role-theory examination of the behavior of customer contact service workers. In T.A. Swartz, D.E. Bowen, & S.W. Brown (Eds.), *Advances in services marketing and management*, Vol. 2: 279-300. Greenwich, CT: JAI Press.

Wiley, J.W. 1991. Customer satisfaction and employee opinions: A supportive work environment and its financial costs. *Human Resource Planning*, 14: 117-128.

Zeithaml, V.A., Parasuraman, A., & Berry, L.L. 1990. *Delivering quality service: Balancing customer perceptions and expectations*. New York: The Free Press.

Zeithaml, V.A., Parasuraman, A., & Berry, L.L. 1996. The behavioral consequences of service quality. *Journal of Marketing*, 40: 31-46.

Zeithaml V.A. & Bitner, M.J. 1996. Services marketing. New York: The McGraw-Hill Companies, Inc.

ETHNICITY AND CONSUMER BEHAVIOUR: AN EMPIRICAL INVESTIGATION OF ROLE OF HALAL FOOD LABELLING IN GROCERY FOOD MARKET

> Dr Ahmad Jamal Juwaidah Sharifuddin Cardiff Business School, UK Email: jamala@cardiff.ac.uk

ABSTRACT

This paper is based on an on going research project (doctoral) in which the aim is to investigate the effects of using halal food labeling on consumer behavior within the Muslim shoppers in the UK. In particular, the paper reviews some of the relevant literature and proposes some research propositions. The paper argues that the provision of halal food labeling on packaging increases consumer utility and provides additional benefits to consumers such as an enhanced perceptions of value and lower perceived costs. It is also argued that Muslim shoppers patronize supermarkets that sell halal labeled products. The paper discusses implications and acknowledges the limitations.

INTRODUCTION

The significance of understanding ethnic minority subcultures and the associated cultural dimension to marketing has been stressed by many (Burton, 2000; Bouchet, 1995; Costa & Bamossy, 1995; Jamal, 2003; Penaloza & Gilly, 1999). Ethnic minority subcultures are growing in size and have an increased purchasing power accompanied by heightened political and cultural awareness and ethnic pride (Cui, 1997; Penaloza & Gilly, 1999). For some, mass marketing is a thing of the past and one needs to respond to consumer differences with differentiation and segmentation strategies (Sheth et al. 1999). Others argue that marketers and consumers have become 'positioned within and traversing multiple cultural spheres' (Penaloza & Gilly 1999, p.84) with marketers playing the role of cultural intermediary whose function is to produce new symbolic meanings and their interpretations (Elliot, 1999; Featherstone, 1991; Jamal, 2003). Many in the USA (e.g., major retailers, grocers, banks and other financial service companies) have already responded by adopting their marketing mix strategies to target ethnic minority consumers (Edwards, 1994; Gore, 1998; Holliday, 1993; McDermott, 1994; Mummert, 1995). Marketers in Europe, however, have not been so proactive in terms of realizing the impact of the cultural diversity on their marketing programs (Clegg, 1996; Burton, 2000; Nwankwo & Lindridge, 1998).

A review of the literature suggests that the ethnicity and the extent to which ethnic minorities adopt the consumer cultural environment of a country can influence their buying behaviors. However, most of this literature is North American in origin and application. The aim of this study is to investigate the buying behavior of Muslim housewives within the context of grocery food shopping in the UK. There are about 1.6 million Muslims in the UK (Census, 2001), however, some estimate the figure to be around three million (Williams & Sharma, 2005). Currently, the Muslim population of European countries is around 15m; this is expected to rise by 100% by 2015 whereas the EU's non-Muslim population is likely to shrink by 3.5 per cent over the same period (Carter, 2005). Despite this, Muslims and their buying behaviors are little reported in consumer behavior and marketing literature (Jamal, 1997; Peattie et al., 2006). Food consumption is a central issue for many of the World's leading religions including Islam which has a major influence on the choice of foods that are permitted (Halal) and those that are prohibited (Peattie et al., 2006). In recent years, mainstream brand owners have realized the significance of recognizing the needs of Muslim consumers because of the growth in the number of Muslims living in Europe. Brands such as Nokia, HSBC and Loylds TSB have already introduced specific products that meet the specific needs of Muslim consumers. Within the food and drinks market, leading players such as GlaxoSmithKline have secured halal endorsement from the Muslim Law Council for its Ribena and Lucozade drinks (Carter, 2005).

The aim of this paper is to investigate the role of Halal labeling in creating and enhancing perceived customer value within the grocery food market among Muslim consumers. The next section presents the conceptual framework guiding this research and some of the proposed research prepositions to be tested in this research. Since this is a work in progress paper, we conclude by discussing some of the implications for brand managers.

LITERATURE REVIEW

Halal Food Labeling

Islam is the second largest religion embraced by the people around the globe. Muslim population comprised of up to 1.8 billion people, (20 percent of the world population) (CIA World Facts 2005). Based on the estimated expenditure per capita for food of US\$0.85 a day, it is estimated that the market for halal product is US\$560 billion a year (International Market Bureau Canada 2004). In the UK, Muslim comprised 3.1 percent of the population in England and 0.7 percent in Wales (National Statistics Consensus 2001). It is the most common religion in the country after Christianity. For Muslim people, they are obliged to consume halal food. Halal means lawful. Halal food is defined as food that is not made of, or contains, anything that is prohibited by the Islamic law. It also has to be manufactured, prepared and sold in clean and hygienic manner and in accordance to the strict rules in Islamic law.

The Islamic Food and Nutrition Council of America (IFANCA), a non-profit organization based in Chicago, USA, certifies Halal food production in over 20 countries around the globe in all food industries, cosmetics, meat & poultry slaughter, packaging materials and chemicals. Similarly, the Halal Food Authority (HFA), UK is a voluntary, non-profit making organization which monitors and regulates red meat and poultry. It identifies halal meat from non-halal, by putting marking or tagging for authenticity of halal on the carcasses, soon after slaughter at the slaughterhouses. The Authority also endorses and authenticates food products, pharmaceuticals, confectionery, toiletries, flavorings, emulsifiers, colorings (including E numbered additives etc) for Muslim usage. This is also done on an annual contractual basis by licensing the provider, after auditing ingredients, method of manufacture and process together with packaging and labeling (see for instance, www.halalfoodauthority.co.uk for more information).

Role of Halal Food Labeling in Consumer Decision Making

Decisions about product characteristics or attributes are important elements of marketing strategy, since, by changing the product attributes, marketers can make their products more attractive to consumers (Peter & Olson, 1996; Stephen & Simonson, 1997). In this context, marketers are often interested in identifying the product attributes that are considered as most important by consumers during their evaluation and purchase of products. By doing so, they can identify different target audiences with different attribute importance structures (Chao, 1989a). They can then position their brands on the basis of attributes that are relevant, meaningful and valuable to each of the target audiences. Product attributes are also a starting point for the `means-end chain (see, for example, Gutman, 1982), which is an important consumer behavior construct. The notion of means-end chain suggests that consumers see most product attributes as a means to some end - that end could be a consequence and/or a more abstract value (Claeys & Swinnen, 1995; Gutman, 1982; Peter and Olson, 1996).

Many have explored the evaluative criteria (or product attributes) against which each choice alternative is evaluated by a consumer (Bettman, 1970; Fishbein, 1963; Fishbein & Ajzen, 1975; Rosenberg, 1950). The evaluative criteria can include objective attributes such as price, brand name, country of origin or subjective attributes such as quality, comfort and design (see, for example, Grapentine, 1995; Myers & Shocker, 1981). In this context, it is often argued that consumers make their choices on the basis of their evaluation of, and knowledge about, the product attributes (Geistfeld, et al., 1977; Peter & Olson, 1996; Wahlers, 1982). In certain cases, consumers can compare alternatives across various product attributes and choose the one they most prefer. In other situations, consumers may evaluate each option separately and then pick the one that suits those best (Stephen & Simonson, 1997).

The primary evaluative criteria, however, is often also conceptualized as information cues and can fall into two broad categories: intrinsic and extrinsic (Lee & Lou, 1996; Monroe & Dodds, 1988; Peter & Olson, 1996; Rao & Monroe, 1989; Richardson et al., 1994; Schellinck, 1983). Intrinsic cues are those that are specific to a particular product and include the physical attributes such as shape, design, style and ingredients of a product (Lee and Lou, 1996; Ulgado & Lee, 1993). On the other hand, extrinsic cues are considered to be not part of the physical product itself (although they are product-related).

Previous research suggests that consumers utilize both intrinsic as well as extrinsic information cues during product evaluations (Lee & Lou, 1996; Monroe & Dodds, 1988; Peter & Olson, 1996; Rao & Monroe, 1989; Richardson et al., 1994; Schellinck, 1983). It is often argued that extrinsic cues are more general in nature and can include brand name, price, packaging and country of origin (see, for example, Lee & Lou, 1996; Richardson et al., 1994). Previous research suggests that consumers are more aware of extrinsic cues and thus rely more heavily on them while evaluating products, compared with the intrinsic cues (see, for example, Bettman & Park, 1980; Dodds et al., 1991; Han & Terpstra, 1988; Lee & Lou, 1996). Richardson et al. (1994), for instance, examined the relative importance of extrinsic versus intrinsic cues in determining perceptions of store brand quality for five products in the USA (regular potato chips, French onion chip dip, chocolate chip cookies, cheese slices and grape jelly). Their findings suggested that US consumers' evaluations of store brand grocery items were driven mainly by the extrinsic factors associated with the products rather than intrinsic characteristics.

Similarly, others have suggested that brand name is a significant product attribute in product evaluations as consumers are more likely to be familiar with the brand name than with all other product attributes (see, for example, Bettman & Park, 1980; Dodds et al., 1991; Peterson & Jolibert, 1976). Same goes with country of origin which is also an important product attribute during brand evaluation (see, for example, Ahmed & d'Astous, 1996; Bilkey & Nes, 1982; Johansson et al., 1985; Ulgado & Lee, 1993). In other words, consumers use these attributes as heuristics (Chaiken, 1980; Furse et al., 1984; Sheth et al., 1999) or short hand cues to make quality inferences. This process can be explained via the 'affectreferral' process illustrated by Wright (1975) which argues that consumers do not engage in extensive evaluation of brand attributes; rather they simplify their decision making process by relying on summary information such as brand name. Within the context of grocery food shopping, prior research indicates that consumers prefer to rely on extrinsic cues in making decisions as the products are purchased regularly and considered as low-value items (Richardson et al., 1994). For high-value items such as precious jewelery, customers look at both quality and brand name (namely, both intrinsic and extrinsic cues) in their evaluation and purchase criteria (Jamal & Goode, 2001). Since consuming halal food is an important consideration for many Muslim housewives, it is proposed that the halal food labeling will act as an important brand attribute acting as a summary construct helping consumers to make informed choices. Hence, the first of our research propositions is as follows:

P1: While purchasing grocery food products and while choosing a particular brand, Muslim consumers will mainly rely on halal food label to make their choices.

According to the acquisition value models (e.g., Dodds et al., 1991; Zeithaml, 1988), consumers' perceived value of a brand is positively influenced by the benefits consumers believe they are getting by acquiring and using the brand (e.g., brand quality) and is negatively influenced by the sacrifices they make in acquiring the brand (e.g., price paid and the time/effort and psychic costs incurred). In terms of benefits, it is commonly argued that brands have significance that goes far beyond their utilitarian, functional, and commercial value (Czikszentmihalyi & Rochberg-Halton, 1981; Ericksen, 1996; Leigh & Gabel, 1992; Levy, 1959; Mick, 1986). In other words, consumers do not 'consume products for their material utilities but consume the symbolic meaning of those products as portrayed in their images' (Elliot, 1997, p. 286). Thus the brands that are consumed are not only 'bundles of attributes that yield particular benefits' (Holt, 1995, p. 1) but they are capable of signifying symbolic meaning to consumers. This was confirmed by a recent study by Bhat and Reddy (1998) who reported that brands have both functional as well as symbolic significance for consumers. The symbolic meaning, which is attached to brands, is often communicated through the use and consumption of brands (Gottdeiner, 1985; McCracken, 1986). Since there is a growing interest and pride in their culture and religious heritage, and a willingness to make a statement by what they buy (Carter, 2005; Peattie, et al., 2006), Muslims living in the West are likely to attach greater value and importance to brands carrying the halal logo.

In terms of sacrifices, Baker et al., (2002) identified two types of shopping experience costs: time/effort and psychic costs and examined their effects on retail store merchandise value perceptions and store patronage intentions. The time/effort cost construct captured consumers' perceptions of their time

and effort invested while shopping at a store whereas the psychic cost represented consumers' mental stress or emotional labor during shopping experience. This is related to Zeithaml's (1988) notion of non-monetary costs which reflect the sacrifices consumers make in their assessment of perceived value. In a related domain, consumer researchers argue that consumers are likely to engage in extensive information search and deliberation while purchasing items that are personally relevant to them. In other words, when involvement is high, consumers spend more time, effort and psychological energy while making choices. With in the context of grocery shopping, Beharrell and Denison (1995), having studied a sample of customers of a major European retailer, posited that routine food shopping for many consumers can be highly involving. For high-involvement products, consumers need more information, not influenced only on image issues and visual response (Kupiec & Revell, 2001). As such, consumers tend to be more strongly brand loyal, including willingness to postpone purchase or go elsewhere to shop for a brand that is not available in the store at the time of shopping. They will not readily accept any substitutes. Muslims living in the West are very conscious of halal food ingredients spending extra time and effort in reading brand labels (Peattie et al., 2006). Hence, our next set of research propositions:

P2: In the case of Muslim consumers purchasing grocery food products, perceived value will be higher when the brand is labeled as halal.

P3: In the case of Muslim consumers purchasing grocery food products, perceived costs will be lower when the brand is labeled as halal.

A stream of research has investigated the effects of perceived value on willingness to buy (Dodds et al., 1991; Grewal et al., 1998), store patronage intentions (Baker et al., 2002), repurchase intentions (Jen & Hu, 2003), satisfaction (Day, 2002; Lam et al., 2004) and customer loyalty (Lam et al., 2004; Yang & Peterson, 2004). In the case of ethnic minority consumers, others have reported that people who strongly identify with their ethnic identity are likely to express their feelings through shopping behaviors (Herche & Balasubramaian 1994; Shim & Gehrt 1996). In the context of Muslim grocery consumers, recent studies have reported a tendency and preference towards shopping at retail stores that sell halal food merchandise (Jamal, 2006, 1997; Peattie et al., 2006). In a recent study of Muslim housewives' perceptions of food marketing practices, Peattie et al., (2006) reported that participants had to complete their shopping in multiple locations because of the lack of availability of Halal food in mainstream supermarkets. Also, while many expressed their feelings of social exclusion due to the restricted choices, others expressed their disappointment due to the mixing of permissible and prohibited foods by both manufacturers and catering outlets. For example, multi-packs of crisps often contained cheese and onion crisps as well as chicken or beef flavored crisps, which meant that some of the items purchased were wasted. Given the high levels of importance attached to the consumption of halal food by Muslim consumers, we propose the following:

P4: While purchasing grocery food products, Muslim consumers will patronize mainstream supermarkets that sell brands with halal labels in comparison with those that do not sell such brands.

DISCUSSION AND CONCLUSIONS

Since this is a working paper and is based on a doctoral research in progress, we have presented here some of the conceptual issues underlying this work and some of the research propositions that will be used in the study. It is our intention to collect data from Muslim housewives across the UK using a questionnaire. The current study aims to contribute towards a growing body of literature aimed at understanding the buying behavior of ethnic minorities in the West (Jamal, 2003; 2006; Peattie, et al., 2006). More specifically, the study aims to explore the role of halal food labeling in creating consumer perceived value within the grocery food market. The study aims to discuss implications for brand positioning and for retail policy formulation.

Brand positioning is regarded as a key tool for brand implementation in competitive markets (Aaker, 1996; Hooley et al., 1998; Kotler, 2000). It has been analyzed both from a strategic standpoint (Ries & Trout, 1986; Park et al., 1989; Hooley et al., 1998) and an analytical perspective (Hauser & Koopelman, 1979; Caroll & Green, 1997; Hair et al., 1998). According to Kalafatis et al. (2000),

positioning is an iterative process, consisting of deliberate and proactive actions aimed at the definition of distinct consumer perceptions. Aaker and Joachimsthaler (2000) consider brand positioning as the part of brand identity and value proposition that is to be actively communicated to specific target audience. We argue that positioning the brand as halal can also help penetrate non-Muslim market, making it an acceptable brand for the entire food market. Furthermore, consumers including Muslims have increasing concerns about health issues related to their food intake. A halal positioning strategy based on functional brand attributes may wish to build brand associations by delivering information on product hygiene, cleanliness, and in accordance to Islamic Law. This positioning strategy can be based on relevant advantages of the brand compared to competing brands, and may refer to production processes, product use and/or product elimination (Meffert & Kirchgeorg 1993; Peattie 1995). Also, halal positioning can be based on emotional brand benefits such as a feeling of well-being, personal satisfaction, conformance with self-identity, religion, and even conformance with reference groups. This is in line with Hartmann et al. (2005) who argued that that in green branding, a functional positioning led to a heightened cognitive perception of the brand as environmentally sound, while an emotional positioning strategy had a significant effect on the brand's positioning relative to the emotional dimension of green brand associations.

This research proposes that halal branding can provide significant benefits to the consumers. Use of halal labels can lead to increased perceived value, reduction in search cost, time cost, and psychic cost and hence help consumers increase the acquisition utility of their purchase and enhance the efficiency of the shopping experience. Buying a halal labeled brand can also provide shoppers with the moral satisfaction of behaving according to their religious principals and values, and adhere to their cultural identities, which can be categorized as hedonic benefits (Chandon et al. 2000).

The paper is based on a research in progress and hence has only focused on presenting the research propositions that have been identified as part of the overall conceptual framework. Furthermore, the research is aiming to investigate the effects of halal food labeling within the grocery food market. Future research might wish to consider other product categories (e.g., financial products) to investigate the effects of provision of halal logo on consumer perceptions and attitudes. Furthermore, the study is based on responses from Muslim housewives in the UK only. Further research could explore the effects of halal labeling on consumer responses in different cultures and contexts.

REFERENCES

Aaker, D. A. 1996. *Building strong brands*. New York, NY: The Free Press.

Aaker, D.A. & Joachimsthaler, E. 2000. *Brand leadership*, New York, NY: The Free Press.

Ahmed, S. A. & d'Astous, A. 1996. Country-of-origin and brand effects: A multi-dimensional and multi-attribute study. *Journal of International Consumer Marketing*, 9(2): 93 - 115.

Baker, J., Parasuraman, A., Grewal, D. & Voss, G.B. 2002. The influence of multiple store environment cues on perceived merchandise value and patronage intentions. *Journal of Marketing*, 66 (2): 120-141.

Beharrell, B. & Denison, T.J. 1995. Involvement in a routine food shopping context. *British Food Journal*, 97 (4): 24-29.

Bettman, J.R. 1970. Information processing models of consumer behavior. *Journal of Marketing*, 7 (3): 370-377.

Bettman, J.R. & Park, C.W. 1980. Effects of Prior Knowledge and Experience and Phase of the Choice Process on Consumer Decision Processes: A Protocol Analysis. *Journal of Consumer Research*, 13 (3): 316 – 326.

Bhat, S. & Reddy, S.K. 1998. Symbolic and functional positioning of brands. *The Journal of Consumer Marketing*, 15 (1): 32.

Caroll, J. D. & Green, P. E. 1997. Psychometric methods in marketing research: part II. Multidimensional scaling. *Journal of Marketing Research*, 34 (May): 193-204.

Carter, M. 2005. Muslims offer a new Mecca for marketers niche branding: businesses are courting one of Europe's fastest growing consumer groups. *The Financial Times*, August 11.

Chandon, P., Wansink, B. & Laurent, G. 2000. A benefit congruency framework of sales promotion effectiveness. *Journal of Marketing*, 64 (4): 65-81.

Chao, P. 1989. The impact of country affiliation on the credibility of product attribute claims. *Journal of Advertising Research*, 29 (2): 35-41.

CIA World Fact Book. 2005.

Clegg, A. 1996. Color blind. *Marketing Week Cover Story*, June 21.

Costa, J. A. & Bamossy, G. J. 1995. Perspectives on ethnicity, nationalism, and cultural identity. In Costa, J. A. and Bamossy, G. J. (eds.), *Marketing in a multicultural world*: 26-67. Sage Publications, London.

Cui, G. 1997. Marketing strategies in a multicultural ethnic environment. *Journal of Marketing Theory and Practice*, Winter: 122-134.

Day, E. 2002. The role of value in consumer satisfaction. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 15: 22-32.

Dodds, W.B., Monroe, K.B., & Grewal, D. 1991. Effects of price, brand, and store information on buyers' product evaluations. *Journal of Marketing Research*, 28 (3): 307-319.

Edwards, C. 1994. Retailers, grocers marketing to segmented ethnic society. *Marketing News*, 28 (2), January 17: 8.

Elliot, R. 1999. Symbolic meaning and Postmodern consumer culture. In Brownlie, D. M., Wensley, S. R. and Whittington, R. (Eds.), *Rethinking marketing: Towards critical marketing accountings*: 112-125. Sage, London.

Gore, J. P. 1998. Ethnic marketing may become the norm. *Bank Marketing*, 30 (9), September: 12-15.

Grewal, D., Monroe, K.B. & Krishnan, R. 1998. The effects of price-comparison advertising on buyers' perceptions of acquisition value, transaction value, and behavioral intentions. *Journal of Marketing*, 62 (April): 46-59.

Gutman, J. 1982. A means-end chain model based on consumer categorization processes. *Journal of Marketing*, 46 (2): 60-73.

Hartmann, P., Ibanez, V.A, & Sainz, F.J.F. 2005. Green branding effects on attitude: functional versus emotional positioning strategies. *Marketing Intelligence & Planning*, 23 (1): 9-29.

Holt, D.B. 1995. How consumers consume: a typology of consumption practices. Journal of *Consumer Research*, 22 (1): 1-16.

Hooley, G., Saunders, J. & Piercy, N. F. 1998. *Marketing strategy and competitive positioning*, 2nd ed., Hemel Hempstead: Prentice-Hall.

International Market Bureau Canada, 2004.

Jamal, A. 1997. Acculturation and consumer behavior: a study of cross cultural differences, interethnic perceptions and consumption experiences in Bradford. Unpublished PhD thesis, University of Bradford.

Jamal, A. 2003. Retailing in a multicultural world: the interplay of retailing, ethnic identity and consumption. *Journal of Retailing and Consumer Services*, 10 (1): 1-11.

Jamal, A. & Goode, M. 2001. Consumers' product evaluation: a study of the primary evaluative criteria in the precious jewelry market in the UK. *Journal of Consumer Behavior*, 1 (2): 140 – 155.

Jamal, A., Davies, F., Chudry, F., & Al-Marri, M. 2006. Profiling consumers: a study of Qatari consumers' shopping motivations. *Journal of Retailing and Consumer Services*, 13: 67-80.

Jen, W. & Hu, Kai-Chieh 2003. Application of perceived value model to identify factors affecting passengers' repurchase intentions on city bus: a case of the Taipei metropolitan area. *Transportation*, 30 (3): 307-327.

Kalatafis, S. P., Tsogas, M.H. & Blankson, C. 2000. Positioning strategies in business markets. *Journal of Business & Industrial Marketing*, 15 (6): 416-437.

Kotler, P. 2000. Marketing Management, Millennium ed., Upper Saddle River, NJ: Prentice-Hall.

Kupiec, B. & Revell, B. 2001. Measuring consumer quality judgments. *British Food Journal*, 103 (1): 7-22.

Lam, S.Y, Shankar, V., Erramilli, M.K. & Murthy, B. 2004. Customer value, satisfaction, loyalty, and switching costs: an Illustration from a business-to-business service context. *Journal of the Academy of Marketing Science*, 32 (3): 293-311.

Lee, M. and Lou, Y. C. 1996. Consumer reliance on intrinsic and extrinsic cues in product evaluations: A conjoint approach. *Journal of Applied Business Research*, 12 (1): 21.

Leigh, J.H. and Gabel, T.G. 1992. Symbolic interactionism: its effects on consumer behavior and implications for marketing strategy. *The Journal of Consumer Marketing*, 9 (1): 27-38.

McCracken, G. 1986. Culture and consumption: a theoretical account of the structure and movement of cultural meaning of consumer goods. *Journal of Consumer Research*, 13: 71–84.

Meffert, H. and Kirchgeorg, M. 1993. *Marktorientiertes Unweltmanagement*. Stuttgart: Schaeffer-Poeschel.

Monroe, K.B. and Dodds, W.B. 1988. A research program for establishing the validity of the price-quality relationship. *Journal of Academy of Marketing Science*, 16 (Spring): 151-168.

Mummert, H. 1995. Reaching ethnic markets. *Target Marketing*, 18 (11), November 17: 14-17.

Park, C. W., Jaworski, B. J. & McInnes, D. 1989. Strategic Brand Concept-Image Management. *Journal of Management*, 50 (October): 135-145.

Peattie, S., Peattie, K., and Jamal A. 2006. Protecting Consumer Interests: Responsible and Inclusive Marketing of Food to Ethnic Minority Consumers, *Proceedings of the 35th EMAC Conference*, May 23-26, Athens, Italy.

Peattie, K. 1995. *Environmental marketing management*, London: Pitman Publishing.

Penaloza, L. & Gilly, M. C. 1999. Marketer acculturation: the changer and the changed. *Journal of Marketing*, 63 (July): 84-104.

Peter, J.P. and Olson, J.C. 1996. *Consumer behavior and marketing strategy*, 4th ed., Boston, USA: Irwin.

Rao, A.R. & Monroe, K.B. 1989. The effect of price, brand name, and store name on buyers' subjective product assessments: an integrative review. *Journal of Marketing Research*, 26 (August): 351-357.

Rao, A.R. & Monroe, K.B. 1989. The effect of price, brand name, and store name on buyers. *Journal of Marketing Research*, 26 (3): 351-358.

Richardson, P. S., Dick, A. S. and Jain, A. K. 1994. Extrinsic and Intrinsic Cue Effects on Perceptions of Store Brand Quality. *Journal of Marketing*, 58 (October): 28 – 36.

Sheth, J. N., Mittal, B., & Newmann B. I. 1999. *Customer behavior: Consumer behavior and beyond*. Harcourt Brace and Company, Orlando.

Stephen, M.N. & Simonson, I. 1997. Attribute-task compatibility as a determinant of consumer preference reversals. *Journal of Marketing Research*, 34 (2): 205-219.

UK National Statistics Census. 2001.

Ulgado, F.M. and Lee, M. 1993. Consumer evaluations of bi-national products in the global market. *Journal of International Marketing*, 1 (3): 5-22.

Wright, P. 1975. Consumer choice strategies – simplifying vs. optimizing. *Journal of Marketing Research*, 12 (1): 60-67.

Yang, Z. & Peterson, R.T. 2004. Customer perceived value, satisfaction, and loyalty: the role of switching costs. *Psychology & Marketing*, 21 (10): 799-822.

Zeithaml, V.A. 1988. Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52 (3): 2-22.

THE EFFECTIVENESS OF JAKIM HALAL LOGO ON CONSUMERS' CONFIDENCE IN MALAYSIA

Zainalabidin Mohamed Golnaz Rezai, Mad Nasir Shamsudin Eddie Chiew Fook Chong Ismail Abd Latif

ABSTRACT

The introduction of Halal logo by the Malaysian Department of Islamic Development (JAKIM) has generated more awareness among the Muslim communities of the importance of consuming products or engaging in services that follow Islamic guidelines and principles. In March 2006, the Prime Minister of Malaysia Datuk Seri Abdullah Ahmad Badawi announced that all state governments have been directed to use the standard Halal logo issued by JAKIM, thus making the logo the national Halal logo of Malaysia. Previously, state governments in Malaysia were allowed to use their own Halal logo. The lack of enforcement in monitoring the usage of certified Halal logo has caused the public to question the validity of some of the products that were claimed to be Halal. The objective of this study is to gather information on consumers' perception towards the JAKIM Halal logo and to assess the level of confidence of the Halalness of food products which carry this logo.A sample of 426 Muslim respondents were interviewed via structured questionnaires regarding their confidence level and purchasing behavior towards food products with Halal logo. Eight Halal logos from other countries were also displayed in order to gauge the level of confidence among consumers on the logos. Descriptive statistics were used to describe the socio-economic/demographic background and attitudes of respondents. The logit model was used to determine the extent to which selected socio-economic/demographic characteristics and attitudes influenced the respondents' confidence on Halal logo. The results of this study suggest that consumers are very concerned about Halal food and Halal logo on food products. Even though, consumers react more positively to JAKIM Halal logo, there is still enough evidence to support that consumers are more careful in evaluating the Halalness of all kinds of food products by referring to the list of ingredients. Nevertheless, most consumers are able to differentiate JAKIM Halal logo from the other logos, regardless of the brands on the food products. This implies that consumers trust Halal logo rather than brand of the products when forming judgments about the Halalness of food products and its quality. In general, various socio-economic and attitude factors significantly influenced the likelihood of consumers' confidence on JAKIM Halal logo .The findings of this study indicated that religiosity, marital status, education level, residential area and SHARIYAH and JAKIM approval are significant determinants of the consumers' probability of confidence on JAKIM Halal logo.

INTRODUCTION

Religion is a system of beliefs and practices by which groups of people interprets and responds to what they feel is supernatural and sacred (Johnstone, 1975). Most religion prescribes or prohibits certain behavior including consumption behavior. Schiffman and Kanuk (1997) assert that members of different religious groups are likely to make purchase decisions which are influenced by their religious identity. Such a phenomenon is widely acknowledged in international business and marketing strategies. As Muslim consumers become more knowledgeable of their religion, it is inevitable that they will be more particular on the type of products and services that they consume or use (Temizhan, 2000). In addition, as consumers become increasingly more sophisticated in their dietary and health-related issues, the relevance of informative labeling and the belief in the right to be adequately informed will strengthen. The introduction of Halal logo by the Malaysia's Department of Islamic Development (JAKIM) has generated more awareness among the Muslims of the importance of consuming products or engaging in services that follow Islamic guidelines and principles.

Halal logo also certifies food outlets which are permissible to be patronized by Muslims. The aim of this endorsement is to indicate to their target consumers that their products meet the Islamic standards. This definitely will create significant advantages to the particular manufacturers versus its competitors that do not have Halal certification. However several food-related lawsuits have made media headlines recently. High 5¹ stated that its bakery products were cooked in 100% Halal oil when in fact it was from

¹ High 5 is a local bread manufacturer in Malaysia.

Israel or Germany, which was in doubt about it being Halal (The Malay Mail, 14.Sep.2006). Dinding² poultry also was sued for not ensuring that its products were Halal, and this suit was settled for RM100 million (New Straits Times, 20. January 2006). The lack of enforcement and monitoring in the usage of certified Halal logo has caused the public to question the validity of Halal logo on some of the products or services. Therefore the aim of this study is to acquire information about how trustworthy the JAKIM Halal logo might be, whether consumers were willing to purchase food products with this logo rather than others.

The Halal logo is a reality and needs to be more functionally understood in order to allow marketing strategies to capture the evolving consumer's purchasing behavior changes. The apparent growth of Halal consumerism in Malaysia has made manufacturers and marketers aware of the possible Halal advantages they could exploit by way of Halal processes, Halal packaging and Halal products. This study will attempt to find out the effectiveness of using JAKIM Halal logo among consumers and determine the factors which influence their level of confidence with regards to Halal logo on food products.

LITERATURE REVIEW

Malaysia and Halal Food

Islam preaches a systematic way of life as with any other religions; Islam comes with comprehensive standards and guidelines to be adhered to by Muslims. One of these standards is the concept of Halal, Arabic word which means lawful or permitted for Muslims. Halal refers to a code of conduct which is permitted by Syariah (Syariah is the Arabic meaning for the code of life or law which regulates all aspects of a Muslim life) and it applies to every activity carried out by a Muslim. When used in relation to the economy, it refers to business conducted in a manner deemed permissible in Islam. When used in relation to food, it refers to food which is in compliance with the laws of Islam.

The Malaysian Government has long recognized the importance of Halal and has established mechanisms to secure the confidence of Muslim consumers in certifying products, food producers, abattoirs/slaughterhouses and food premises. Several legislations were enacted for the protection of consumers of Halal products. In 1982, the Malaysian Government established a "Committee on Evaluation of Food, Drinks and Goods utilized by Muslims" ("Committee") under the Islamic Affairs Division of the Prime Minister's Department ("Division") (now known as the Department of Islamic Development Malaysia ("JAKIM")). The main task of the Committee was to check and instill Halal awareness amongst food producers, distributors and importers and the Division is also responsible for the issuance of Halal certificates. In 2003, the Malaysian Government set up the "Technical Committee on Developing Malaysia as the Regional Hub For Halal Products" chaired by the Ministry of International Trade and Industry ("MITI") to stimulate the growth of the Halal food industry and to make Malaysia a Halal hub by 2010. The Malaysian Industrial Development Authority ("MIDA"), a government agency under the purview of MITI, issued the Guidelines for Application of Incentives for Production of Halal Food. Under these guidelines, companies that produce Halal food are given Investment Tax Allowance of 100% of qualifying capital expenditure incurred within a period of 15 years. Such allowance may be setoff against 100% of the statutory income in each year of assessment. Companies that are eligible for such incentives are new companies undertaking Halal food production, existing companies diversifying into Halal food production and existing Halal food companies undertaking upgrading/expansion of existing plants (MITI, 2005).

On August 16, 2004, the Malaysian Prime Minister Datuk Seri Abdullah Ahmad Badawi launched the 'Halal Food: Production, Preparation, Handling and Storage – General Guidelines (MS 1500:2004)'. This was developed by the Malaysian Standard Development System of the Department of Standards Malaysia of the Ministry of Science, Technology and Innovation with the involvement and cooperation of JAKIM, relevant government agencies, non-governmental organizations, universities and industries.

-

² Dinding is a local poultry farm in Malaysia.

MS 1500:2004 incorporates compliance with international standards of Good Manufacturing Practices and Good Hygiene Practices and prescribes practical guidelines for the food industry on the preparation and handling of Halal food (including nutrient supplements) based on quality, sanitary and safety considerations and serves as a basic requirement for food products and food trade or business in Malaysia. In line with being the sole government agency responsible for the issuance of Halal certificates, JAKIM published the Manual Procedure of Halal Certification Malaysia (Manual) and Guidelines on the Appointment of Foreign Islamic Organization as Halal Certification Body for Products to be exported to Malaysia. The Manual is a guideline to co-ordinate the implementation of Halal certification activities in Malaysia at JAKIM's federal level and the State Department/Council of Islamic Affairs level (JAIN/MAIN).

The Manual provides the basic principles to be adopted by every Halal certificate holder in Malaysia and covers application procedure, inspection, monitoring and enforcement. The Manual is a complementary document to MS 1500:2004 and any issuance of Halal certificate by JAKIM/JAIN/MAIN is subject to compliance with MS 1500:2004 and the Manual. The Malaysian Government had allocated RM10 million in its 2005 budget specifically for the purpose of promoting Malaysia as the world producer of Halal products and services. Recognizing the need to prepare Malaysia for this new global market force, the government proposed to establish a Halal Industry Development Board under the Ninth Malaysia Plan (9MP) for 2006 – 2010, to develop the Halal industry in a holistic and orderly manner. Further, the 9MP provided for the setting up of a specific fund for the Halal products industry and the development of Halal food parks to support the Halal industry. "The 9MP will drive the sector's growth in making Malaysia an international hub for Halal products and services" said the Malaysian Prime Minister when tabling the 9MP in March 2006.

The Malaysian government has since announced the establishment of the Halal Industry Development Corporation (HIDC) to spearhead the development of the Halal industry in Malaysia and the international market. HIDC will lead in the development of Halal standards as well as audit and verification procedures, in order to protect the integrity of Halal besides directing and coordinating the development of Malaysia's Halal industry among all stakeholders. In March 2006 the Malaysian Prime Minister announced that all state governments in Malaysia are to use the standard Halal logo issued by JAKIM thus making the logo the national Halal logo of Malaysia. Previously, state governments in Malaysia were allowed to use their own "Halal" logo.

In May 2006, a leading investment bank in Malaysia announced that it will allocate RM500 million in the form of loans to Halal food producers. It is the world's first special Halal package which offers good opportunities to businesses as they provide more depth and opportunities in the Halal industry (The StarBiz, 10th May 2006). The Halal industry in Malaysia has been given a further boost by a recent announcement that an international hypermarket chain has made a commitment to purchase RM1 billion Malaysian Halal products for sale in Britain over the next 5 years (The StarBiz, 20th May 2006).

Halal has now become a universal concept. Halal stands not only for just and fair business transactions but also for animal welfare, social justice and sustainable environment. It is no longer a concept confined or restricted to the slaughtering of animals for the consumption of Muslims but encompasses products and services of the highest quality that meet the ever increasing awareness and needs of consumers in a demanding global market. In the case of Halal labeled foods in Malaysia, some of the questions to be resolved are: a). Can consumers trust the Halal logos on food products; b). Are the Halal claims made by the manufacturers reliable; and c). Do consumers use Halal logo when purchasing food product in the market place. Given the questions above, this study intends to explore the underlying factors influencing consumer perceptions and attitudes towards Halal logo on food products.

RESEARCH METHODOLOGY

Consumer behavior is very complex and determined by emotions, motives and attitudes (Alvensleben, 1997). Attitudes and beliefs play a fundamental role in consumer behavior, because they determine his/her disposition to respond positively or negatively to an institution, person, event, object or product (Azjen & Fishbein, 1989). Personal interviews have been used as the main source of information and have been conducted throughout the Selangor and Klang valley. A sample of 426 Muslim

respondents, were interviewed via structured questionnaires to gather information regarding their confidence level and purchasing behavior towards food products which displayed the Halal logo. The respondents were selected randomly in major supermarkets. Supermarkets were chosen due to the fact that most manufactured food products were widely available there and consumers from different walks of life do their shopping at the supermarket.

Descriptive statistics were used to identify socio-economic/demographic characteristics and attitudes of consumers toward Halalness of food products with JAKIM Halal logo while, the logit procedure was used to determine the extent to which selected socio-economic/demographic characteristics and attitudes influenced the respondents' confidence on Halal logo. The logit model for the representative household 'i' can be expressed as follows:

$$Y_i = \log(\frac{p_i}{1 - p_i}) = a + \sum_{j=1}^{n} \beta x_{it} + e_i$$

Where; Y_i is a dependent variable "Being Confident with JAKIM Halal logo" that had two categories such as "consumers are confident with JAKIM Halal logo" coded as one and otherwise coded as zero. The variable x_i represents the different attributes affecting the representative consumer's confidence on JAKIM Halal logo. In this regression model, the vector x_i consists of variables such as country of origin of the food products, list of ingredients, SHARIYA approval, products' brand, gender, religiosity, marital status, education level and residential area of consumers.

Where;
$$\log(\frac{p_i}{1-p_i})$$
 is called log-odd ratio. The Log-odd ratio is the logarithm of the odds that

a particular purchasing choice will be made by the representative household. P_i is the probability of proxy variable $Y_i = 1$ and $(1 - P_i)$ is the probability of $Y_i = 0$ and e_i is the error term.

The interpretation of the estimated coefficients of the logit is a little tricky. The signs of parameter estimates and their statistical significance indicate the direction of the response associated with the presence or level of a particular variable. The changes in the probabilities associated to the intermediate categories (1 to j - 1) cannot be signed a priori. Thus, category-specific marginal effects are often reported (Gujarati, 1988).

RESULTS AND DISCUSSIONS

Descriptive Analysis

Table 1 shows the characteristics of the sample with regard to their demographic background. About two-third of respondents were from urban, while the rest were from the suburb. About 50.7% of the respondents were female. More than half of respondents (74.2%) claimed that they are very religious while only 3.3% of respondents categorized themselves as not religious. Most of the respondents (54.9%) were married and a majority of them were between 26- 40 years of age (54.9%). Most of respondents (68.5%) were educated at the tertiary level, with a majority working in various positions such as government sector (36.6%), private sector (45.1%) and others (2.3%) which included those retired, unemployed and housewife groups. In terms of income distribution, the study found that at least 42.1% of the respondents had income between RM 1501-3000 per month. About 26.8% of respondents earned RM 1500 and below, while 8.5% had income above RM 6000 per month.

Table 1
Demographic Profile of Respondents

Characteristics	Number	Percentage
Residential area		

Urban	294	69.0
Suburb/ Rural	132	31.0
Gender	216	50.7
Female	216	50.7
Male	210	49.3
Religiosity		
Very Religious	316	74.2
Religious	34	7.9
Somewhat Religious	62	14.6
Not Religious	14	3.3
Education level		
Never been to school	6	1.4
Primary school	30	7.0
Secondary school	98	23
Tertiary	292	68.5
Monital status		
Marital status	186	43.7
Single Married	234	54.9
Widow	6	1.4
Occupation		
Government servant	156	36.6
Privet sector	192	45.1
Self-employed	26	6.1
Student	42	9.9
Others	10	2.3
Age Below 25	64	15.0
	234	15.0 54.9
26-40		
41-60 Above 60	114 14	26.8
Above 00	14	3.3
Income		
Below RM1500	114	26.8
RM1501-RM3000	180	42.1
RM3001-RM4500	54	12.7
RM4501-RM6000	42	9.9
Above 6000	36	8.5

The relationship between the consumers' confidence and attitude were also measured by descriptive analysis and shown in Table 2. Approximately 67.84% of consumers claimed that they trusted JAKIM Halal logo only. The frequency of using Halal logo during purchasing food products indicated that majority of respondents (40.15%) always ensured the existence of Halal logo on food products and 20.18% of them often looked for it. About 15.49 % of the respondents sometimes checked Halal logo and 13.62% looked at it once a while. However, 10.56% never checked Halal logo on food products. In the total sample, 77.93% of respondents indicated that apart from JAKIM Halal logo, other Halal logos from

different countries are not trustworthy. The frequency analysis results of consumers' trustworthy on Halal logo on food products indicated that only 14.8 % of respondents always found Halal logo which trustable, while the majority of consumers (34.98%) often trusted the logos. Only 7.27% of them never trusted Halal logos displayed by food manufacturers.

Table 2
The Relationship between the Consumers' Confidence and Several Characteristics of Consumers' Attitudes towards Halal Logo

Characteristics	Number	Percentage
JAKIM Halal logo and Trustworthy		
Yes	289	67.84
No	137	32.16
Frequency of Using Halal Logo during Purchasing Food Products		
Always	171	40.15
Often	86	20.18
Sometimes	66	15.49
Rarely	58	13.62
Never	45	10.56
All Kind of Halal Logos and Trustworthy		
Yes	94	22.07
No	332	77.93
Frequency of Consumers' Confident on Halal logo		
Always	60	14.08
Often	149	34.98
Sometimes	145	34.03
Rarely	38	8.92
Never	34	7.27

Logit Regression Analysis

The Logit regression analysis was used to estimate, the extent to which selected socio-economic/demographic characteristics and attitudes influenced the respondents' confidence on Halal logo. The estimated parameters and their statistical significance levels were presented in Table 3. The estimated logit model was statistically significant with a Likelihood Ratio Test Probability of <0.0001, which indicates joint significance of all coefficient estimates. Estimated coefficients are tested by using standard errors, *t*-ratios and *p*-values. A positive sign on the statistically significant parameter estimates of one variable indicates the likelihood of the response increasing, holding other variables constant, and *vice versa*. Five variables were all positive and statistically significant, suggesting that response categories are indeed ordered properly. Thus, the socio-economic/demographic factors and consumers' attitudes variables in the ordered model equation are relevant in explaining consumers' confidence on Halal logos on food products. The results indicated that, the socio-economic variables play an important role when explaining the consumer confidence behavior of JAKIM Halal logo.

Based on the statistically significant coefficients, displaying JAKIM Halal LOGO on food products is an important determinant for consumer's confidence, and the effect is positive (Table 3). This finding indicates an increasing likelihood to purchase food products with JAKIM Halal LOGO rather

others. According to the results, Halal foods with JAKIM logo are more frequently consumed compare to others. Table 2 also presents the estimate of odds ratio. The odds ratios are calculated by the logit regression coefficients (Probability = [odd / (1+ odd)]) and it means the level of confidence on JAKIM Halal LOGO is 3.321 higher than other logos. Meanwhile the LIST of INGREDIENTS would be less likely to be trusted by consumers while JAKIM Halal LOGO would be more likely trusted (1.379 times less than JAKIM logo). It is expected that it would be more trustworthy to judge the Halalness of food products based on JAKIM logo which is local and reliable than the list of ingredients which is too scientific in nature.

SHARIYA APPROVAL positively influences the probability of consumers' confidence on JAKIM Halal logo 1.408 more, one aspect should be stressed that the role is played by SHARIYA approval of JAKIM procedure, given that a high positive effect happens as confidential level increases. Estimated coefficient for RELIGIOSITY is positive and significant at the 90% level of confidence. This shows that a high positive effect will emerge as religious level increases and as level of religiosity advances, the likelihood of level of confidence will increase 2.117 respectively. The impact of EDUCATION LEVEL has also significant implication for the frequencies of JAKIM Halal logo consumption. Respondents from urban area are 2.36 times more likely confident with JAKIM Halal logo as compared to consumers from rural areas. Results of logit model indicate a positive relationship between the trustworthiness of JAKIM Halal logo and level of education among consumers.

Estimated coefficient for educated consumers is positive and statistically significant at 90% level of confidence. Educated consumers trust JAKIM logo 1.7 more than those with lower level of education. It is generally believed that educated people are more discriminating in using information and data as compared to less educated consumers. Respondents with family are 2.405 times more likely to put their trust on JAKIM Halal logo than the single group of consumers.

CONCLUSIONS

Considering the effect of Halal logo on food labels, the results of the study showed that consumers are very concerned about Halal food and the logo on food products. Even though it is shown that consumers react more positively to JAKIM Halal food, there is still enough evidence to support that consumers are more careful in evaluating the Halalness of all kinds of food products by referring to the list of ingredients. Nevertheless, most of consumers were able to differentiate JAKIM Halal logo from others, regardless of the presence of the products' brand on the food packaging. This implies that consumers do trust Halal logo rather than the brand of products when forming judgments about the Halalness of food product quality. The findings of this study also indicated that religion, race, marital status, gender and SHARIYA and JAKIM approval are significant determinants of the consumers' confidence probability of JAKIM Halal logo. Despite an increasing trend in attitude and purchase intention of Halal labeled food products there is no significant evidence that consumers are absolutely confident with Halal logo either JAKIM or other countries of origin.

Table 3 Estimates Logit Model for JAKIM Halal Logo and Consumers' Confidence									
Variables		Standard Error	Ratio	<i>P</i> -value					
JAKIM logo displays on									
food products	1.200***	0.376	3.321	0.0014					

Country of origin of products	0.321	0.302	0.623	0.2873
List of Ingredients	-0.472*	0.273	-1.379	0.0831
SHARIYA Approval	0.342**	0.349	1.408	0.0274
Products' Brands	0.298	0.312	1.348	0.3391
Brand Loyalty	-0.235	0.249	-0.791	0.3465
Residential Area	0.383**	0.162	2.36	0.018
Gender	0.8488	0.518	2.337	0.1019
Education Level	0.0002*	0.0001	1.71	0.0766
Level of Religiosity	0.750*	0.409	2.117	0.0668
Marital Status	0.878*	0.532	2.405	0.0994
C	-0.861	2.788	-0.308	0.7575
McFadden R-squared	0.334	Log likelihood	-60.93	32
S.D. dependent var	0.337	Restr. log likelihood	-91.49	96
Probability	0.0000	Avg. log likelihood	-0.42	9

^{***} Statistically significant at the 0.01-level, ** at the 0.05 level, and * at the 0.10 level.

REFERENCES

Alvensleben, R. Von., 1997, Consumer Behavior in Pad berg. In D.I., Ritson, C., Albisu, L.M. (Eds.) *Agro-Food Marketing*, CAB International and CIHEAM, Wallingford, UK.

Ajzen,I .1989. Attitude and structure and behavior. In A.R. Pratkanis, S.J.Breckler and A.G.Greenward (Eds), *Attitude structure function*: 241-275. Hilladale, New-Jersey. Erbaum.

Ajzen, I., & Fishbein, M. 1997. Attitude- behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, 84: 888-918

Department of Islamic Development Malaysia (JAKIM) Available at http://www.JAKIM.gov.my (Accessed January 24, 2007)

Gujarati, D. N.1998. *Basic econometrics* (2nd ed). Singapore: McGraw-Hill Book Company.

Johnston, Roland L. 1975. *Religion and society in interaction: Sociology of religion*. Prentice Hall, USA *Ministry of International Trade and Industry (MITI)*. Available at

http://www.lib.usm.malaysianlink.com (Accessed February 22, 2007)

New Straits Times, 20 January 2006.

Shiffman, LG., and Kanuk, L. 1997. *Consumers' behavior* (6th ed). Prentice Hall.

Temizhan A., Tandogan I., & Donderici O. 2000. The effects of Ramadan fasting on blood lipid levels. *American Journal of Medicine*, 109: 341 – 342

The Malay Mail, 14 September 2006.

The Star Biz, 10 May 2006.

The Star Biz, 20 May 2006.

PURCHASING BEHAVIOR OF MALAYSIAN CONSUMER TOWARDS NATIONAL CARS MADE VIA JOINT VENTURE (JV): COUNTRY OF ORIGIN (COO) EFFECT AND CONSUMER ETHNOCENTRISM (CE)

Mohd. Azwardi Md. Isa Mohammad Basir Saud

Nurhaizal Azam Ariff Universiti Utara Malaysia, Malysia

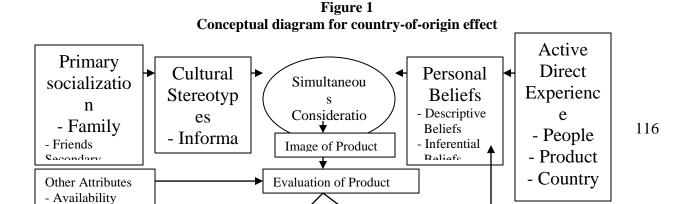
Email: azwardi@uum.edu.my

ABSTRACT

The objective of this research proposal is to study the factors involve in the consumer decision-making process among Malaysian when buying specific national car, particularly Proton, Perodua and Naza – Kia. This topic is important especially to understand the buying pattern among Malaysian. Since Malaysians have more choices of local car brand, national car manufacturer that reveal its dominant local status, is claimed to be loosing its competitiveness. In addition, the trend in car business nowadays requires firms to perform joint venture in order to survive. The fact is, these national cars not only make profit, but also have responsibility to the nation as they carry national image. This research proposal projects aims at finding answers to the following questions; is it true that Malaysians consumers ethnocentrism (CE) towards high involvement product specifically car is low; do Malaysians consumers perceive joint venture (JV) product superior than almost entirely local product since Proton position itself as a genuine national product; do the Malaysians consumers purchase specific brand of national car to demonstrate CE or because of country of origin (COO) effect and what are the specific dimensions of car valued by Malaysian consumers that involved in the decision making that leads to the purchasing of the specific brand of national car.

INTRODUCTION

In order to produce successful car brand, the Malaysian car manufacturers need to posses competitive advantage as well as differing their cars from the others including among entirely foreign car manufacturer, which are available in the Malaysian market. Furthermore, in order to stay competitive in the local market, the Malaysian government imposes several restrictions to foreign cars as well as subsidizes local car firms in many different ways. Among the steps taken are subsidizing the price and facilitate the loan approval for national cars. Moreover, the government only provides loan facilities for national cars for its staffs. In contras, the government also charges high tax to foreign cars. Thus, it makes the price of the foreign cars more expensive. However, for national car firms, it leads to the same nature of competition as all three firms namely Proton, Perodua and Naza-Kia Sdn. Bhd. (NKSB) acquire almost the same treatment from the government. These three national cars have different type and level of joint venture. Proton and Perodua involve in equity joint venture whereas Naza-Kia non-equity joint venture. Major shareholder for Proton is government link company (GLC), Khazanah Nasional Berhad. For Perodua, major shareholder is UMW Corporation Sdn. Bhd., a firm under global conglomerate UMW group. In contras, Naza-Kia is a wholly owned subsidiary under local conglomerate, Naza Group. However, NKSB is only a franchise holder for the KIA, car manufacturer from South Korea. Furthermore, NKSB incorporated to market and distribute Kia's range of vehicle in Malaysia. NKSB does not manufacture car. They only assemble and rebrand the car for Malaysian market. Thus, the country of origin effect (COO) may vary in the decision making process among Malaysian consumers in buying specific national car.



Source: Janda and Rao, 1997

THEORETICAL BACKGROUND

Malaysian Historical Background

Malaysia has an interesting historical background. It used to be administered by British. On 14th August 1945 Japan surrendered and the Japanese military occupation of Malaya ended. The Japanese Occupation led to the loss or at least lowering of the prestige of the western powers. The defeat of the British in Malaya, the Dutch in Indonesia, and the Americans in the Philippines brought this result. The British government was supposed to protect Malaya. It had concluded agreements with the various Malay rulers in which an undertaking was given by the British to protect the Malay states in return for the many privileges and rights it enjoyed. Yet, when the Japanese came, the British had not provided an adequate defense arrangement for this country, hence the speedy surrender. Nonetheless, the Japanese Occupation had aroused the political consciousness of the people and when the British returned to Malaya, a new situation had emerged.

On October 1945, The British announced a bold decision to end indirect rule in the Malay States by uniting all the states into a Malayan Union under a Governor with executive powers. It proposed to initiate a Malayan form of citizenship, which would give equal rights to those who claim Malaya as their homeland. Pulau Pinang and Melaka although parts of the proposed Malayan Union would remain British Settlements. Singapore would remain as a separate colony. The Malayan Union and Singapore would have separate Governors and their individual Executive and Legislative Councils. In the Malayan Union, the Malay Sultans would be Presidents in his own State, of Malay Advisory Council, which would be mainly concerned with religious matters. The Malay Sultans would be asked to sign new treaties, which would give the British Government jurisdiction in their states. These constitutional proposals actually represented a complete change of policy by the British Government. The Malay States had never been British territories. They were and always have been protected Malay States. On October 1945, Sir Harold Mac Michael, special envoy to the British Government arrived in Kuala Lumpur to negotiate the new treaties with the Sultans of the Malay States. The Sultans signed under protest and abdicated their sovereign rights and powers to the British Crown. Political parties and associations were formed all over the country to fight the Malayan Union proposals, which were to come into effect on 1 April 1946 when civil government was to be restored. On 1st March 1946, representatives from the 41 Malay associations and organizations formed the United Malay National Organization (UMNO). UMNO provided the spearhead for the deep and spreading Malay opposition to the Malayan Union. The Malay Unity was a new force to the British and also to the Chinese. UMNO passed a resolution declaring that the agreement signed by the Sultans to be null and void. On 31st March 1945, British Military Administration terminated (www.sejarahmalaysia.pnm.my ---2007). From the historical background, two implications can be derived; Malaysians were exposed to foreigners and familiar with their culture.

Malaysian Economic Background

Initially, when Malaysia gained its independence from British, in the year 1957, the economy was primarily commodity-based with heavy dependence on rubber and tin which contributed about 70 per cent of total export earnings, 28 per cent of government revenue and 36 per cent of total employment. In addition, the economy also remained highly dependent on foreign trade to generate foreign exchange earnings to finance its development (www.epu.jpm.my, 2007).

In order to strengthen its economy the government had taken necessary steps to diversify and modernizing agricultural production. As a result of the progress made in agriculture and manufacturing as well as in utilities, services and other sectors, Malaysia emerged at the end the nineteen sixties with a deeper, broader and stronger economic base. The share of exports of goods and services in the GNP decreased from 52.6% in 1960 to 45.1 % in 1970, while the share of rubber and tin in total merchandise exports fell from 70% to 53% during the decade.

The aggressive development in Malaysia's economic structure happened during the 80's. In the beginning of 1983, Malaysia's economy started to change. The changes included restraining public sector expenditure to reduce budgetary deficits, adopting a private sector led growth strategy introducing economic liberalization and deregulation and improving investment policies and incentives to promote private sector participation. However, due to the renunciation of the public sector coupled with weak external position had weakened the economy initially. The economy recovered in 1987 and continued to grow rapidly, culminating in the economy registering a growth of 9.3 per cent per annum in 1988-90, the highest recorded since Independence. Per capita income, which declined in 1986, grew at an average rate of 6.3 per cent in nominal terms to reach RM6, 224 by 1990. The budget deficit was almost eliminated in 1990 and the balance of payments turned in to a surplus position reaching RM6.6 billion or 8.9 per cent or of GNP in 1987. By 1989, the contribution of the private sector to economic growth surpassed that of the public sector, heralding the transformation of the Malaysia economy to that of a private sector driven economy.

During the 80's also witnessed significant changes occurred in the Malaysia's economy. In this particular decade, the first national car manufacturer, Proton, was born. The move was made realizing that most developed countries posses a strong heavy industry as their economic backbone.

Malaysian National Cars

PROTON was incorporated on May 7, 1983 to manufacture, assemble and sell motor vehicles and related products including accessories, spare parts and other components (www.proton.com). Proton's shareholders (as of 25 July 2002) were Khazanah Nasional Berhad (31.63%), Petroliam Nasional Berhad (11.57%), Mitsubishi Corporation (7.94%), Mitsubishi Motors Corporation (7.94%), Employees Provident Fund Board (7.35%) and Other Local and Foreign Investors (33.57%) (www.proton.com). Following the establishment of Proton, Perusahaan Otomobil KeDua Sdn. Bhd. (Perodua) was launched in 1993, as the second national automotive company. The joint partners or shareholders of Perodua are: UMW Corporation Sdn. Bhd. (38%), Daihatsu Motor Co. Limited. (20%), MBM Resources Berhad (20%), PNB Equity Resources Corporation Sdn. Bhd. (10%) and Daihatsu Malaysia Sdn. Bhd. (5%) (www.perodua.com.my).

Furthermore, in the year 2002, another car company, Naza KIA Sdn. Bhd. (NKSB) also gained the national status. This company was formerly known as Earning Link Sdn. Bhd., a member of the Naza Group of Companies incorporated to market and distributes Kia's range of vehicle in Malaysia. NKSB is the franchise holder for the KIA marque in Malaysia (www.naza.com.my). Thus, it makes Malaysia currently having three national status cars.

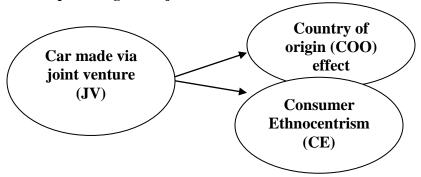
Country of Origin (COO) and Consumer Ethnocentrism (CE) Impact

The impact of COO effects becoming more complicated to measure especially in the way businesses is done nowadays. The existences of the hybrid products challenge the consumers' traditional decision-making criterion. By comparison, hybrids or bi – national products are those branded by a company headquartered in one country yet manufactured in another country (Kim and Pysarchik, 2000).

Furthermore, these products therefore, involve two countries; the country of origin (COO) and the country of manufacture (COM). This particular case is an obvious issue for NKSB. Brodowsky (1998) suggested that multinational production has made the issue of country image effects more complex. This complexity further supported by Nebenzahl *et. al.* (1997) by claiming that the studying of the relationship between country – product – image and purchasing behavior has become more important.

The new trend in product development such as hybrid products leads to product results from joint venture (JV). Then, the COO effects towards JV products becoming more difficult to measure and understood. It is because it interferes with the traditional consumer decision making whereby a consumer purchase local brand because of consumer ethnocentrism (CE) or buying imported goods for its well-known quality. As Figure 1.1 shows, there is possibly causal effect on the car made via joint venture towards consumer ethnocentrism. Shimp and Sharma (1987) suggested that the tendency of consumers to be ethnocentric represents their beliefs about the appropriateness and moral legitimacy of purchasing foreign products. In other words it concerns the issues of the ethics. This ethics will revolve in the consumer decision-making process, and consumers might end up buying specific products for ethical reason. In addition, ethnocentric consumers prefer domestic goods because they believe that products from their own country are the best (Klein *et. al*, 1998).

Figure 2
Conceptual diagram of joint venture effect on consumer decision-making



Besides that, continual improvement towards the product itself will ensure its successfulness in the market. In this case, Proton, Perodua and Naza – Kia need to obtain some feedback from customers and understand the elements that shape their buying behavior. The decision making process include internal and external factors. The internal factors relate to the humanistic values such as self directed and social affiliates values. In reverse, external factors concern with product values such as price, brand, safety, warranty, service after sales, ergonomic factors and loan approval.

Research Objectives

The primary aim of this study is to measure the effect of joint venture (JV) between national car manufacturers and their foreign affiliates towards Malaysian consumers' decision-making in purchasing specific national car. In this particular case, these national car manufacturers are Proton, Perodua and Naza - Kia. Indeed, all these national car manufacturers have different level and type of JV. There are five main objectives that form the basis of this study; to identify and evaluate specific dimensions of car and what factors influence Malaysian consumers' to purchase the specific brand of national status car; to compare the effect of JV towards Malaysian consumers purchasing behavior with regard to the theory of COO and CE; to provide systematic guidance to Malaysia national car companies on how to improve their car performance from consumer point of view and therefore increase their local sales as well as maintain their competitiveness against foreign car; investigate the application of the theories of COO and CE in explaining Malaysian consumers' buying behavior for high involvement products (car) and investigate the application of the theories of COO and CE in explaining Malaysian consumers' buying behavior for high involvement products (car).

RESEARCH METHODOLOGY

The survey method has been identified as a means of gathering data and to achieve the specified research objectives. This research will utilize secondary sources of data, but will initially focus on mail survey and self-administered using a structured questionnaire, supplemented by semi structured interviews and personal observations. Suitable with the nature of the research in the international marketing field focusing on the consumers, mail survey and self-administered using a structured questionnaire will be the main method. In order to gain more information, the supporting use of semi – structured interviews will provide more accurate information. Besides, consumers itself, the researcher will interview several parties involved in the national status car industry such as salesman, mechanic and staff at the service center, insurance company and financing institution. The reason is to obtain the wider information regarding the influence from the parties involved in the consumer decision-making framework. A selected of representative sample of 100 respondents will be chosen for analysis. This research will be conducted using the Malaysian White Pages telephone number directories. Data collected will be analyzed using SPSS package or any other statistical software that might be more suitable.

REFERENCES

Brodowsky, G.H. 1998. The effects of country of design and country of assembly on evaluative beliefs about automobiles and attitudes towards buying them: A comparison between low and high ethnocentric consumers. *Journal of International Consumer Marketing*, 10(3): 85-113.

Economic Planning Unit. Available at: http://www.epu.jpm.my (Accessed January 2007).

Janda, S. & Rao, C.P. 1997. The effect of country-of-origin related and personal beliefs on product evaluation. *Psychology and Marketing*, 14 (7): 689-702.

Kim S. & Pysarchik T. 2000. Predicting purchase intentions for uni-national and bi-national products. *International Journal of Retail & Distribution Management*, 6: 280-291.

Klein, J.G., Ettenson, R. & Morris, M.D. 1998. The animosity model of foreign product purchase: An empirical test in the people's republic of China. *Journal of Marketing*, 62: 89-100.

NAZA. Available at: http://www.naza.com.my (Accessed November 2006).

Nebenzahl, I.D., Jaffe, E.D. & Lampert S.I. 1997. Towards a theory of country image effect on product evaluation. *Management International Review*, 37(1): 27 – 49.

Perpustakaan Negara Malaysia. Available at: http://www.sejarahmalaysia.pnm.my (Accessed January 2007).

Perusahaan Otomobil Kedua. Available at: http://www.perodua.com.my (Accessed November 2006). Shimp, T. & Sharma, S. 1987. Consumer ethnocentrism: construction and validation of the CETSCALE. *Journal of Marketing Research*, 24: 280-9.

STRATEGIES FOR INTERNATIONAL MARKETING

Snehal Mistry
Tanu Narang
C.K Pithawalla Institute of Management, Gujarat, India
Email: snehalmistry@yahoo.com

ABSTRACT

This paper is a non-empirical theoretical paper clarifying the interaction of different epistemologies or ways of entering in international market which are exploited by many Multinationals across the Globe, with objectives of economies of scale or encasing on learning from the domestic market. But the detailed cases which went under study give some different results and talks about how replication strategy resulted into travesty. MNCs found themselves stuck in a middle kind of situation because they were not able to manage the tradeoff between the Cost and Control as well as application of Market knowledge and Marketing knowledge. This paper contributes to international Market Entry strategy literature with solution for MNCs how they can maintain better tradeoff with pragmatic approach during implementation.

INTRODUCTION

The process of penetrating and then developing an international market is a difficult one, which many companies still identify as an Achilles' heel in their global capabilities. Two aspects of the typical approach are particularly striking. First, companies often pursue this new business opportunity with a focus on minimizing risk and investment—the complete opposite of the approach usually advocated for genuine start-up situations. Second, from a marketing perspective, many companies break the founding principle of marketing—that a firm should start by analyzing the market, and then, and only then, decide on its offer in terms of products, services, and marketing programs. In fact, it is far more common to see international markets as opportunities to increase sales of existing products and so to adopt a "sales push" rather than a market-driven approach. Given this overall approach, it is not surprising that performance is often disappointing. Profitability in international markets has lagged behind average firm profitability for much of the last two decades (the "foreign investment profitability gap"). This may well be because of what Ghemawat and Ghadar describe as "top-line obsession," a focus on revenue growth rather than profitability growth.

This common mismatch between expectations and situational requirements stems, above all, from a failure to follow in international operations the marketing strategy process that is probably established in the core domestic business. This may be because participation in the market is indirect (i.e., via an independent local distributor or agent, rather than via a directly controlled marketing subsidiary). It also often reflects a lack of control over strategic marketing and a failure to think rigorously about how the business will develop over the course of several years. While it is true that certain distinctive characteristic of an international marketing situation demand a different approach to marketing.

This Paper will begin by examining these unique international marketing challenges and then discuss, in turn, several phases of the process of market entry and development, including the following:

- The objectives of market entry, which will have implications for the strategy and organization adopted.
- The choice of market entry mode (i.e., the form of marketing organization through which the company participates in the market). Particular attention will be paid to the low-intensity modes of entry most commonly favored in market entry situations.
- The marketing entry strategy, with a particular focus on the lessons learned from the strategies of western multinationals in emerging markets.
- A framework for the overall evolution of an international marketing strategy.

LITERATURE REVIEW

What Is Different about International Marketing?

Most executives are quite clear that international marketing is different from home-country marketing, and most multinational companies insist that their senior managers have international experience on their resumes. Despite this pragmatic recognition of the uniqueness of the international marketplace, there has been little agreement over the exact nature of this distinctiveness. Although the

question has been long and inconclusively discussed by academics and business analysts, agreement has been limited to the valid but rather obvious observation that international marketing, as opposed to marketing in a single country, takes place in an environment of increased complexity and uncertainty, in areas as varied as consumer behavior and government regulation. This suggests that the differences between domestic and international marketing are differences of degree rather than underlying differences of kind. They are:

A context of rapid business growth and organizational learning: Penetration of a foreign market is a zero-base process. At the point of market entry, the foreign entrant has no existing business and little or no market knowledge, particularly with regard to the managerial competence necessary to operate in the new market environment. During the years after market entry, therefore, the rate of change in the country-specific marketing capability of the firm is likely to be greater than the rate of change in the market environment, and firm effects may dominate market effects in shaping strategy. This is particularly important given the business context, in which the generation of new business is of prime importance—rather than efficiency in managing a relatively stable business. This usually results in (a) entering the market via a partnership with a local distributor or other marketing agent rather than via a directly controlled marketing unit and (b) a relatively rapid sequence of changes to the marketing strategy (such as new product introductions or expansion of distribution) or to the marketing organization (e.g., taking over marketing responsibility from the local distributor).

Managing a multi-market network: From the time a company enters its second country-market, it will inevitably be influenced by its previous experience. The greater the number of national markets in which a company participates, the more likely it is to seek to manage them as an aggregated network rather than as independent units. Marketing strategy decisions in one country-market may in this case be made against extra-market criteria. For example, price levels may be set to minimize the difference among markets and to maintain a price corridor rather than purely to reflect local market conditions. Similarly, a multinational company may subsidize price levels in one market for strategic reasons while recouping that loss in another market. In practice, this frequently results in asymmetric competition in any single market, with different companies pursuing different objectives and setting different performance standards. It is possible that one company may be participating in the market simply to learn, and it may therefore tolerate low profitability, while others are pursuing more conventional profit maximization goals.

Co-location of strategic marketing and distribution functions: The distribution unit in the country-market, whether an independent organization or a wholly-owned subsidiary, has to manage a strategy for growth, and it will therefore be judged on organizational criteria including feasibility, level of desired risk, supportability, and control issues. By contrast, distribution management in domestic markets is largely concerned with the implementation of preexisting marketing strategies such as communication platforms and target customer selection, and so the distributor is judged against efficiency or cost-minimization criteria. Although some more-established firms manage this trade-off with considerable sophistication, all too often the delegation of marketing strategy to what is essentially a distribution organization results in underperformance, as nobody is in fact formulating a marketing strategy

It is possible, however, to identify commonalities across companies in this process of internationalization and so to describe the usual evolution of international marketing strategy. Such a framework has to begin by recognizing that different objectives for market entry may produce quite different outcomes in terms of entry mode and marketing strategy.

Objectives of Market Entry

Companies enter international markets for varying reasons, and these different objectives at the time of entry should produce different strategies, performance goals, and even forms of market participation. Yet, companies frequently follow a standard market entry and development strategy. The most common, which will be described in the following section, is sometimes referred to as the "increasing commitment" pattern of market penetration, in which market entry is via an independent local distributor or partner with a later switch to a directly controlled subsidiary. This approach results from an objective of building a business in the country-market as quickly as possible but nevertheless with a

degree of patience produced by the initial desire to minimize risk and by the need to learn about the country and market from a low base of knowledge.

The fundamental reason for entering a new market has to be potential demand, of course, but nevertheless it is common to observe other factors driving investment and performance measurement decisions, such as:

Learning in lead markets: In some circumstances, a company might undertake a foreign market entry not for solely financial reasons, but to learn. For example, the white goods division of Koc, the Turkish conglomerate, entered Germany, regarded as the world's leading market for dishwashers, refrigerators, freezers, and washing machines both in terms of consumer sophistication and product specification. In doing so, it recognized that its unknown brand would struggle to gain much market share in this fiercely competitive market. However, Koc took the view that, as an aspiring global company, it would undoubtedly benefit from participating in the world's lead market and that its own product design and marketing would improve and enable it to perform better around the world.² In most sectors, participation in the "lead market" would be a prerequisite for qualifying as a global leader, even if profits in that lead market were low. The lead market will vary by sector: the United States for software, Japan for consumer electronics and telecommunications, France or Italy for fashion, and so on.

Competitive attack or defense: In some situations, market entry is prompted not by some attractive characteristics of the country identified in a market assessment exercise, but as a reaction to a competitor's move. The most common scenario is market entry as a follower move, when a company enters the market simply because a major competitor has done so. This is obviously driven by the belief that the competitor would gain a significant advantage if it were allowed to operate alone in that market, and so it is most common in concentrated or even duopolistic industries. Another frequent scenario is "offense as defense," in which a company enters the home market of a competitor—usually in retaliation for an earlier entry into its own domestic market. In this case, the objective is also to force the competitor to allocate increased resources to an intensified level of competition. In both cases, a company will have to adapt its strategies to the particular strategic stakes: rather than focusing on market development, the firm will set market share objectives and be prepared to accept lower levels of profitability and higher levels of marketing expenditure.

Scale economies or marketing leverage: A number of objectives result from internationalization undertaken as what is sometimes described as a "replication strategy," in which a company seeks a larger market arena in which to exploit an advantage. In many manufacturing industries, for example, internationalization can help the company achieve greater economies of scale, particularly for companies from smaller domestic country-markets. In other cases, a company may seek to exploit a distinctive and differentiating asset, such as a brand, service model, or patented product. In both cases, the emphasis is on "more of the same," with relatively little adaptation to local markets, which would undermine scale economies or diminish the returns from replication of the winning model. To achieve either of these objectives, a company must retain some control, so it may enter markets with relatively high-intensity modes, such as joint ventures. In particular, either franchising or licensing are business models naturally suited for the rapid replication of businesses through expansion of units since both are centered on protected and predefined assets.

Apart from these varied marketing objectives, it is also common for governments to "incentivize" their country's companies to export, in which case the company may enter markets it would otherwise not have tackled. This, in turn, would suggest that most companies would adopt different entry modes for different markets. More commonly, however, companies have a template that is followed in almost all markets. This usually starts with market entry via an indirect distribution channel, usually a local independent distributor or agent.

Modes of Market Entry

The central managerial trade-off between the alternative modes of market entry is that between risk and control. On the one hand, low intensity modes of entry minimize risk. Thus, contracting with a local distributor requires no investment in the country-market in the form of offices, distribution facilities,

sales personnel, or marketing campaigns. Under the normal arrangement, whereby the distributor takes title to the goods (i.e., buys them) as they leave the production facility of the international company, there is not even a credit risk, assuming that the distributor has offered a letter of credit from its bank. This arrangement also minimizes control, however, since the international company will have little or no involvement in most elements of the marketing plan, including how much to spend on marketing, distribution arrangements, and service standards. In particular, it should be noted here that effective control over marketing operations is impossible without timely and accurate market information, such as customer behavior, market shares, price levels, and so on. In many cases, low-intensity modes of market participation cut off the international firm from this information, since third-party distributors or agents jealously guard the identity and buying patterns of their customers for fear of disintermediation. Such control can only be obtained via higher-intensity modes of market participation, involving investments in local executives, distribution, and marketing programs. This is truly a trade-off in that companies cannot have it all, but must find compromise solutions. The fact is that control only comes from involvement, and involvement only comes from investment.

Another vital distinction here is between financial risk and marketing risk. It is financial risk that is usually the major consideration at the point of market entry, and it is financial risk that is minimized by low-intensity modes of market participation. However, this risk comes at the price of low control over business strategy, so that in fact marketing risk is maximized, with a local partner making all the important marketing decisions. It is the desire for greater control over the business (i.e., to minimize marketing risk) that explains the usual evolutionary pattern of increasing commitment.

The alternative modes of entry can therefore be distinguished by where each falls on the risk-control trade-off (Refer to Figure 1). In addition, there are a number of points that should be borne in mind about each.

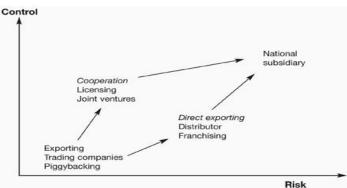


Figure 1
The Market Entry Mode Decision

Export/import and trading companies: Serving an international market through export/import agents, is particularly suitable for companies with little international experience since almost all international operating functions are borne by the agent, including the costly and time-consuming requirements such as bills-of-lading, customs clearance, and invoice and collection. However, in addition to the low level of control, a couple of additional drawbacks should be noted. First, agents such as these operate on the basis of economies of scope, seeking to act as intermediaries for as many vendors as possible—they are servants of many masters. Second, agents often operate on a commission basis, and they do not actually buy the goods from the international vendor, so there is a credit and cash flow risk that is not present in distributor arrangements.

Piggybacking: Although such arrangements are rarely featured in international business texts, many companies begin their internationalization opportunistically through a variety of arrangements that may be described as "piggybacking," because they all involve taking advantage of a channel to an international market rather than selecting the country-market in a more conventional manner. For example, a firm may be offered some spare capacity on a ship or plane by a business partner, or it may find that a domestic

distributor is already serving an international market and so grants a foreign distribution license that requires nothing more than an increase in domestic sales. An example of this is the Italian rice firm F&P Gruppo, owners of the leading Gallo brand, which entered Poland via their Argentinean subsidiary rather than direct from Italy, thus leading to the rather bizarre situation of packets of rice with Spanish-language packaging covered in stickers in Polish. The reason, it transpires, was that the Argentinean air force was importing freight from Poland via regular flights, but it was sending over empty aircraft on the outward leg, a source of export distribution capacity that was bought by a consortium of local food companies.

The most common form of piggybacking is to internationalize by serving a customer who is more international than the vendor firm. Thus, a customer requests an order, delivery, or service in more than one country, and the supplier starts selling internationally in order to retain the customer and increases its penetration of the account. This is particularly common in the case of business-to-business companies and technology-oriented start-ups. Another common situation is when two companies in the same industry combine to use the same distribution channel for products that are not directly competitive, thus obviating to some extent the financial disadvantage of establishing distribution when sales volumes are still low. Thus, for example, Minolta piggybacked on IBM's international distribution network, which helped Minolta achieve otherwise unaffordable distribution and helped IBM defray the cost of the distribution network. Similarly, competitors in some industries, such as pharmaceuticals, routinely license their sales and/or distribution to each other in markets where the competitor is better established and the products are not directly competitive.

When piggybacking via distributors or other comparable partners, the main disadvantage, in addition to the obvious lack of control, is the greater marketing risk that comes from not having studied the market potential and structure.

Franchising: Franchising is an under explored entry mode in international markets, but it has been widely used as a rapid method of expansion within major developed markets in North America and Western Europe, most notably by fast food chains, consumer service businesses such as hotel or car rental, and business services. At heart, franchising is suitable for replication of a business model or format, such as a fast-food retail format and menu. Since the business format and, frequently, the operating models and guidelines are fixed, franchising is limited in its ability to adapt, a key consideration in employing this entry mode when entering new country-markets. There are two arguments to counter this. First, the major franchisers are increasingly demonstrating an ability to adapt their offering to suit local tastes. McDonald's, for example, is far from being a global seller of American-style burgers, but it offers considerably different menus in different countries and even different regions of countries In such cases, the format and perhaps the brand is internationally consistent, but certain customer-facing elements such as service personnel or individual menu choices can be tailored to local tastes. Secondly, it must be recognized that there are product-markets in which customer tastes are quite similar across countries. This is an example of a business, like fast food, that is not culture bound and in which marketing knowledge (i.e., the product- or service-specific knowledge involved in marketing this particular offering) is at least as important as local market knowledge (i.e., the knowledge required to operate successfully in a particular territory). It is also important to note that in such businesses, the local service personnel are a vital differentiating factor, and these will obviously still be local in orientation even if they operate within an internationally consistent business format.

The main drawback of franchising is the difficulty of adapting the franchised asset or brand to local market tastes—even experienced corporations like McDonald's or Marriott, which have managed to thrive on this trade-off as discussed above, have taken several decades and some false starts to get to this point of advanced practice. A key indicator that franchising carries this constraint is the fact that marketing budgets at local levels are usually restricted to short-term promotions rather than market development.

Licensing: Licensing is a common method of international market entry for companies with a distinctive and legally protected asset, which is a key differentiating element in their marketing offer. This might include a brand name, a technology or product design, or a manufacturing or service operating process. Licensing is a practice not restricted to international markets. Disney, for example, will license its

characters to manufacturers and marketers in categories such as toys and apparel even in its domestic market while it focuses its own efforts on its core competencies of media production and distribution. But it offers a particularly effective way of entering foreign markets because it can offer simultaneously both a low-intensity (and therefore low risk) mode of market participation and adaptation of product to local markets. Continuing with Disney as an example, its many licensing arrangements in China allow its characters to adorn apparel or toys suited to local taste in terms of color, styling, or materials this is because, as is usual in licensing agreements, the local licensee has considerable autonomy in designing the products into which it incorporates the licensed characters. The other major advantage of licensing is that, despite the low level of local involvement required of the international licensor, the business is essentially local and is in the shape of the local business that holds the license. As a result, import barriers such as regulation or tariffs do not apply.

As always, there are disadvantages, and two in particular should be factored into any decision on licensing. First, although it facilitates the creation of localized product, licensing is characterized by very low levels of marketing control. Second, and perhaps most importantly, licensing runs the risk of creating future local competitors. This is particularly true in technology businesses, in which a design or process is licensed to a local business, thus revealing "secrets," in the shape of intellectual property that would otherwise not be available to that local business. In the worst case scenario, the local licensee can end up breaking away from the international licensor and quite deliberately stealing or imitating the technology. This might arise from malicious intent or simply a breakdown in relations, as is not uncommon between an international company and its local partner.

Marketing Entry Strategies—Learning from Emerging Markets

Just as the internationalization boom of the 1990s proved instructive with regard to market assessment, so there is much to be learned from the marketing strategies adopted at entry by western companies in emerging markets. While an argument can be made for such a replication strategy on the grounds of leveraging competitive assets such as brand names, it can only be made by ignoring the fundamental tenet of marketing, which is that companies should responsively adapt their offerings in the face of different market conditions. The result in most cases has been an unprofitable niche position, in which MNCs compete with each other for the business of the small elite who value their brands and can afford their prices. The fierce competition among multinationals is also indicative of "me-too" niche marketing strategies driven by replication rather than local market responsiveness, and it is evidence of a flawed execution of the original market entry strategy (to judge from the MNCs' declared objectives in entering emerging markets) of market penetration.

To turn around their business in these markets, multinationals must in effect reenter the markets by rethinking their marketing strategy at two levels. First, they must embrace a mass-marketing mindset. This mindset, which includes the need for aggressive attention to price competitiveness, should be reintroduced as the medium-term goal of the MNCs in emerging markets. Secondly, MNCs must develop dynamic strategies for reaching those mass markets; in effect, market expansion strategies that will take them out of the elite niche.

There are two major reasons why multinationals should adopt a mass-marketing approach in emerging markets. First, it is demanded by the typical emerging market structure. Second, anything else is inconsistent with the rationale behind the entry of multinationals into these markets, which was market penetration that was justified by the high potential of large and/or economically undeveloped populations. The principal reason why these billions of people are described as potential consumers rather than categorized into market segments is that they lack the financial resources to purchase the multinationals' products. The affordability gap will only be bridged when companies reach down to them by offering products at affordable prices.

In practice, however, most multinationals did not develop localized products as part of their entry strategy, instead preferring to transplant offerings from their traditional developed markets. Even disregarding the question of whether the product met local needs, this is a niche strategy because of the price position that such products inevitably occupy. Keen to maintain a degree of global price consistency

and unable to lower the price much because of the threat of parallel importing, these transplanted products end up being priced at points at which only 3–5 percent of the population can afford them. It is this niche strategy that has given local competitors the space to develop their own competence and brands far more quickly than multinationals had anticipated.

Mass marketing, as explained by business historian Richard Tedlow, began with the "breakthrough idea" of "profit through volume." ³ The alternative business paradigm, that of keeping prices and margins high, was dominant in the era preceding mass marketing and is increasingly a hallmark of the "era of segmentation," which characterizes most developed markets now. In these developed markets, marketing strategies begin with breaking down demand into well-defined segments and developing brands and products narrowly targeted at those segments—almost the complete opposite of mass marketing. By contrast, mass marketing was built around good but simple products, narrow product ranges, and low rates of product obsolescence.

The case of Kellogg, the U.S. cereals giant, demonstrates that it is not only local competitors who can sense the need for mass marketing and deliver it. Kellogg, lured by the prospect of a billion breakfast eaters, ventured into India in the mid-1990s. Like many of its counterparts, Kellogg's market entry strategy proved unsuccessful, and, after three years in the market, sales stood at an unimpressive \$10 million. Indian consumers were not sold on breakfast cereals. Most consumers either prepared breakfast from scratch every morning or grabbed some biscuits with tea at a roadside tea stall. Advertising positions common in the west, such as the convenience of breakfast cereal, did not resonate with the mass market. Segments of the market that did find the convenience positioning appealing were unable to afford the international prices of Kellogg's brands. Disappointing results led the company to reexamine its approach. Eventually, Kellogg realigned its marketing to suit local market conditions: the company introduced a range of breakfast biscuits under the Chocos brand name. Priced at Rs 5 (10 U.S. cents) for a 50-gram pack (and with extensive distribution coverage that includes roadside tea stalls), they are targeted at the mass market and are expected to generate large sales volumes. Other emerging market veterans such as Unilever, Colgate Palmolive, and South African Breweries have amply demonstrated the viability of mass markets in emerging economies and the benefits of rapidly transferring knowledge gained in one emerging market to others.

Another argument is that emerging market consumers are rapidly becoming more like their affluent market counterparts, and that it is therefore sensible to offer globally standardized products and wait for the consumer to evolve towards a preference for these. This convergence argument may or may not be true, but it is certain that the rate of change is slow; specifically, in most emerging markets, the mass market will remain poor well beyond the current planning horizons of most multinationals. Even as they grow more affluent, it is far from certain that Chinese and Indian consumers' preferences will converge with those of Europeans or Americans. It is as likely that they may retain idiosyncratic local consumption patterns that are driven by cultural norms.

There are two general approaches to moving towards mass-market strength that correspond to a fundamental choice that MNCs must make about the basis and nature of competition. On the one hand, MNCs must decide the basis on which they wish to compete in emerging markets. They can do so by either transferring their global assets, such as brand names of proven strength in other countries, or by developing local (i.e., market-specific) sources of advantage, which include but are not restricted to brand names.

There are two principal routes of localization. The first is based upon the use of global sources of advantage, but it involves the MNC adapting its marketing mix to make that global asset more suited to local emerging market conditions. For example, an MNC might transfer an established global brand into an emerging market but change its packaging size, price points, or even its product formulation to enhance its attraction to the emerging market retailer and consumer. (Kellogg's approach in India is an example of this degree of localization.) It is important to note that this strategy does leverage the MNC's global assets (i.e., it is not based upon marketing derived ground-up from analysis of the local market). An alternative strategy is to develop new market-specific resources, a more direct but more costly and probably a slower approach than adaptation. This strategy is starting to be seen in the form of a number of

MNCs acquiring local brands that are added to their portfolio alongside global counterparts. In Japan, for example, Coca-Cola carries a number of locally-oriented brands, such as Georgia iced coffee, that enable it simultaneously to meet local taste segments and to derive greater economies of scope from its sales and distribution investments in the country. Alternative local resources that might be developed are distribution assets, such as company-specific warehouses or fleets of vans or even bicycles. P&G took this approach in certain Eastern European markets. In these former communist states, the distribution systems were not simply undeveloped—they had completely collapsed. Recognizing that intensive distribution was an enabling condition for the development of their consumer goods business, P&G invested substantial sums in developing its own

distribution network. It did so by funding distributor businesses in the form of vans, information technology, working capital, and extensive training.⁴ This model, known within the company as the "McVan Model," produced a significant competitive advantage over both international and local competition; in Russia. This bold approach illustrates perfectly the trade-off between control and risk

A Framework for the Evolution of Marketing Strategies in an International Market

The process of business development in an individual foreign country-market consists of a sequence of distinct business challenges, and this evolution produces a sequence of marketing strategies and marketing organizations. This evolution, originally described in the conceptual paper by Susan P. Douglas and C. Samuel Craig from which Figure 2 is adapted, consists of three principal phases: (1) a low-commitment market entry, in which the MNC seeks incremental sales with minimum investment and is in effect testing the market; (2) a phase of intensified local marketing activity to develop business beyond the platform achieved in market entry and maximize performance within the country; (3) the consolidation of national units into a more integrated and efficient global marketing organization. The evolution of the corporation through these phases appears to accelerate with international experience from a more laissez-faire attitude in early years of international operation to a deliberate and forceful approach as the firm becomes more dependent upon, and committed to, its international business. This reflects the organizational learning that occurs systematically during internationalization and highlights the fact that the objectives an MNC sets itself for its business in any individual country-market can be a function not only of characteristics of the country, such as market potential, stability, and existing business infrastructure, but also of its own corporate international experience, and level of commitment to international markets.

Figure 2
The Evolution of International Marketing Strategy (Source: adapted from Douglas and Craig

	Initial Market ———— Entry	Local Market ————— Expansion	Global Rationalization
Key objective	Assessment and testing of new market opportunities	Achieve economies of scope to leverage local operating unit	Economies of scale to leverage presence
Managerial focus	Corporate center driving international expansion	Local management seeking local performance improvement	Regional and corporate managers seeking consolidation of multidomestic network
Marketing objective	Seek new geographical opportunities for existing marketing assets	Develop new market-specific marketing assets to maximize local market share	Identify marketing assets with global potential and seek consistent management
Marketing organization	Partnerships with independent local marketing firms	Delegation to local marketing management	Seek opportunities for knowledge and personnel transfer around network

In many ways, the initial phase is more concerned with sales rather than marketing. Given the international firm's focus on risk minimization and its lack of local knowledge, the distributor will usually take the easiest option of selling the newly available products to its existing customer base. Indeed, the distributor will usually have been selected on the basis of this customer base. In this initial phase, there is little adaptation to the local market because the low sales levels cannot support the fixed costs of developing a local offer and because the international firm is still learning about the market. In fact, the only circumstance in which the international company is clearly targeting a segment of customers is when its broader international marketing strategy is based upon an international segment. In consumer markets, Nike, for example, addresses similar segments in multiple countries; in business to business markets, the customer is often international.

It is often at this point that the international company takes over distribution and begins to invest in its own marketing organization in the country-market. Once this organization is in place, the range of products and services expands rapidly, often including new offers developed specifically for the local market. In this stage, the emphasis on local market development results in a marketing focus not unlike that in the domestic market or any other single market. In the countries of the European Union, for example, many international firms are now shifting marketing strategy to a regional level, so they therefore realize that they do not need a senior marketing executive and team in each country.

There are a number of key learnings that experienced executives identify from this evolution:

Greater Commitment at Market Entry: Increasingly, experienced companies seek closer control over marketing strategy at the time of market entry instead of delegating everything to a local distributor. This usually involves placing one or two appropriately qualified executives, in-market alongside the local sales and distribution partner. The objective is to accelerate market development and maximize performance earlier in the process rather than relying on the distributor's customer base.

Early Development of Local or Regional Marketing Programs: Experienced multinationals are becoming far more capable of modular design in their products or services, identifying a core platform from which local variations can be more easily and economically developed. This enables earlier development of products tailored to local market conditions, which can be expected to accelerate market penetration. In many cases, the level at which products are customized is regional rather than country by country. This enables a multinational to retain some economies of scale while still adapting to local demand characteristics. Once a firm's international marketing network is well developed, such regional products may then be available at the time of market entry for other country-markets in the region.

Another important underlying dynamic, which experienced multinationals come to learn, is the distinction between market knowledge and marketing knowledge. Market knowledge is a local operating capability that is required for doing business in any country: it includes knowledge of local regulatory requirements, business practices, negotiating styles, cultural norms, and a host of other details that add up to "the way people do business in a given country." Clearly, this cannot be acquired quickly by an outsider, so it explains why even the most experienced multinational will always need some sort of local partner at the time of market entry. Marketing knowledge, by contrast, is a global product-oriented capability: Anheuser Busch or Heineken know more about the marketing of beer than any local partner

they take on because of years of experience in a wide range of markets and segments. Like local market knowledge, it cannot be acquired quickly by somebody new to the business. It is clear that both types of knowledge (market knowledge and marketing knowledge) are required to grow a business in a new international market.

CONCLUSIONS

The central trade-off to be managed is between the requirements at entry and the different needs of the business once revenues and market coverage begin to grow. At the time of entry, the stance adopted by most international entrants is one of risk minimization, almost market testing, and this result in great reliance on a local partner. Over the longer run, however, most companies will want greater control and involvement. Different forms of entry mode provide different levels of control early on, but greater control is almost always associated with greater investment and commitment—and therefore greater exposure and risk

The difficulties of adapting marketing strategy to the phase of product-market evolution are amply illustrated by the experience of many western multinationals in emerging markets since 1990. Many have essentially replicated the strategies prevailing in their developed home markets, with careful targeting to the most immediately attractive segments. In effect, these companies need to replicate the strategies they themselves adopted several decades earlier in opening up the mass markets in their own domestic economies—the original foundations of their current size and expertise. The more sophisticated international marketing companies are now finding ways of adapting to local market conditions, including new locally oriented brands, new distribution channels, and new thinking in areas such as pack size and pricing. The lesson from this wave of international market development is that marketing fundamentals, such as the importance of designing a marketing mix, remain a better guide to managerial decision making than the replication thinking.

REFERENCES

Douglas, S.P., & Craig, S.C. 2005. *International Marketing Research*, 3rd Ed. John Willey & Sons. Ghemawat, Pankaj, & Fariborz Ghadar. Global integration, global concentration. *Industrial and Corporate Change*, 15 (August 2006): 595-623.

Tedlow, Richard 1996. *New and improved: The story of mass marketing in America*. 2nd Ed. Boston: Harvard Business School Press.

http://www.newsweek.com

CONSUMPTION PATTERNS OF OLDER CONSUMERS IN MALAYSIA: WHAT MATTERS TO THEM?

Ataollah Tafaghodi Jami
University of Utah, USA
Fon Sim Ong
University of Malaya, Malaysia
Email: ongfs@um.edu.my

ABSTRACT

The proportion and the absolute number of older people in Malaysia have been increasing steadily over the past decade. By 2035, Malaysia will be an aged society. While the elderly are becoming a more important force in the marketplace, the research to date has been somewhat limited in scope and inconclusive with respect to what influences the patronage decisions of elderly in Malaysia. This study attempts to examine the differences in spending patterns of older Malaysian consumers with reference to selected demographic variables. What do they spend on and what matters to them in purchase decisions? Based on non-probability quota sampling, 1500 old people from three ethnic groups in eight geographical regions in Peninsular Malaysia participated in the survey. Research results show that the older people spent most on food, followed by gross rent, fuel and power. These categories of items accounted for 67 percent of their monthly expenditure. There is a strong positive relationship between monthly income and total monthly expenditure. With an exception of few items such as healthcare expenses, and food and beverage away from home, there were hardly any significant differences in terms of monthly expenditure patterns among the older adults. Generally, factors important to the older adults in purchase decision were: durability followed by safety features, quality, comfort and price. Design and brand were the least important.

INTRODUCTION

Society is aging world-wide. Truly extraordinary demographic changes are transforming the developed countries of the world. As the population of the world ages, it will have a profound impact on much of society. Never again will population segments be distributed as they have been in the past, with a large base of young people and far fewer older individuals (United Nations, 2002). Malaysia's population is not currently particularly elderly, although this will change over the next two decades. Research on older persons in Malaysia has been conducted mainly from the perspective demographic, health, and healthcare. Relatively few studies have been conducted to examine their buying behaviors (Ong & Phillip 2003, 2007). An indication of the lack of attention on older consumers' market in Malaysia can be seen from the type of goods and services available in this country. Marketers continue to assume that the older adults' consumption pattern and lifestyles remain largely the same over the life span, ignoring the possibility that occurrence of life events could have brought about changes in their behavior as consumers. (Ong 2003).

The major objective of this study is to test whether there are differences in spending patterns among Malaysian old consumers based on age, ethnicity, income and gender. In addition, this study also seeks to examine the evaluative criteria considered important in purchase decisions by older adults as well as to identify differences that exist with respect to gender, age, income and ethnicity.

LITERATURE REVIEW AND HYPOTHESES

In consumer and marketing research there is a long tradition of using demographic variables to understand and profile consumer segments (Roscoe, LeClaire, & Schiffman 1977). And, marketers find observable socioeconomic and demographical data attractive to use because they, generally, are easy to obtain, understand, and apply (Ahmad 2003). Although researchers have suggested using variables other

than demographic to better understand behavior (e.g. Mathur, Lee & Moschis, 2006), demographics remain useful in providing the basic understanding about consumer behavior especially where empirical research is limited.

Age

In a review of 33 methods of segmenting the mature market, Bone (1991) found that chronological age was the most common method. In one of the earliest studies about elderly expenditure pattern, Borzilleri (1978) found that those over age 65, compare to those below this age, spent a larger percentage of their budgets on food, furnishings, household operations, fuel and utilities, and medical care, while they allocated a smaller percentage of their budgets on transportation, apparel, reading, recreation, and education. However, in terms of absolute income, older people spent less on food away from home, clothing, recreation, household furnishings and equipment, education, auto purchase and operation, alcoholic beverages, and tobacco (Blisard & Blaylock 1994; Chen & Chu 1982; Chung & Magrabi 1990; Dardis, Derrick, & Lehfeld 1981; Ketkar & Cho 1982; Lazer & Shaw 1987; Neal, Schwenk, & Courtless 1990). Abdel-Ghany and Sharpe (1997) explored differences in consumption patterns between American younger (those aged 65 to 74) and older elderly (those aged 75 and older). They also examined the effect of other socio-demographic variables on spending for each elderly group. Thirteen categories of consumption expenditure as dependent variables (food at home, food away from home, alcohol/tobacco, housing, apparel/apparel services, transportation, health care, entertainment, personal care, reading/education, cash contributions, personal insurance, and miscellaneous) were included in their study. Among these 13 expenditure items, except for the three groups of reading/education, cash contribution, and miscellaneous, there were significant differences in consumption pattern between those aged 65 to 74 and aged 75 and older.

Further, in a research similar to Abdel-Ghany and Sharpe's study, Lee (2001) tested the difference between consumption patterns of Korean elderly groups. She also found that except for two groups of utility and household appliances/services, there were differences in consumption patterns between Korean younger (65 to 74 years old) and older elderly (75 years old or older).

In this study, the Malaysian elderly population is divided into three groups: 55 to 64 years old, 65 to 74 years old and those aged 75 years old or older. In this study we test for (a) the differences in expenditure pattern of Malaysian elderly groups; (b) the differences in evaluative criteria in purchase decision.

- H1 (a): There are significant differences with respect to expenditure patterns among the different age groups of older Malaysians.
- H1 (b): There are significant differences with respect to evaluative criteria used in purchase decision among the different age groups of older Malaysians.

Income

Effect of income on older consumer's expenditure was well established across studies. Regardless of measurement methods, more affluent elderly spend more on different items. In addition, the expenditure pattern and the importance of product categories change with aged consumers' income level. In 1997, Abdel-Ghany and Sharpe found that income was significantly related to mature consumers' expenditure on food at home, food away from home, alcohol/tobacco, housing, apparel/apparel services, transportation, health care, entertainment, personal care, and personal insurance. Lee (2001) found that Korean's expenditure on food at home, food away from home, utility, clothing, healthcare, transportation/communication, and Ceremonial/Personal Care/Miscellaneous items was significantly related to their income.

Furthermore, it was also found that income has a significant effect on expenditure of some specific product groups like apparels, and technological innovations (Zeithaml & Gilly 1987; Lee et al. 1997). Besides, it was found that income is one of the five key segmentation criteria for segmenting the mature market. It provides marketers with an easy-to-use, actionable segmentation method (Bone 1991).

Since income has a significant effect on expenditure pattern, it is hypothesized that there is a positive correlation between income and expenditure as follows:

H2 (a): There is a positive correlation between income and total monthly expenditure. H2 (b): The expenditure pattern between the higher and the lower income groups differed significantly. H2 (c): The evaluative criteria for purchase decision used by the high income group differed significantly from the low income group.

Gender

In one of the first studies, Sherman and Schiffman (1984) pointed out that, in recent years, social gerontologists have become interested in certain types of inequalities, between male and female elderly, that would seem to be of potential importance to consumer behavior. In some cases, they found that the greater inequalities experienced by women in society worsen with advancing age. One of the important features of aging is that the traditional sex-role boundaries gradually fade, due to the reduction of differences between roles and the sharing of household tasks (Lipman 1961). The result is that in terms of decision making, there is more equality (Lipman 1961; Neugarten 1972). Thus, it is expected that age will be associated with more equal consumer sex role perceptions and that there will be no differences due to sex among elderly consumers. However, in terms of expenditure pattern, this equality may not be observable. For example, Sherman, Schiffman, & Mathur (2001) observed that older women are more price conscious, more likely to seek out discounts or be deal prone than older men. Moreover, previous studies have shown that female elderly consumers were found to spend more on apparel than male elderly consumers (Lee et al. 1997; Neal et al. 1990). Regarding expenditure on food away from home, Abdel-Ghany and Sharpe (1997) reported that single female spent less compared to both married couples and single males. Also, single male spent more on food away from home compared to married elderly male. In addition, Abdel-Ghany and Sharpe (1997) observed that single male elderly spent less on healthcare products compared to single female.

Past research on Malaysian elderly show that men and female do not have equal economical standing in older ages. Masud, Haron, Hamid and Zainaluddin (2006) found that elderly women were less paid, more female lived below poverty line, were less educated, were unemployed, and a larger number were dependent on sources of income other than work and savings compared to men. Therefore, it is expected that (a) male and female elderly exhibit different spending patterns and (b) male and female differ significantly with respect to the importance placed on different evaluative criteria in purchase decision.

H3 (a): Malaysian older men have significantly different expenditure patterns from women.

H3 (b): Malaysian male adopt different evaluative criteria in purchase decisions compared to female.

Ethnicity

Race is used to capture differences of taste and preferences in consumption that might influence expenditures across households (Abbott 1977; Taeuber 1988; Zitter 1988). Some studies found that while the impacts of race on the various expenditure categories were not uniform, but in the case of apparels, Black American older consumers spent less compared to White Americans (Abdel-Ghany & Sharpe 1997; Fareed & Riggs 1982; Lee et al. 1997; Neal et al. 1990). Also, in case of both food at home and food away from home, Black Americans spent less compared to non-blacks (Blisard & Blaylock 1994). On the other hand, researchers reported that there was just a little difference among Hispanic, Black and White older persons in United State (Escarce & Kapur 2003).

Malaysian population is made up of three major ethnic groups: the Malays, Chinese, and Indians. Previous researches show that different Malaysian ethnic groups have different behaviors (Othman & Ong 1993, 1995). In addition, the different socio-economic circumstances experienced by three major ethnic groups in the past exacerbated the influence of culture, especially for older adults (Ong & Phillip 2003). In this study we test (a) the expenditure patterns among the three ethnic groups; and (b) we compare the use of different evaluative criteria for purchase decision.

H4 (a): Malaysian Malays, Chinese and Indians have significantly different expenditure patterns. H4 (b): The Malays, Chinese, and Indians use different evaluative criteria for purchase decision.

Evaluative Criteria in Purchase Decisions

Past research on older consumers and their needs in the market place point to the fact that evaluative criteria are product specific. Different evaluative criteria are used for different categories of products. Lambert (1979) found that factors important for purchase decisions are: discounts improved retail personnel-customer interactions, assistance given to elderly in locating products within the store, bigger prints on price tags and labels, and readable store directions. Lumpkin and Greenberg (1982) on apparel shopping found that creating a personal relationship was more important than fashion, price or convenience-related appeals. Curasi (1995) found that older consumers valued price and customer service in their purchase decisions for retail patronage. The importance of service, especially in the relationship between store personnel and the elderly consumers was further supported by the study of Johnson-Hillery, Kang and Tuan (1997). In a study on food shopping, Hare, Kirk and Lang (1999), key shopping elements were merchandised-related: size, price, promotions, and quality and store-related: layout and check-out system. Lipke (2001) found that brand was not important to elderly since this group of consumers were not keen on brands.

RESEARCH METHODOLOGY

Data for this study were obtained from a large scale door-to-door survey using face-to-face interviews³. The respondents were older adults, aged 55 years or older, residing in eight major towns in Malaysia. We focused on older consumers because of the greater variability in behaviors that exists in the older population. The notion that people become increasingly heterogeneous with age is an undisputed fact and universally acceptable (Moschis, 1992). Quota sampling was used due to a lack of mailing lists of older adults in addition to ensuring a good representation of the three ethnic groups--Malays, Chinese, and Indians. Interviews were conducted using the appropriate language, mainly English, Malay which is the national language, and Chinese. A total of 1356 respondents participated in the survey.

Variables

The survey questionnaire contained many questions relating to issues about older consumers. However, this study utilizes questions relating to expenditure on ten main categories of products/services were included: 1) food, 2) beverages and tobacco, 3) clothing and footwear, 4) gross rent, fuel and power, 5) furniture, furnishings and household equipment and operations, 6) medical care and health expenses, 7) transport and communication, 8) recreation, entertainment, education and cultural services, 9) food and beverages away from home, 10) other miscellaneous goods and services. For each of these items, the respondent was asked to state his/her estimated monthly expenditure. The mean monthly expenditure on the total of ten items was RM1301.9 (SD = RM790.8). A series of correlation analyses show that income has a significant positive correlation with monthly expenditure (r = .629, p < .001) and a significant negative correlation with total expenditure (r = .518, p < .001). It is decided that further analyses on each of the expenditure items will be based on the percent of expenditure on product to total expenditure for a meaningful comparison of differences in expenditure patterns. In other words, the expenditure on each item is expressed as a percentage to total expenditure.

The present study also utilizes question relating to a list of factors that consumers consider important when making purchase decisions. The importance was measured using a 5-point Likert scale (1 = not important at all, to 5 = very important). Factors included are: design, ease of use/user friendliness, safety features, durability, clear labels, after sales service, brand, quality, environmentally friendly, and comfort. In the last part of questionnaire, demographic characteristics such as age, income, gender, and educational level of each respondent were requested.

³ The study was sponsored by the Ministry of Science, Technology and Innovation, under the IRPA funding.

The Sample

After dropping incomplete and unusable questionnaires, a total of 1233 responses were used for data analysis. The average age of the respondents is 63.58 (SD= 7.25) years old. Based on their age, the respondents were grouped into three age groups of 55 to 64 years old, 65 to 74 years old, and 75 years old or more. A total of 748 respondents (60.7%) were in the age group of 55-64 years old, 358 or 29.0% were between 65-74 years old while the remaining 10.3% were 75 years or older. Among respondents, 710 (57.6%) were male and 523 (42.4%) female. The Malays made up 55.6% (n= 686), followed by 29.4% (n=362) Chinese, and 11.8% (n=145) Indians. About 3% of them were other races. The mean estimated household income was RM2405.4 (SD= RM2453.9). In terms of employment status, 19.1% (n=235) of respondents have fulltime jobs, 23.2% (n=286) of them have part-time jobs and 57.7% (n=712) of them are unemployed.

RESULTS AND DISCUSSION

Table 1 shows the monthly estimated expenditure on each of the items while Table 2 shows the expenditure on a particular product expressed as a percentage to total expenditure. Results show that Malaysian elderly spent a large proportion of income on food which made up 39% of monthly expenditure. Gross rent, fuel and power took 12.4% of the monthly expenditure, food and beverages away from home 11.4% of monthly expenditure, transport and communication, 10.3% of monthly expenditure, and medical care and health with 7.3% of monthly expenditure. These were the five major categories of expenditure of Malaysian older consumers. These five categories made up about 78 percent of their monthly expenditure.

Research results show that generally, older adults considered durability the most important factor in purchase decision (Table 3). They valued things that could last its life span. In addition, they were concerned about price, comfort, and safety features. Design and brand were the least important with mean values of 2.8 and 2.7, respectively.

Hypotheses Testing

Age: In order to test for significant differences in age with respect to expenditure we grouped the sample into three age groups: 55 to 64 years old (n = 748), 65 to 74 years old (n=358) and 75 years old or older (n=126). The older age groups tended to have less income compared to those in the younger age groups. Since age and income has a significant negative correlation (r = -.113, p < 0.001), percentage of each item's expenditure to total expenditure is used to analyze the differences in spending pattern among the different age groups so that the effect of income is partial out.

Research results support hypothesis H1 (a) in three product categories: beverages and tobacco group, medical care and health expenses, and recreation, entertainment, education and cultural services (Table 2). For the remaining seven items, no significant differences were observed. In the case of beverages and tobacco, mature consumers who were between 65 to 74 years old spent significantly (p<0.04) higher portion of their monthly expenditure (with 6.1% of their monthly expenditure) on beverages and tobacco compared to those who were between 55 to 64 years old (5.1%). However, the portion of monthly expenditure, that those who were 75 years old or more spent on beverages and tobacco, was not significantly different from the other two age groups.

For medical care and health expenses, research results show that those who aged 55 to 64 years old spent 6.8% of their monthly expenditure on this category of product which was significantly (p<0.002) lower than those who are 65 to 74 years old (with 8.3% of their monthly expenditure). On the other hand, those who are 75 years old or more spent 7.8% of their monthly expenditure on healthcare product which was not significantly different from the other two groups. This result is more obvious by knowing the fact that health issues rise with age of people and those who are older have higher demand for healthcare services. In addition, this finding is also reported in some of the previous researches (Abdel-Ghany & Sharpe 1997; Borzilleri 1978; Lee 2001).

Expenditure on recreation, entertainment, education and cultural services was another category of product in which younger elderly spent more than elders. Abdel-Ghany and Sharpe (1997) and Borzilleri (1978) also reported the same pattern of behavior in their research. For hypothesis H1 (b), significant

differences were observed for four of the evaluative criteria: durability, after sales service, quality and environmentally friendly. For durability, older consumers in the 55-64 years age group ($\bar{x} = 4.40$, SD = 0.77) differed significantly from those aged 75 years or older ($\bar{x} = 4.15$, SD = 0.99) but was not significantly different from the age group of 65-74 years ($\bar{x} = 4.34$, SD = 0.75). For quality, after sales service and environmentally friendly, the younger age group (55-64 years) placed more importance on these three factors compared to those aged 75 years or older. Those in the age group of 65-74 also differed significantly from those aged 75 years or older (Table 3).

Income: Pearson correlation supports H2 (a) regarding the positive relationship between income and expenditure, with r = .629 (p < .001). Median income (RM2000) was used to divide the sample into two groups: the low income and the high income group for testing H2 (b). Expressing expenditure as a percentage of total expenditure, significant differences could be observed for 7 of the categories: food, clothing and footwear, gross rent, fuel and power, furniture and furnishing, transport and communication, recreation and entertainment, as well as on other miscellaneous goods and services, supporting hypothesis H2 (b) (Table 2). The low income group also differed significantly from the high income group with respect to the evaluative criteria used for purchase decisions, supporting hypothesis H2 (c) (Table 3). The high income group placed significantly more emphasis on all factors except price and comfort, suggesting that this group of consumers may be more discerning and had higher expectations.

Gender: Research results of this study are similar to Abdel-Ghany and Sharpe's study, in which male consumers spent significantly more on food and beverages away from home and less on medical care and health products compared to female. Malaysian male elderly spent on average RM158.3 (SD =132.18) each month on food and beverages away from home, which is significantly (p<0.001) higher than female's expenditure (RM134.6, SD = 114.88). The other spending pattern which was significantly different between Malaysian men and women was their expenditure on medical care and health products (Table 1).

When expressing the expenditure on product as a percentage of total expenditure, the spending pattern of male differed from female on two products: medical and health care products, and food and beverages away from home (Table 2). For older female, the proportion of medical care and health expenses formed a significantly larger proportion of total expenditure (5.5% of total expenditure at p <.001) compared to males (4.6% of total expenditure). The older males tend to spend a significantly larger proportion of their income on food and beverages away from home. This is consistent with the social economic background of male compared to female. For the rest of the expenditure, there were no significant differences between male and female.

For hypothesis H3 (b), male differed significantly from female with respect to four of the evaluative criteria: design, safety features, after sales service, and quality (Table 3). Female placed more importance than male on design (female $\bar{x}=2.91$, SD = 1.29; male $\bar{x}=2.71$, SD =1.34) while male emphasized more on quality ($\bar{x}=4.38$, SD = 0.85), safety features ($\bar{x}=4.3$, SD = 0.81) and after sales service ($\bar{x}=3.48$, SD = 1.22) compared to female. This is in line with general expectations that female are more inclined to value design, the ecstatic aspect of products more than male.

Ethnicity: The results indicate partial support for H4 (a). Except for expenses on medical care and health, as well as on food and beverages away from home, the three ethnic groups showed no significant differences in their expenditure patterns. For medical care and health expenses, Indians spent (8.9%) significantly a higher proportion of their monthly expenditure (to total expenditure) compared to Malays (6.8%) at p < 0.002 whereas there were no significant differences between the Chinese and Indians, and between the Chinese and Malays.

Chinese older consumers spent 12.0% (to total expenditure) of their monthly expenses on food and beverages away from home. On the other hand, Malays spent 10.7% of their monthly expenses on food and beverages away from home, which was significantly (p<0.038) less than the percentage of

expenditure spent by the Chinese While there was no significant differences between the Chinese and Indians and between Malays and Indians.

For hypothesis H4 (b), the three ethnic groups differed significantly with respect to design, safety features, and after sales service. The Malays ($\bar{x}=2.88$, SD = 1.33), significantly relied more on design compared to the Indians ($\bar{x}=2.57$, SD = 1.36) at p<.035, while there was no significant difference between the Chinese and the Malays, as well as between the Chinese and Indians (Table 4). The Malays ($\bar{x}=4.37$, SD = 0.83), placed more importance on safety features compared to the Indians ($\bar{x}=4.18$, SD = 0.88) at p<.039), whereas there was no significant differences between the Chinese and Malays and Between Chinese and Indians with respect to the importance of safety features in purchase decisions. For after sales service, the Chinese ($\bar{x}=3.57$, SD = 1.21), emphasized significantly more than the Malays ($\bar{x}=3.37$, SD = 1.22) at p<.036, while there was no significant difference for the Malays and Indians and between Indians and Chinese.

CONCLUSIONS

Marketing to older adults in Malaysia should begin with an understanding or an appreciation of the needs of this group of consumers and their spending patterns and the evaluative criteria they use in decision making rather than being driven by a narrow and inaccurate stereotyping of them. The older adults represent a growing segment in numbers and as a proportion of total population. Although researchers propose the adoption of variables other than demographics to segment a market, we feel that demographic variables provide useful basic understanding of consumers especially in the case where limited information is available. This study makes use of demographic variables simply because it is a first attempt at providing some basic understanding about older consumers and their spending pattern as well as on evaluative criteria that are important for purchase decisions among older consumers.

The findings of this research suggest that the older consumer market could be segmented based on age, income, gender and ethnicity. The characteristics of each segment and the main concerns of its members will also help marketers in designing products and messages to reach the older consumers in the targeted segment. For example, knowing that expenditure on food away from home differ between male and female as well as among the three ethnic groups is important to marketers in planning for new product development and marketing communications.

REFERENCES

Abbott, J. 1977. Socioeconomic characteristics of the elderly: Some black-white differences. *Social Security Bulletin*, 40: 16-42.

Abdel-Ghany, Mohamed & Deanna L. Sharpe. 1997. Consumption patterns among the young-old and old-old. *Journal of Consumer Affairs*, 31 (1): 90.

Ahmad, Rizal. 2003. Benefit segmentation: A potentially useful technique of segmenting and targeting older consumers. *International Journal of Market Research*, 45 (3): 373-88.

Blisard, Noel & James R. Blaylock. 1994. Food expenditure projections: 1990-2010. *Agribusiness*, 10 (2): 105-14.

Bone, P.F. 1991. Identifying mature segments. Journal of Services Marketing, 5 (1): 47-60.

Borzilleri, Thomas C. 1978. The need for a separate consumer price index for older persons: A review and new evidence. *The Gerontologist*, 18 (3): 203-36.

Chen, Yung-Ping P. & Kwang-wen W. Chu. 1982. Household expenditure patterns: The effect of age of family head. *Journal of Family Issues*, 3 (2): 233-50.

Chung, Young Sook & Frances M. Magrabi. 1990. Age-related changes in expenditure patterns in *The* 36th Annual Conference of the American Council on Consumer Interests.

Curasi, C. F. 1995. *Male senior citizens and their shopping preferences*, University of South Florida. Available www.sbaer.uca.edu/Research/1995 (Accessed February 5, 2003).

Dardis, Rachel, Frederick Derrick, & Alane Lehfeld. 1981. Clothing demand in the United States: A cross-sectional analysis. *Home Economics Research Journal*, 10 (2): 212-21.

Escarce, Jose J. & Kanika Kapur. 2003. Racial and ethnic differences in public and private medical care expenditures among aged Medicare beneficiaries. *The Milbank Quarterly*, 81 (2): 249-75.

Fareed, A. E. & G. D. Riggs. 1982. Old-young differences in consumer expenditure patterns. *The Journal of Consumer Affairs*, 16 (1): 152-60.

Hare, C., Kirk, D. & Lang, T. 1999. The food shopping experience of older consumers. *Journal of Marketing Practice: Applied Marketing Science*, 5(6/7/8): 213-232

Johnson-Hillery, J. Kang, J. & Tuan, W.J. 1997. The difference between elderly consumers' satisfaction levels and retail sales personnel's perceptions. *International Journal of Retail and Distribution Management*, 25 (4): 126-137.

Ketkar, Suhas L. & Whewon Cho. 1982. Demographic factors and the pattern of household expenditures in the United States. *Atlantic Economic Journal*, 10 (3): 16-27.

Lambert, Z.V. 1979. An investigation of older consumers' unmet needs and wants at the retail level. *Journal of Retailing*, 55(4): 35-57.

Lazer, William & Eric H. Shaw. 1987. How older Americans spend their money. *American Demographics*, 9: 36-41.

Lee, Jinkook, Sherman D. Hanna, Chiu Fui Joyce Mok, & Hui Wang. 1997. Apparel expenditure patterns of elderly consumers: A life-cycle consumption model. *Family and Consumer Sciences Research Journal*, 26 (2): 109-40.

Lee, Yoon G. 2001. Consumption patterns of elderly households: are they different between younger and older elderly in Korea? How do they differ between Korea and the us? *Consumer Interest Annual*, 47: 1-11.

Lipke, D.J. 2001. Pledge of allegiance. American Demographics, Itacha.

Lipman, A. 1961. Role perceptions and morale of couples in retirement. *Journal of Gerontology*, 16: 267-71.

Lumpkin, J.R. & Greenberg, B.A. 1982. Apparel shopping patterns of the elderly consumers. *Journal of Retailing*, 61(2): 75-105

Masud, Jariah, Sharifah A. Haron, Aizan T. A. Hamid, & Zumilah Zainaluddin. 2006. Economic wellbeing of the elderly: Gender differences. Consumer Interest Annual, 52: 456-61.

Mathur, Anil, Lee, Euehun & Moschis, George, P. 2006. Life-changing events and marketing opportunities. *Journal of Targeting, Measurement and Analysis for Marketing*, 14 (2): 115–128.

Neugarten, B. 1972. Personality and the aging process. *Gerontologist*, 9-15.

Ong, F.S. & D.R. Phillip. 2003. Stress, resources, and life satisfaction among older adults in Malaysia. *HALLYM International Journal of Ageing*, 5 (2): 111-29.

Othman, M.N. & F.S. Ong. 1993. Leisure activities of young, urban, Malaysian adults: Implications for marketers. *Malaysian Management Review*, 28 (March): 33-53.

Othman, M.N. 1995. Ownership and usage patterns of electrical appliances in urban Malaysia: an Ethnic comparison. *Malaysian Management Review*, 30 (March): 26-46.

Roscoe, Jr., A. Jr. LeClaire, & L.G. Schiffman. 1977. In A. D Woodside, J. M. Sheth & P. D.

Bennett (Ed.), Theory and management applications of demographics in buyer behavior in consumer and industrial buying behavior. New York: Elsevier-North Holland.

Sherman, E.M. & Leon G. Schiffman. 1984. Applying age-gender theory from social gerontology to understand the consumer well-being of the elderly. *Advances in Consumer Research*, 11 (1): 569-73.

Sherman, Elaine, Leon G Schiffman, & Anil Mathur. 2001. The influence of gender on the new-age elderly's consumption orientation. *Psychology & Marketing*, 18 (10).

Taeuber, Cynthia. 1988. *Diversity: The dramatic reality in diversity in aging*, S. A. Bass, E. A. Kutza and P. M. Torres-Gill (Ed.), Glenview, IL: Scott Foresman and Co., 1-45.

Zeithaml, Valarie A. & Mary C. Gilly. 1987. Characteristics affecting the acceptance of retailing technologies a comparison of elderly and non-elderly consumers. Journal of Retailing, 63 (1): 49-68.

Zitter, Mark. 1988. Older population most diverse of all American age groups. *Healthcare Financial Management*, 42 (12): 38-42.

Table 1
Monthly Expenditure by Age, Gender, Income and Ethnicity

		Gender#		Age (Years)				Income#	
Items	Total (n=1233) Mean (SD)	Male (n=710) Mean (SD)	Female (n=523) Mean (SD)	55-64 (n=748) Mean (SD)	65-74 (n=358) Mean (SD)	75 & above (n=126) Mean (SD)	ANOVA F-test	Low (n=744) Mean (SD)	High (n=489) Mean (SD)
Food	455.3 (297.1)	453.2 (260.8)	458.1 (340.4)	480.9 (310.3)	436.0 (286.3)	353.9** (206.2)	11.06**	364.1 (204.7)	594.0** (356.5)
Beverages and tobacco	70.6 (100.7)	74.9 (99.4)	64.7 (102.2)	69.8 (101.8)	75.9 (107.2)	60.7 (69.7)	1.12	53.6 (71.8)	96.5** (128.9)
Clothing and footwear	48.9 (75.5)	51.1 (73.5)	46.1 (78.0)	54.1 (84.0)	42.9 (59.4)	35.2 (58.2)	5.03	25.3 (44.5)	84.9** (96.0)
Gross rent, fuel and power	164.3 (172.7)	159.5 (140.9)	170.8 (208.2)	174.5 (167.3)	155.6 (197.7)	128.3 (113.2)	4.52	113.3 (95.1)	241.8** (227.1)
Furniture, furnishings and household equipment and operations	36.2 (63.7)	38.4 (63.6)	33.2 (63.8)	39.1 (64.1)	34.7 (66.0)	23.4 (52.6)	3.43*	16.2 (39.6)	66.8** (79.4)
Medical care and health expenses	96.6 (100.0)	91.0 (89.9)	104.2** (111.8)	95.8 (102.7)	102.7 (97.9)	84.6 (88.0)	1.61	69.4 (76.4)	138.0** (116.2)
Transport and communication	134.2 (114.5)	140.4 (119.0)	125.8** (107.7)	142.3 (122.7)	125.8 (100.4)	110.8** (95.7)	5.52**	106.7 (97.5)	176.0** (125.3)
Recreation, entertainment, education and cultural services	91.3 (250.7)	88.4 (135.1)	95.2 (351.4)	108.1 (312.1)	64.9 (93.2)	67.1 (89.5)	4.26*	50.6 (80.9)	153.2** (377.2)
Expenditure on food away from home	118.6 (107.0)	125.3 (111.9)	109.6** (99.4)	119.8 (107.9)	121.3 (110.2)	105.2 (90.9)	1.15	92.6 (91.0)	158.1** (117.1)
Expenditure on beverages away from home	29.6 (48.1)	33.0 (51.5)	25.0** (42.6)	31.2 (49.6)	25.0 (42.7)	32.9 (52.9)	2.34	17.6 (34.4)	47.8** (59.0)

Other miscellaneous goods and	56.5	59.2	52.7	60.9	51.6	44.7	2.05	31.7	132.4**
services	(99.2)	(104.7)	(91.1)	(112.1)	(73.0)	(79.4)		(57.0)	(6.0)

^{*} significant at the 0.05 level (2-tailed), ** significant at the 0.01 level (2-tailed), # Student t-test used for testing significance.

Table 1
Monthly Expenditure by Age, Gender, Income and Ethnicity (Cont'd)

		Ethnicity					
	Total	Malays	Chinese	Indians	ANOVA		
	(n=1193)	(n=686)	(n=362)	(n=145)	F-test		
Items	Mean (SD)	Mean (SD)	Mean (SD)	Mean			
				(SD)			
Food	457.2	416.2	546.0	429.7	24.02**		
	(298.4)	(264.7)	(347.7)	(268.0)			
Beverages and tobacco	68.2	62.5	75.6	76.3	2.74		
	(97.1)	(99.5)	(97.6)	(82.1)			
Clothing and footwear	46.7	44.2	54.2	39.6	2.91		
	(74.3)	(61.1)	(98.3)	(59.8)			
Gross rent, fuel and power	162.5	149.6	187.1	161.9	7.01**		
	(154.7)	(140.8)	(185.1)	(125.5)			
Furniture, furnishings and	34.8	37.8	32.7	25.8	2.53		
household equipment and	(62.2)	(62.9)	(64.6)	(51.4)			
operations							
Medical care and health	95.3	81.2	116.5	109.0	16.62**		
expenses	(100.4)	(79.4)	(130.2)	(92.9)			
Transport and communication	133.7	126.3	144.8	140.9	3.36*		
	(115.6)	(108.7)	(120.9)	(131.2)			
Recreation, entertainment,	89.6	86.4	97.3	85.4	0.24		
education and cultural services	(254.1)	(216.7)	(344.2)	(117.7)			
Expenditure on food away from	115.7	104.1	140.6	108.0	14.95**		
home	(105.7)	(87.5)	(133.6)	(94.8)			
Expenditure on beverages away	30.2	25.7	35.5	38.1	7.11**		
from home	(48.5)	(45.1)	(53.5)	(49.2)			
Other miscellaneous goods and	145.8	129.8	176.2	146.0	1.14		
services	(125.7)	(107.3)	(154.0)	(114.4)			

Table 2
Expenditure on Items Expressed as a Percentage to Total Expenditure

		Gender#			Age (Years)				ome#
Items	Total	Male	Female	55-64	65-74	75 & above		Low	High
ICHIS	(n=1233) % (SD)	(n=710) Mean (SD)	(n=523) Mean (SD)	(n=748) Mean (SD)	(n=358) Mean (SD)	(n=126) Mean (SD)	ANOV AF -test	(n=744) Mean (SD)	(n=489) Mean (SD)
Food	38.7 (18.2)	26.3 (17.2)	26.1 (17.1)	38.7 (17.7)	38.4 (18.4)	39.5 (20.1)	0.18	41.8 (18.7)	34.1 (16.3)
Beverages and tobacco	5.4 (6.8)	3.9 (5.2)	3.5 (5.0)	5.1 (6.6)	6.1 (7.4)	5.2 (5.5)	3.15*	5.6 (7.5)	5.1 (5.6)
Clothing and footwear	3.3 (4.3)	2.1 (3.0)	2.1 (3.1)	3.5 (4.5)	3.1 (3.8)	2.8 (4.3)	2.36	2.5 (4.1)	4.1 (4.3)
Gross rent, fuel and power	12.4 (7.5)	8.3 (6.1)	8.6 (6.7)	12.6 (7.5)	12.1 (7.6)	12.2 (7.2)	0.50	11.9 (7.2)	13.1 (7.8)
Furniture, furnishings and household equipment and operations	2.2 (3.7)	1.5 (2.5)	1.3 (2.5)	2.4 (3.6)	2.1 (3.7)	1.7 (4.2)	2.07	1.5 (3.4)	3.4 (3.8)
Medical care and health expenses	7.3 (6.6)	4.6 (4.8)	5.5** (6.0)	6.8 (6.2)	8.3 (6.8)	7.9 (7.6)	6.68**	7.2 (7.2)	7.6 ** (5.4)
Transport and communication	10.3 (7.6)	7.4 (6.4)	7.0 (6.6)	10.5 (7.7)	10.2 (7.4)	10.2 (7.2)	0.19	11.0 (8.7)	9.3 (5.4)
Recreation, entertainment, education and cultural services	5.4 (7.4)	4.0 (5.7)	3.6 (5.6)	6.1 (8.2)	4.2 (5.7)	5.0 (6.5)	7.79**	4.6 (7.2)	6.7 (7.5)
Expenditure on food and beverages away from home	11.3 (8.0)	8.1 (6.6)	7.3** (6.4)	10.8 (7.5)	11.8 (8.8)	12.3 (8.1)	2.99	11.1 (8.6)	11.5** (6.9)
Other miscellaneous goods and services	3.6 (4.9)	2.6 (3.9)	2.4 (3.9)	3.6 (4.9)	3.7 (4.9)	3.1 (4.9)	0.56	2.9 (5.0)	4.6 (4.7)

Table 3 **Importance of Evaluative Criteria for Purchase Decisions**

		Gene	der#		Age (y	Income#			
Product Characteristics	Total (n=1232) Mean (SD)	Male (n=710) Mean (SD)	Female (n=523) Mean (SD)	55-64 (n=748) Mean (SD)	65-74 (n=358) Mean (SD)	75 & above (n=126) Mean (SD)	ANOVA F-test	High (n=489) Mean (SD)	Low (n=744) Mean (SD)
Design	2.80 (1.33)	2.71 (1.34)	2.9** (1.3)	2.80 (1.34)	2.77 (1.30)	2.87 (1.34)	0.24	2.93 (1.25)	2.71 (1.37)**
User friendliness	4.10 (0.89)	4.13 (0.90)	4.05 (0.88)	4.08 (0.91)	4.13 (0.83)	4.10 (0.96)	0.34	4.20 (0.77)	4.03 (0.95)**
Safety features	4.31 (0.83)	4.36 (0.81)	4.24* (0.85)	4.33 (0.84)	4.30 (0.76)	4.23 (0.90)	0.82	4.44 (0.71)	4.23 (0.89)**
Durability	4.36 (0.79)	4.39 (0.78)	4.32 (0.81)	4.40 (0.77)	4.34 (0.75)	4.15 (0.99)	5.47**	4.44 (0.71)	4.31 (0.83)**
Clear labels	3.71 (1.25)	3.75 (1.24)	3.66 (1.26)	3.74 (1.24)	3.75 (1.21)	3.48 (1.34)	2.56	4.08 (0.99)	3.47 (1.33)**
After sales service	3.42 (1.21)	3.48 (1.22)	3.34* (1.19)	3.49 (1.21)	3.43 (1.14)	3.03 (1.23)	7.77**	3.72 (1.01)	3.23 (1.28)**
Brand	2.65 (1.39)	2.69 (1.45)	2.61 (1.30)	2.68 (1.39)	2.60 (1.38)	2.62 (1.39)	0.47	2.85 (1.38)	2.53 (1.44)**
Quality	4.34 (0.83)	4.38 (0.81)	4.28* (0.86)	4.36 (0.84)	4.35 (0.75)	4.13 (0.98)	4.18*	4.43 (0.76)	4.27 (0.87)**
Environmentally friendly	3.30 (1.22)	3.31 (1.23)	3.29 (1.21)	3.34 (1.21)	3.31 (1.19)	2.99 (1.33)	4.56*	3.60 (0.98)	3.10 (1.32)**
Comfort	4.30 (0.76)	4.32 (0.74)	4.26 (0.77)	4.33 (0.73)	4.27 (0.77)	4.17 (0.87)	2.66	4.30 (0.74)	4.29 (0.77)
Price	4.27 (0.82)	4.32 (0.78)	4.21 (0.87)	4.28 (0.84)	4.32 (0.73)	4.10 (0.93)	1.33	4.31 (0.77)	4.23 (0.88)

^{*}significant at the 0.05 level (2-tailed); **significant at the 0.01 level (2-tailed)

Student t-test used to test for significance. Mean measured by a five-point Likert scale, the higher the mean, the greater is the importance

Table 4
Ethnicity, Expenditure Patterns and Factors in Purchase Decisions

			Ethnic (s and Factors in		Ethnic Groups			
	Total	Malay	Chinese	Indian		=	Total	Malay	Chinese	Indian	
Percentage of Total	(n=1193)	(n=686)	(n=362)	(n=145)	ANOV	Product	(n=1193)	(n=686)	(n=362)	(n=145)	ANOV
Expenditure	Mean	Mean	Mean	Mean	A	characteristic	Mean	Mean	Mean	Mean	A
•	(SD)	(SD)	(SD)	(SD)	F-test	s	(SD)	(SD)	(SD)	(SD)	F-test
Food	39.19	39.71	39.08	37.02	1.31	Design	2.80	2.88	2.74	2.57	3.87*
	(18.16)	(19.08)	(16.52)	(17.60)			(1.33)	(1.33)	(1.32)	(1.36)	
Beverages and	5.32	5.13	5.41	6.02	1.05	User	4.10	4.14	4.09	3.99	1.86
tobacco	(6.84)	(7.05)	6.47	6.71		friendliness	(0.89)	(0.89)	(0.90)	(0.89)	
Clothing and	3.17	3.11	3.30	3.15	0.24	Safety features	4.31	4.37	4.25	4.18	4.55*
footwear	(4.26)	(4.12)	(4.30)	(4.83)			(0.83)	(0.80)	(0.87)	(0.82)	
Gross rent, fuel and	12.46	12.12	12.84	13.14	1.79	Durability	4.36	4.40	4.33	4.25	2.79
power	(7.44)	(6.86)	(8.41)	(7.46)			(0.79)	(078)	(0.85)	(0.76)	
Furniture, furnishings	2.18	2.36	1.97	1.86	2.04	Clear labels	3.70	3.71	3.68	3.69	0.05
and household	(3.65)	(3.79)	(3.51)	(3.24)			(1.25)	(1.28)	(1.23)	(1.16)	
equipment and											
operations											
Medical care and	7.30	6.80	7.63	8.89	6.70**	After sales	3.43	3.37	3.57	3.33	3.85*
health expenses	(6.62)	(6.27)	(6.90)	(7.23)		service	(1.21)	(1.22)	(1.21)	(1.16)	
Transport and	10.38	10.79	9.64	10.34	2.67	Brand	2.67	2.72	2.65	2.43	2.69
communication	(7.62)	(8.27)	(6.57)	(7.25)			(1.39)	(1.37)	(1.45)	(1.37)	
Recreation,	5.33	5.63	4.72	5.48	1.78	Quality	4.34	4.38	4.26	4.34	2.60
entertainment,	(7.46)	(7.50)	(7.68)	(6.61)			(0.82)	(0.77)	(0.93)	(0.75)	
education and											
cultural services											
Expenditure on food	11.18	10.69	12.03	11.42	3.35*	Environmental	3.30	3.28	3.33	3.32	0.20
and beverages away	(8.07)	(7.25)	(9.56)	(7.55)		ly friendly	(1.23)	(1.26)	(1.18)	(1.17)	
from home											
Other miscellaneous	3.47	3.68	3.39	2.68	2.54	Comfort	4.29	4.31	4.30	4.17	2.16
goods and services	(4.90)	(4.91)	(5.09)	(4.24)			(0.76)	(0.76)	(0.73)	(0.78)	
						Price	4.26	4.26	4.29	4.17	0.45
							(0.83)	(0.84)	(0.82)	(0.81)	

^{*} significant at the 0.05 level (2-tailed)** significant at the 0.01 level (2-tailed)

ANTECEDENTS OF CUSTOMER LOYALTY IN THE UK COSMETICS MARKET

Dr Ahmad Jamal
Cardiff Business School, UK
Email: jamala@cardiff.ac.uk
Dr Sajid Khan
American University of Sharjah, UAE
Matoula Stamatia Tsesmetzi
Cardiff Business School, UK

ABSTRACT

While prior research has reported a number of antecedents of loyalty including affect, trust, satisfaction, attitudes and commitment, the current paper aims to investigate the effects of self-image congruence, perceived quality and brand innovativeness on customer loyalty. Using data from 193 female users of cosmetics brands, the paper demonstrates that the consumers' perceptions of their selves, quality and brand innovative are linked to their loyalty levels. However, the effect of brand innovativeness can be different depending upon the frequency of using and buying the brand. The paper discusses implications for brand managers and argues to take into account customer characteristics such as usage and purchase frequency while developing positioning strategies.

INTRODUCTION

The purpose of this research is to explore the impact of self-image congruence, quality and brand innovativeness on customer loyalty. Self concept is normally defined as 'the totality of the individual's thoughts and feelings having reference to himself as an object' (Sirgy, 1982; Wylie, 1989). An application of self concept in consumer behavior suggests that consumers can express themselves by choosing brands whose personalities are perceived to be congruent with their own personalities (Aaker, 1999; Kassarjian, 1971; Sirgy 1982). During the consumption process, a product-user image interacts with the consumers' self concept generating a subjective experience referred to as self-image congruence (Sirgy, et al. 1997). Previous research indicates that self-image congruence can influence consumers' satisfaction towards brands, their brand preferences, purchase intentions, and can encourage positive word of mouth and attitudes (Ericksen, 1996; Sirgy et al., 1997, 1991; reference to authors' prior published work). This has practical implications. Managing the user and usage imagery is particularly critical for brands whose core associations are primarily non-product-related attributes and symbolic or experiential benefits (Keller, 1999). Brand managers have to carefully manage the interrelationship between a brand's perceived image and the consumer's self-image (Hong & Zinkham, 1995). In this context, they often spend millions of pounds every year to create and support brand images, which, they hope, are consistent with consumers' self images. Similarly, consumers are likely to differ in their levels of self-image congruency and hence might require different targeting approaches and advertising appeals (Graeff, 1996; reference to authors' prior published work).

However, the effects of self-image congruence are likely to be stronger for products that are conspicuous in nature and are publicly consumed, than those that are less conspicuous and are privately consumed (Onkvisit & Shaw, 1987; Sirgy et al., 2000). The current paper focuses on make-up cosmetics, and in particular cosmetics choices by women, for which no prior research exists. Furthermore, no prior research has looked into the effects of self-image congruency on customer loyalty. Since customer loyalty reflects a memory-based brand choice where brands are retrieved from memory directly when making a brand choice (Ming-Hui & Shihti, 1999) and self-image congruency reflects some higher level abstract cognitive schemas (Sirgy & Samli, 1985), we expect self-image congruence to be directly related to customer loyalty. We focus on customer loyalty because it is an important theoretical as well as practical issue for most marketers and customer researchers (Aaker, 1992; Reichheld, 1996; Asuncion et al., 2004; Bloemer et al., 1999; Caruana, 2002). Increase in customer loyalty levels mean lower marketing costs (Aaker, 1991), enhanced opportunities for brand extensions and increased market shares (Buzzell et al., 1975; Buzzell & Gale, 1987), favorable word of mouth (Dick & Basu, 1994), less price sensitive consumers (Keller, 1993;

Rundle-Thiele & Mackay, 2001) and increased brand equity (Aaker, 1991; de Chernatony & McDonald, 1998; Yoo & Donthu, 2001; 2002). However, despite tremendous interest in customer loyalty, very little empirical research has explored the effects of self-image congruence on customer loyalty.

Furthermore, an increasing number of companies are spending more on quality issues (Grandzol & Gershon, 1997) and there is a continued interest in investigating its effects on firm's performance measures such as return on investment, net revenues, customer growth and sales (Sousa & Voss, 2002; Zeithaml, Berry, & Parasuraman, 1996). At a brand level, perceived quality represents an overall impression of the relative inferiority or superiority of the brand (Bitner & Hubbert, 1994; Zeithaml, 1988) and is widely considered as a type of an attitude. As perceptions of quality go up, consumers can better recognize the differentiation and superiority of the brand through their long term personal experiences with the brand (Yoo et al., 2000). We argue that since perceived quality is part of brand value (Zeithaml, 1988), high perceived quality can drive a consumer to choose the brand rather than a competing alternative (Yoo et al., 2000) causing an increase in loyalty levels.

Similarly, Dickson's (1992) theory of competitive rationality implies that, due to the highly competitive nature of the marketplace, firms need to innovate to remain competitive and successful. This is backed up by Kay's (1993) framework for corporate success which argues that competitive advantage is based on brand reputation, innovation and implementation of market orientation. Increasingly marketers have also acknowledged the important role of innovation in contributing to firm's performance (Varadarajan & Jayachandran, 1999). Similarly, a four-year global study of 524 brands across 100 categories during 1997 to 2001 found that many brands were able to significantly beat their respective category's growth rates by investing in product (e.g., change the formula or reposition) and packaging innovation (Blasberg & Vishwanath, 2003). Similarly, within the cosmetics industry, firms often use various marketing tools (e.g., innovative packaging) to stand out and draw attention from consumers. Keller (1991) argued that innovations in product design, merchandising and manufacturing are particularly critical for performance based brands (whose sources of brand equity primarily rest in product related features). While consumers are constantly bombarded with new products and new innovations, little is known about consumers' perceptions towards them and the extent to which these perceptions can influence their relationships with brands and their behavioral patterns including loyalty behavior. It might be that some consumers develop positive affect and attitudes towards brands that they perceive as innovative and hence are willing to patronize those brands more than the others. Such perceptions are important because they help develop strong, favorable and unique brand associations in consumer minds (Keller, 2001).

The current paper aims to fill these gaps in the literature and uses empirical data to demonstrate the effects of self-image congruence, consumer perceptions of quality and the extent to which a brand is perceived to be innovative on customer loyalty. In doing so, the paper demonstrates the moderating effects of some individual differences such as frequency of purchase and usage.

RESEARCH METHODOLOGY

Data to examine the effects of self-image congruence, quality and innovativeness was obtained from female cosmetic users in a leading metropolitan city in the UK. A preliminary discussion with the female users of make-up cosmetics identified six major brands (e.g., L'Oreal, Max Factor, Clinique, Christian Dior, Bourjois and Estee Lauder). Since there was more than one strong brand in this category, we adopted a multi step approach to measure self-image congruence. The first step included asking the question: 'Which of the following brands of make-up cosmetics do you buy most often?' The respondents were then presented with six options each with the six brands identified. They were then asked to indicate their main brand of make up cosmetics. Following Sirgy et al., (1997), the second step involved asking respondents to think about their main brand of make up cosmetics and the kind of person who typically used the brand. While imagining the typical brand user in their minds, respondents were then asked to respond to four measures for self-image congruence (e.g., 'Using my main brand of make-up cosmetics is consistent with how I see myself most of the time') as reported by Sirgy et al., (1997).

We used six items (based on Yoo et al., 2000 and Dodds et al., 1991) to measure perceived quality (e.g., "My main brand of make-up cosmetics is of high quality"). Following, Yoo et al., (2000), these items captured consumers' subjective judgment about a brand's overall excellence or

superiority over other brands and as such focused on the overall quality rather than individual elements of quality. Similarly, three items to measure consumers' perceptions of brand innovativeness were used (e.g., My main brand of make-up cosmetics is very innovative") after an extensive review of the branding literature (e.g., Keller, 2001, 2001, 1999; Beatty et al., 1999). Furthermore, we used five items to measure customer loyalty (based on Beatty & Kahle, 1988; Oliver, 1997; Yoo et al., 2000) to capture the overall commitment of being loyal to the specific brand (e.g., I consider myself to be loyal to my main brand of cosmetics make-up).

A total of ten pilot tests were then conducted with female consumers who were seen as similar to the population for the study and a leading academic member of staff at a leading local university. The purpose of the pre-testing was to refine the questionnaire and to assess the validity and applicability of measures for the cosmetics market; some minor amendments were made to the questionnaire after the pilot tests. Three hundred questionnaires were then distributed among users of cosmetics make-up brands who expressed their willingness to participate and who were all invited to fill in self-administered questionnaires. The procedure resulted in 203 completed questionnaires with a response rate of 67%. However 10 were incomplete resulting in 193 usable questionnaires. Out of the 193 usable questionnaires, 110 (57%) identified themselves as daily users of cosmetic make-up brands and spent an average of £13 per month (71%). Overall, the sample is primarily aged 18-34 (82.3%); 67.9% single and 18.1% married; highly educated (75 % holding university degrees), largely students (44%) worked in education/medical services (26.4%) and professionals or senior management positions (16.6%), and 100 % female.

RESULTS AND DISCUSSION

All of the items used to measure self-image congruence, perceived quality, perceived brand innovativeness and loyalty were subjected to exploratory factor analysis with principal axis factoring and varimax rotation with scree test criterion and eigen values used to confirm the number of factors to extract (Hair et al., 1998). The main purpose of the exploratory factor analysis was to confirm whether items loaded correctly to the corresponding factors as identified by prior research. A final four-factor model was estimated, while none of the items exhibited low factor loadings (<0.40) or high cross-loadings (>0.40). Cronbach alpha coefficients were then computed to quantify the scale reliabilities of the factors identified (Nunnally, 1978); all of the alpha scores were above the threshold level of 0.70.

Pearson correlation tests revealed that both self-image congruency (r=0.413, p<.001), perceived quality (r=0.502, p<.001) and brand innovativeness (r=0.483, p<.001) were all significantly related to customer loyalty. A multivariate regression was then performed with self-image congruence, perceived quality and brand innovativeness as independent variables and customer loyalty as a dependent variable. The regression results indicated high and significant beta weights for self-image congruence ($\beta=0.246$, significant at 1% level, t value = 3.902), perceived quality ($\beta=0.314$, significant at 1% level, t value= 4.441) and brand innovativeness ($\beta=0.213$, significant at 1% level, t value= 2.909) with the independent variables accounting for about 35% of the variance in loyalty scores (adjusted R square = 0.352, F statistic 35.730). The regression equation was tested for multicollinearity using Variance Inflation Factor (VIF) and tolerance for each of the independent variables. The results indicated that multicollinearity did not appear to be a problem within the independent variables. Both correlation tests and regression analysis pointed to the direction that there appeared to be a significant and positive relationship between self-image congruence and loyalty, between perceived quality and loyalty and between brand innovativeness and loyalty.

Moderating Role of Individual Characteristics

In order to determine the impact of individual differences such as frequency of use and frequency of purchase, we proceeded as follows. We first divided the data set into two groups with those using the make-up cosmetics everyday (n=110) categorized as heavy-users and those who used cosmetics less often (four times per week to one per two weeks, n=83) categorized as light-users. Using these definitions of heavy and light users, the multivariate regression was performed comparing the groups with self-image congruence, perceived quality and brand innovativeness as independent variables and loyalty as a dependent variable. The regression results indicated that, in the case of

light-users, while the beta weights for self image congruence (β = 0.339, significant at 1% level) and perceived quality (β = 0.416, significant at 1% level) were high and significant, the beta weight for brand innovativeness was neither high nor significant with the independent variables accounting for about 32% of the variance in loyalty scores (adjusted R square = 0.318, F statistic 13.73). This suggests that, in the case of light users, brand innovativeness does not appear to play a role in encouraging loyalty behavior. However, the regression results showed that, for heavy-users, there existed a moderate but significant relationship between self image congruence and loyalty (β = 0.168, significant at 05% level, t value = 2.089) and a strong and positive relationship between perceived quality and loyalty (β = 0.250, significant at 1% level) and between brand innovativeness and loyalty (β = 0.390, significant at 1% level) with the independent variables accounting for about 41% of the variance in loyalty scores (adjusted R square = 0.413, F statistic 26.52).

Similar procedure was adopted to determine the moderating impact of frequency of purchase with those buying the cosmetics every two weeks classified as regular buyers and those who bought cosmetics every four weeks to every six months categorized as infrequent buyers. The multivariate regression was again performed comparing the two groups. The regression results indicated that, in the case of infrequent buyers, while the beta weights for self image congruence ($\beta = 0.279$, significant at 1% level) and perceived quality ($\beta = 0.287$, significant at 1% level) were moderately higher and significant, the beta weight for brand innovativeness was neither high nor significant with the independent variables accounting for about 31% of the variance in loyalty scores (adjusted R square = 0.309, F statistic 15.358). This suggests that for infrequent buyers, their perceptions of brand innovativeness did not link up with their loyalty behavior. However, the regression results showed that, for frequent buyers, there existed a moderate but significant relationship between self image congruence and loyalty ($\beta = 0.186$, significant at 05% level, t value = 2.113) and a strong and positive relationship between perceived quality and loyalty ($\beta = 0.344$, significant at 1% level) and between brand innovativeness and loyalty ($\beta = 0.309$, significant at 1% level) with the independent variables accounting for about 42% of the variance in loyalty scores (adjusted R square = 0.417, F statistic 19.55).

CONCLUSIONS

Overall the results indicate that self-image congruence, perceived quality and brand innovativeness appear to be important antecedents of customer loyalty in the cosmetics market. We concur with prior research and argue that within the cosmetics market, a) customers do prefer brands that have images compatible with their perceptions of self (Belk, et al. 1982; Solomon 1983), b) high perceived quality can drive customers to choose a specific brand on a repeated basis (Yoo et al., 2000) and c) high investment in product innovations can lead to improved returns on investment measured in the form of increased loyalty levels (Blasberg & Vishwanath, 2003). In terms of application of self-concept, marketers can probably enhance the effectiveness of their communications by using advertising appeals (value-expressive) that encourage customers to think about their self images and those of typical brand users (Hong & Zinkhan 1995; Mehta 1999). Similarly, brand managers can focus on improving the brand quality and engage in innovative activities to encourage customer loyalty. However, our findings also imply that while developing positioning strategies, brand managers should not treat heavy and light users and frequent and infrequent buyers in the same way. Obviously the ultimate aim of marketing is to encourage consumption and therefore failure to innovate can have even more serious consequences than anticipated by prior research (Keller, 1999; Dickson, 1992). This is because and as our research has reported product innovations are extremely valued by those who tend to buy and use the product more often than those who buy less often and are light users.

As with all research projects, the findings presented are characterized by limitations that restrict the extent to which they can be reliably generalized. For example, we measured constructs at one point in time, thus essentially from a static perspective. A longitudinal study that considers the effects of self-image congruence, perceived quality and brand innovativeness on loyalty over time might be able to take into account the dynamics in consumer behavioral and attitudinal patterns in a better way. Furthermore, the data analysis was limited to few leadings brands within the cosmetics market which means that the findings may be restricted to the patrons of these brands. Furthermore,

the study could have utilized a larger sample improving the confidence in the generalizeability of the findings. However, irrespective of the limitations, this study highlights a number of useful antecedents of customer loyalty within the cosmetics market.

REFERENCES

Aaker, J. L. 1999. The malleable self: the role of self-expression in Persuasion. *Journal of Marketing Research*, 36(1): 45-57.

Bitner, M. J. & Hubbert, A. R. 1994. Encounter satisfaction versus overall satisfaction versus quality. In Ronald T. Rust and Richard L. Oliver (Eds.), *Service quality: New directions in theory and practice*, London: Sage.

Blasberg, J. & Vishwanath, V. 2003. The key to growing brands. *Marketing Magazine*, 108 (34), 06 October.

Dickson, P. R. 1992. Towards a general theory of competitive rationality. *Journal of Marketing*, 56 (1): 69-84.

Ericksen, M. K. 1996. Using self-congruence and ideal congruence to predict purchase intention: a European perspective. *Journal of Euro –Marketing*, 6(1): 41-56.

Graeff, T. R. 1996. Using promotional messages to manage the effects of brand and self-image on brand evaluations. *Journal of Consumer Marketing*, 13 (3): 4-18.

Hong J. W. & Zinkham, G. M. 1995. Self-concept and advertising effectiveness: the influence of congruency, conspicuousness, and response mode. *Psychology & Marketing*, 12 (1): 53-77.

Kassarjian, H. H. 1971. Personality and consumer behavior: A review. *Journal of Marketing Research*, 8 (November): 409-418.

Keller, K. L. 1999. Managing brands for the long run: brand reinforcement and revitalization strategies. *California Management Review*, 41 (3): 102-125.

Keller, K. L. 2001. Building customer-based brand equity. *Marketing Management*, 10 (2): 14-20.

Mehta, A. 1999. Using self-concept to assess advertising effectiveness. *Journal of Advertising Research*, 39 (January/February): 81-89.

Onkvisit, S., and Shaw, J. 1987. Self-concept and image congruence: Some research and managerial implications. *Journal of Consumer Marketing*, 4 (1): 13-23.

Sirgy, M. J., Grewal, D., Mangleburg, T. F., Park, J., Chon, K., Claiborne, C. B., Johar, J. S. & Berkman H. 1997. Assessing the predictive validity of two methods of measuring self-image congruence. *Journal of the Academy of Marketing Science*, 25(3): 229-241.

Sirgy, M. J., Johar, J. S., Samli A. C. 1985. Using self-congruence and ideal congruence to predict purchase motivation. *Journal of Business Research*, 13 (3): 195-206.

Sirgy, M. J. 1982. Self-concept in consumer behavior: A critical review. *Journal of Consumer Research*, 9 (December), 287-300.

Yoo, B., Donthu N., & Lee S. 2000. An examination of selected marketing mix elements and brand equity. *Journal of the Academy of Marketing Science*, 28 (2): 195-211.

Zeithaml, V. A. 1988. Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52 (July): 2-22.

Zeithaml, V. A., Berry, L. L., & Parasuraman A. 1996. The behavioral consequences of service quality. *Journal of Marketing*, 60 (April): 31-46.

CONSUMER SPENDING AND CREDIT CARD USAGE: DOES IT AFFECT CREDIT DEBT?

Ishak Ismail
Universiti Sains Malaysia, Penang, Malaysia
M. Sadiq Sohail
King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia
Hasbalaila Alias, MBA.,
Universiti Sains Malaysia, Penang, Malaysia

ABSTRACT

Despite the spread in usage and ownership of credit cards, few studies have examined its affect on consumer debt in developing nations. Since the launch of credit cards in Malaysia, it has been extensively marketed and easy to obtain. Critics have charges that this leads to excessive spending and compulsive buying. The main purpose of this study is to understand consumer's attitude and spending using credit cards. Based on an extensive review of literature, a model is developed for the study, which identifies the psychographic factors that influence the consumer attitudes towards using credit cards. Based on a survey of card users in Malaysia, this study found support to some of the theoretical expectations and lend support to some of the earlier deviations reported in the literature. This study makes a valuable contribution given the fact that there is a dearth of empirical studies of this nature focusing on Malaysia.

INTRODUCTION

The spread of credit card ownership and usage in developing Asian countries has been overwhelming. However, a review on literature on credit card reveals that most studies have been undertaken in developed country settings. Since its evolution in the early twentieth century in the United States of America, credit cards have now become a major system that stimulates household and personal spending even in many developing countries of the world (Watkins, 2000).

Credit card was first introduced in Malaysia in the mid 70s, when Diners Club was allowed to expand their Charge Card business. Most of the early cardholders were either professionals or successful businessmen. By the end of 1970s, an estimated 20,000 card were issued. At that time, owning a credit card was considered as a symbol of prestige. However, with the passage of time, eligibility criteria for obtaining credit cards were increasingly relaxed. As a result of this, the number of cardholders reached to almost 3 million by the turn of the last century.

The proliferation of credit cardholders has brought an indiscriminate spending by users. Increased consumption has brought many side effects. Many Malaysians seem to display an excessive buying behavior called compulsive buying. Easy availability of credit and compulsive buying has led to many adverse consequences. Another noteworthy feature of card users in Malaysia is that they use the card to grant loans for themselves. It is easier to obtain credit cards in Malaysia rather than applying for personal loans, which requires the applicant to comply with more formalities like providing guarantors or collaterals. It was reported that outstanding debts from credit card holders amounted to RM5.719 billion by the year March 2000 (RM or Ringitt Malaysia is the local currency, 3.80 RM was approximately equal to 1 USD at the time of study; Bank Negara Annual Report, 2000). By the year 2000, credit card debts outstanding accounted for 1.35% of the total loans outstanding or 11.41% of the total consumption credit. On a more serious note, 6.43 percent of the outstanding debts had to be converted to non performing loans. An alarming increase in the number of credit card holders seeking bankruptcy proceedings over the years were also been reported.

The objectives of this research are to study the effect of personal attributes on attitude of credit card usage, as well as to measure the effect of attitudes on average credit card debt. This study proposes a model that helps in a better understanding of average debt of credit cardholders in Malaysia, which in turn is influenced by cardholders' attitude and behavior towards usage of credit card. Based on a study of Kasarjian and Robertson (1991) that psychographic variables effect consumers' purchasing behavior, this study examines consumer behavior theories in predicting and

explaining behavior. The causal path of the model is that psychographic variables lead to attitude formation, which in turn influences behavior. A positive attitude towards credit card is likely to ensure that consumers are cautious in spending.

LITERATURE REVIEW

Consumer Credit

The evolution of consumer credit involves the use of corporate power to remove the liquidity constraints that historically have limited consumer spending (Watkins, 2000). Lack of liquidity constrains consumer spending and this has an impact to the economy. The Malaysian government has been making efforts to increase consumer spending, which in turn leads to raising GDP growth. To increase domestic spending, the government reduced employees' monthly contributions to Employees Provident Fund (EPF) by 2 percent. The annual fee for credit card holder has also been waived. It is clear the government is encouraging the greater use of credit cards. This availability of credit has enabled consumers to purchase products/services that might not have been otherwise possible. Governments encourage credit purchase as it helps to increase consumer expenditures without increasing wages.

Theories on Predictive Behavior and Action

Ajzen and Fishbein (1980) developed a theory of the relationship between attitude and behavior. The basic proposition underlying this theory is that in order to predict certain behavior, it is necessary to measure the person's attitude towards performing that behavior, not just the general attitude towards the objects at which the behavior is directed. This theory aims to measure behavioral intentions, recognizing that certain uncontrollable factors inhibit prediction of actual behavior. Both the attitudinal and the normative components (subjective norm) of a decision are based on sets of specific beliefs held by individuals. The attitudinal component reflects the favorableness of people's evaluation of the behavior whereas the subjective norm refers to people's perception of the extent to which others that are important to them think that they should perform the behavior.

Going a step further, Ajzen, (1991) introduced a further determinant of intention called perceived behavioral control. The theory postulates a direct connection between perceived behavioral control and behavior which applied when people have limited control over their actions. Further refining the model, Ajzen and Madden (1986) proposed that perceived behavioral control will emerge as an additional predictor, of intentions and actual effect evident only in relation to behaviors that cannot be performed at will. Perceived behavioral control indicated the extent to which such a person can manage his environment and his temperament, and thus helps to quantify this risk to his intended action.

Another model defines attitude as a learned association between an object and an evaluation (Fazio, 1986). This definition is quite consistent with the uni-dimensionalist view of attitude in that it excludes beliefs, intentions and other cognitive elements (Fazio, Powell & William, 1989). One of the factors identified by Fazio (1986) that leads to a strongly learned attitude is the mode of attitudes formation. These are the attitudes that are formed on the basis of personal experience.

Purchasing behavior may be predicted either from stated intention or from the person's estimate of their purchase probability. Infosino (1986) found that purchase likelihood could forecast new product sales. Behavior, which has been defined as a tendency to respond in a certain way, may have a favorable or unfavorable disposition. (Hanna & Wozniak (2001) Fazio and Zanna (1981) find that the association of attitude with behavior is more predictable and consistent when the attitude has been formed through direct experience. At the behavioral level, traditional consumer research has focused almost exclusively on the choice process that generates consuming decision in actual buying behavior.

Psychographic Variables

A review of literature also reveals that there a number of psychographic variable that influence in attitude formation amongst consumers. A first one of which, which is more an economic variable has often referred to as 'time consciousness'. Timing factor can affect many stages of decision making and consumption. It is sometimes measured in opportunity cost or in terms of what the person could be doing instead of spending time searching for products or services. Consumers

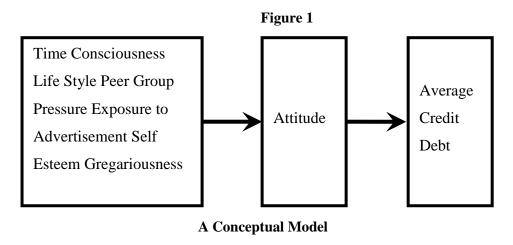
who are short of time want to obtain product quickly and with minimal effort. A consumer's experience of waiting can radically influence his perceptions of service quality. Feldman and Hornik (1990) mentioned that, individual's priorities determine their time style.

The second variable worth mentioning is that of life style of a consumer. Prasad (1975), Rich and Jain (1968) identify a pattern of consumption reflecting how people live, how they spend their money and time. There is a difference between the consumption style of rich and poor people, with the upper class tending to shop not simply out of necessity but also for pleasure. Further, the middle and upper-class consumers tend to engage in more information search before they make a purchase, which is in contrast to lower-class consumer who opt to rely more on rely on in-store display rather than advise of sales person.

Further research on consumer influence to attitude formation has identified variables such as influence of peer group (Cartwright & Zander, 1968), influence of advertisements (Batra & Ray, 1986), self-esteem (DeRosis, 1973) and gregariousness (Sharaf, 1999). A study by Kassarjian and Robertson (1991) chooses — psychographic variables as independent variables in their study on consumer life styles. This study relates lifestyle to consumers' purchasing behavior using credit card. The foregoing review of literature forms a basis for developing a conceptual framework for the present study.

Conceptual Framework

Consistent with the conceptualization of this study, a model was developed specifically to study the relationship between psychographic variables, attitude development and credit card usage by cardholders in Malaysia. Figure 1 shows a model of the constructs and hypothesized relationships investigated in the study. Based on the foregoing review of literature, the following hypotheses are postulated:



H1: There is a significant association between average credit card debt and cardholders attitude towards credit cards in Malaysia.

H2: There is a positive relationship between the psychographic variables and the attitude of cardholders in Malaysia

REESEARCH METHODOLOGY

The psychographic variables chosen as predictors in this study identified from literature included factors namely, time consciousness, life style, peer group pressure, self esteem, exposure to advertisement and gregariousness. Overall, the instrument contained 4 statement to capture information relating to the dimension of time consciousness; 7 statements to gather information on lifestyle; 5 statements to know about peer group pressure; 4 statements relating to the dimension of exposure to advertising; 5 statements relating to self esteem, 4 statements for the dimension of gregariousness and 3 statements to measure attitude. Five point Likert-type scales were employed.

Credit card users reside and work in Penang formed the population in this study. Samples are distributed conveniently and they were asked before hand whether they are credit card holders. If

their answer is yes, the questionnaires will be given to them. A pilot study was conducted to examine if all items of the questionnaires were understandable and clear to participants.

Data Collection

Data was collected by using the mall-intercept survey technique (Bush & Hair, 1985) in the shopping malls and city square of Penang Island, which is Malaysia's second largest city. The target respondents were individual credit card users in Malaysia. While by no means perfect, the mall-intercept approach can result in "a sample, which, while not strictly representative, may nonetheless be relatively free of any systematic bias" (Douglas & Craig, 1983). The mall intercept technique has been used in a number of similar studies (for example Balabanis et al, 2001; Andrews et al, 1999; Griffin et al, 2000). A total of 2000 questionnaires were distributed of which 1210 were returned giving a response rate of about 60 percent.

RESULTS AND DISCUSSION

Of the 1210 responses received, 48 percent were males and the remaining 52 percent were female respondents. Overall, 62 percent were married. In terms of age grouping, 40 percent were between the age of 30 and 40 years, while another 35 percent were between 18 and 25 years of age. Table 1 provides an overview of the respondent characteristics.

Demographic Profile of Respondents

Variable	Percentage
Gender	
Male	47.9
Female	52.1
Marital Status	
Married	62.0
Single	37.2
Age Group	
18- 30 years	35.5
30- 40 years	40.5
40- 50 years	19.8
> 50 years	4.2
Annual Salary/Income	·
Less Than RM20,000	28.1
RM20,001 to RM30,000	38.0
RM30,001 to RM40,000	12.4
RM40,001 to RM50,000	9.1
More Than RM50,000	12.4
Race	
Malay	72.7
Chinese	23.1
Indian	4.2
Average Debt	
Nil	24.8
Below RM 2,000	50.4
RM 2001- 4, 000	17.4
More Than RM 4,000	7.4
Pattern	
Heavy User	14.9
Light User	85.1

In terms of ethnicity, over 70 percent of the respondents approached belonged to the Malay race. As for a grouping based on the respondents' annual salary or income, 38 percent of the respondents had

an annual income between RM 30,000 to 40,0000. Of all the respondents, about one-fourth indicated that they have no outstanding balance. Responding to a dichotomous question, 85 percent of the respondents claim their card usage pattern as being light, while the remaining 15 percent call themselves as heavy users.

Mean Values and Reliability Scores

Table 2 provides an overview of the means, standard deviations and results of the coefficient alpha. As said earlier, all the factors were measured on a five-point Likert type scale scales, exception of attitude for which a five-point semantic differential scale was used. The means score for the dimension of attitude is 2.44. This low score implies that respondents keep themselves under control when using credit card, thereby the abuse of credit card facility is low. With this thrifty and cautious approach, the tendency to overspend is slim. A low score indicate that the respondents strongly disagree with the statement, and a high of 5 indicates that they strongly agree with the statement asked. Apart from the score for the 'attitude 'dimension, all other dimensions indicate a score that is over the mean of 2.5, which indicates an agreeable response. The dimension of 'time consciousness' receives the highest mean score. The high degree of agreement indicates that respondents are time conscious and consider time as precious to them. The dimensions of 'self-esteem' and 'gregariousness' also score higher mean indicating that do not bother much on what people think of them and generally do what they please.

Table 2
Mean Values, Standard Deviation and Cronbach's Alpha

Items	Mean	Standard	Cronbach
		Deviations	alpha
Time Consciousness	3.90	0.709	0.6388
Life Style	2.99	0.795	0.8158
Peer Group Pressure	2.94	0.633	0.6521
Exposure to Advertisement	2.85	0.337	0.6062
Self Esteem	3.60	0.774	0.7646
Gregariousness	3.39	0.645	0.7099
Attitude	2.44	0.963	0.8427

To check the internal consistency, coefficient alpha's (Cronbach's) was calculated to ensure the reliability of the items and its groups using internal consistency analysis. The coefficients ranged between 0.6262 and 0.8427. All of these are above the value of 0.6 which as suggested by Nunally (1967) is sufficient value of reliability in an exploratory research.

To test the first hypothesis, correlation (Pearson's) test was used to test the relationship between average credit card debt and cardholders attitude towards credit cards in Malaysia. From the results of the test, it can be seen that there is no significant relationship between the two variables tested. This hypothesis does not find support. A possible explanation for this might be that respondents are very cautious in their spending using credit card or it is also probable that most of use credit card for convenience and promptly settle credit card bills. We suggest further research be undertaken to study the underlying motives.

Table 3
Correlation between Attitude and Average Debt

	Attitude	Average Debt
Attitude	1.000	.106
Sig. (2 tailed)		.245
Average Debt	.106	1.000
Sig. (2 tailed)	.245	

To test the second hypothesis, multiple regression procedure was used. Attitude as a dependent variable was regressed against the independent variables, life style, self esteem, time

consciousness, peer group pressure, exposure to advertisement and gregariousness. The results of the multiple regression analyses are displayed in Table 4.

The results indicate that four of the six relationships are in predicted positive direction but only the estimate for consumers' lifestyle and attitude is significant. Thus, only this variable is supported, while others are not. This suggests that for credit cardholders in Malaysia 'life style', is the only variable that influences the attitude towards credit card spending. Further, the coefficient of multiple determination (R²) is 0.138. This indicates that about 13.8% of the total variation in attitude can be explained by the 6 independent variables. The low R² implies that the independent variables chosen can account for only a small fraction of the variation in attitude.

Table 4
Multiple Regression

with the regression								
Independent Variables	В	Std Error	Beta	T	Sig.			
(Constant)	1.029	.791		1.301	.196			
TIME	.132	.123	.097	1.076	.284			
STYLE	.310	.115	.256	2.694	.008			
PEER	.122	.161	.080	.761	.448			
ADVERT	.227	.144	.157	1.579	.117			
ESTEEM	169	.118	136	-1.435	.154			
GREGARIOUS	128	.137	086	934	.352			
$R^2 = 0.138$ F= 3.042 Sig. F	F = 0.008							
Dependent Variable = attitude								

In addition, due to a high intercorrelation amongst the independent variables, collinearity diagnostics statistics were performed on each of the variables. Collinearity refers to the situation, which there is a high multiple correlation when one of the independent variables is regressed on the others (Norusis, 1993). In this study, multicollinearity is not indicated. The Variance Inflation Factor (VIF) is below 10 for all the independent variables. When VIF is high, there is multicollinearity and instability of b and beta coefficients, which does not apply in the present instance. For diagnostic purpose, the Durbin-Watson value of 1.527 falls within the acceptable range. It shows no autocorrelation problem.

DISCUSSION AND CONCLUSIONS

This paper undertakes a study of the factors that are believed to influence attitude towards spending using credit card and the attitude formation towards credit card debt. There are 3 components have been studied, i.e., psychographics variables and exposure to advertisement; attitude; and behavior.

From the results, the following conclusions can be drawn. Firstly, only the dimension of life style appear to influence attitude while other factors like self esteem, time consciousness, peer group pressure, exposure to advertisement and gregariousness are not. In another study, time consciousness and gregariousness were found to have an impact on level of card usage (Sharaf, 1999). To this extent, the findings of the present study are different. With the improvement in standard of living among Malaysians, the life style also changed. In large cities big cities, there is a proliferation of branded goods. Consumers in Malaysia re becoming more brand conscious and are seeking these products that gives them products suiting their lifestyle and thereby satisfaction.

A second important finding of this study is that surprisingly self esteem does not have any impact on the formation of attitude. Past studies on self esteem observed that consumer's attitude towards spending is influenced by their level of self esteem. The findings of this study is contradicts to popular belief. That self esteem does not have any impact on the attitude could be due to the fact that credit card is no longer considered a prestige item to posses. It is now a necessity. Users need credit card for convenience.

Finally, it is observed that behavior is not significantly associated with attitude. There is no significant impact of attitude on credit card debts. A possible explanation for this is that consistent to other findings, credit cards in Malaysia have been seen as a convenience product. This has not led to any compulsive buying or abuse of credit card facilities.

While this study found support to some of the theoretical expectations and lend support to some of the earlier deviations reported in the literature, it has some limitations of its own. First, the data for this study was collected from only one city, Penang.. This limits the generalizability of the findings to Malaysia. This limitation provides an opportunity for further research. Future research should consider the need for longitudinal research, as longitudinal research designs may be used to explore how comparison standards change over time.

On a more specific note, we suggest that the conceptual framework developed for this study be extended to include the dimension of personality traits and its impact on attitude to spend using credit card. This will be particularly interesting to explore as the present study does not reveal any impact of psychographic variables on consumer attitude.

REFERENCES

Ajzen, I. 1991. The theory of planned behavior. In Locke, E.A (Ed.), *Organizational behavior and human decision processes*: 179-211.

Ajzen, I. & Fishbein, M. 1980. *Understanding attitudes and predicting social behavior*, Englewood Cliffs, NJ: Prentice Hall.

Ajzen, I & Madden, T.J. 1986. Prediction of goal-directed behavior: Attitudes, intention and perceived behavioral control. *Journal of Experimental Social Psychology*, 22: 453-474.

Andrews, C., Burton S & Netemeyer, R., 2000. Are some comparative nutrition claims misleading? The role of nutrition knowledge, ad claim type and disclosure conditions. *Journal of Advertising*, 29(3): 29.

Balabanis, G, Diamantopoulos, A., Dentiste, R. M & Melewar, T.C. 2001. The impact of nationalism, patriotism and internationalism on consumer ethnocentric tendencies (in Turkey and the Czech Republic). *Journal of International Business Studies*, 32(1): 157.

Bank Negara Malaysia, Central Bank of Malaysia. 2000. Annual report.

Batra, R. & Michael, L. Ray. 1986. Affective response mediating acceptance of advertising, *Journal of Consumer Research*, 13: 234-249.

Bush, A.J. & Hair, J. 1985. An assessment of the mall intercept as a data collection method. *Journal of Marketing Research*, May 22 158-67.

Cartwright, D. & Zander, A. 1968. *Group dynamics: Research and theory*. New York: Harper and Row.

De Rosis, L.E. 1973. Self-esteem, dignity or the sense of being. *American Journal of Psychoanalysis*, 23(1): 16-27.

Douglas, S. & Craig, C. 1983. *International marketing research*, Englewood Cliff, NJ: Prentice-Hall, Inc.

Fazio, R.H. 1986. Automatic activation of attitudes. *Journal of Personality and Social Psychology*, 50: 229-238.

Fazio, R.H. & Zanna, M. 1981. Direct experience and attitude-behavior consistency. *Advances in Experimental Social Psychology*, 14: 161-202

Fazio, R.H., Powell, M.C. & Williams, C.J. 1989. The role of attitude accessibility in the attitude-to-behavior process. *Journal of Consumer Research*, 16 (4): 280-288.

Feldman, L.P and Hornik, J. 1990. The use of time: An integrated conceptual model. *Journal of Consumer Research*, 7: 407-419.

Griffin, M., Babin, B & Modianos, D. 2000. Shopping values of Russian consumers: The impact of habituation in a developing economy. *Journal of Retailing*, Spring 76(1): 33.

Hanna, N. & Wozniak, R. 2001. Consumer behavior: An applied approach. NJ: Prentice Hall.

Infosino, W.J. 1986. Forecasting new product sales from likelihood of purchase ratings. *Marketing Science*, 5(1): 372-384.

Kasarjian, H.H. & Robertson, T.S. 1991. Perspective in consumer behavior. IL: Scott, Foresman.

Norusis, M.J. 1993. SPSS for windows base system user's guide release 6.0. IL: SPSS Inc.

Nunally, J.C. 1967. Psychometric theory. NY: McGraw Hill.

Prasad, V.K. 1975. Socioeconomic product risk and patronage performance of retail shoppers. *Journal of Marketing Research*, 39(1): 42-47.

Rich, S.U. & Jain, S.C. 1968. Social class and life cycle as predictors of shopping behavior. *Journal of Marketing Research*, 5: 41-49

Sharaf, S. 1999. Factors that influence the level of credit card usage. MBA Thesis, School of Management, University Science Malaysia, Penang.

Watkins, J.P. 2000. The corporate power and the evolution of consumer credit. *Journal of Economic Issues*, 34(4): 909-933

CORPORATE GOVERNANCE COMPLIANCE AMONG BOD AND THE EFFECTS TO THE COMPANY'S NET PROFIT MARGIN IN MALAYSIA

Noriza Mohd Saad Khairul Anwar Zamani

Universiti Tenaga Nasional, Pahang, Malaysia Email: noriza@uniten.edu.my

ABSTRACT

This study investigates the level of corporate governance compliance among the board of directors (BOD) of public-listed companies in Malaysia and the effects to firm's performance. To analyze the level of corporate governance compliance among companies, secondary data is used, which are gathered from the analysis of companies' annual report taken from a sample of 60 public-listed companies in the Main Board of Bursa Malaysia Security Berhad over the period between 2001 and 2005 were randomly selected. The result found that most of the company has complied well with the code of corporate governance in Malaysia. This study also had found the evidence that there is a relationship between (BOD) facets with the company's net profit margin (NPM). Overall this study had found that there is a proof that the company with good corporate governance compliance can maximize the shareholders wealth by maximizing their NPM.

INTRODUCTION

The East Asian Financial Crisis of 1997-1998 demonstrated the importance of effective corporate governance in developing countries (Allan, 2004). Malaysia was adversely by this crisis. The enforcement of Code of Best Practices by Malaysian Institute of Corporate Governance (henceforth, MICG) to public listed companies in 2001 was an effective measure in the wake of the mid-1997 Asian crisis. As one of major element of the corporate governance, Board of Directors provides additional provisions to the shareholders as well as other investors of the firms because it serves as an effective monitoring mechanism to reduce the agency conflict. It imposes more stringent monitoring by shareholders by increasing involvement and the power of the Board of Directors in the firm's decision making. The recent surge of studies (Bai, Liu, Lu, Song, & Zhang 2003; Bauer, Günster, & Otten 2005; Black, Jang, & Kim 2005; Chiang 2005; Drobetz, Schillhofer, & Zimmermann 2003; Gugler, Mueller, & Yurtoglu 2003; Nandelstandh & Rosenberg 2003; Wan & Ong 2005) on the relationship between corporate compliance and performance signal market (and public) awareness about corporate governance such that firms no longer can ignore the importance of and implication of neglecting corporate governance. In other words, return on investment (ROI) and net profit margin (NPM) of non-complying firms would suffer because market will penalize the firms for decisions that do not allow them to realize greater value. Nonetheless, the facts that there are substantial variations in corporate compliance across firms within the same country (Mohamad Ishak, Hartini, and Noriza 2004, Klapper and Love (2004) suggest that some firms are not yet convinced about the incentive from adopting the corporate governance. In attempt to find evidence that can convince these non-complying firms, this study will determine whether or not firms with higher level of corporate compliance significantly perform better in their firm's performance than those noncomplying firms. Consistent with the ultimate objective of corporate governance to realize "long-term shareholder value", this study uses firm's NPM to measure performance.

LITERATURE REVIEW

Current Status of Corporate Compliance in Malaysia

Through a survey on annual reports of 556 public listed companies in Bursa Malaysia, formerly in 2003, Mohamad Ibrahim et al. (2004) found the level of corporate compliance to the Code of Best Practice in these firms is very high. Furthermore, the level of corporate compliance is consistently high for all corporate governance mechanisms or practices concerning Board of Directors that include: BOD composition; BOD responsibilities, BOD meeting, remuneration of directors; and BOD training. Their finding is consistent with the score of Governance (GOV) index introduced by Klapper and Love (2004). In their study involving 13 other emerging countries, Malaysia's mean

score (54.44) in the Index puts it at the sixth place after South Africa (66.53), Singapore (65.34), Chile (61.63), Hong Kong (58.27), and Brazil (57.26). Focusing the scope to Pacific Basin countries, the results suggest that Malaysia has performed well relative to the other countries in the region because the results also imply that Malaysia stands at the third place after Hong Kong and Singapore. This is beside the fact that in term of economic development, those countries are more established and advanced than Malaysia.

The Malaysian High Level Finance Committee (1999, p. 10) defines corporate governance as the process and structure used to direct and manage the business affairs of the company towards enhancing business prosperity and corporate accountability with the ultimate objective of realizing long-term shareholder value whilst taking into account the interest of other stakeholders. According to Mathiesen (2002), corporate governance is a field in economics that investigates how to secure or motivate efficient management of corporations by the use of incentive mechanisms, such as contracts, organizational designs and legislation. This is often limited to the question of improving financial performance, for example, how the corporate owners can secure/motivate that the corporate managers will deliver a competitive rate of return. Shleifer and Vishny (1997) defined that the corporate governance deals with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment. In April 1999 OECD had defined that the corporate governance is the system by which business corporations are directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among different participants in the corporation, such as, the board, managers, shareholders and other stakeholders, and spells out the rules and procedures for making decisions on corporate affairs. By doing this, it also provides the structure through which the company objectives are set, and the means of attaining those objectives and monitoring performance. OECD's definition is consistent with the one presented by Cadbury (1992). Larcker, Richardson and Tuna (2005), they defined that the corporate governance generally refers to the set of mechanisms that influence the decisions made by managers when there is a separation of ownership and control. Some of monitoring mechanisms are board the of directors, shareholders, and operation of the market for corporate control. As demonstrated by Pass (2004), corporate governance actually deals with the "duties and responsibilities of a company's board of directors in managing the company and their relationships with the shareholders of the company and the stakeholder groups". To put it into effective work, in essence, such dealing should be appropriately governed, regulated, imposed and enforced.

Corporate Compliance and Firm's Performance

For the purpose of examining the effects of corporate governance on performance, our study uses market in addition to accounting measures to validate potential biasness in our results because as Bauer et al. (2003) argue, accounting numbers could be biased measures of performance. The conviction that corporate governance contributes positively to firm's performance is by no means new to practitioners (Bai, Liu, Lu, Song, & Zhang 2003). Similar to Chong (2003), Bai et al. (2003) argued that for such conviction to be realized, two conditions must be satisfied. Firstly, good governance increases returns to shareholders of the firms. Secondly, the stock market has to be sufficiently efficient such that stock prices fully reflect the fundamental values. While the second condition poses no threat to companies in developed countries, it by itself is a challenge their counterparts in emerging countries like Malaysia. This is due to the fact that question on market efficiency in these emerging countries is still far from resolved. Lack of technological sophistication to disseminate information on timely basis or lack of critical analyses that can provoke public awareness and demand for timely information are among the few explanations. For the purpose of this study, we assume that the second condition has been satisfied. Based on the empirical studies that we manage to review in this study, mostly suggest that corporate governance does have significant effect on corporate performance. While most studies suggest positive effects, Vafeas (1999) is one of the few who finds that board meeting frequency is inversely related to firm value. Nonetheless, further examination on the finding reveals that the case is due to the fact that BOD meets more frequently when the companies are facing bad times. Intuitively, the finding implies that BOD, recognizing the significance and effectiveness of

their meetings, conduct meetings more frequently in order to improve the companies' performance. Thus, this result is still consistent with the theoretical prediction of corporate governance.

As mentioned earlier, most of the studies that we review provide evidence that supports the positive influence that corporate governance has on corporate performance or at least the existence of significant relationship between corporate governance and corporate performance. Using public listed companies in the two stock markets in China, Chong et al. (2003) finds that firm's corporate governance practice has a positive effect on its market value. Similar results are obtained from a study on Finland companies for the period of 1990 to 2000 (Nandelstandh & Rosenberg 2003). These authors found a positive association between corporate governance attributes and firm performance. Chiang (2005) argues that the positive effects of corporate governance are driven by the signal that investors receive from companies' transparency regarding corporate governance. Because only performing companies "dare" to become transparent, disclosure of compliance with corporate governance signals management belief about their future performance. Accordingly, market reacts favorably to such disclosure by correcting share prices.

In term of performance, Bauer et al. (2003) find that corporate governance relates negatively (significantly in EMU countries) with ROE and NPM (net profit margin). Among explanations provided by the authors are those accountings numbers are biased measures of performance. The effects were stronger in the UK than in the EMU countries due to different quality of governance standards. The primary focus of the corporate governance literature has been on the role of the board initiating the agency conflicts between CEO and shareholders (Fama and Jensen, 1983). An assumption of much of the corporate governance literature is that boards are endogenously determined monitoring institutions (Hamelin & Weisbach, 2003; Romano, 1996). If boards exist to monitor shirking by the CEO and management, then outside directors should be more effective monitors than are employees (Demsetz & Lehn, 1985; Weisbach, 1988; Morck, Shleifer & Vishny, 1998). Based on this premise, much of this literature focuses on the proportion of outside directors and the link between various measures of firm performance and corporate governance (Bhagat & Black, 2000). Firm performance is certainly one critical measure of management's performance and implicitly, the board's performance in monitoring managerial decision-making. They also report that is no relationship between percent of external directors on a board and long term stock market and accounting performance.

Rafel Crespí and Carles Gispert (1998) with a sample of 113 Spanish listed companies find a positive relationship with company performance and board remuneration, even if they measure performance via accounting variables or stock market returns. The strongest relationship is associated with performance based on book values, the basis over which remuneration is usually calculated. They find a negative relationship between board compensation and industry performance.

REESEARCH METHODOLOGY

This study utilizes the secondary data, which are gathered from the analysis of companies' annual report taken from a sample of 60 public-listed companies in Main Board of Bursa Malaysia in year 2001-2005. Questions were developed to cover various elements of corporate compliance programs with regards to the board of directors. Issues covered were separated into four main parts, (i) Board Meeting (BM), (ii) Board Composition (BC), (iii) Board Training (BT) and (iv) Board Remuneration (BR). There are two main purposes of this study which is to identify the level of compliance in corporate governance practices and the effects of compliance level among BOD to companies' NPM.

The companies' NPM is calculated using the following equation;

$$NPM_i = \frac{NP_i}{Sales_i}$$

Where NP_i = Net profit of the ith company for each year, and $Sales_i$ = Sales of the ith company for each year.

Next, the relationship between the BOD facets and firm performance will be estimated using the following regression equations:

$$NPM_i = \alpha + \beta_1(BM_i) + \beta_2(BC_i) + \beta_3(BT_i) + \beta_4(BR_i) + \varepsilon_i$$

Where α = the constant term,

 β = the slope or coefficient estimates of the explanatory variables,

 BM_i = the BOD meeting of the ith company,

 BC_i = the BOD committees of the ith company,

 BT_i = the BOD training of the ith company,

 BR_i = the BOD remuneration of the ith company, and

 NPM_i = the net profit margin of the ith company.

To find evidence on the relationship between dependent and independent variables, the null hypothesis of the study are developed to outfit for the pooling regression model. The hypothesis is stated below:

Ho = *There will be no relationship between NPM and the independent variables.*

*Notes:

The decision rules is to accept Ho if P > 0.05 @ 5% and reject Ho if P < 0.05 @ 5%.

Coefficient Correlation: The association between dependent and independent variables (> 60% = strong).

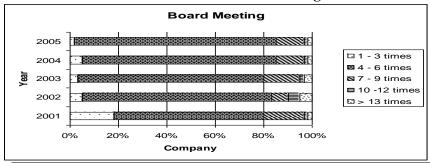
 R^2 : How much dependent variables can be explained by all independent variables (.50% = strong)

RESULTS AND DISCUSSION

Part 1: Analysis of Corporate Governance Compliance among BOD in 2001-2005. Board Meeting (BM)

The Code suggested that details of attendance of the directors are revealed in annual report during the financial year to make sure the directors are committed to be part of the company. In order to have effective board structures and procedures, the board should meet at least 4 times a year. In this analysis, it was found that most of the companies complied very well with the practice that the board should meet regularly at least 4 times a year. For the year 2001, the company didn't complied indicate only 18.3% and compliance level achieved to 81.7%. For the year 2002 and 2004 indicate that only 5% of the company didn't comply but 95% was complied. For the year 2003 and 2005, the company that didn't complied with the code is 3.3% and 1.7% respectively. Overall, majority of the companies have complied very well with the code in order to make their companies efficient and can accomplish their organization goal. This result is consistent with the study done by Vafeas (1999), conduct meetings more frequently in order to improve the companies' performance.

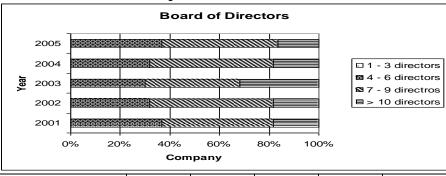
Figure 1 Number of Board Meetings



Number of Meeting	2001	2002	2003	2004	2005
1 - 3 times	18.3%	5.0%	3.3%	5.0%	1.7%
4 - 6 times	61.7%	78.3%	76.7%	80.0%	83.3%
7 - 9 times	16.7%	6.7%	15.0%	11.7%	11.7%
10 -12 times	1.7%	5.0%	1.7%	1.7%	1.7%
> 13 times	1.7%	5.0%	3.3%	1.7%	1.7%

Board Composition: The key to good corporate governance practice lies in getting the right board in place. A company with a properly balanced board and effective independent directors should be left to run its business, with the board being accountable for its stewardship. In the study, all of the companies have complied well with the code that they must have at least 4 directors in the board. It also learned that for 5 successive years, majority of the company have elected to have 7 to 9 directors in their board of directors.

Figure 2
Composition of the Board

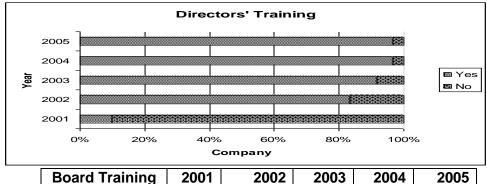


No. of Directors	2001	2002	2003	2004	2005
1 - 3 directors	0.0%	0.0%	0.0%	0.0%	0.0%
4 - 6 directors	36.7%	31.7%	30.0%	31.7%	36.7%
7 - 9 directors	45.0%	50.0%	48.3%	50.0%	46.7%
> 10 directors	18.3%	18.3%	21.7%	18.3%	16.7%

The study also reveals that for year 2001 until 2005 except 2003, only small amount of the company elected to have more than 10 directors. Brown (2004) in his study proves that firms with broad sizes of 6 to 15 are relatively more profitable. Overall most of the companies have elected to have 7 to 9 directors which are consistent with the recommendation by Lipton and Lorsh (1992) who argued that the preferred board size is eight or nine with ten being the limit in order for a board to be effective.

Board Training: In order to have good directors in their rank, all the companies listed in Bursa Malaysia have to send their directors to the Mandatory Accreditation Program (MAP) conducted by the Research Institute of Investment Analysts Malaysia (RIIAM) in accordance with the Listing Requirements of the Bursa Malaysia Securities Berhad ("Bursa Malaysia"). The program also can be assumed as the formal orientation program that could be a one or two day program that involve educating the director as to the environment of the business, the company's current issues and the corporate strategy, the prospect of the company with reference to input from director and the common responsibilities of directors. Victor (2001) reports that it is widely accepted that the responsibility for ensuring that all directors receive the required training to fulfill their responsibilities.

Figure 3
Training of the Directors



Yes	10%	83.3%	91.7%	96.7%	96.7%
No	90%	16.7%	8.3%	3.3%	3.3%

In the analysis, for the year 2001 majority of the companies (90%) does not send their directors to the MAP for their formal orientation program instead only 6 or 10% of the companies did sent their directors to the MAP. This circumstance happened because the Malaysian Code on Corporate Governance was scheduled to come into full force for listed issuers with financial year ending after 30 June 2001. But for year 2002 after the corporate governance was incorporated in Bursa Malaysia Listing Requirement, majority of the companies (83.3%) sent their directors to the MAP despite the fact that remaining 16.7% did not sent their directors to the MAP conducted by RIIAM. Based on the figure 4.3 above, the statistics show that for 4 continuous years, majority of the companies (3.3% for the last two years) sent their directors to the MAP despite the fact that small amount of the companies still does not comply with the code. Overall, since the introductions of the Malaysian Code on Corporate Governance by the Finance Committee in 2000, most of the companies complied with the practice.

Board Remuneration: The Malaysian Code on Corporate Governance declared that the level of remuneration should be adequate to attract and hold the directors needed to run the company successfully. Apart from that code also recommends that the company's annual report should disclose all the contain details of the remuneration of each director. Victor (2001) conducted a study among listed companies in Singapore stated that the companies are required to disclose in their annual reports the level of remuneration received by directors.

Directors' Remuneration

2005
2004
2004
2003
2003
2002
2001
0% 20% 40% 60% 80% 100%
Company

Figure 4
Level of Directors' Remuneration

Range of Salaries	2001	2002	2003	2004	2005
< RM 2m	71.7%	75.0%	71.7%	70.0%	68.3%
RM 2m - RM 3.99m	11.7%	13.3%	18.3%	20.0%	21.7%
RM 4m - RM 5.99m	10.0%	6.7%	6.7%	6.7%	5.0%
> RM 6m	6.7%	5.0%	3.3%	3.3%	5.0%

Based on the figure 4.4, it was found that for 5 successive years from 2001 to 2005, majority of the company (around 70% every year) have spent the total of remuneration below RM2 million a year to attract and retain the directors needed to run the company successfully. In the study also, it was found that the total remuneration of RM2 million to RM3.99 million have increased slightly every year meanwhile the total remuneration below RM2 million have decreased from year to year starting 2003. It's mean that some of the companies are starting to pay more to their directors to hold their service to their BOD. This trend might be continue in the coming years because the company want to make sure the directors give a full commitment and good performance to achieve their goal and objective of the organization.

Part II: Analysis of the Relationship between NPM and All Independent Variables based on 5 conservative years

Based on table 4.1, for the year 2001, there is a relationship between NPM and BC and BT. Therefore the null hypothesis will be rejected at this level. BC is positively related to NPM with the significance level of 0.021 with T-Ratio is 2.368 while BT also have positively related to NPM with

0.002 significant levels with their T-Ratio value is 3.227. But when we look to the value of R, its indicate 50.4% and it's not a very strong relationship and the R-Square indicates that 25.4% of the variation in NPM is explained by the variation in the corporate governance. For the year 2002, none of the independent variables has significant relationship with NPM. The R value indicates the model have a relationship but not strong enough, only 17.3% while the value of R Square indicates only 3% of the variation in NPM is explained by the in the corporate governance. So, the null hypothesis will be accepted because none of the P-Value has value less than 0.05 significant levels. For the year 2003, NPM is positively related to BC with the significant level of 0.025 and the T-Ratio indicates 2.304. It also found that NPM is negatively related to BM with 0.002 significant levels and -3.247 is the T-Ratio value. This result was supported by previous research done by Bauer et. Al (2004) found that also are negatively related between corporate governance practices with ROE and NPM. But when the study analysts the relationship between NPM and all independent variables, its show the relationship between the variables is not strong, it's indicates only 43.9%. The R-Square indicates that only 19.3% of the variance in NPM is explained by the variation in corporate governance. So, the null hypothesis can be rejected at this level (BM and BC only). It's mean that the good corporate governance can help the company to increase their profit and achieve their organizational goals. Similar to Chong (2003), Bai et. Al (2003) argued that good governance increases returns to shareholders of the firms.

Table 4
Relationship between NPM and Independent Variables (IVs)

		epenaent		/		
Year	IVs	Model Summary		T-Ratio	P- Value	Standard
			R			
		R	Square			Coefficient
2001	BM			0.606	0.547	0.074
	BC	0.504	0.254	2.368	0.021*	0.309
	BT			3.227	0.002*	0.376
	BR			0.143	0.887	0.018
2002	BM			-0.08	0.936	-0.011
	BC	0.173	0.03	1.041	0.302	0.162
	BT			0.421	0.676	0.057
	BR			0.052	0.959	0.008
2003	BM			-3.247	0.002*	-0.43
	BC	0.439	0.193	2.304	0.025*	0.332
	BT			-0.144	0.886	-0.018
	BR			-0.114	0.909	-0.016
2004	BM			-0.011	0.992	-0.43
	BC	0.192	0.037	0.798	0.428	0.332
	BT			0.557	0.58	-0.018
	BR			0.771	0.444	-0.016
2005	BM			-0.61	0.544	-0.082
	ВС	0.29	0.084	-0.478	0.634	-0.068
	BT			2.000	0.05*	0.26
	BR			0.837	0.406	0.116

Significant at 0.05 (5%) level

For the year 2004, none of the independent variables have significant relationship with NPM. Thus, the null hypothesis is accepted. The R value indicates the model have a relationship but not strong enough, only 19.2% while the value of R Square indicates only 3.7% of the variation in NPM is explained by the in the corporate governance. So, the null hypothesis will be accepted because none of the P-Value has value less than 0.05 significant levels.

For the year 2005, there is relationship between NPM and BT and the relationship is significant 0.050 levels and the T-Ratio value indicates 2.000. The standardized coefficient of 0.260 indicates the parallel relationship between NPM and BT. So, the null hypothesis can be rejected at this

level. The R-Square indicates only 8.4% of the variation in NPM is explained by the variation in corporate governance while the R value indicates that the model do not have a strong relationship (29%).

CONCLUSIONS

In this study, it can be conclude that majority of the companies that listed in Bursa Malaysia have complied very well with the code in corporate governance practices. As we can see in the statistics in chapter four, it's proved that the companies have held at least 4 times board meeting. It was found that majority of the companies have conducted their meeting between 4 to 6 times a year and it's very consistent every year. Besides, it was found that majority of the companies have 7 to 9 directors which are consistent with the recommendation by Lipton and Lorsh (1992) who argued that the preferred board size is eight or nine with ten being the limit in order for a board to be effective. During the year 2001 when the government introduce the Malaysian Code on Corporate Governance, most of the companies not sent the directors to the MAP but in the year 2002 onwards, the study had found majority of the company comply with the code despite the facts that there is small amount of the companies did not comply with the practice.

The study also found that evidence was obtained indicating that, there is a relationship between corporate governance and the firm's net profit margin and at the same time there is evidence to show that there is no relationship between the variables. For the year 2002 and 2004 it's indicates that there is no relationship between corporate governance and firm's net profit margin. It's also found that there is relationship between the variables despite the fact that the relationship doesn't prove to be the strong relationship because the value of R is below 60% which consistent with suggestion made by Gompers *et al.* (2003). But in this investigation also, there is evidence there is no relationship between the variables which is consistent with the research done by Bauer, Guenster and Otten (2003).

For the recommendations, the company that did not comply with the code of corporate governance they should follow the footsteps of the company that comply with the practice. It's because in this study, it's found that the corporate governance had a relationship with the company's net profit margin. When the company had good governance system, they will attract the investor to invest in their company and directly the company can compete in the business that they involved because they have had enough capital and resources. So, it will be highly recommended for the company to comply with the code because it will give the investor confidence to put their money to the company.

The study only focus on 60 companies listed in main board Bursa Malaysia Securities Berhad from 4 major industries that is consumer product, industrial product, trading and services and also properties out of 11 industries. It was recommended that in coming study should try to analyze all 11 industries listed in main board even though the number of the company in that industries small. The firm's performance also only focuses on NPM where next study can further investigate on return on investment, stock return and so on.

REFERENCES

Andres et al. 2005. Corporate boards in OECD countries: Size, composition, functioning and effectiveness. 13 (2): 197-300.

Ararat, M. & Ugur, M. 2003. Corporate governance in Turkey- An overview and some policy recommendations. *Corporate Governance*, 3(1): 58-75.

Bai et al. 2003. Corporate governance and market valuation in China. William Davidson Working Paper (564).

Bauer, R., Guenster, N. & Otten, R. 2004. Empirical evidence on corporate governance in Europe-The effect on stock returns, firm value and performance. *Journal of Asset Management*, 5(2): 91-104.

Bhasa, M.P. 2004. Global corporate governance- Debate and challenge. *Corporate Governance*, 4(2): 5-17.

Black et al. 2005. Does corporate governance predict firm's market values? Evidence from Korea. *Working paper N 86/2005*. Available at http://ssrn.com/abstract=311275

Bonnafous-Boucher, M. 2005. Some philosophical issues in corporate governance - The role of property in stakeholder theory. *Corporate Governance*, 5(2): 34-47.

Brown, L.D & Caylor, M.L. 2004. Corporate governance and firm performances. *Unpublished Paper*, *Georgia State University*.

Chiang. 2005. An empirical study of corporate governance and corporate performance. *The Journal of American Academy of Business:* 95-101.

Cornelius, P. 2005. Good corporate practices in poor corporate governances system. *Corporate Governance*, 5(3): 12-23.

Corporate Governance Committee 1997. Corporate governance principles: A Japanese view.

Available at http://www.ssrn.com/

Dalton, C.M., & Dalton, D.R. 2005. Corporate governance reforms- Profiling at its worst. *Journal of Business Strategy*, 26(4): 7-9.

Davies, H. 2002. Corporate governance and the development of global capital market. *Balance Sheet*, 10(3): 14-18.

Drobetz et al. 2003. Corporate governance and expected stock returns: Evidence from Germany, WWZ/Department of Finance, Working Paper No.2/03.

Heinrich, A. 2005. Why corporate governance in the Russian oil and gas industry is improving. *Corporate Governance*, 5(4): 3-9.

Holland, J. 2001. Financial institutions, intangibles and corporate governance. *Accounting, Editing & Accountability Journal*, 14(4): 497-529.

Jackson, S., Farndale, E. & Kakabadse, A. 2003. Executive development - Meeting the needs of top teams and boards. *Journal of Management Development*, 22(3): 185-265.

Joh, S.W. 2001. Korean corporate governance and firm performance. *Unpublished Manuscript Working Paper, Korea Development Institute*.

Klapper & Love. 2004. Corporate governance, Investor protection and performance in emerging markets. *Journal of Corporate Finance*, 10(5): 703-728.

Kula. 2005. The impact of the roles, structure and process of boards on firm performance: Evidence from Turkey.

Lee, K. 2002. Linking corporate governance to firm behavior and performance: The case of Korean Chaebols viewed as a leveraged CMS firm. *School of Economies*, 28(10): 19-32.

Mardjono, A. 2005. A tale of corporate governance. *Managerial Auditing Journal*, 20: 272-283.

Mohamad Ishak et al. 2004, The disclosure of corporate compliance program: A study on the board of directors in the Bursa Malaysia public-listed companies. *Proceedings UIBMC 2004*: 250-263.

Nikomborirak, D. 2001. An assessment of the role of board of directors in building good governance:

The case of Thailand. Paper presented at the *Third Asian Round Table on Corporate Governance:* The Role of Boards and Stakeholders in Corporate Governance.

Parker, S., F.Peters, G. & Turetsky, H. 2002. Corporate governance and company failures - A survival analysis. *Corporate Governance*, 2(2): 4-12.

Victor et. al. 2001. The role of boards and stakeholders in corporate governance. Paper presented at *The* 3^{rd} *Asian Roundtable on Corporate Governance Singapore*.

Zandstra, G. 2002. Enron, board governance and moral failings. Corporate Governance, 2(2): 16-19.

INTELLECTUAL CAPITAL AND PERFORMANCE OF AN ORGANIZATION

Ayaz Mahmood Qaisar Abbas

COMSTATS Institute of Information Technology, Islambad, Pakistan

ABSTRACT

Organizations which have realized the shift from tangible assets to intangible assets have started to formulate mechanisms to manage these intangibles. Intellectual Capital is an apparatus which attempts to measure these intangible assets of a firm. This paper examines the link between components of intellectual capital and performance of different firms in the Pakistan telecom sector. In this research we were able to prove that human capital, customer capital and performance are related. All these variables showed a strong positive relationship. Further it was established that performance can significantly be explained through the human capital and customer capital. About 45% of the variance in the performance could be explained through these two variables.

INTRODUCTION

Knowledge is awareness gained through practice. Humans have progressed by recognizing, appreciating and sharing of knowledge. It is through reasoning faculties of mind, humans are able to appraise evidence and draw inferences. Otherwise if every human was to only believe in what he/she has seen and done then we would all be in the stone ages and continuously re-inventing the wheel.

Humans use their experiences to build intelligence. The human factor is an essential aspect used to obtain organizational goals and producing commodities. Any organization would like to harness this factor of production and use it to improve its productivity. The classical view of economics says that growth depends on two major factors of production Land and Labor, which was then replaced by Capital and Energy but economist like Paul Romer, Robert Slow see Technology and Knowledge as an essential part of new economic system. In old economy, the factors for competitive advantage were raw material, transportation routes, customer markets, and a large labor pool. But in the new economy success depends on effective use of technology innovation and entrepreneurship. The most important input for a firm is now the skill and talent of their work force.

There has been an increasing role of Information Technology in our lives and this has changed the world around us. People have now become more informed and knowledgeable and can quickly accumulate facts. In 1960's Peter F. Drucker coined the term "knowledge worker" and suggested that the United States economy has shifted from a product to knowledge economy in which the main resource is not capital but knowledge.

These factors of production, such as knowledge and knowledge worker, are difficult to contain and control. Due to the mobility of work force and information the management of this factor of production becomes a challenge. Retaining its knowledgeable worker and the Knowledge has becomes top priority. It has become imperative for organizations to be pro active in managing this vital factor of production. The management of "Knowledge" and "knowledge worker" is needed, to retain its competitive edge. That is why the current focus of management has shifted, towards a more "people" oriented policy. Workers are not just considered as just raw hands but as skilled workers who posses valuable knowledge. To develop the K.E the pool of knowledge has to be managed. Hence the term "Knowledge Management" was conceived.

Knowledge Management

Knowledge Management (KM) encompasses actives such as assessing, capturing, organizing, refining and transferring of knowledge in an Organization. Knowledge which is in the databases and books of the organization, Knowledge is also in the minds of the employees. In recent years the schools of "Behavioral Management" have really emerged as the most popular place of practice for the managers. There has been an ever greater stress in dealing with the human aspects of an organization and the modern managers are now very much concerned with the sensitivity of the issue. A refocus has been made on the brain power of the workers which is the driving force behind the success of organization. Information Technology has also facilitated the flow of information and

capturing of information. All these factors have resulted in the conducive environment for the emergence of this new area we call the *Knowledge Management*.

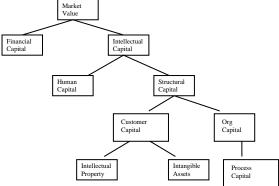
Intellectual capital management and knowledge management are to be considered as part of a continuum. They both deal in identifying, recording and managing of tacit and explicit knowledge assets of a firm. Intellectual Capital deals with the identification of these intangible assets. It usually starts with recognizing and measuring (assessing) knowledge of an organization, this is connoted by **Intellectual Capital**. Some type of knowledge is in the books and ledgers yet some knowledge is in the minds of the employees. It is a known fact that resources can be better managed when quantified. So, "What gets quantified gets managed".

Intellectual Capital (Knowledge Capital)

It is that component of the organization which deals specially with the measuring of the intangible assets. These assets are generally divided into Human and Structural Capital. According to Strassman, (2002) Intellectual Capital (I.C) is what is left over after suppliers, employees, creditors or share holders and government has been paid.

Edvinsson (2003) classified Intellectual Capital into Human, and Structural capital. The structural capital is then further classified into customer and organizational capital see figure 1.

Figure 1 Skandia Navigator



Source: Edvinsson (2003) Human Resource Development in Knowledge based Economy

This a fairly new area of management science and few companies are working with Intellectual Capital. One major debating point being that it is difficult to have detailed formula to calculate economic value of intellectual capital. This does not necessarily mean that it is insignificant to design a tool of quantifiable measuring indices which enables an enterprise to recognize the status quo of intellectual capital. Intellectual Capital is a fairly a new area for managing organizations resources. Therefore a handful of companies are working with I.C.

To asses the intellectual capital a number researcher and management practitioner proposed different models and frameworks. Few note able methodologies are IC-index, Intangible Asset Monitor, Balance Score Card and Skandia Navigator. To emphasize on the importance of I.C in this study we have tried to establish the relationship between the Performance and the Intellectual capital components (human capital, customer capital) in the Pakistan's telecom sector.

Previous Research

Some specific studies concerning the relationship between the I.C components and Performance have been conducted. We would like to mention few of them which helped us develop our model for this research. Sulvian (2000) argued that the traditional accounting methods which are based on tangible assets and historical transactions based information are inadequate for evaluating I.C, which is the largest and the most valuable assets for many enterprises. The traditional accounting tends to understate the value significantly. Similarly Brenannan (2000) has brought the attention to the inadequacy of the traditional accounting methods. He stated that there is difference between the company book value and market values. This is a proof that there exits an intangible asset which is

not part of the companies balance sheet. This article also focuses on regulations to measure this asset. The article also covers an in-depth analysis of the different frameworks available for measuring intellectual capital. Broadly the frameworks of IC presented under the three heading – internal, external and human capital. Certain guidelines are available for reporting the IC. IC should be measured in a way; it is useful for decision making.

Guthrie (2001) conducted a similar work to Brenanna and also highlighted the flaws in the traditional accounting method to evaluate a company value. The author has discussed the work of different Swedish companies which have measured the intellectual capital. These companies study properly assessed the value of a company and different financial and non financial metric were obtained.

Hansson (2004) *et al* used the data from the CARNET survey to establish the relationship between human capital and company performance. The study used the existing database on human resource management of different European Union countries. The study took the variables such as training, education, and skills/competence to represent the human capital and related it with the performance of company. The relationship between the two variables was positive. The study also revealed that the training helped to stay ahead of the competition generated substantial gains. A company with better education level affected the innovations but not necessarily the profits.

Maridis (2004) using the VAIC framework assessed the Intellectual Capital performance of the Japanese banking sector. The researcher wanted to establish the relationship between the values based performance of these banks and its components i.e. human capital and physical capital. The research in detailed demonstrated the mechanism of calculating the VAIC. The VAIC provides the business performance index which was then compared by the human and physical capital values. The researcher using the regression analysis not only proved the relationship between the value based performance index and it's components i.e. human and physical capital but also established that the ten best banks with the highest performance index had a good usage of human capital as compared to physical capital.

While studying the Taiwanese Information Technology industry Wang et al (2005) investigated the impact of intellectual capital on the business performance. They also wanted to establish the relationship between the components of IC from a cause and effect perspective. The researcher were able establish the relationship between the performance of a company and the IC components, innovation capital, process capital and customer capital. But the research could not establish the relationship between human capital and performance.

The researchers used the least square method to establish the relationship between the performance and the components of IC. For performance the researcher used indicators such as ROA, operating income ratio etc , for human capital number of employees , number of employees who have higher education, for innovation capital R&D density, R&D employee ratio etc, for process capital he used productivity ratio, organization stability ratio etc, and for customer capital he has used growth ratio, advertising ratio etc. The author used different combination of these variables to formulate an effective indicator of the different components.

The cause and effect relationship between the HC and other components of the IC were established. Where it was proved that the HC contributed and influenced the other components of IC which in turn affected the performance of the company.

In another study by Saenz, (2005) on human capital indicators, business performance indicator and market to book ratio studied the IC indicators of four Spanish banks three years published financial and non financial data was used. The study highlighted the human capital and its relationship to market to book ratio (MBR), return on equity (ROE) and efficiency. The study used Pearson correlation to verify the relationship between these variables. It was found that there was a strong positive relationship between the HC and MBR, but there was a weak negative relationship between the HC and efficiency of an organization. A weak positive relationship between the ROE was also obtained.

Closer to our research, Chen *et al* (2004) states that IC is used to create and enhance the organization value and success. IC measurement focuses on constructing an effective measurement model in which financial indices are combined with non financial to reflect thoroughly a company's operations under the influence of a knowledge economy and to offer more accurate information for Knowledge Management.

This study proposed a new model for measuring the Intellectual capital. The paper designed a qualitative index system to measure the human, customer, innovation and structural capital. Each of these components of IC was identified by a number of indicators on which respondents from different companies were asked to evaluate their respective companies. The respondents were also asked to evaluate on the performance of these businesses.

The researcher used the Pearson's correlation to establish a significant relationship between performance and IC. In the same study it had also been established that there is a positive relationship between the components of IC.

Bontis *et al* (2000) conducted a study on the Malaysian industries in which they circulated a questionnaire with 63 items. The questionnaire was filled by 107 MBA students from 7 different universities. The questionnaire was first psychometrically validated in previous studies as well as through Cronbach's alpha test. The study also established the relationship between customer capital, human capital and performance by help of the least square method. The results of human capital variable indicated a strong relationship with customer and structural capital and both were significant. The study further showed as positive relationship between structural and performance of a firm which proved that there is a relationship between these variables. The study also looked at the path analysis between these variables. It was proved that HC and CC are related it was further proved that CC was related to SC and Performance is linked. (HC → CC → SC → Performance).

Study Design

To establish the relationship between the components of I.C (Human and Customer Capital) and performance of a company, we approached 60 management level employees from ten different telecom companies to fill in a 3 part questionnaire. The questionnaire we personally administered, 47 successful responses were received from these ten companies. 23 responses were from cellular companies, 10 from long distance and 15 from manufacturing. Employees of different management positions filled out these questionnaires. To obtain a more holistic picture of an organization's intellectual capital, three to six subjects were used from each organization. The respondents were selected on the basis of convenience to the researcher. The subjects who best suited to provide the information were approached to take part in this survey.

Organization which is not sensitive to human aspect of business would not be able to compete with business world. Humans are employees who run the companies, who make decisions and perform tasks. High employee turn over causes companies to lose their intangible asset such as the "knowledge" acquired by the employees, while working in the organization. If organizations would not protect and nurture it will one day lose its competitiveness hence bring down its performance. Similarly customer satisfaction leads to customer retention which is always less costly to a firm.

Satisfaction of customers, quality of product or service, goodwill in the market, customer retention etc are important aspects for the success of a company.

The researchers believe that both these factors have a positive relationship with the performance of company. Although there are few studies in the area of IC in which performance was linked with its components. But in this study we have focused purely on human and customer capital. The intention is to predict the impact of these factors on performance by establishing its relationship with human and customer capital. The following model is considered:

P=f(HC,CC)

Where:

P : performance of company

HC: Human Capital CC: Customer Capital

E : error term

P= α +βHC+γCC+ ε (Eq....1)

Performance can be determined by financial and non financial indicators as used in the studies by (Bontis, CRANET, Hansson, and Kujansivu). Financial profitability of company is one generic indicator for Performance. For non financial we can consider the quality of service as an indicator of the performance of a company. The researcher used four Performance indicators, these indicators were used in the CRANET survey which is the largest and the most representative

independent survey of Human Resource Management Policies and practice in the world. (CRANET.org, 2006). The same four variables have also been used by Hansson (2002).

For Human Capital we have indicators which depict the status of employees within the organization, such as their satisfaction level, their education level, and their turn over level.

The Customer Capital dimension has elements such as customer relationship level, the market share level, service and product quality level.

Different Indicators from 13 different studies and reports were collected, 192 human capital indicators were identified with variations mostly due to the nomenclature. A total of 37 indicators for customer capital were identified. Fifteen variables for Human Capital and 11 variables for Customer Capital have been selected. The selection was done on the basis of the highest frequency, the most common and relevant variables were selected.

Reliability Analysis

Since the indicators used for the human and customer capital were filtered through different research studies, the researchers wanted to check the consistency among the indicators of each concept. The Cronbach's alpha is reliability coefficient that indicates how well the items in a set are positively correlated to one another (Sekran, 1996).

Quantitative Analysis

Quantitative analysis would be conducted through two ways

- (a) To establish the strength of the linear relationship between two variables we use correlations methods. The correlations coefficient provides a measure to establish the strength. In our study we would like to establish a linear relationship between human capital, customer capital and performance. Similar approach has been adopted by researchers Hansoon (2004), Wang (2005), Saenz (2005), and Chen (2004) to establish the relationship between the different dimensions of Intellectual capital.
 - Pearson's Correlation will be used to obtain the correlation coefficient to establish the degree of association between the three variables (human, customer and performance)
- (b) Regression Analysis will be used to establish the causal relationship between the independent and dependent variables. We will use this analysis to study the relationship between the HC, CC and the performance of a company. This analysis would be used to reveal the extent dependence of performance on human capital and customer capital. Previous studies of (Bontis, 2000; Marvidis, 2004; Wang, 2005) in the area of Intellectual capital and its effect on performance have used in this kind of analysis to prove their hypothesis.

Variables

The study has two types of variables, the independent variables and the dependent variable. The dependent variable of the study is performance of the organization and independent variables are human capital and customer capital.

Independent Variables

"Human Capital" and "Customer Capital" are measured with the help of some indicators. For the human capital study is using 15 main operationalized elements for the customer capital, the study is using 11 elements. The list of elements is a follow:

Human Capital:

- 1. Job Satisfaction of Employees
- 2. Trainings provided to the employees
- 3. Assessment conducted by the HR & Supervisors
- 4. Assignments/projects undertaken by the Organization
- 5. New recruitment & fresh blood hiring
- 6. Following of Recruitment processes & Procedures
- 7. Adequate number of employees to perform routine & intricate tasks.
- 8. Skill set required to handle routine & intricate tasks.
- 9. Number of experienced employees to make decisions & carry out complex tasks.

- 10. Employee innovativeness
- 11. Balance between Responsibilities & Empowerment.
- 12. Employee Attitude
- 13. Intellectual property rights
- 14. Employee Turnover
- 15. Overall Employee Education level

Customer Capital:

- 1. Accurate Information to Customers
- 2. Product & Services of the company
- 3. Goodwill of the Company to attract New & retain old customers.
- 4. Customer complain response time
- 5. Customers relation with organization
- 6. Internal Stakeholders relationship with the organization. Frequency of the marketing campaigns
- 7. Number of Outlets/Franchises
- 8. Customer traffic on website

Customer Retention rate.

- 9. Market Share of the Organization
- 10. Market Growth potential.

Dependent Variable

The study has one dependent variable "Performance". The operationalized concepts used to measure are four. Following is a list of those elements.

Performance:

- 1. Service Quality
- 2. Level of Productivity
- 3. Profitability
- 4. Rate of Innovation

Data Collection:

No secondary source for Intellectual capital is available for the companies operating in Pakistan, especially companies which are from the Telecom sector. Most of these companies are privately owned companies and very few are public limited. The mechanism/ tool of collecting primary data were questionnaire. These questionnaires were personally administered among the different employee of the telecom companies. Most of the respondents were in management positions. A qualitative index would be generated from the questionnaires similar to studies by Bontis, 2000; Chen, 2004).

The scales used in measuring the satisfaction in questionnaire is an interval scale called the numerical scale with 5 points provided with bipolar adjectives on both ends. Other scales used are nominal scale which will be used for obtaining demographical data.

It expected that the components of intellectual capital are linked with the performance of a company. The organization having a higher customer capital and good human capital would register higher performance (higher financial profits and better quality of service). There are a number of research studies which have focused on this new concept and have proved using different subjects and industries. In our local setup no such study has been published, the purpose is to verify the theories in the area of Intellectual capital.

Hypotheses

The objective of the paper is to estimate the relationship between the different components of intellectual capital and performance of a company. By developing different hypotheses statements, we want to prove these statements by applying different statistical tools and tests.

Hypothesis 1:

Customers to an organization are elementary reasons for existence. It is imperative that organizations have to have satisfied customers, who receive proper attention and information. To be able to deal with customers and satisfy their need an organization needs good human resource who are committed and properly trained. Therefore we believe an organization which has committed and properly trained employees will also have satisfied customers. Hence our fist hypothesis states:

H1: There is relationship between human capital and customer capital.

Hypothesis 2:

The output/performance of a firm is very much associated with the kind of input used by the firm. By output we mean quality of service, level of product and profits. By input we mean the level of human resource, amount of finances and other resources etc. Usually it has been observed that organization with better human resource would have better output. This leads us to our second hypothesis:

H2: There is relationship between human capital and performance.

Hypothesis 3:

Satisfied and loyal customers can create consistence sales, and regular profits. If an organization is performing well then one can safely say that this firm has regular customers and they are content with the services and products received from this firm. The researchers believe that firms' performance and loyalty of customer are associated. This leads us to the third hypothesis:

H3: There is relationship between customer capital and performance.

Hypothesis 4:

There are numerous factors which could be used to predict the performance of firms. Managers use a Varity of indicators to forecast the performance of a firm. Out of many we believe that the most prominent and notable factors are the human resource level and customer capital. By measuring these two major variables one can predict the performance of a firm:

H4: The independent variables (Human, Customer Capital) will significantly explain the variance in the Performance of a firm.

It is hypothesized that there is a causal relationship between the independent variable (human and customer capital) and the dependent variable performance.

RESULTS

The analysis is decomposed into three parts: the first part deals with reliability of data, second part discuss the co relational analysis and in the last part, regression analysis is presented.

Reliability of Data

To collect data on customer capital, human capital and performance of a company different studies and reports were consulted. To select properly the correct and valid elements for the dimensions customer and human capital a total of 13 studies were used. From which 229 elements were found. The researcher selected the most common used indicators in these studies. A total of 26 indicators were selected from human and customer capital. Similarly for the performance three different studies were consulted and out of them 4 indicators were identified for measuring Performance.

To verify the reliability of the indicators we used the Cornbach's Alpha Test and the following results were found:

- The Alpha received on the 15 indicators of Human Capital is .8596 which is good and shows that the indicators used are relevant.
- The Alpha received on the 11 indicators of Customer Capital is .8366 which is good and shows that the indicators used are relevant.
- The Alpha received on the 4 indicators of performance is .8031 which is good and shows that the indicators used are relevant.

Correlation between Human and Customer Capital

There is a strong positive relationship between human and customer capital. The relationship value is .592 and is significant. Which means that the both these variables co-vary. Organizations where human capital is high the customer capital of those organizations would also be high. Which proves our hypothesis (1) and that states 'there is a positive correlation between customer capital and human capital'

Correlation between Human Capital and Performance

There is a strong positive relationship between human capital and performance. The relationship value is .501 and is significant. What it means that these two variables co-vary. The organizations which have higher human capital would also show high performance. Which proves our hypotheses (2) and that states 'there is a positive correlation between human capital and performance'

Correlation between Customer Capital and Performance

There is a strong positive relationship between customer capital and performance. The relationship value is .655 and is significant. This shows that both the variables co-vary. This means the organizations which have higher customer capital would also show high performance. Which proves our hypothesis (3) i.e., states 'there is a positive correlation between customer capital and performance'

Regression Analysis

The regression run on the model i.e., the performance of a company is dependent on human capital and customer capital came up with results, that the coefficient of human capital is positive but not statistically significant. It shows that there is positive relationship between human capital and performance of the organization. The studies conducted by Wang (2005) also had similar results in which human capital did not show a direct impact but showed an indirect impact on performance through customer capital, process capital, intellectual capital. Saenz (2005) in his study had results indicating that the human capital had a very weak relationship with efficiency and return on equity (performance).

The coefficient of customer capital is not only positive but highly significant. It means if there is more customer capital then the performance of the organization will increase. The coefficient of customer capital is 0.523 and the coefficient for human capital is 0.163 it shows that the contribution of customer capital is more as compared to human capital. The value of R-Square received is .449 which shows that the variables bring about 45% variations in the performance of the organization. Which indicates that these variables bring sufficient variation in the dependent variable, only 55% variation is caused by other variables.

Results of the F-test shows that the overall model is statistically significant and these two variables i.e. HC and CC predicts the variation in the dependent variable, which prove our hypothesis (4) that the independent variables (Human, Customer Capital) will significantly explain the variance in the performance of a firm.

We also believe that there is a causal relationship between the independent variable (human and customer capital) and the dependent variable performance of telecom sector. The intention is to identify the extent to which the independent variables can predict the variance in the dependent variable. These findings reconfirm the previous studies and models presented by researchers such as Chen (2004), Bontis (2000).

DISCUSSION AND CONCLUSION

We know that an organization's market value is different from its book value (Lev, 1997). To bridge this gap, a new improved mechanism is required. Intellectual Capital assessment in conjunction with the traditional accounting methods can provide a more holistic organization market value. Intellectual Capital includes all the processes and assets which are not normally shown on the balance sheet and all the intangible assets (trademarks, patents and brands) which modern accounting methods consider.

The employees and the customers are important assets which are not visible in the financial books of an organization. Our inability to measure and valuate should not be the reason for ignoring

this intangible asset. As the saying goes "Not all that's Valuable is Tangible". Both customer capital (customer relationship, retention, market growth) and human capital (employee satisfaction, evaluation, and training) are the intangible components of the factors of production and are vital for the performance of an organization.

There is a growing concern to understand and manage these intangible assets in the Europe and USA but awareness of this management issues is very little in the developing countries of Asia particularly in Pakistan. A limited number of managers are aware of this concept and to bring their attention we have tried to publicize this theory by conducting research in this particular area and have tried to share with them the importance of this concept.

In this paper it has been established that there is a positive relationship between customer capital, human capital and performance of a company through hypotheses H1, H2, H3. The research showed a positive correlation between the customer capital and human capital (0.592). Furthermore, the relationship between human capital and performance is positive (0.501) and the coefficient between customer capital and human capital is also positive (0.655). All the above correlation coefficients were significant at 1% level of significance. Meaning that, where the Human Capital is good the Performance would be also be higher suggesting that organization should mange their Human Capital if they want to ensure higher Performances. Similarly it has also been proven that where Customer Capital is high the Performance is high signifying that organization having good customer capital would also have high output.

The research has also proved that the Performance of an organization can be predicted through customer and human capital hence substantiating hypothesis H4. Approximately 45% variation in the performance of company can be predicted through the human and customer capital of an organization. The coefficient of human capital was 0.167 and was statistically insignificant, but the customer capital coefficient was 0.523 and was highly significant at 1% level of significance. Overall the model was also significant at 5% level of significance.

For researchers and practitioners these finding are healthy signs. Since one cannot directly measure the effects of these intangibles towards the outputs, therefore an indirect method of measuring the effect might be required. Further studies are essential to help establish the credibility of these new concepts. We believe that these concepts will gradually be accepted and practiced by managers when they learn more about them.

The true value of an organization is a paradox, because the traditional accounting mechanisms only capture the book value of the company, where as the market value is not fully represented. By market value we mean the actual book value plus the intangible assets (customer, human capital) possessed by the organization.

The finding also encourages the management to invest more into the development of its customer and human capital. Since the management can't see the direct effects of human and customer capital on performance they think the spending on human, customer capital as an expense. This notion needs to be changed and spending on human and customer capital needs to be taken as an investment.

Progression towards the new economy, known as the knowledge economy requires management to manage its knowledge capital. The first step in this process is to measure the company's intellectual capital. This study is an effort in this direction, i.e. measure the intellectual capital, promote its importance and high light its effect on the performance of a company.

Limitations

The constraint of time is always a limitation; especially in our case this study is part of the MS thesis which had to be completed in certain allotted time. Collection of primary data from different organizations is as usual difficult and in our case the most effective method of collection of data was through personally administered questionnaire.

The sensitivity of the subject also created barriers especially while collecting data on the Performance of a Company, employees were reluctant to provide information for various reasons. The respondents felt that the management might not agree to the disclosure of internal information, in some cases they were not confident or sure on the accuracy of the financial information.

All the IC dimensions were not included in the study because the researcher felt that the human capital and customer capital were the two major components which could easily depict the

intellectual capital status and to which the respondents could easily answer. Moreover the respondents get annoyed when they see lengthy questionnaires so we limited our study to just two most important dimensions (HC, CC).

Selection of the organizations was very much based on the convenience of the researcher, Telecom organizations located in Islamabad, Pakistan were selected and employees were approached through personal contacts and references. Most of the organization's head offices are in Islamabad so it allowed the researcher to obtain a holistic assessment of the situation at these companies.

REFERENCES

Bontis, N., Chua, W., & Richardson, S., 2000. Intellectual capital and business performance in Malaysian industries. *Journal of Intellectual Capital*, (1)1:100

Naimah, B., & Connell, B., 2000. Intellectual capital: Current issues and policy implications, *Journal of Intellectual Capital*, (1)3: 206-240

Chen J., Zhaohui Z., & Hong Y. 2004. Measuring intellectual capital a new empirical model and empirical study. *Journal of Intellectual Capital*, (5)1: 195 -212.

Edvinsson, L. 2003. Investing in intellectual capital: Potential cost and benefits. *Human Resource Development in a Knowledge based Economy*. *The Emirates Center for Strategic Studies and Research*: 181-200.

Guthrie, J. 2001 The Management, measurement and the reporting of intellectual capital. *Journal of Intellectual Capital*, (12)1.

Hansson, B. Johnson, U. & Heinz, C. 2004. The impact of human capital and human capital investments on company performance. Evidence from literature and European survey, *Impact of Education and Training*: Luxembourg.

Kalim & Lodhi. 2004. The impact of knowledge economy . The Pakistan Development Review, (41)4: 787-804

Kujansivu P. & Antti Lonnquvist. 2005. How do investments in intellectual capital create profits? *Frontiers of E-Business Research*.

Maridis, D. G. 2004. The intellectual capital performance of Japanese banking sector, *Journal of Intellectual Capital*, 5(1).

Saenz, J. 2005. Human capital indicators, Business performance and market to book ratio. *Journal of Intellectual Capital*, (6)3: 374-384.

Stressman, P. A. 2005. Calculating knowledge, Available at Capital.files.stressman.com/pub/km/1999-10.php . (Accessed in Jul 2006).

Sulvian, P. 2000. Value driven intellectual capital: How to convert intangible corporate assets into market value. Wiley & Sons.

Wang W. Y. & Chingfu C. 2005. Intellectual capital and performance in causal model: Evidence from the IT industry in Taiwan. *Journal of Intellectual Capital*, (5)2: 222-232.

World Bank. 2000. World Bank Development Indicators. The World Bank Report

INTEGER PROGRAMMING METHODS TO SUPPORT DECENTRALIZED PRIMARY HEALTH CARE RESOURCE ALLOCATION: A CASE STUDY IN TOWER HAMLETS

Mohammad Ishfaq College of London, UK Email: mishfaq60@hotmail.com

ABSTRACT

Health for all by year 2000 has been a popular slogan from late 80s until the turn of new millennium. The work presented in this paper refers to a case of Tower Hamlets District Health Authority (DHA) in London and shows the methods of utilizing Integer Programming (IP) technique to support decentralized primary health care. In the pursuit of health for all the Tower Hamlets DHA had started a process of localized planning in order to allocate resources for primary health care. In this respect a case study of the district nursing service in Tower Hamlets was carried out in early 90s and the work is presented here to explain how decentralization and flexible decision-making processes were used then and to what extent these methods are applicable in the new millennium. In this regard two alternate ways of delivering the district nursing services are compared a) district nurses may be allocated to health centers in various localities/decentralized units to visit and serve patients within their administrative boundaries, and b) administratively nurses may be allocated to health centers in various localities but operationally they may visit and serve patients across their administrative boundaries subject to saving in travel time. In both cases a trade off between travel time saving and equality in service provision has been examined.

INTRODUCTION

Integer programming techniques are widely used in large-scale planning decisions where circumstances require planning models to contain integer-valued variables. For example, in utilization of an aircraft, a ferry, or any other piece of equipment that provides large-scale capacity and is expensive-a fractional value is normally meaningless in the context of any decision problem. Similarly planning problems where fixed costs/set-up costs, batch sizes, or either-or decisions are involved can be solved using integer programming models. Many other decision problems involving combinatorial optimization such as traveling salesman, machine scheduling, sequencing etc. with resource constraints can be solved using integer modeling. Analogous to that of the traveling salesman approach, the present paper develops two mixed integer programming models to allocate district nurses for decentralized primary health care service delivery in Tower Hamlets district health authority.

The process of implementing decentralized primary health care service delivery in Tower Hamlets started in 1985/86. To achieve decentralization a number of issues to be tackled were spelt out in a draft strategy. These included: defining the boundaries for localities (decentralized units at sub-district level); preparing an information system; and developing resource allocation mechanisms. The work presented in this paper concentrates on a case study of resource allocation for the delivery of the district nursing service in Tower Hamlets. This service operates by nurses visiting patients in their homes; therefore two data elements, need for service (demand in economics terms) and nurses' travel time to visit patients, are essential for resource allocation in the district nursing service. The present paper initially explains the methods used to derive service need and travel time data.

District nurses are administratively based in health centers and travel to visit their patients. The need of patients for services offered by district nurses varies between types of patient (and indeed from patient to patient). Below we derive need estimates for the year 1991 in Tower Hamlets for three age categories: 5-14, 15-64, and over 65. Separate teams of health visitors provide care for children under five - therefore this age group has been excluded from the exercise.

To identify the health care needs of each Region's population, the NHS used the RAWP formula from 1977 to 1990. This formula for funding has been replaced by funding on a capitation basis. However the government in its white paper working for Patients acknowledges that the RAWP formula has proved a useful method of producing a better national distribution of resources by significantly reducing regional inequalities. As the principles of the RAWP formula have been

considered useful in identifying equitable needs, the need for district nurses in each ward will be derived following the principles of the RAWP formula.

The RAWP formula is based on four elements; Service Activity, Population, Standardized Mortality Rates (SMRs) as a proxy indicator for morbidity, and indicators of Social Deprivation. In the following sections we interpret each of these variables in terms of the Tower Hamlets district nursing service.

REESRACH METHODOLOGY AND DISCUSSION

A data set comprising age and sex specific service activity in 1989 (the latest available information) was obtained from district nursing returns based on the Korner information system in Tower Hamlets. The Korner information system at the time of the study was in an early stage of development. Therefore there were doubts about some service activity data, and in particular that regarding children under five. It seems that in cases where the age of the patient was omitted by the district nurse, the patients were recorded as fewer than five by the system. To counter-act this presumed error, a possibility, suggested by a locality manager in Tower Hamlets, was to add all cases recorded as fewer than five into the category of elderly patients. This was justified on the grounds that it is mostly old people who are seen by the district nurses and who are therefore most likely to have been erroneously recorded as less than five. Since the numbers included were very small, and for simplicity, this argument was accepted and the number of patients under five was added into the category of patients over 65.

After making the necessary adjustments in the service activity data the next requirement was population data for the years 1989 and 1991. The 1989 population was required to derive the service activity rate to be applied to the 1991 population in order to derive the expected service use for the year 1991.

To estimate the service activity rate during 1989, population figures for the same year were also required. The London Research Center (LRC) estimates of ward populations by age and sex for the years 1986 and 1991 were obtained via Tower Hamlets local authority. From these figures, an estimated population for the year 1989 was obtained using linear interpolation. This method of estimating population between any two periods is used by the UN. Using linear interpolation, the ward-base age and sex specific population for the year 1989 were derived.

SMRs

The methods for deriving SMRs and their importance in identifying need for health care are discussed elsewhere. In 1988 the RAWP review committee recommended that to identify need a) SMRs less than 75 years should be used to take account of premature death, and b) SMRs should be used with an elasticity of 0.5 because with an increase in SMR the rate of increase of need for service decreases. In what follows SMRs have in consequence been employed with an elasticity of 0.5. However, since we are calculating the need for service in three different age categories, it is not appropriate to use the SMR under 75 years (as recommended in the RAWP review report) in each case. Ideally, appropriate age-specific SMRs should be employed; however using SMRs for areas as small as a ward are problematic, mainly because of the small number of deaths. This problem has also been recognized by Curtis and Taket who suggest combining the data on deaths from 1981 through 1985. It was not possible, however, to disaggregate SMRs into age and sex specific rates at ward level, as in various cases the data was too limited to permit reliable estimation. In order to use age and sex specific SMRs at ward level, we suggest that data on deaths for at least ten years should be combined.

Indicators for Social Deprivation

Social conditions are now well recognized as influencing the need for health care. However there is no unique indicator of social deprivation. A number of researchers have produced such indicators. The most important among them are the UPA8 (Under Privileged Areas) indicator, Scott-Samuel's 'objective indicator' of the need for primary health care, Thunhurst's method of defining areas of poverty, and Townsend's indicators of material deprivation. All these indicators are related to identifying the need for health care. The Department of Environment has also developed its own urban deprivation indicators in the context of urban development policy. However their indicators,

according to Curtis and Taket, were measures of general social conditions rather than specific indicators of the relative need for health care.

Similarly most of these indicators have attracted criticism in the literature on account of complicated methods to derive them. However, the method of deriving a deprivation index developed by Townsend, Simpson and Tibbs is fairly simple and straight forward. Since use of this method has also been preferred by Tower Hamlets Health Authority, we have therefore in this study used Townsend's ward-based index scores of deprivation as input to a method for deriving the need for district nursing service.

Model for Deriving the Need for District Nursing Service

The model is designed to derive ward-based need for each of three age categories of patients. It derives service activity rates for each category of patients for the year 1989 and applies them to the estimated future population of 1991. After that the extent of need for each category of patients is derived by taking into account ward specific SMRs (with an elasticity of 0.5) and Townsend social deprivation indicators. The notation adopted is as follows:

- j the j^{th} ward,
- k the kth age group, and
- s the s^{th} sex.

Table 1
Estimates of Ward-based Need for District Nursing Service 1991

Estimates of ward-based Need for	District	ı mursing	z Service 1	.991
Wards	5-14	15-64	65 ⁺	All Ages
Blackwall	35	1055	5517	6608
Bow	33	1095	6824	7978
Bromley	49	1796	9938	11782
East India	26	931	6106	7067
Grove	10	433	3048	3491
Holy Trinity	29	1007	9042	10079
Lansbury	31	1201	7713	8945
Limehouse	39	1454	8791	10283
Millwall	47	1798	7557	9402
Park	14	621	5138	5772
Redcoat	18	789	6635	7442
Shadwell	67	1721	9856	11643
Spitalfield	97	2242	11729	14068
St. Dunstans	45	1394	11186	12626
St. James	25	965	7228	8219
St. Katherine's	80	2561	10201	12824
St. Marys	43	1262	8125	9430
St. Peters	41	1401	9350	10792
Weavers	52	1473	11942	13017
Total Need	781	25199	155926	181486

The data available are:

 WP_{jks} estimated population in ward j, age group k, and sex s for the year 1991,

 CL_{ks} average number of cases seen by district nurses in age group k and sex s for the year 1989,

 P_{ks} estimated total district population in age group k and sex s for the year 1989,

 SMR_j standardized mortality ratio based on 1981-85 data in ward j,

 U_j Townsend deprivation index score in ward j.

The model for estimating need is

$$N_{jk} = \sum_{s} WP_{jks} \left(\frac{CL_{ks}}{P_{ks}}\right) SMR_{j}U_{j}a$$

$$N_{jk} = \sum_{s} WP_{jks} \times (CL_{ks} \div P_{ks}) \times SMR_J \times U_j^a$$
....(1) where

 N_{jk} is need for service in 1991 in ward j, age group k, and a is the SMR elasticity, equal to 0.5.

Equation (1) is the multiplication of age, sex, and ward specific service activity rates per population in 1989 by corresponding population estimates for 1991 to produce expected future service activity - which is then adjusted according to SMRs and social deprivation. Need is then combined for both sexes. The need for district nursing service derived for each ward and age category is given in Table 1.

Having derived estimates of need, our next essential data element for resource allocation, as mentioned earlier, is an estimate of nurses travel time. This is explained in the following section.

Travel Time between Health Centers and Wards

To provide nursing care, district nurses visit patients in their homes. A complication in the calculation of nurses' travel time is that although nurses are administratively based in health centers, they may in practice start their day's work by traveling from their own homes to the patients. Since nurses' traveling patterns are generally not known, we will nevertheless assume for simplicity that in Tower Hamlets nurses work by traveling from the health centers. In Tower Hamlets the district nursing service is delivered from eleven health centers, and geographically Tower Hamlets is divided into nineteen electoral wards. We may regard traveling as taking place between health centers and wards. In order to construct a travel time matrix between health centers (supply points) and wards (need points), a map of the road network and travel times by car between health centers and all traffic junctions in Tower Hamlets were obtained from the Geography department of the London School of Economics. (Car travel time was used because it is known that nurses normally travel to patients using their own cars). The road network map was then superimposed on the land-use map of Tower Hamlets to determine those traffic points which coincide with the residential areas in each ward. From these, only the maximum travel time that a nurse would require to travel from a health center to a ward was used. This was done in order to give maximum allowance for nurses' travel time. By this method we constructed 11 x 19 matrix of the maximum travel time between health centers and wards.

We have in the foregoing sections identified the need for each ward in Tower Hamlets using the principles of the RAWP formula, and defined a measure of travel time that nurses would require to travel between health centers and wards. In the following sections we will utilize these data as input parameters to allocate district nurses - one of the tactical steps to achieve decentralized primary health care.

The district nurses in Tower Hamlets as already mentioned are administratively based in 11 health centers and travel to visit their patients in their own homes. Tower Hamlets is sub-divided into four localities/decentralized units, each locality consists of several electoral wards. There are altogether 19 electoral wards in Tower Hamlets. Our objective is to allocate district nurses to the health centers within each locality in such a way that the need of each patient group in each ward is satisfied equitably while the total annual traveling time by the district nurses is minimized.

In developing a method of this kind it would in principal have been desirable to work interactively with responsible decision-makers. In this case such access was not feasible. However Ann Taket, then of the Department of Community Medicine, Tower Hamlets Health Authority agreed to act as a 'proxy' decision-maker in this respect. As a result of these discussions, it was decided to develop a resource allocation mechanism corresponding to two alternative ways of delivering the district nursing service:

- a) Services to be organized on a locality basis, with health centers serving the populations of wards falling within the locality boundaries; and
- b) Localities remain as managerial units for the health centers within their boundaries, but district nurses from any health centre are able to be allocated to service the populations of any wards within the district.

The objective of analyzing the situation in two ways is primarily to examine the implications of removing locality based restrictions on service delivery. Accordingly we have developed two alternative mathematical models, one disallowing cross boundary flows, and the other permitting

them. The following three assumptions were made as a result of discussion between Ann Taket , then of the Department of Community Medicine, Tower Hamlets Health Authority, Professor Jonathan Rosenhead, and Susan Powell of the LSE:-

- 1) The average number of patients that may be seen by a district nurse in a day was taken to be 8, 7, and 6 in age groups 5-14, 15-65 and over 65 respectively; and
- 2) In practice it is known that district nurses may start a day's work from home to go on their rounds. In the absence of data about their actual traveling patterns it was assumed in this study that, as an approximation, a district nurse will travel from her base in the health center to the patient. A measure of the cost of this traveling is the maximum travel time between health centers and the residential areas of wards of residence. The estimation of these times has already been described.
- 3) As already mentioned that service delivery is to be organized on a locality basis therefore number of nurses allocated to each locality must be integer. However, part-time nurse allocation to health centers within each locality is possible. The models are explained in the following sections.

Model One

In this model service provision is strictly confounded within the context of existing localities, aims to allocate an integer number of district nurses to each locality so that the proportion of need met is as equal as possible across all wards and across all patient categories (the equity constraint), and so that the total traveling time of nurses is minimized. The model is described below. In the description of model the following indices are used:-

```
p the p^{\text{th}} locality, j_p the j^{\text{th}} ward in locality p, i_p the i^{\text{th}} health center in locality p, k the k^{\text{th}} patient age group.
```

The data available to the model are:-

P The number of localities (4 in this case),

 m_p The number of wards in locality p,

 n_p The number of health centers in locality p,

K The number of patient age groups (3 in this case)

 $N_{j_p k}$ The need of patient group k in ward j_p , expressed as number of visits per year

 a_k The average number of visits to patient group k that can be made by a district nurse in a day (taken as 8, 7, and 6 for age groups 5-14, 15-64, and over 65 respectively),

 $T_{i_p j_p}$ The traveling time between health center i_p and ward j_p ,

The number of district nurses to be allocated in Tower Hamlets (given as 75),

W Number of working days in a year (assumed to be 260)

ADFMAX This abbreviation stands for α Deviation from Maximum equity. It is a given value permitting deviation from 100% equity (in service delivery to allow flexibility in the model.

The variables in the model are:-

 Z_p The number of nurses to be allocated to locality p (integer),

 $X_{i_p j_p k}$ The number of whole time equivalent nurses in health center i_p in locality p who are deployed to serve patient group k in ward j_p (a continuous variable that may take any real value).

 α_{max} The maximum proportion of total need which can be satisfied (see constraint (d) below).

 α_{min} The minimum proportion of total need which can be satisfied (see constraint (e) below).

The objective function is to minimize the total annual travel time by the district nurses:

$$\underset{\text{Minimize}}{\text{Minimize}} \sum_{p} \sum_{i_{p}} \sum_{j_{p}} \sum_{k} w \times a_{k} \times X_{i_{p}j_{p}k} \times T_{i_{p}j_{p}k}$$

The constraints are:-

a) All the nurses must be allocated:

$$\sum_{p} Z_{p} = Z$$

b) In each locality the sum of the nurses allocated to the health centers must equal those allocated to the locality:

$$\sum_{i_p} \sum_{j_p} \sum_{k} X_{i_p j_p k} = Z_p \text{ for } p = 1, ..., P$$

c) Each health center must have at least one nurse:

$$\sum_{j_p} \sum_{k} X_{i_p j_p} \ge 1 \text{ for } i_p = 1, ..., n_p; \ p = 1, ..., P$$

With the condition of service delivery strictly within a prescribed set of health centers and wards in a locality - disallowing cross boundary flows - this model becomes too restricted to allocate integer number of nurses to each locality with 100% equity α . In order to relax this restriction two equity levels α_{max} and α_{min} have been introduced through following two equations. The variation between two levels is controlled by giving any value to ADFMAX (the model is infeasible with 100% equity i.e. giving ADFMAX zero value which makes $\alpha_{max} = \alpha_{min} = \alpha$.

d) The maximum need that is satisfied must be less than or equal to α_{max} :

$$\sum_{j_p} (W \times a_k \div N_{j_p k}) \times X_{j_p i_p k} \le \alpha_{\max} \quad \text{for } k = 1, ..., K; j_p = 1, ..., m_p; \ p = 1, ..., P$$

e) The minimum need that is satisfied must be greater than or equal to α_{min} :

$$\sum_{j_p} (W \times a_k \div N_{j_p k}) \times X_{j_p i_p k} \ge \alpha_{\min} \text{ for } k = 1, ..., K; j_p = 1, ..., m_p; p = 1, ..., P$$

f) The deviation from equity, that is, the difference between maximum and minimum ward proportions of need met, must not exceed a given value:

$$\alpha_{max}$$
 - $\alpha_{min} \le ADFMAX$

g) The non-negativity and integrality conditions:

$$z_{\rm p} \ge 0$$
 and integer $p = 1, ..., P$
 $X_{i_p j_p k} \ge 0$ $k = 1, ..., K; j_{\rm p} = 1, ..., m_{\rm p}; i_{\rm p} = 1, ..., n_{\rm p}; p = 1, ..., P$

Model Two

In this model, it is assumed that localities remain as managerial units for the health centers within their boundaries, but district nurses from any health center are able to be allocated to serve the populations of any ward within the district. This assumption has been made to examine the implications of removing locality based restrictions on service delivery. The aim is the same as in Model One, to allocate an integer number of district nurses to each locality in such a way that the proportion of the need that is met is the same (the equity constraint), and that the total time traveled by nurses is minimized.

The notation used is similar to that used in Model One. The following indices (mostly the same as in Model One with slight variation where sub-grouping of wards for localities is not needed) are used:

p the pth locality,

J the *j*th ward,

 i_p the *i*th health center in locality p,

k the *k*th patient age group.

The data available to the model is:-

P The number of localities (4 in this case),

N The number of wards,

 n_p The number of health centers in locality p,

K The number of patient age groups (3 in this case)

 N_{ik} The need of patient group k in ward j, expressed as number of visits in a year

 \mathcal{A}_k The average number of visits to patient group k that can be made by a district nurse in a day (which are taken 8, 7, and 6 for age groups 5-14, 15-64, and over 65 respectively),

 $T_{i,j}$ The traveling time between health center i(p) and ward j,

Z The umber of district nurses to be allocated in Tower Hamlets (given as 75)

W The number of working days in a year (assumed to be 260).

The variables in the model are:-

 Z_p The number of nurses to be allocated to locality p (an integer variable),

 $X_{i_p,jk}$ The number of nurses to be allocated to health center i in locality p to serve

patient group k in ward j (a continuous variable),

 Y_{j_n} Allocate or not ward j to locality p (a 0-1 variable)

α The measure of equity (a continuous variable)

The objective function is to minimize the total annual travel time by the district nurses:

$$\text{Minimize} \quad \sum_{p} \sum_{i_p} \sum_{j} \sum_{k} W \times a_k \times X_{i_p j k} \times T_{i_p j k}$$

The constraints are:-

a) All the nurses must be allocated:

$$\sum_{p} Z_{p} = Z$$

b) In each locality the sum of the nurses allocated to the health centers must equal those allocated to the locality:

$$\sum_{i_p} \sum_{j} \sum_{k} X_{i_p j k} = Z_{p \text{ for } p = 1, ..., P}$$

c) Each health center must have at least one nurse:

$$\sum_{j} \sum_{k} X_{i_{p}jk} = 1 \text{ for } i_{p} = 1, ..., n_{p}; p = 1, ..., P$$

d) Each ward must be assigned to a locality:

$$\sum_{p} Y_{j_p} = 1$$
 for j = 1,...,N

e) The district nurses allocated to locality p may only serve a set of wards that have been allocated to locality p:

$$X_{i_p,jk} \leq N_{jk} \times Y_{j_p}$$
 for $k = 1, ..., K; j = 1, ..., N; i_p = 1, ..., n_p; p = 1,..., P$

f) The proportion of need that is satisfied is the same for all patient groups in every ward throughout the district:

$$\sum_{p} \sum_{i_{p}} W \times a_{k} \times X_{i_{p}jk} = N_{JK} \times \alpha \quad \text{for } k = 1, ..., K; \ j = 1, ..., N$$

(There is no longer a need for the extra degrees of freedom provided by upper and lower limits for α . It is because model one had restriction to find integer values for nurses allocation to serve the given set of wards in each locality whereas in this case model allows freedom to nurses in each locality to serve any set of wards.)

g) There is an upper bound on the number of nurses that can be allocated to a locality:

$$Z_p \le 50$$
 for $p = 1, ..., P$

(This was introduced because the computer package used requires the user to specify upper bounds on integer variables.)

h) Non-negativity and integrality conditions:

$$Z_p \ge 0$$
 and integer $p=1,...,P$
$$Y_{jp} = 0,1 \ j=1,...,N; \ p=1,...,P$$

$$X_{i_p,jk} \ge 0 \ k=1,...,K; \ j=1,...,N; \ i_p=1,...,n_p$$
 $\alpha \ge 0$

Both models are similar in that their objective is to allocate nurses to localities. However they solve the problem by assuming two different methods of service delivery. Model One considers service delivery strictly within a prescribed set of health centers and wards in a locality - disallowing cross boundary flows. Model Two, on the other hand, considers that each locality comprises only a set of health centers which can deliver service to any set of wards which may not coincide with present locality boundaries. The models were run on the mathematical programming system Sciconic and the solutions obtained are explained below.

Solution of Model One

Model One is infeasible with a 100% equity constraint. To obtain a feasible solution the equity constraint was relaxed and some variation was allowed to occur in the proportion of need satisfied. By allowing equity to deviate by 6% the model gave a feasible solution. The model was then solved several times allowing equity to deviate by 10%, 15%, 20%, and 25% respectively in order to examine its impact on the allocation of nurses to the localities and on total travel time. A brief summary of these results is given in Table 2.

Table 2
Results from the solution of Model One with various equity levels

Annual Travel Time (in hours)	8974	8874	8786	8696	8603
Deviation from Equity	6%	10%	15%	20%	25%
α_{max}	70.1%	70.8%	73.8%	76.3%	77.9%
$lpha_{min}$	64.1%	60.8%	58.8%	56.3%	52.9%
Number of Nurses in Localities					
Isle of Dogs	7	7	7	7	6
Bethnal Green and Globe Town	23	24	24	25	25
Stepney and Wapping	22	21	21	20	20
Bow and Poplar	23	23	23	23	24

Table 2 shows that with a 6% deviation from equity, the need that is satisfied for each ward and each age group remains within the limits of 70% and 64%. With a 25% deviation from equity, the distance traveled reduces only by 4%. A 4% saving in travel time is a very minor advantage to offset against permitting equity to deviate by 25%. Similarly the change in the pattern of the allocation of nurses to localities is also insignificant as equity is allowed to deviate from 6% to 25%. This suggests that nurses should be allocated so as to achieve a minimum deviation from equity.

Using a 6% permitted deviation from equity the number of nurses allocated to the localities, to individual health centers along with wards and each age group assigned is given in Appendix-1. Varying the deviation from equity results in little change in the number of nurses allocated to the localities. Likewise the wards served by the health centers shown in Appendix-1 also remained unchanged when equity was allowed to deviate by up to 25%.

Model One does not permit cross boundary flows. We now proceed to discuss the results of Model Two.

Solution of Model Two

In this model it is assumed that health centers have been allocated to localities, and the model assigns wards to localities while minimizing total travel time. The results are given in the following Table 3.

Table 3
Results from the solution of Model Two

results if our the solution of violet i wo	
Annual traveling time in hours	7,812.22
Need satisfied	65.9%
Number of nurses in localities	
Isle of Dogs	7
Bethnal Green & Globe Town	35
Stepney & Wapping	21
Bow & Polar	12

Table 3 shows that the traveling distance in Model Two is 13% less than that in the case of Model One with a 6% equity deviation. This means that by disregarding locality boundaries and allowing cross boundary flows there may be a considerable saving in travel time as well as more equity in service delivery. Although model two suggests substantial economy in terms of travel time and greater equity in service delivery, however against service delivery allowing cross boundary flows there may be a set of managerial difficulties. One example of this as we have seen is uneven allocation of nurses to localities i.e. the number of nurses allocated to localities 2, 3, and 4 vary between 12 and 35. Such arrangements would consequently generate uneven workload among localities thus restricting nurses' ability to respond sensitively to local need. On the other hand model one allocates fairly uniform number of nurses to the same set of localities. With only 6% equity deviation and 13% extra traveling time, service delivery under specified set of geographical basis could be more integrated and responsive to local need.

The allocation of nurses to localities and health centers to serve each age category of patients by ward, as a result of Model Two, is given in Appendix-2. Model Two offers a better solution in terms of travel time saving; however there could be other considerations. For example, Appendix-2 shows that Bethnal Green health center has been allocated nearly 26 nurses. This is because as many as seven wards comprising 42% of the total district need are easily accessible to this health center. This is an example of the potentially desirable consequences of nominally more efficient arrangements. Given the existing localities this allocation gives substantial cross boundary flows. Since future service delivery is planned on a locality basis, allowing too many cross boundary flows may be problematic.

In the light of above analysis it is obvious that both the models have explored alternatives for allocating nurses. This exercise demonstrates that an interactive rational planning method can contribute to the implementation of decentralization in primary health care. The method is based on a flexible approach, which gives choices to the decision-maker in order to make a rational decision.

CONCLUSIONS

We have demonstrated the feasibility of applying the Linear Integer Programming approach to the allocation of nurses to health centers to serve an equal proportion of need in each ward. The two models were developed in consultation with a hypothetical decision-maker from Tower Hamlets. In the first model we considered a situation where wards and health centers are pre-allocated to existing localities; while in the second model only health centers are pre-allocated to existing localities, with unrestricted assignment of wards to health centers determined by the model.

Both models have given solutions, which can be useful in policy formulation. The first model revealed that by allowing some deviation from equity of need satisfaction there could be some saving in travel time; however permitting the gap between maximum and minimum needs satisfied to widen considerably gives only a trivial saving in travel time. The second model revealed that permitting flows to cross the boundaries of the existing localities significantly reduces traveling time.

Conducting the analysis from two different points of view enables a decision-maker to explore the implications of alternative priorities. The work reported in the present paper is necessarily only indicative; a fuller study could be conducted interactively with the responsible decision-making body. However this account does demonstrate that a systematic rational planning approach can contribute to the process of decentralized planning of primary health care in Tower Hamlets.

Currently we are experiencing developments in the business world at a very high speed and mostly these are related to information development and presentation using internet. Among these developments, e-commerce, Business to Business (B2B) Information, EDI (Electronic Data Interchange) etc. are worth to mention where trade volume is running into trillion of US dollars. Nevertheless on the analysis and strategic decision making side, the Operational Research (OR) Techniques are respected as robust tools for managerial decision making. According to Anderson, Sweeney and Williams [13] users of management science tools have found new ways to apply management science techniques supported with advanced technology however basic approaches and fundamental theories of OR/Management Science have remained unchanged. We therefore argue that the Integer Programming techniques we presented here have better scope for application than before as model building and software applications have become more user friendly and widely understood. Rational decision making tools would continue to support decision makers.

REFERENCES

Anderson D.R, Sweeney, D.J, & William, T.A. 2002. *An introduction to management science: Quantitative approaches to decision making* (10th edition). NY: Thomson South Western.

Abadie J. 1970. Integer and non-linear programming. NY: Elsevier.

Balinski M.L. 1974. Approaches to integer programming.

Curtis, S.E. & Taket, A.R. 1989. The development of geographical information system for locality planning in health care. 24 (4): 391-399.

DHSS. 1976. Sharing resources for health in England: Report of the resource allocation working party. London: HMSO.

DHSS. 1987. Integrated analysis for the review of RAWP: Technical working group

Papers. London: Coopers and Lybrand Associates.

DHSS. 1989. Review of the resource allocation working party formula: Final report by the NHS management board. London: DHSS.

Garfinkel, R. S. & Nemhauser, G. L. 1972. *Integer programming*. NY: Wiley.

Gomory, R.E. 1958. Outline of an algorithm for integer solution to linear programs. *Bull. Amer. Math. Soc.* 64: 275-278.

Greenberg, H. 1971. Integer programming. NY: Academic Press.

HMSO. 1989. Working for patients. London: HMSO Cmnd. 555.

Hu, T.C. 1969. Integer programming and network flows. MASS: Addison-Wesley.

Ishfaq, M. 1992. Decentralized resource allocation in primary health care: Formal methods and their application in Britain and Pakistan. Ph.D. thesis submitted at LSE, London.

Jarman, B. 1983. Identification of under-privileged areas. *British Medical Journal*, 286: 1705-1709.

Kirkby, D. 1983. Maths games in the classroom: 13 Integer addition games.

Kush, T. 1981. Wyndham Lewis's pictorial integer. Pryor, A.J. 1983. Heuristic methods in Integer linear programming, and simplex acceleration techniques. Ph.D. Thesis.

Schrijver, A.1986. Theory of linear and integer programming.

Scott-Samuel, A. 1984. Need for primary health care: An objective indicator. *British Medical Journal*, 287: 457-458.

Sloane, N.J.A. 1973. A handbook of integer sequences.

Taha, H. A. 1975. *Integer programming: Theory, applications, and computations*. NY: Academic Press.

Thunhurst, C. 1985. The analysis of small area statistics and planning for health. *The Statistician*, 34: 93-106.

Towsend, P., Phillimore, P., & Beattie, A. 1986. *Inequalities in health in the North Region:*

An interim report. Northern Regional Health Authority and University of Bristol, Bristol.

Tower Hamlets DHA. 1989. *Tower Hamlets people no.* 2. Department of Community Medicine and Public Health, London.

UN. 1983. *Manual X: Indirect techniques for demographic estimation*. Department of International Economic and Social Affairs, New York.

Vile, R.C. Jr. 1982. The Apple II Programmer's handbook: Programmes and programming Techniques.

Wagner, H.M. 1969. *Principles of operations research* (second ed.). NJ: Prentice-Hall.

Ziont, S. 1974. Linear and integer programming. NJ: Prentice-Hall.

MEASURING PERFORMANCE THROUGH RATIO ANALYSIS IN THE BANKING SECTOR: A LITERATURE REVIEW

Dr. Junaid M. Shaikh Shaharudin Jakpar Curtin University of Technology (Australian University), Malaysia E-mail: junaid.s@curtin.edu.my

ABSTRACT

According to Nicholas G. Apostolou and Sue Knight (1998) in their article, ratio analysis is an excellent tool for providing critical insight about a company's financial condition and future prospects. Ratios provide increased information about a company's ability to meet its loan interest and principal payments. Ratio analysis is the art of analyzing the relationship between two or more amounts in a company's financial statements. The actual ratio results are much more meaningful when compared with a company's historical results or industry averages. Ratio results for a given year viewed in isolation can contribute to erroneous conclusions about a company's financial position. As a result, the analyst should consider industry performance. Thus, in present paper various literature and indicators has been examined for measuring performance in banking sector by considering two common examples.

INTRODUCTION

The existing main research areas in financial ratio analysis are fairly separate from each other sometimes with traditions of their own. Historically, these trends have developed to a degree on their own without a distinct with theory framework to encompass the entire field of financial statement analysis. Research on the functional form of financial ratios has been characterized by theoretical discussion about the ratio format in financial ratio analysis and empirical testing of the ratio model. We conclude from the review that the proportionality assumption for financial ratios is stronger within an industry than between industries. Moreover, proportionality varies from ratio to ratio, and between time periods indicating problems in temporal stability.

The rationale of this study is to compare the company's financial figures over a period of time, a method sometimes called trend analysis. Through trend analysis, it is easier to identify trends, good and bad of the companies. Ratios are highly important profit tool in financial analyses that help financial analysts implement plans that improve profitability, financial structure, reordering, leverage, and interest coverage. Although ratios report mostly on past performances, they can provide lead indications of potential problem areas.

LITERATURE REVIEW

Literature analysis has been done with respect to following areas:

Forecasting and Measuring

According to David T Boyd, Larry Kronk and Russell Skinner (2002) in their article where Just-In-Time (JIT) is a proven success to the companies report. The benefits are expected to improve financial performance in terms of a company's financial accounting ratios. All the benefits are also use to clarify the trends, simple linear regression is used. Conventional hypothesis is testing is performs on pre and post-implementation data to determine the significance and the actual improvements in measuring performance. JIT implementation varies from company to company and has impact on the financial accounting measures. The financial accounting measures may be a function to the degree of overall philosophy use in the companies studied.

A study entitled Marketing and Comparative Performance by Peter Doyle and Veronical Wong (1996)states that the research instrument can be used to follow up a change program to measure the progress in enhancing core capabilities, processes and organization commitment. In assessing business performance a distinction needs to be made between today's performance outcomes and strategies, which drive future performance. Academic favor shareholders value analysis as the most appropriate measure of financial performance but managers still find that accounting measure of profits and return on capital employed more measurable and immediate. Future performance depends on today's effort to sustain and create competitive advantage

(Day, 1990: Reichheld, 1996).

An article entitled 'Targets and How to assess Performance against Them' by Paul Walsh is focus on target. Target is something aimed at or to be aimed at. This means target indicating a current or future level of achievement. Target can be called as benchmarks or numeric goals. Target is used to perform monitoring and improvement roles. Company can make improvement in the underlying processes using target. It is important for performance improvement and convinces employees about the credible and attainable in the companies, so the target must be set. The target also gives implication on Balance Scorecard and with a good leadership and enough resources for reengineering. Target also specify about the future budget. There are four styles of targets, which are flat-line, step, seasonal and growth curve. These styles help managers to measure and forecast the company's budgets.

Pitfall Condition

Brealey, Myers and Marcus (1998) in their book entitled Fundamentals of Corporate Finance (2001), believe that financial ratio analysis will rarely be useful if practiced mechanically. This is because it requires a large dose of good judgment. A financial ratio seldom provides answers but they do help managers ask the right questions. So, companies typically compare financial ratios with the company's ratios in earlier years and also with other firm's ratio which in same business or industry.

According them, most of the managers use a few salient ratios to summarize the firm's leverage, liquidity, efficiency and profitability. The manager also can combine accounting data with other data to measure the esteem in which investors hold the company or the efficiency with which the firm uses its resources. Detecting management fraud is a difficult task using normal audit procedures (Porter and Cameron, 1987; Coderre, 1999). This supported by the Statement of Auditing Standards (SAS) No.82 (AICPA,1997), which requires auditing firms to detect management fraud, which will increase the need to detect management fraud effectively.

Prior researcher, Charambalos T. Spathis, (2002) in his study entitled Detecting False Financial Statements Using Published Data: Some Evidence from Greece has given some evidences that the pitfall conditions in this financial ratios justly exists. He believes that the fraudulently misstated on financial statements and insider trading are the most common risk that normally rises. He commonly knew this risk as false financial statements. When a financial statement contains falsifications, its elements no longer represent the true picture, which we called as fraud. Eliott and Willingham, (1980) defined management fraud defined as "deliberate fraud committed by management that injures investors and creditors through misleading financial statements". For Wallace (1995), fraud is a "scheme designed to deceive; it can be accomplished with fictitious documents and representations that support fraudulent financial statements".

Scott L. Summers & John T. Sweeney, (1998) in their research entitled 'Fraudulently Misstated Financial Statements and Insider Trading; An Empirical Analysis', however also states that managers who commit financial statements fraud are likely to use their knowledge about the fraud to protect or increase their wealth. These managers actually could engage in both the fraud and the illegal insider trade with the expectation that neither would be discovered. It is supported by statement written by Liang-Hsuan Chen, Shu-Yi Liaw and Yeong Shin Chen from Department of Industrial Management Science, National Chenh Kung University, Tainan, Taiwan, Republic of China (2001). According to them, the accurate financial date from the published financial statements can evaluate the managing performance of a business unit from different perspectives.

As reviewed by Carrol Stephen Windhaus (2000) in his article, ratio analysis is a prerequisite procedure when bankers and other lenders evaluate some kind of loan application. These simple formulas evaluate the firm's performance or the projected financial statements, which is submitted in anticipation of how the company will succeed with the use of loan proceeds. And when the numbers are 'crunched' the lender compares the company's results with those existing businesses in the same type of product or service industry as them.

RESEARCH METHODOLOGY

The study has narrowed down the research scope to a study of financial ratio technique application on the financial statements of the selected companies in Malaysian banking sector. The main objective of this study is actually to measure and identify the implication of financial ratio

analysis towards performance-in term of comparison on companies in Malaysia. The main idea is only to concentrate our study on several implications, which is on the financial ratio itself, prospect and possible pitfall condition of each selected company in Malaysian. Our research will be local and foreign base banks registered in Bank Negara Malaysia.

The first part in preparing our report would be the data collection process. Data gathered will be mostly secondary data. This is most relevant since the topic mostly rely on published data and information especially on the company's financial performance and financial ratio analysis application. The accounting practice also depends on secondary data as resource of study.

As for our first phase on data collection, we will gather data from detailed study of the existing published literature on financial ratio analysis and financial statements performance measurement. All of the resources will vary from research in journals to articles and review in various newspaper and magazines to ensure we can get fully acquainted with subject matter.

Next for our second phase of this data collection process, the data and literature available and pertinent to the study will be collected from secondary sources. The information and the data so collected are systematically arranged, analyzed, and interpreted for arriving at certain conclusion with regards to the recent financial ratio application and its implication towards company's financial performance. The static relating to difference aspects of financial ratio analysis can be obtained from Bank Negara Malaysia database and report besides from the accounting database available on Internet. The work of presentation, the derivation of conclusion and the formulation of technique and measurement for future direction will be done for the most part on the basis of official data.

Research Framework

Research framework is in general a comprehensive explanation on research process. This is important to research where it is a base of the whole study. In this study we will try to see the whole idea of financial ratio technique application on financial statement of the selected companies in Malaysian banking sector and perform an inter-firm comparison besides comparing with some others foreign company. The research framework will be divided into various parts, which are given below:

The research process begins with the possible opportunity at hand. Before the problem/opportunity of this study can be defined clearly and precisely, we need to carry out the following: We have to study the clear picture about the environment of Malaysian financial system, the overview and introduction of financial ratio technique, the idea about this financial ratio analysis, and also the trend of financial; ratio analysis application in Malaysia and global. Other than observation we need to obtain other sources of data that can assist us in identifying problems and opportunities especially in banking sector and the application of financial ratio analysis. There resources we can get from the reports of Bank Negara, Accounting Journal, article from internet and financial data and reports of companies in banking sector that can obtain from the Kuala Lumpur Stock Exchange website.

Once the problem has been precisely defined or opportunities are clearly delineated, the next step is to develop the approach to the research problem. In this research we have to identify the implication of financial ratio analysis towards the financial performance of the selected companies in Malaysian banking sector so, we need to clarify in specify our research objective. Our research objective will be:

- To examine each selected company's financial position based on their annual financial statement.
- To measure and forecast each selected company's performance and prospect based on their financial ratio analysis.
- To determine the possible pitfall condition of each selected companies based on their financial ratio analysis.

After identifying the research objectives we have to classify our variables. These variables designed to achieve research objectives. The list of our variables will be further discussed in our Research Methodology chapter. The possible example of variables that we want to study should be:

- 4. Return on Capital Employed Percentage......Variable four

We have decided that this research will be basically a descriptive research. Some parts of this research are mostly being covered by other researches. The parts on data finding and analysis not only will an explanation on relationship between variable but it is also description purposes.

RESULTS AND DISCUSSION

Basically, this chapter will present all of the gathered for analysis and data finding execution process. There are three major part of this chapter which consists of the introduction part; organization's background and financial review part and end up with the inter-firm comparison part. The introduction part will briefly describe and explain the general idea of a prospective financial statement analysis and the financial performance measurement. This also includes the brief introduction on financial statement and the importance of financial statement to be analyzed and interpreted.

Then, the second part is the brief introduction on every single organization's background. This will be done based on their extract financial statement by performing financial ratio analysis formulation as the main objective of this research project. This part also includes a comprehensive analysis to identify that organization's overall financial performance, their possible prospect and pitfall condition based on the ratio analysis findings.

Finally in the third part there are overall data findings analysis where we perform an interfirm comparison to demonstrate the needs and efficiency of financial ratio analysis in evaluating and assessing financial performance based on the financial statement. This means that we make a comparison between one of the local base banks and another one foreign base banks on their financial performance and financial condition based on their financial ratio result.

All this two part will accomplish the data finding and analysis chapter of this research report where every part plays an important role to one and another in order to come out with a proper findings and analysis.

Financial Statement Analysis Prospective

Financial statements are the main point of the annual report. The users of financial statements which include the firm's managers, stockholders, bondholders, security analyst, and suppliers, lending institutions, employees, labor unions, regulatory authorities and the general public. The statements are to convey information to the users of those statements about the corporation's financial position, financial performance and financial adaptability. The user's needs are varied. However, for suppliers the primary need is information to access the corporation's ability to remain profitable, to repay outstanding or whether to sell company. The financial statements of a corporation consist of balance sheet, income statement and statement of cash flows.

Annual report: A company's annual report, sometimes called the annual report to shareholders, is the primary direct communication from management to a company's shareholders. It discusses the operations of the company in detail. Although companies prepare and disseminate quarterly reports to shareholders and regulatory bodies, these reports are very brief.

Financial analysis: Financial analysis is an effort to gain an understanding about a business. Ratios attempt to provide information about the two quantities used to generate the ratio. Simply put, an accounting ratio is the relationship of one figure in the accounts to another. Financial ratios are used to interpret and explain financial statements and it can be effective tools in evaluating a company's liquidity, debt position, and profitability. Probably no tools are as effective in evaluating where a company has been financially and projecting its financial future as the proper use of financial ratios. A firm can use the financial ratio effectively to relate its financial data.

Users of financial statement often compare a company's ratio with benchmarks or norms. There are four areas of interest to investors; liquidity, efficiency, solvency and profitability. These areas form the basis for categorizing ratios. Liquidity relates to the ability to meet short-term liabilities, and efficiency refers to how efficiently a company is using its assets. Solvency refers to company's ability to meet its long-term obligations, and profitability is the company's capacity to generate profits.

Computing ratios is only a starting point in analyzing a company. Ratios provide clues as to what might be expected. Moreover, ratios often give conflicting signals. For instance, one might presume that the more cash a company has, the better it is able to pay its debts. But accumulating a lot of cash is not necessarily a good strategy, because idle cash earns little or no return. The company might have higher net income if it instead invested the cash. This type of inconsistency is pervasive throughout financial statement analysis.

Financial Performance Measurement

The financial statement usually stated the financial performance and profitability. Financial statement provides information about five areas of financial performance. First is short term solvency. Ratio of short-term solvency measures the ability of the firm to meet their financial obligations. To the extent a firm has sufficient cash flow; it will be able to avoid defaulting on its financial obligations and thus avoid experiencing financial distress.

Accounting Liquidity measures short-term solvency and is often associated with net working capital, which is the difference between current assets and current liabilities. Recall that current liabilities are debts that are due within one year from the date of the balance sheet. The basic source to pay this debt is current assets. Current ration and quick ratio are the most commonly used of accounting liquidity. A second area is activity. Ratios of activity are constructed to measure how effectively the firm's factors. One logical starting point is to compare assets with sales for the year to arrive at turnover. This idea is to find out how effectively assets are used to generate sales.

A third area is financial leverage. Financial leverage relate to the extent to which a firm relies on debt financing rather than equity. Measures of financial leverage are tools in determining the probability that the firm will default on its debt contracts. Too much debt can lead to a higher profitability of insolvency and financial distress. On the other hand, debt is an important form of financing and provides a significant tax advantage because interest payments are tax deductible.

The most difficult attributes of a firm is to conceptualize and measure profitability. In a general sense, accounting profits are the difference between revenues and costs. Unfortunately there is no completely unambiguous way to know when a firm is profitable. The best financial analyst can measure current or past accounting profitability. Many business opportunities, however involve sacrificing current profits for future profitability. For example, all new products require large start-up cost and as a consequence, produce low initial profits. Thus, current profits can be a poor reflection of true future profitability. Another problem with accounting-based measures of profitability is that they ignore risks. It would be false to conclude that two firms with identical current profits were equally profitable if the risk of one was greater than the other.

The most important conceptual problem with accounting measures of profitability is they do not give us a benchmark for making comparisons. In general, a firm is profitable in the economic sense only if its profitability is greater than investors can achieve on their own in the capital markets.

Hong Kong Shanghai Bank Corporation (HSBC BANK)

Headquartered in London, HSBC Holdings is one of the largest banking and financial services organizations in the world. HSBC's international network comprises over 8000 offices in 80 countries and territories in Europe, the Asia-Pacific region, the Americans, the Middle East and Africa.

Table 1 Some Financials HSBC

Some I manerals 11800					
	1998 RM'000	1999 RM'000	2000 RM'000	2001 RM'000	
NET INCOME	189,826	15,627	1,014,932	1,044,531	
PRE-TAX PROFIT	(241,432)	(476,696)	439424	482780	
NET PROFIT /LOSS	(269,755)	(476,696)	439,424	422,637	
TOTAL ASSETS	23,259,100	22,523,457	24,295,017	23,137,174	

(Source: HSBC Bank Annual Report)

This table shows the net income, pre-tax profit, net profit and total assets. It notices that the net income in 1998 is RM189, 826,000. In 19999, its net profit moves down to RM15, 627,000. However, a year later, its recovering is noticed big amount of this net income. It is RM1, 014,932,000 and it slightly rises again in 2001, puts it total amount for that year is RM1, 044,541,000. Refer to the table above, profit before tax for HSBC is not too good for 198 and 1999since it gives a negative sign which is (RM241,432,000) in 1998 and becomes worse in 1999, (RM476,696,000). There is improvement in 2000 because the profit before tax is had changed to positive sign that equal to RM439, 424,000. Then it increases to RM482, 780,000 in 2001. HSBC faces net loss for 2 years consecutively. It is (RM269, 755,000) in 1998 and (RM476, 696,000 in 1999. It becomes better in year 2000 and records a net profit of RM439, 424,000 in 2000 and RM422, 637,000 in 2001. Its total assets from 1998 to 2001 are not to assured because its amount is moved up and down for that 4 years period of time. It notices an amount of RM23, 259,100,000 in 1998 and it becomes lower in 1999, RM22, 523,457,000. In 2000, it gets higher compared to 1999 and Gin in 2001, it moves down downward to RM23, 137,174,000.

Ratio analysis formulation: HSBC's current ratio for 1998 is 1.0229and slightly moves down to 1.0199 in 1999. It gets higher in 2000 with its ratio of 1.0331 and 1.0319 in 2001. These 4 years ratios generally indicates how liquid the bank is. The bank is more liquid if its ratio is higher. In the case of HSBC, it is in then most liquid during 2000. The ability to cover the current liabilities actually more depends on quick ratio. This ratio shows that the bank's capability to settle it by referring whether the ratio is high or low. So, for HSBC, its highest ratio goes to year 1999, followed by year 2001. For sure, it is better to have a high ratio rather than low ratio in ensure that the bank can face it. As a result, the higher the quick ratio, the higher the bank's liquidity, which is usually, corresponds to its financial health.

HSBC's return on total assets is being biggest during 2000, with its rate of 1.81%. It is getting smaller in 201, 1.71%. For the year 1998 and 1999, it notices the negative rate of this return on total assets. This ratio actually indicates the shareholders return on their investment in the bank 2000 becomes with the largest figure since it has a great amount of profit after tax and total assets as well. The return on total shareholders gives the information about the equity of the shareholders. There is a negative sign both in year 1998 and 1999 because its calculation involves net loss and net profit. Shareholders' may get their highest return in year 2000 and the second one is in 2001. Shareholders of HSBC probably will obtain their return from year 2000 and 2001. It is a very low profitability to get their return in 1998 and 1999.

Table 2 Ratio Analysis HSBC

	1998	1999	2000	2001
	RM'000	RM'000	RM'000	RM'000
GROS PROFIT	(241,432)	(476,696)	439,424	482,780
NET PROFIT	(269,755)	(476,696)	439,424)	422,637
LIQUIDITY RATIO:				
CURRENT RATIO	1.0229	1.0199	1.0331	1.039
QUICK RATIO	0.8350	0.8487	0.7686	0.8413
PROFITABILITY RATIO:				
RETURN ON TOTAL ASSETS	-1.16%	-2.12%	1.81%	1.71%
RETURN ON SHAREHOLDERS	-21.35%	-42.08%	30.45%	24.01%
RETURN ON CAPITAL EMPLOYED	-14.67%	-30.09%	25.32%	23.36%

(Source: Calculation based on data collection)

According to the Table 2 above, HSBC definitely will not acquire any benefits on its invested capital through out these 2 years, 1998 and 1999 since it experiencing losses before taxation. So, its best investment is in year 2000 because this return on capital employed is closely relates to capital invested in the bank.

Bumiputra Commerce Bank (BCB)

Bumiputra Commerce Bank (BCB) is one of the Malaysia's leading banks in the retail and corporate sectors. It created an e-Banking portal called *Biz Channel* to provide online banking services to its customers. BCB's e-Banking portal today offers payroll, trade financing, and cash management services and integrates tightly into Channel-e, BCB's retail portal.

Table 3
Some Financials BCB

	1998 RM'000	1999 RM'000	2000 RM'000	2001 RM'000
NET INCOME	249,205	459,427	1,449,603	1,092,207
PRE-TAX PROFIT	71,748	123,464	520,785	117,029
NET PROFIT	21,863	83,143	337,785	75,029
TOTAL ASSETS	19,298,647	57,724,993	58,232,510	58,559,429

(Source: Bumiputra Commerce Annual Report)

Table 3 above shows the BCB's extract financial statement from 1998 to 2001. There is a great increment of its net income from year to year, which indicates that the bank shows rapidly development in producing their income. Year 2000 was the best year with its net income collection RM1, 449,603,000 followed by year 2001. For Pre-tax profit, 2000 is the highest amount of profit before tax because its total collection for that particular year is high and 1998 shows a very smallest amount of pre-tax profit. In 1999, it notices the net income of RM459, 427,000 and year 2001 is RM1, 092,207,000. Meanwhile, year 2000 was the best year for BCB Bank since it stated that the largest net profit is RM337, 785,000. This is because this year the BCB has been implement the merger and of course had put into practice a new management that have assist them increase their net profit. Year 1999 shows the second largest amount of net profit with RM83, 143,000. In conclusion, year 2000 is the best year since it stated biggest amount in net income, pre-tax profit, and net profit. However, the BCB total assets are decreasing.

Ratio analysis formulation: According to Table 4, BCB having its excellent period during year 2000 with its net profit is RM337, 785,000, followed by year 1999, RM122, 850,000. Its smallest net profit is in 1998, with RM 43,726. It is most probably because of the economic crisis that gives impacts to the bank's performance. In 2001, its net profit is not also persuaded which merely records RM75, 029,000. However, according to these net profit figures, it indicated that the performance of this bank is quite good since it not faces loss. Since the current ratio are higher than 1, it seems to be that this bank will be able to cover its liabilities since it has enough amount of current assets. According to the table above, BCB is getting down in 1999. Although the ratio is getting rising and falling during the 4 years period, the bank still can cover its current liabilities for that particular year since the ratio is higher than 1.

Table 4
Ration Analysis BCB

	1998 RM'000	1999 RM'000	2000 RM'000	2001 RM'000
GROSS PROFIT	71,748	123,646	520,785	117,029
NET PROFIT	43,726	122,850	337,785	75,029
LIQUIDITY RATIO:				
CURRENT RATIO	1.1338	1.0371	0.0294	1.0309
QUICK RATIO	0.8519	0.7442	0.7738	0.7855
PROFITABILITY RATIO:				
RETURN ON TOTAL ASSETS	0.23%	0.21%	0.57%	0.13%
RETURNS ON SHAREHOLDERS	3.08%	3.82%	9.70%	2.12%
RETURN ON CAPITAL EMPLOYED	20.76%	27.70%	10.96%	22.73%

(Source: Calculation based on data collection)

Besides the current ratio, the quick ratio also measures the bank's liquidity. The best quick ratio for BCB is in year 1998, 0.8519, followed by 0.7855 in 201. It slightly reduces in 2000, 0.7738 and decreases again in 1999 with its ratio of 0.7442. The BCB liquidity seems to be decreased slightly because its quick ratio is decreased. The smaller ratio for the bank, the lessen liquidity the bank has. The high ratio in 1998 is because of having a big amount of cash and account receivables. Profitability ratios for BCB are determined by calculating these 2 ratios: return on total assets ratio and return on shareholders. Return on total assets actually measures the operating efficiency of the bank. BCB has its highest return on total assets during the year 2000, 0.57% and reduces to 0.12% 1 year later. It is because of its profit after taxes and the movement down of total assets that year. In 1998, the ratio is 0.23%, and in 1999, 0.21%. The higher percentage makes this bank better because the bank is receiving a higher rate return from its investment in these assets.

Return on shareholders ratio for BCB is increasing year by year. The ratio is high in 2000, 9.70% may be because of the profit after tax is very high compared to the shareholders funds. In 1998 and 1999, the ratio recorded is 3.08% and 3.82%. The year 2000 gives the smallest percentage of 2.12% because its total shareholders funds are very high compared to its profit after tax. At last is return on capital employed. It gives a very high percentage in 2000(10.96%). It reduces to 2.27% in year after. In 1998, the percentage is 2.08% and in 1999, its percentage is 2.77%. According to this ratio, the bank is declared having a good performance if its percentage is high. So, its best investment is in year 2000 because this return o capital employed is closely relates to capital invested in the bank.

The Expectation Needs

The procedure is potentially biased by other irrelevant information without an expectation as the first part of an analytical procedure. For example, a comparison of current and prior year balances is biased by the presumption that prior year balances are relevant predictors of what current balances should be. Using the current to prior year comparison approach increases the chance of the researcher will not properly identify an account for which the balance should have changed significantly, for example, because of the effect a sharp increase in utility rates has on utility expenses. Trend analysis is the weakest where it relies on data for only a single account. In contrast, ratio analysis incorporates directly the expected relationships between two or more accounts. For example, turnover ratios are useful because there typically is a stable relationship between sales and other financial statements accounts, especially receivables and inventory. Thus, ratio analysis is more likely than trend analysis to identify potential misstatement.

CONCLUSIONS

Most of the firms prefer to employ financial ratio analysis to evaluate their companies' performance since it is easier to understand and more practical to make a report on company's financial condition and operations. Besides discussion about the general review about the financial ratio, we are trying to know closely about the functions or roles or the financial ratio analysis especially in assisting and enhancing the company's financial patterns. Once ratios are calculated, we will need some benchmarks to find out where the company stands at that particular point. Useful benchmarks are industry averages to find out how the company is performing. In our case it is necessary to obtain industry performance measures. In short, we will apply ratio analysis to financial statements to analyze the success, failure, and progress of the business.

Ratio analysis enables the business owner or manager to spot trends in a business and to compare its performance and condition with the average performance of similar business. Using a sample drawn from banking institutions, we will scrutinize on a year-to-year basis instead of month-to-month basis since these numbers can paint an accurate financial picture of a business' financial performance. We will work on the previous five years of the banks' financial statements in order to make analysis on it identity their prospect.

Limitations

First any changes in accounting policies that occurred during the time span should be considered when making the comparative analysis of a company's financial statement. Second the data gain is based from the 1998 to 2001 financial statement. It might not give a proper indication of the companies' current financial position. Third, determination whether ratios were calculated before

or after adjustments were made to the balance sheet or income sheet, such as non-recurring items and inventory or pro forma adjustments. In many cases, these adjustments can significantly affect ratios. Fourth, ratios are based on financial statements which are summaries of the accounting records. Through the summarization some important information may be left out which could have been of relevance to the users of accounts. The ratios are based on the summarized year end information which may not be a true reflection of the overall years' results. Fifth, inflation renders comparisons of results over time misleading as financial figures will not be within the same levels of purchasing power. Changes in results over time may show as if the banks have improved their performances and position when in fact adjusting for inflationary changes will show a different picture.

Acknowledgements:

We are very much grateful to our research assistance Teoh Boon , Jenny Chow, Lian Shin, Chow Yun and Dillan Chan for assisting in this work.

REFERENCES

Ali Abul Hassan bin Sulaiman Gabenor, 26 February 2000.

Armstrong J.E 1998. Auditing to detect fraud. *The CPA Journal*, September: 78-82.

Bank Negara Malaysia. 2000. Press release: Meeting with Anchor Banks, Tan Sri Dato' Seri

Barnes, P. 1986. The statistical validity of the ratio method in financial analysis: an empirical examination: a comment. *Journal of Business Finance and Accounting*, 13/4: 627-635.

Boyd, D.T. 2001. Corporate adoption of JIT: The effect of time and implementation on selected performance measure. *Southern Business Review*, Spring: 20-26.

Charalambolas T. S. 2002. Detecting false financial statement using published data: Some evidence from Greece. *Managerial Auditing Journal*, April: 179-191.

Financial Accounting Standards. 1997. Standards Number 128, Earning Per Share (EPS) FASB, Structure, FASB, February.

Foster, G. 1986. *Financial statement analysis* (second edition). Englewood Cliffs, New Jersey: Prentice Hall. Inc.

Fridson, M. S. & Marocco. M. J. 1986. Financial statement analysis. Altman.

Edward I. & McKinney, M.J. ny. *Handbook of corporate finance*. John Wiley & Sons.

International Accounting Standards. 1997. IAS 1 Presentation of Financial Statements [revised], IAS.

Ledford, M.H., & Sugrue, P.K. 1983. Ratio analysis: Application to U.S. motor common carriers. *Business Economics*, September 1983, 46-54.

Morley, M.F. 1984. *Ratio analysis*. The Institute of Chartered Accountants of Scotland.

Pohlman, Randolph & Hollinger, Robert D. 1981. Information redundancy in sets of financial ratios. *Journal of Business Finance & Accounting*, 8:5: 511-528.

Romney, M.B., W.S. Albrecht & D.J. Cherrington. 1980. Auditors and the detection of fraud. *Journal of Accounting*, 149(5): 63-69.

Salamon, G.L. 1982. Cash recovery rates and measures of firm profitability. *Accounting Review*, 57(2): 292-302.

The Central Bank and the Financial System in Asia. 1999. Bank Negara Malaysia.

The Relationship between Competitive Intelligence and Organizational Performance

Ching Seng Yap Md Zabid Abdul Rashid Universiti Tun Abdul Razak (UNITAR)

Email: yapchingseng@yahoo.com

ABSTRACT

The business environment has become more competitive due to advancement in ICTs and globalization. Business organizations are pressured by this phenomenon while striving for their business success. The emergence of competitive intelligence (CI) in dealing with such circumstances has gained attention from both practitioners and academic. The paucity of knowledge on CI has inspired the conduct of this study to identify the strategic roles of CI and to examine the determinants of CI practices as well as whether CI leads to enhanced performance. Organization theory literature contends that environmental turbulence and organizational strategy influence the behavior of information searching and scanning. From the normative perspective, information searching and scanning activities reduce environmental turbulence by providing quality information for managers in decision making which lead to enhanced business performance. Building on the relevant literature, a proposed conceptual framework is constructed on the dimensions of environmental turbulence, organizational strategy, CI practices and organizational performance.

INTRODUCTION

The business environment has become more turbulent and competitive due to advancement of information and communication technologies and globalization. Business organizations are pressured and challenged by these phenomena while striving for their business success or even their survival. Competitive intelligence (CI) has emerged as one of the measures for companies to face the competitive environments more effectively. CI is both a process and a product. As a process, CI is the set of legal and ethical methods for collecting, developing, analyzing and disseminating actionable information pertaining to competitors, suppliers, customers, organization itself and business environment (SCIP, 2006). As a product, CI is information about the present and future behavior of competitors, suppliers, customers, technologies, government, acquisitions, market and general business environment (Vedder & Guynes, 2000/2001).

Reviews of past research have revealed that CI practices are highly associated with outcomes. There are cases where CI brings positive impacts on organizational performance in different areas, for instances, Merck & Co., NutraSweet, Texas Instrument, Shell, East Kodak Company, Motorola, AT&T, Metropolitan Life Insurance Company, Marion Merrell Dow, FMC & Corning (Gilad, 1989; Rouach & Santi, 2001). CI becomes a key factor to sustained competitive advantage, integration of business strategy and environment, and strategy formulation and implementation. Effective CI practices will lead to successful alignment of competitive strategies with environmental requirements and the achievement of outstanding performance. CI is perceived to be an integral part when assessing competition and devising tactical and strategic plans. CI is commonly used in four primary areas related to strategy in companies: support for strategic decision-making; early warning of opportunities and threats; competitor assessment and tracking; and support for strategic planning and implementation (Caudron, 1994; Prescott & Smith, 1989).

Despite the increasing importance of CI in business organizations, there have, unfortunately, been few systematic attempts to marshal empirical evidence about the relationships between CI practices and contextual factors. Nor have the performance implications of the match between the contextual factors with CI practices been investigated. Whether CI practices are contingent upon environment and organizational strategy as well as the probable significant value of CI in strategic decision making, however, remains germane in this field of research. Moreover, reviews of the literature also contend that current evidence of the value and impact of CI is anecdotal or consists of indirect assessment (McGonagle & Vella, 2002). Therefore, this paper proposes to investigate the following research questions:

- (1) What is the level of CI practices undertaken in Malaysia?
- (2) What are the strategic roles of CI in business organizations?
- (3) Do environment turbulence and organizational strategy affect CI practices?
- (4) Does CI lead to enhanced organizational performance?

The next section of the paper reviews past research with respect to the predictors of CI practices, the characteristics and processes of CI practices and organizational performance. Building on the relevant literature, a proposed conceptual framework is constructed and followed by the development of hypotheses for the study.

LITERATURE REVIEW

CI Practices

CI has been defined in various ways. Gilad (1989) provided a straight-forward definition, in which CI is described as being able to predict competitors' move, customers' move, government's move and so forth. Whereas Fahey, King and Narayanan (1981) defined CI as to provide actionable intelligence which is information that has been synthesized, analyzed, evaluated and conceptualized. CI should also be distinguished from other related terminologies, especially environmental scanning, which has been a popular topic in strategy research. According to Gilad (1989), environmental scanning is broader as CI focuses on the immediate environment – competitors, suppliers, customers and other forces with which organization transacts. In another word, the scope of CI is more specific than environmental scanning. However, Rouibah (2003) considers environmental scanning another term of CI along with early warning system, strategic watch and business intelligence. Other relevant terminologies included business intelligence, competitor intelligence, market intelligence, technical intelligence, knowledge management, market research etc.

Typically, the roles of CI can be categorized as follows:

- (1) Supporting strategic decision-making; (Caudron, 1994; Gelb et al., 1991; Prescott & Smith, 1989).
- (2) Identifying early warning and blind spot of threats and opportunities or sensitization by making people aware that the company faced significant and formidable competitors to whom it must respond; (Coudron, 1994; Gelb et al., 1991; Ghoshal & Westney, 1991; Prescott & Smith, 1989).
- (3) Performing benchmarking by comparing the firms with its competitors on a set of variables such as setting cost target, quality standards, wage bills, manpower strength, and R&D expenditure; (Gelb et al., 1991; Ghoshal & Westney, 1991).
- (4) Supporting strategic planning and implementation, especially in the fields of marketing, IT and R&D; and in preparing for merger or takeover talks. (Coudron, 1994; Gelb et al., 1991; Ghoshal & Westney, 1991; Prescott, 1999; Prescott & Smith, 1987; Vedder, 2000; Vedder & Guynes, 2002; White, 1998).
- (5) Supporting competitor assessment and tracking (Coudron, 1994; Gelb et al., 1991; Ghoshal & Westney, 1991; Prescott & Smith, 1989).

There are many classifications of CI discussed in the literature. According Cavalcanti (2005), Business Intelligence (BI) can be classified as follows: environmental intelligence (EI) refers to the economic, technological, social, political, legal and natural environments; market intelligence (MI) refers to direct competitors, indirect competitors, suppliers and partners, distributors, products, market structure, and market conjecture; consumer intelligence (CI) refers to present day transaction clients, real consumers, potential clients, demographics, psychographics, interchange of information and knowledge, and rising tendencies of the targeted public; external intelligence (XI) refers to EI, MI and CI grouped together; organizational intelligence (OI) refers to the marketing and sales, production, research and development, finance, human resources, and general administration functions; and business intelligence (BI) refers to EI, MI, CI, and OI grouped together.

The source of CI collected can be viewed from internal or external, primary or secondary; personal or impersonal. Human in an organization may be the major source of information (Herring, 1998). External sources are obtained outside the organization while internal sources are generated within the organization. Personal sources communicate information personally to the executive whereas impersonal sources communicate information to broad audiences, or through formalized,

group communication activities. The source of information may be collected form the following: the Internet, reports, annual reports, government publications, professional prepared reports, business magazine (trade journal/publication), trade show, own salesperson, distributors and dealers, newspaper, external consultant.

Aguilar (1967) distinguished four modes of environmental scanning as (1) undirected viewing in which organizations are generally exposed to information without specific purpose; (2) conditioned viewing in which organizations are directed exposure to information without active search; (3) informal search in which organizations put relatively limited and unstructured efforts to obtain specific information; and (4) formal search in which organizations put in deliberate efforts following pre-established plans, procedures and methodologies to search for information.

Jain (1984) classified scanning systems of business organizations into four phases: primitive, the first phase in which organizations face the environment as it appears, are exposed to information without purpose and effort, and scan the environment without an impetus; ad hoc, the second phase in which organizations watch out for likely impact of the environment without active search, are sensitive to information on specific issues, and scan the environment to enhance understanding of a specific event; reactive, the third phase in which organizations deal with the environment to protect the future, pay unstructured and random effort to collect less specific information, and scan the environment to make an appropriate response to market and competition; and proactive, the fourth phase in which organization predict the environment for a desired future, pay structured and deliberate effort to collect specific information through pre-established methodology, and scan the environment strategically for competitive advantage. Subramanian et al. (1993) adopted the same category in their study relating to environmental scanning and business performance.

In summary, the practices of CI can be categorized into four approaches, namely, ad hoc, in which the CI service is used sporadically to support specific issues as they arise; continuous comprehensive, in which the CI service is used to support decisions across a wide range of corporate planning and decision-making activities; continuous focus, in which the CI service is used to support strategic decision making in certain narrowly focused areas of corporate activity, and project-based, in which the CI service is used in the context of specific projects within the corporation, with a defined beginning and end but of greater substance than the ad hoc utilization (Cartwright et al., 1995; Prescott & Smith, 1987).

Wright et al. (2002) identified two locations where CI may exist, ad hoc location where no dedicated CI unit within the organizational structure, and designated location that supports CI as a business function. When there is no any specific location, CI unit is mostly found in marketing, market research, R&D, information services/MIS or corporate strategic planning (Holtzman, 2004; Viviers et al., 2002).

Environmental Turbulence

Organizations have been conceptualized and researched as open system engaging in transactions with the environments. Dill (1958) pioneered the study on the relationship between task environment and managerial autonomy. According to him, there are three perspectives of environmental research: objects, attributes and perceptions. Objects or components are divided into task and general environments. Task environments include customers, suppliers and competitors. General environments include regulatory groups, technology and socio-cultural sector. Attributes or dimensions of environments are complexity – the number and diversity of external factors facing the organization; dynamism – the degree of change exhibited in those factors; and munificence – availability of sufficient resources for the organization. Perceptions are managers' perceived environmental uncertainty.

The environmental sector can be divided into task (immediate) sectors or general (remote) sector. The task environment is considered to be industry specific and consists of all those organizations with which a given organization must interact to grow and survive. It typically includes customers, suppliers and competitors. These sectors are closer to organizations and therefore information about opportunities and threats is more easily accessible and the timing of developments is more easily understood. The general environment consists of broad forces that influence societal institutions as a whole. It includes economic conditions, technological development, political and regulatory environments, and socio-cultural and demographic trends. The opportunities and threats

posed by these sectors tend to be more abstract and the timing of development is more difficult to estimate (Priem, Love & Shaffer, 2002). The task environment is associated with greater degree of strategic uncertainty as compared to the general environment. This is because the task environment changes quickly and is considered more complex and important than the general environment (Priem et al., 2002). The task environment is likely to have a direct impact on the firm and is thus considered more important to business level strategy, especially in goal setting and goal attainment. In contrary, the general environment is more likely to have an indirect impact on organizational performance and is often liked to corporate level strategy (Bourgeois, 1980).

Duncan (1972) defined the concept of environmental uncertainty as (1) lack of information regarding the environments when making decisions; (2) lack of knowledge about the outcome of a specific decision made in terms of how much the organization would cost if the wrong decision is made; and (3) inability to assign the probability on environmental factors that affect success or failure in decision making. Duncan (1972) investigated two dimensions of the environment: complexity (simple–complex) and dynamism (static–dynamic). In addition, Daft, Sormunem and Park (1988) contended that perceived environmental sector importance translates perceived environmental uncertainty into strategic uncertainty which reflects the strategic value of environmental information for organizational performance. By incorporating perceived complexity, perceived rate of change and perceived importance, perceived strategic uncertainty (PSU) is defined as the perceived absence of sufficient information about environmental events and activities and the inability to predict external changes in strategically important sectors.

Past empirical studies have examined the relationship between level of environmental uncertainty and scanning behaviors such as the type of information collected, the sources of information, the complexity of scanning system, the frequency of scanning etc. For example, when strategic uncertainty increased, managers would rely on personal modes of scanning and would use external sources of information (Elenkov, 1997). When perceived strategic uncertainty is decomposed, perceived strategic importance is the most significant predictor of scanning behavior (i.e., higher frequency of information collection), followed by perceived rate of change and perceived complexity (Daft, Sormunen & Parks, 1988; Boyd & Fulk, 1996; May, Stewart & Sweo, 2000).

Daft, Sormunen and Parks (1988) found the task environment such as customer, economic and competitor sectors were perceived as being more strategically uncertain than and the general environment such as regulatory, economic and socio-cultural sectors and thus received higher frequency of information collection. Their findings are supported by the studies of Sawyerr (1993), Yasai-Ardekani and Nystrom (1996), Ebrahimi (2000), and Garg, Walters and Priem (2003). Note that all the studies discussed above are based on environmental scanning, meaning that none of them were specifically devoted to CI practices.

Organizational Strategy

Reviews of literature contend that competitive strategy affect and is affected by environment scanning activities. Past researchers adopted either Porter's (1980) generic strategy model such as low cost leadership strategy and differentiation strategy (Jennings & Lumpkin, 1992; Raymond, Julien, & Ramangalaby, 2001; Miller, 1989), or Miles and Snow's (1978) strategic typology such as prospector, defender, analyzer and reactor, (Beal, 2000; Cartwright et al., 1995; Hambrick, 1982; Miller, 1988), or combination of the two (Parnell, 1997, 2000).

Porter's (1980) generic competitive approaches or generic strategies have been regarded as the most complete and theoretical sophisticated representations of the business level strategy construct (Miller, 1988, 1989; White, 1996). It has received substantial empirical support in strategy research (Dess & Davis, 1984; Hambrick, 1983; Miller, 1988; Miller & Friesen, 1986). Porter (1980) categorizes the strategy into cost leadership, differentiation and focus. Cost leaders strive to produce goods and services at a cost lower than their competitors in the industry. The cost minimization is crucial in the entire value chain, including cost control, sales force, R&D and advertising. They emphasize on internal efficiency. Differentiators attempt to focus on producing products and services uniquely and thus charge a premium price. Uniqueness can be in the forms of product design, brand image, customer service and technology features. Miller (1986 & 1988) divides differentiation strategy into either product innovation differentiation or marketing differentiation. Product innovation differentiation strives to create the most up-to-date and attractive products and services in terms of

quality, efficiency, design innovation or style. Marketing differentiation attempts to create unique image for the products and services through intensive marketing practices and image management such as advertising, prestige pricing and market segmentation. Focus strategy serves a circumscribed and specialized customer segment of the market: a certain kind of customers, a limited geographic market, or a narrow range of products and services. It is believed that the focus strategy is able to serve its narrow target market more effectively or efficiently than competitor who are competing more broadly. The focus strategy can be achieved either through cost leadership or differentiation. Porter's generic strategies are not mutually exclusive as a firm may pursue several strategies simultaneously (Dess & Davis, 1984; Hall, 1980; Hambrick, 1983; Hill, 1988; Miller & Friesen, 1986).

From the past empirical studies, Jennings and Lumpkin (1992) found a significant difference between strategies adopted by companies and environmental scanning activities. Organizations with a differentiation strategy engaged in environmental scanning focusing on opportunities and customers' attitudes evaluation while cost leadership strategy focusing on evaluation of threats from competitors and regulator. Low cost strategy is also found to be positively related to higher frequency and wider scope of scanning (Yasai-Ardekani & Nystrom, 1996). The finding was consistent with Miller's (1989) results and supported by the study of Hagen, Haile and Maghrabi (2003) but conflict with that of Hambrick (1982). Moreover, Walters and Priem (1999) and Walters, Priem and Shook (2005) also found that business-level strategy was related to the focus of scanning activities, specifically the differentiators emphasized on external opportunities and thus collected information on market and technological sectors. On the other hand, cost leaders focused more on internal capabilities such as cost control and thus placed more emphasis on political, legal and economic sectors. By adopting Miles and Snow's (1978) strategic typology, Subramanian, Fernandes, and Harper (1993a) found that prospectors have the most advanced scanning system, followed by analyzers and defenders. They also found that the scanning systems used by an organization vary depending on its strategic orientation and the scanning systems used by defenders were significantly different from those of analyzers and prospectors.

Organizational Performance

Organizational performance has been widely accepted as a complex, multi-faceted and contentious concept as the question on how it can best be measured has been debated within and among a variety of disciplines such as accounting, operations management, marketing, human resource management, international business, organizational behavior, information systems and strategic management (Neely, 1999). Being the ultimate dependent variable in theoretical and empirical studies of strategic management research, there exist different frameworks for measuring organizational performance.

The balance scorecard, a performance measurement and strategic management system proposed by Kaplan and Norton (1992) has been the most popular tools among organizations in measuring performance. The balanced scorecard is a customer-based planning and process improvement system, with its primary focus on driving an organization's change process by identifying and evaluating pertinent performance measures. It is an integral part of the vision identification, strategy formulation and implementation, with an emphasis on translating strategy into a set of financial and non-financial measures. These measures cover four equally important perspectives: financial, customer, internal, and innovation and learning. While it reflects many attributes of other frameworks, it explicitly links measurement to organizational strategy. It was argued that the framework will only be realized if an organization links its measures clearly to the identified drivers of performance.

Neely et al. (1995) have identified the shortcomings of the balance scorecard with the absence of a competitive dimension and the importance of other measurements such as human resource perspective, employees' satisfaction, product/service quality, and society/ community/environment perspective. A multifaceted framework called Performance Prism was developed by Neely and Adam (2000) to address the shortcomings of the existing frameworks. The Performance Prism takes into the considerations of all the requirements of all stakeholders to be central to performance measurement by incorporating shareholders, investors, customers, employees, suppliers and regulators into the balance scorecard. Having identified the key stakeholders of the organization and defined their requirements,

it would be necessary to determine if the organization has the strategies in place to deliver stakeholder satisfaction.

Among the categories of organizational performance measures, subjective performance measures of profitability and organizational growth are the most popular in the literature of strategic management. (Bourgeois, 1980; Dess & Robinson, 1984; Falshaw, Glaister & Tatoglu, 2006; Miller, 1986; Papadakis, 1998; Priem, Rasheed & Kotulic, 1995; Venkatraman & Ramanujam, 1987). Organizational performance is of the most widely researched but least understood and most contentious area in strategic management. The problem of conceptualizing, operationalizing and measuring the organizational performance construct often leads to inconsistent and conflicting results. What organizational performance measurement to be adopted will and should be different depending on the field of study and the research questions as a meaningful way to understanding the abstract idea of effectiveness is to consider how researchers have operationalized and measured the construct in their work.

Daft et al. (1988) found that high-performing firms as measured by return on asset (ROA) did more frequent scanning through all media when strategic uncertainty was high as compared with that of low-performing firms. This finding is supported by the studies Analoui and Karami (2002). Subramanian, Fernandes and Harper (1993b) also found support for a relationship between advanced scanning systems and high performance as measured by profitability and growth. This finding is supported by the studies of Subramanian and Kumar (1994), Subramanian and Ishak (1998) and Zahra, Neubaum and El-Hagrassey (2002). In contrary, Sawyerr, Ebrahimi and Thibodeaux (2000) found that environmental scanning frequency did not affect organizational performance as measured by profit margin and ROE.

Conceptual Framework and Hypotheses Development

Building on the relevant literature, the conceptual framework (presented in figure 1) is constructed on the dimensions of environmental turbulence, organizational strategy, CI practices and organizational performance.

Environmental Turbulence P1 CI Practices Strategic Importance Organizational Complexity Performance P3 Rate of Change • Frequency of CI • Profitability • Type of CI Market Growth Competitive Strategy • Source of CI P2 • Strategic Use of CI Cost Leadership Differentiation Focus

Figure 1
Proposed Conceptual Framework

Reviews of the literature revealed that the CI practices are influenced by the environmental factors, such as the perceptions of strategic uncertainty in terms of environmental complexity, variability (rate of change) and strategic importance. It would be appropriate to decompose the perceived strategic uncertainty construct and test it separately. In addition, empirical research indicated that degree of change explains more variance in perceived uncertainty than does complexity at the business level of strategy making (Bourgeois, 1985; Duncan, 1972). Daft et al. (1988) suggested perceived strategic important by sector be included in the environmental uncertainty construct as managers are unable to pay attention at every single environment sector the organizations face and thus are required to focus on the sectors that are perceived to be important to organizational

performance. As such the first proposition and three sub-propositions for the proposed study are proposed as follows:

P1: There is a relationship between perceived strategic uncertainty of an organization's environment and CI practices.

P1a: There is a relationship between perceived strategic importance of an organization's environment and CI practices.

P1b: There is a relationship between perceived complexity of an organization's environment and CI practices.

P1c: There is a relationship between perceived variability of an organization's environment and CI practices.

The CI practices are also found to be associated with the type of strategy that organizations pursue. Based on the empirical studies on Porter's (1980) competitive strategy, the choice of any three strategies – cost leadership, differentiation and focus does have an impact on CI practices, specifically they place different emphases in different sectors and utilize different sources in acquiring CI and make different use of CI. As such the second proposition and three sub- propositions for the proposed study are proposed as follows:

P2: There is a relationship between the type of business strategy adopted by an organization and CI practices.

P2a: There is a relationship between cost leadership strategy and CI practices.

P2b: There is a relationship between differentiation strategy and CI practices.

P3b: There is a relationship between focus strategy and CI practices.

One of the roles of CI practices is to add value to business processes such as effective implementation of strategic decisions and enhanced organizational learning which may lead to positive process outcomes and subsequently affect the organizational performance. As such the third proposition and two sub- propositions for the proposed study are proposed as follows:

P3: There is a relationship between CI practices and perceived organizational performance.

P3a: There is a relationship between CI practices and profitability.

P3b: There is a relationship between CI practices and market growth.

Implications of the Model

The proposed model may have implications on two perspectives: academic and managerial. For the academic perspective, the proposed conceptual framework can be considered an integrative approach to strategy theory, combining the concepts of strategy from contingency theory (CI as a contingent to determine organizational performance as appropriate fit among environment-CI and strategy-CI is required for optimum performance); resource-based view of the firms (CI as a form of intangible/invisible resources that may lead to sustainable competitive advantage and then improved organizational performance) and configuration theory (CI as a domain of configurations besides organizational process, structure, strategy and environmental attributes). Meanwhile, it is hoped that the proposed framework will shed light on the understanding of the roles CI and its impact among managers as CI is still relatively new in the business field, especially in Malaysia, and be subsequently adopted by business organizations as one of the measures in dealing with increasing competitive business environment.

CONCLUSIONS

This proposed study does not deal with all the activities of CI cycle apart from CI acquisition and use. It would be too ambitious to cover all the phases of CI cycle for this study, no doubt that the other phases of CI cycle are also important. The proposed study will be confined to environmental turbulence and organizational strategy in relation to CI practices. It does not examine other contextual factors such as organizational culture, structure, managers' attributes, top management support and leadership. These constructs may have certain degree of impact on CI practices and thus may serve as the antecedents for future studies. The paper aims to identify the strategic roles of CI, the determinants of CI practices and its impact on organizational performance. As most of the past research on CI practices has been either simply descriptive of CI acquisition behavior or has addressed only its general relationship with a contextual variable such as environmental or

organizational factors and/or organizational performance. The proposed study attempts to suggest the linkages of CI practices with these variables with the intention to make an integrative approach to the field of study.

REFERENCES

Aguilar, F.J. 1967. Scanning the business environment. New York: McMillan.

Analoui, F., & Karami, A. 2002. How chief executives' perception of the environment impacts on company performance. *Journal of Management Development*, 21(4): 290–305.

Beal, R.M. 2000. Competing effectively: Environmental scanning, competitive strategy, and organizational performance in small manufacturing firms. *Journal of Small Business Management*, 38(January): 27–47.

Bourgeois, L.J. 1985. Strategic goals, perceived uncertainty, and economic performance in volatile environments. *Academy of Management Journal*, 28(3): 548–573.

Boyd, B.K., & Fulk, J. 1996. Executive scanning and perceived uncertainty: A multidimensional model. *Journal of Management*, 22(1): 1–21.

Cartwright, D.L., Boughton, P.D., & Miller, S.W. 1995. Competitive Intelligence Systems: Relationships to strategic orientation and perceived usefulness. *Journal of Managerial Issues*, 7(4): 420–434.

Caudron, S. 1994. I spy, you spy. *Industry Week*, 143: 35–40.

Cavalcanti, E.P. 2005. The relationship between business intelligence and business success. *Journal of Competitive Intelligence and Management*, 3(1): 6–11.

Daft, R.L., Sormunen, J., & Parks, D. 1988. Chief executive scanning, environmental characteristics and company performance: An empirical study. *Strategic Management Journal*, 9(2): 123–139.

Dess, G.G., & Beard, D.W. 1984. Dimensions of organizational task environments. *Administrative Science Quarterly*, 29: 52–73.

Dess, G.G., & Davis, P.S. 1984. Porter's (1980) Generic Strategies as Determinants of Strategic Group Membership and Organizational Performance. *Academy of Management Journal*, 27(3): 467-488.

Dess, G.G., & Robinson, R.B. 1984. Measuring organizational performance in the absence of objective measures: The case of the privately-held firm and conglomerate business unit. *Strategic Management Journal*, 5(3): 265–273.

Dill, W.R. 1958. Environment as an influence on managerial autonomy. *Administrative Science Quarterly*, 11(1): 409–443.

Duncan, R.B. 1972. Characteristics of organizational environments and perceived environmental uncertainty. *Administrative Science Quarterly*, 17(3): 313–327.

Ebrahimi, B.P. 2000. Perceived strategic uncertainty and environmental scanning behavior of Hong Kong executives. Journal of Business Research, 49: 67–77.

Elenkov, D. 1997. Strategic uncertainty and environmental scanning: The case for institutional influence on scanning behaviour. *Strategic Management Journal*, 18(4): 287–302.

Fahey, L. King, W., & Narayanan, V. 1981. Environmental scanning and forecasting in strategic planning – The state of the art. *Long Range Planning*, 14: 32–39.

Falshaw, J.R., Glasaiter, K.W., & Tatoglu, E. 2006. Evidence on formal strategic planning and company performance. *Management Decision*, 44(1): 9–30.

Garg, V.K., Walters, B.A., & Priem, R.L. 2003. Chief executive scanning emphases, environmental dynamism, and manufacturing firm performance. *Strategy Management Journal*, 24(8): 725–744.

Gelb, B.D., Saxton, M.J., Zinkhan, G.M., & Albers, N.D. 1991. Competitive intelligence: Insights from executives. *Business Horizons*, January-February, 43–47.

Ghoshal, S., & Westney, D.E. 1991. Organizing competitor analysis systems. *Strategic Management Journal*, 12(1): 17–31.

Gilad, B. 1989. The role of organized competitive intelligence in corporate strategy. *Columbia Journal of World Business*, 24(Winter): 29–35.

Hagen, A., Haile, S., & Maghrabi, A. 2003. The impact of the type of strategy on environmental scanning activities in the banking industry: An international perspective. *International Journal of Commerce & Management*, 13(2): 122–143.

Hambrick, D. 1982. Environmental scanning and organizational strategy. *Strategic Management Journal*, 3(2): 159–174.

Herring, P. 1988. Building a business intelligence system. *The Journal of Business Strategy*, 9(3): 4–9.

Holtzman, J. 2004. The blind spots of CI managers and other barriers to adding strategic value. *Strategic Dynamic Group White Paper*, 2–13.

Jain, S.C. 1984. Environmental scanning in US corporations. *Long Range Planning*, 17(2): 117–128.

Jennings, D.F., & Lumpkin, J.R. 1992. Insight between environmental scanning activities and Porter's generic strategies: An empirical analysis. Journal of Management, 18(4): 791–803.

Kahaner, L. 1996. Competitive intelligence. New York: Simon & Schuster.

Kaplan, R.S., & Norton, D.P. 1992. The balance scorecard – Measures that drive performance. *Harvard Business Review*, January-February: 71–79.

May, R.C., Stewart, W.H., & Sweo, R. 2000. Environmental scanning behavior in a transitional economy: Evidence from Russia. *Academy of Management Journal*, 43(3): 403–427.

McGonagle, J.J., & Vella, C.M. 2002. A case for competitive intelligence. *Information Management Journal*, 36(4): 35–40.

Miles, R.E., & Snow, C.C. 1978. *Organizational strategy, structure, and process*. New York: McGraw-Hill.

Miller, D. 1986. Configurations of strategy and structure. *Strategic Management Journal*, 7(3): 233–250.

Miller, D. 1988. Relating Porter's business strategies to environment and structure: Analysis and performance implications. *Academy of Management Journal*, 31(2): 280–308.

Miller, D. 1989. Matching strategies and strategy making: Process, content and performance. *Human Relations*, 42(3): 241–260.

Miller, D., & Toulouse, J.M. 1986. Chief executives personality, corporate strategy and structure in small firms. *Management Science*, 32(11): 1389–1409.

Neely, A., Gregory, M., & Platts, K. 1995. Performance measurement system design: A literature review and research agenda. *International Journal of Operations & Production Management*, 25(12): 80–116.

Neely, A. 1999. The performance measurement revolution: Why now and what next? *International Journal of Operations & Production Management*, 19(2): 205–228.

Papadakis, V.M., Lioukas, C.S., & Chambers, D. 1998. Strategic decision-making processes: The role of management and context. *Strategic Management Journal*, 19(2): 115–147.

Parnell, J.A. 1997. New evidence in the generic strategy and business performance debate: A research note. *British Journal of Management*, 8(2): 175–181.

Parnell, J.A. 2000. Reframing the combination strategy debate: Defining forms of combination. *Journal of Applied Management Studies*, 9(1): 33–54.

Porter, M.E. 1980. *Competitive strategy*. New York: Free Press.

Prescott, J.E. 1999. The evolution of competitive intelligence. *Proposal Management*, Spring: 37–52. Prescott, J.E., & Smith, D.C. 1987. A project based approach to competitive analysis. *Strategic Management Journal*, 8(5): 411–423.

Prescott, J.E., & Smith, D.C. 1989. The Largest survey of "Leading-Edge" competitor intelligence managers. *Planning Review*, 17(3): 6–13.

Priem, R.L., Love, L.G., & Shaffer, M.A. 2002. Executives' perceptions of uncertainty sources: A numerical taxonomy and underlying dimensions. *Journal of Management*, 28(6): 725–746.

Priem, R.L., Rasheed, A.M.A., & Kotulic, A.G. 1995. Rationality in strategic decision processes, environmental dynamism and firm performance. *Journal of Management*, 21(5): 913–929.

Rajagopalan, N., Rasheed, A.M., & Datta, D. K. 1993. Strategic decision processes: Critical review and future directions. *Journal of Management*, 19(2): 349–364.

Raymond, L., Julien, P.A., & Ramangalaby, C. 2001. Technlogical scanning by small Canadian manufacturers. *Journal of Small Business Management*, 39(2): 123–138.

Rouach, D., & Santi, P. 2001. Competitive intelligence adds value: Five intelligence attitudes. *European Management Journal*, 19(5): 552–559.

Rouibah, K. 2003. Environmental scanning, anticipatory information and associated problems: Insight from Kuwait. *Communications of the International Information Management Association*, 3(1):

47–63. Available at http://www.iima.org/CIIMA/CIIMA%20V3%20N1%205%20Roulibah.pdf (Accessed September 20, 2006).

Sawyerr, O.O. 1993. Environmental uncertainty and environmental scanning activities of Nigerian manufacturing executives: A comparative analysis. *Strategic Management Journal*, 14(4): 287–299.

Sawyerr, O.O., Ebrahimi, B.P., & Thibodeaux, M.S. 2000. Executive environmental scanning, information source, utilization, and firm performance: the case of Nigeria. *Journal of Applied Management Studies*, 9(1): 95–115.

SCIP. 2006. What is CI? Available at http://www.scip.org/ci (Accessed September 20, 2006).

Sharfman, M.P., & Dean, J.W. 1991. Conceptualizing and measuring the organizational environment: A multidimensional approach. *Journal of Management*, 17(4): 681–700.

Subramanian, R., Fernandes, N., & Harper, E. 1993a. An empirical examination of the relationship between strategy and scanning. *The Mid-Atlantic Journal of Business*, 29(3): 315–330.

Subramanian, R., Fernandes, N., & Harper, E. 1993b. Environmental scanning in US companies: Their nature and their relationship to performance. *Management International Review*, 33(3): 271–286.

Subramanian, R., & Ishak, S.T. 1998. Competitor analysis practices of US companies: An empirical investigation. *Management International Review*, 38(1): 7–23.

Subramanian, R., & Kumar, K. 1994. The scanning of task environments in hospitals: An empirical study. *Journal of Applied Research*, 10(4): 104–115.

Vedder, R.G., & Guynes, C.S. 2002. CIOs' perspective on competitive intelligence. Information Systems Management, Fall: 49–55.

Vedder, R.G., & Guynes, C.S. 2000/2001. A study of competitive intelligence practices in organizations. *The Journal of Computer Information Systems*, 41(2): 36–39.

Venkatraman, N., & Ramanujam, V. 1987. Measurement of business economic performance: An examination of method convergence. *Journal of Management*, 13(1): 109–122.

Viviers, W., Saayman, A., & Muller, M.L. 2005. Enhancing a competitive intelligence culture in South Africa. *International Journal of Social Economics*, 32(7): 576–589.

Walters, B.A., & Priem, R.L. 1999. Business strategy and CEO intelligence acquisition. *Competitive Intelligence Review*, 10(2): 15–22.

Walters, B.A., Priem, R.L., & Shook, C.L. 2005. Small business manager scanning emphases and the dominant logic of the business-level strategy. *Journal of Small Business Strategy*, 15(2): 19–32.

White, D. 1998. Competitive intelligence. Work Study, 47(7): 248–250.

White, R.E. 1986. Generic business strategies, organizational context and performance: An empirical investigation. *Strategic Management Journal*, 7(3): 217–231.

Wright, S., Pickton, D.W., & Callow, J. 2002. Competitive intelligence in UK firms: A typology. *Marketing Intelligence & Planning*, 20(6): 349–360.

Yasai-Ardekani, M., & Nystrom, P.C. 1996. Design for environmental scanning systems: tests of a contingency theory. *Management Sciences*, 42(2): 187–204.

Zahra, S.A., Neubaum, D.O., & El-Hagrassey, G.M. 2002. Competitive analysis and new venture performance: Understanding the impact of strategic uncertainty and venture origin. *Entrepreneurship Theory & Practice*, 27(Fall): 1–28.

A STUDY OF THE INDIAN ECONOMY IN THE GLOBALIZED ERA

Anju Das International School of Business & Media, Bangalore, India

ABSTRACT

Until a few years ago, even after globalization and liberalization India existed only as some faraway place on the map. Today the world's attention is trained on India; We Indians are asking ourselves today - Can we live up to the expectations or not? But one fact is that India is now firmly a part of the global value chain. However, this fact is based on the last 3-4 years performance of India. Recently on March 13, 2007 our Prime Minister, Dr. Manmohan Singh, while talking to some business heads highlighted that India has recorded more than 8% growth in national income for three consecutive years. The reasons behind this could be attributed to a rise in savings (32% of GDP), a rise in investments – 34% of GDP, demographic age distribution of the large Indian population where 50% of the population is less than 25 years of age, and national consensus on economic policies. However, India needs a lot of improvement in areas such as banking and financial systems, infrastructure, and education.

INTRODUCTION

This paper begins with an overview of the Indian subcontinent over the last few years. It aims at highlighting the following:

- Outbound acquisitions made by Indian companies abroad.
- Inbound acquisitions with Indian domestic companies
- Acquisitions within the country of India
- The bi-lateral trade agreements with other countries outside India
- The areas of improvement, which India needs to address and step up considerably in order to sustain the growth.
- Suggestions for improvement

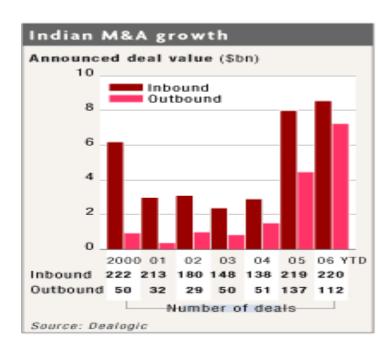
The focus on acquisitions within and abroad helps us to take cognizance of the existing and future potential of the India. A study of the areas where India needs to improve will help us to realize where we lag behind and need considerable changes to stabilize and sustain this spurt of growth. This research was based entirely on secondary data sources which were subject related. The sources used were books, journals, newspapers, reports and websites.

LITERATURE REVIEW

Some Facts about India

As per the head of Investment banking for UBS India, the company used to represent foreign nationals and their possible strategies into India, 5 years ago. Today the major business deals are from Indian companies wanting to go global.

According to Dealogic, a data provider, in the first nine months of 2006, Indian companies announced a record of 112 foreign acquisitions with a combined deal value of \$7.2 billion against \$4.5 billion in 2005. To begin with let us examine some factual data about India. Year 2006, India has been a destination for the world's most powerful heads of State beginning with Saudi King Abdullah followed by French President Jacques Chirac, US President George Bush, the Australian Prime Minister John Howard and more recently the Russian PM Mikhail Fradkov. And the list is endless. While enhancing economic, trade and energy ties were topmost on the agenda, these recent events epitomize India's emerging role in the changing geo-strategic world order.



Outbound Business Deals

Automobiles sector: Hero Group, a joint venture partner of Honda is negotiating with BMW AG (Bayerische Motoren Werke Aktiengesellschaft) to source components from India. The company expects to start with an initial order for disc brakes and gears, and intends to move up the value-added chain over a period of time. BMW already sources seats, seat trims, electronics and door panels from India. The company intends to increase its purchase of Indian-made components and has set up a purchasing office in India to manage sourcing for its global operations.

Electronics sector: Tata Auto Comp Systems (TACO) and Sasken Communication Technologies have formed a joint venture to address the automotive electronics market. The new company to be called TACO Sasken Automotive Electronics Private Limited, will design, develop and market automotive electronic products for the global market, addressing both original equipment manufacturers (OEMs) and aftermarket ones.

Oil & petrochemicals sector: Essar Energy holdings, a part of Essar Global and the holding company of Essar Oil Ltd (EOL) have bagged three exploration blocks in Madagascar, located near Africa. Reliance Industries will set up 50,000 barrels per day (bpd) refinery in Yemen, for which it has already picked up a stake in two oil blocks. Yemen has two refineries and has awarded a contract for a third to India's Reliance Industries jointly with Yemen's Hoodoil. ONGC Videsh Ltd. (OVL), the wholly owned subsidiary of state-owned Oil and Natural Gas Corporation Ltd has tied up with the National Oil Corporation of Libya for oil exploration. ONGC signed a memorandum of understanding with Russia's state oil company OAO Rosneft, in order to jointly study and bid for oil and gas exploration assets, and refining and marketing projects in India, Russia and other countries. ONGC and Rosneft are already partners with Exxon Mobil Corp in Russia's Sakhalin-1 project and have a 20 percent stake in it. ONGC is keen on partnering with Rosneft to bid for Sakhalin-3 project in Russia's Far East.

Venezuela's state oil company, Petroleos de Venezuela SA, plans to set up a refinery and establish a petroleum retailing venture in India. The proposed refinery would process the Venezuelan crude from the San Cristobal block where India's ONGC Videsh Ltd., an arm of ONGC, has been offered a 30 percent stake.

ONGC is set to sign a swap deal with Brazil's Petrobras. ONGC will offer equity stake to Petrobras in India's largest gas find in the hydrocarbon-rich Krishna Godavari (KG) Basin, while ONGC would be offered equity stakes in oil-rich blocks in Brazil. ONGC had initiated talks with global players like ENI of Italy, Brazil's Petrobras and UK major BP and BG Group to develop the Krishna Godavari block.

Infrastructure sector: The Sun Group and the Apollo Real Estate Advisors Joint Venture Company has closed its USD 630 million SUN-Apollo India Real Estate Fund, to be invested in various real estate projects in India. The fund was launched in April 2006 and had its first closing in August 2006. Leading US, European and Middle Eastern institutional investors, multilateral agencies and high net worth individuals are said to have invested in the fund. The fund at its early stage is said to have invested in a 5 million square feet IT park being developed on 58 acres of land in Chennai.

DS Constructions Ltd (DSCL) has entered into a tie-up with Flughafen Munchen GmbH (FMG) - Munich Airport International to bid for the restructuring and modernization of airports announced by the Government of India. Under the agreement, the consortium, under the name of Indian Gateway Airports, will jointly participate in the bidding process. The consortium will form a special purpose vehicle to undertake work on the project, if awarded. DSCL will hold an 80 percent stake in Indian Gateway Airports. The balance 20 percent will be held by FMG.

Kotak Realty is planning to setup its second real estate fund by raising around USD 350 million for its second real estate fund from international investors, financial institutions and High Networth Individuals (HNIs). The fund is expected to invest in hotels, healthcare, retailing, education and property management projects in northern India.

Indian Railways is set to expand its operations to Sri Lanka. Sri Lanka has offered India an oil block on nomination basis in return for the Indian Railways setting up a 160 km rail route from Colombo to Matara. This would be Indian Railways' first foreign venture.

Delhi based real estate developer Parsvnath Developers are in advanced discussions with Dubai based \$30 billion real estate company Nakheel Group for a 50:50 joint venture

Telecommunications sector: Videsh Sanchar Nigam Limited's acquisition of Teleglobe International Holdings for USD 254 mn in July, 2005 was one of the largest investments made in the US by any Indian company. VSNL Global recently received International Long distance (ILD) and Internet service provider (ISP) licenses in Sri Lanka. Bharti Group and Reliance Communications are vying for Sri Lanka's 5th GSM-based mobile operator license along with Singapore's Tele and Malaysia's Maxis Communications.

Steel sector: Indian group Tata Steel won its bid to take over Anglo-Dutch steel company Corus. Tata outbid Brazilian rival CSN in an auction set up by the UK's Takeover Panel.

Textile sector: Indian Textile design and manufacturing firm Himatsingka Seide plans to acquire an Italy-based textile company, Giuseppe Bellora SpA for an undisclosed amount. The acquisition would give Himatsingka, access to high-end distribution networks in the global home textile segment.

Inbound Business Deals

Foreign direct investments: The New York Stock Exchange and other foreign investors including General Atlantic, SAIF Partners and Goldman Sachs have together picked a 20 percent stake in Mumbai-based National Stock Exchange. As per market reports, the deal size for the entire stake is estimated to be around USD 460 to 480 million. As per the Foreign Direct Investment guidelines, foreign investment in stock exchanges is capped at 49 percent. Foreign investment includes 26 percent of direct investment and 23 percent of investment by portfolio investors. The Securities and Exchange Board of India (SEBI) has stipulated a five percent investment limit for a single foreign investor.

Banking & financial services sector: UBS Global Asset Management has acquired Standard Chartered's mutual fund business (Standard Chartered AMC) in India for USD 120 million. The transaction is, however, subject to certain regulatory approvals and is expected to be completed in the second half of 2007. Standard Chartered AMC managed a total asset base of USD 2.8 billion (INR 12,624 crore, a crore is 10 million) at the end of December 2006. The Indian mutual fund industry had close to USD 73.5 billion assets under management at the end of December 2006.

Government of Singapore Investment Corporation and the New York-based hedge fund, Galleon Partners have invested 20 percent stake in Edelweiss Capital for around USD 90 million. With around 600 employees, it offers services ranging from brokerage to investment banking, asset management and insurance advisory. Edelweiss reported total revenues of USD 32.2 million (INR 147 crore) and a profit after tax of USD 9.3 mn (INR 42 crore) for FY06.

Oman-based BankMuscat has agreed to acquire a 43 percent stake in the stock broking group Mangal Keshav for an undisclosed sum. The Mangal Keshav Group, headquartered in Mumbai, has

20 branches and 220 franchises at 70 locations across India It accounts for around two percent of the total volume of exchange business in India. Earlier in October 2006, BNP Paribas acquired 33 percent stake in Geojit Financial Services. Barclays UK has earmarked \$370 million for its Indian operations in the coming years.

Retail sector: Pantaloon Retail, India's leading retailing company, has formed a joint venture with US-based Staples, one of the largest office-product retailers in the world. The new joint venture company, Staples Future Office would bring together Pantaloon's local business knowledge with Staples' best practices and global procurement strengths in the office products business, which has huge potential for growth in India. Staples Future Office would serve businesses of all sizes through delivery as well as cash-and-carry locations by offering a wide range of office products from core office supplies to printers and computers.

Ireland's leading fresh produce firm, Total Produce Plc, plans to form a joint venture with Tata Chemicals Ltd. to distribute farm produce such as fresh fruits and vegetables in India. The new venture would set up back-end operations by building distribution facilities and would work towards sourcing of farm produce and supplying it to Indian retailers and wholesalers. The venture would focus on improving efficiencies, increasing shelf life and reducing product loss in the supply chain. Tata Chemical has built a network of about 500 agri-service centers, branded as 'Tata Kisan Sansar' which would be tapped to source produce for the new venture. Total Produce was recently spun off from Irish fruit distributor Fyffes Plc. Bharti Group and Wal-Mart has tied up in the Retail sector.

Textile industry: Indian Textile design and manufacturing firm Himatsingka Seide plans to acquire an Italy-based textile company, Giuseppe Bellora SpA for an undisclosed amount. The acquisition would give Himatsingka, access to high-end distribution networks in the global home textile segment. Bellora has a significant presence in the luxury bed linen segment across Europe and its products are sold through its own distribution outlets and through major European department stores.

FMCG industry: The U.S. based Kimberly-Clark Corporation and Genpact have entered into a five year outsourcing contract. Under the contract Genpact would support certain finance and accounting services of Kimberly-Clark, which include accounts payable and travel expenses, pricing administration, accounting-to-reporting and supply-chain accounting.

IT sector: Bangalore based Subex Azure has entered into conditional contract to acquire Syndesis limited in an all-cash deal. The deal values Syndesis at USD 164.5 million. Subex Azure is a provider of revenue maximization solutions to telecom companies and Syndesis is a player in Operations Support Software for telecom companies. 3i, Cisco and Oman International Fund (OIF) have invested USD 125 million in India's Nimbus Communications Ltd. EMC Corporation, the world's largest maker of storage computers and software, plans to double its investment in India to \$500 million by 2010. US IT giant Cisco is to invest around US\$1.1bn in India over the next five years, largely on research and development projects. Cisco also expects that at least one fifth of its top executives will be based in India over the next two to three years.

Entertainment industry: Tata Sky, the joint venture between Tata group and Star TV has sold a 10 percent stake to Singapore-based private equity fund Temasek Holdings for USD 55 million. Ushodaya Enterprises Limited, which owns Eenadu newspaper, ETV and Ramoji Film City, has announced that global private equity firm Blackstone Group and its affiliates would invest up to USD 275 million in the Hyderabad-based media house.

Pharmaceutical Industry: Dabur Pharma, India's leading player in the generic oncology drug segment, has acquired its Thailand-based marketing and distribution associate, Biosciences Co. for an undisclosed amount. Dabur plans to expand its foothold in Thailand's rapidly growing oncology market by marketing its 30-drug portfolio through Biosciences' strong network. Nicholas Piramal India Ltd (NPIL), has entered into an agreement with US based pharma company Eli Lilly to develop a metabolic disorder treatment molecule from the non-clinical studies stage up to Phase III of human clinical trials. NPIL would receive a payment of USD 100 million as well as royalties on successful drug launch. Biocon has announced a 50:50 joint venture with Neopharma, an Abu Dhabi-based company promoted by NRI Dr. B. R. Shetty. JB Chemicals & Pharmaceuticals Ltd., an Indian pharmaceutical company, is planning to set up a pharmaceutical Special Economic Zone (SEZ) covering 130 hectares in Gujarat.

Infrastructure sector: Morgan Stanley has acquired a 10.75 percent stake in Mumbai-based Oberoi Constructions for a consideration of USD 152 million. The investment is so far said to be the biggest

by any foreign institution in the Indian property development industry. Oberoi Constructions has projects in Mumbai and New Delhi and is currently developing around 15 million square feet property. In 2006, Morgan Stanley had invested USD 68 million in Bangalore-based Mantri Developers Private Ltd and USD 65 million in New Delhi-based Alpha G: Corp Development Private Ltd. It also plans to invest USD 1 billion in the real estate sector.

Through its real estate investment arm, JP Morgan has invested USD 61.4 million in a residential property project worth over USD 117 million being developed by Mumbai-based Lodha Builders. The investment is said to be in form of debt in return for a small stake in the company. Lodha Builders plans to give fixed returns on the investment till it is completely paid off. The two companies are considering a long-term partnership for upcoming projects in the future._Dubai based ETA Ascon group plans to make a capital investment of \$500 - \$600 million in the next 2 years in areas of infrastructure, construction, containers, financial services and many other sectors. Citigroup Property Investors, NY has invested the 1st tranche of \$30 million in Nitesh Estates, Bangalore for a \$100 million, 250-key luxury hotel. Australian firms like AKD Softwoods, Techbeam, Bescon Industries, Sustainable Built Environments (SBE) and Concreters Warehouse representing the \$10 billion construction industry of Victoria have discussed business prospects with Indian majors in Hyderabad and Bangalore. Bescon Industries, a leader in decorative concrete products, is keen on a joint venture or establishing a franchisee to bring in its products to the Indian market.

Telecom sector: Cable & Wireless (C&W), UK's leading telecom company, plans to enter the national long-distance (NLD) and international long-distance (ILD) market in India. Though the company is yet to apply for NLD and ILD licensees, it is reportedly scouting for its joint venture (JV) partner in India. Current regulations permit FDI of up to 74 percent for undertaking ILD business. Major international players who have forayed into the ILD segment include AT&T which has a JV with the Mahindras and British Telecom (BT) which has formed a JV with Bhartias of the Jubilant Group.

Russia's largest private sector consumer services company AFK Sistema is looking at setting up a manufacturing base for telecom equipment in India. In addition to telecom, the group is also focused on sectors such as insurance, media, banking and real estate. Sistronics, Sistems' subsidiary company, designs and installs a wide variety of telecommunications equipment and software, including fixed network and mobile network equipment.

International mobile phone giant Nokia plans to set up a design facility in Bangalore, to cater to the burgeoning demand for its handsets in the country.

Automobiles sector: Korean car major, Hyundai, plans to move Getz production exclusively to India. Honda Siel plans to set up a second car plant in Rajasthan. Toshiba, Nissan & Suzuki Motors will be involved in a lot of investments in India.

Aviation industry: Boeing plans to bring forth generation fighters, F-18 /E Super Hornets and twin rotor CH-47 Chinook helicopters to India.

Steel industry: Stemcor (Steel Industry) has finalized the Rs. 1500 crore pelletisation plant in Orissa

FDI

Japan will be investing \$10 billion in India as institutional investments. UK plans to invest in food processing, agri retail and manufacturing.

Alcohol industry: UK based Cobra Beer is thinking of investing in \$20 million over the next 2-3 years.

Cosmetics industry: Estee Lauder Companies, the \$6.5 billion beauty products major is planning to launch its skincare and color cosmetics brands- Clinique and Estee Lauder (perfumes and skincare) in India

Acquisitions within the country

Retail sector: The Aditya Birla Group, one of India's largest conglomerates, has acquired Trinethra Super Retail Limited, a south India based supermarket and convenience store chain. The company has over 170 stores under the Trinethraand Fabmall brands spread across Andhra Pradesh, Kerala, Karnataka and Tamil Nadu. The acquisition would provide the Group a strong foothold in South India and is in line with its strategy to be a leading player in the retail business.

Entertainment & media: Adlabs Films, has acquired controlling stake in Siddhartha Basu's television content company Synergy communications. Synergy Communications will be renamed Synergy Adlabs Ltd; the first production venture for the new company is Kaun Banega Crorepati on Star Plus. Infrastructure sector: New Mangalore Port Trust (NMPT) is embarking on a phase-wise investment at an average of USD 222 million per year over the next seven years. NMPT is building a port-based special economic zone in collaboration with Infrastructure Leasing & Financial Services Limited (IL&FS), Oil and Natural Gas Corporation (ONGC), and Kanara Chamber of Commerce. The expansion of the port would enhance the cargo-handling capacity of the port to 52 million tonnes per annum. In 2005-2006, NMPT handled 34.5 million tonnes of cargo. NMPT proposes to invest USD 44 million to increase the number of berths from 14 to 18, and USD 156 million for a new container terminal.

Bilateral trade

In my research for bilateral trade ties I could concentrate only on the following countries – Russia, Canada, Israel, Italy, UK & USA. Due to a limitation on time constraints the scope of research was not able to account for the other countries across the globe. However, in the previous sections on acquisitions/ tie-ups by Indian companies and foreign companies I have mentioned about firms in other countries. However, the list is endless.

Russia

Economic ties: India and Russia plan to set up a Joint Study Group (JSG) to finalize a roadmap for increasing the bilateral trade turnover to US \$ 10 billion by 2010. India is the largest processing center of diamonds and Russia produces rough diamonds in abundance. During President Putin's visit to India in October 2004, a protocol for co-operation in diamond trade was signed. Tata Motors has invested 2 million dollars to adjust its cars to the climatic conditions of Russia and is planning to start its supplies this year. ICICI bank has acquired 100% of shares of the Russian Investment Credit Bank. ICICI Bank will also be issuing credit cards in Russia as apart of the expansion of range of services. Berger Paints will be starting operations in South Russia by the beginning of this year for which it has invested about \$2.5 million and is expected an annual turnover of \$3-4 million from the Russian plant. Military ties: India is the leading buyer of Russian weapons in 2005 and account for 40% of Russian exports. BrahMos Aerospace is a \$300 million Indo-Russia JV to manufacture 1000 supersonic cruise missiles over the next decade for domestic and export markets. Both the countries have also signed an IPR on bilateral technical co-operation and also protecting the intellectual property rights of the two countries.

Space ties: An agreement has been signed between Roskosmos and ISRO on the joint use of Sovietera Global Navigational Satellite System (GLONASS).

Tourism ties: Although Moscow and St. Petersburg are famous tourist spots in Russia statistics show the number of Russian tourists visiting India are far higher than Indian tourists visiting Russia. India with its blend of traditionalism in the folds of modernization has a rich heritage which attracts foreign tourists.

Pharmaceutical ties: Shreya Life Sciences, Moscow, Russia was started in 2002 and has presently a business of US \$30 million in CIS countries. The company is enjoying its 4th position among Indian companies and has the ambition to achieve a business prospect of US \$100 million in 3 years time. In 2003, as per the Russian State Customs Committee, imports from India grew by 49%. India initially constituted 4-5% of Russia's pharmaceutical imports. That figure has increased to 7.82% thereafter. Escorts Heart Institute and Research center is also ready to set up a medical facility in that country.

Nuclear Engineering: India has tied up with Russia in the Kugankulam NPP project in this field. The Russian companies involved in this project are Atomstroyexport JSC and Indian Atomic Energy Corporation.

Canada

The trade flow between Ontario and India has doubled over the last 5 years to Canadian \$1.1 billion. Of Canada's population of close to 33 million, Indians make up over 2 million. Indian banks like State bank of India and ICICI bank have already created a presence in Canada and working on

further expansions. Other banks like Bank of Baroda, Punjab National bank and UTI Bank are trying to enter this market.

Isreal

Economic & business ties: The volume of bilateral trade between Israel and India has more than doubled to \$2.4 billion in the last 5 years. By 2008 it is expected to reach at least \$5 billion. In the last 15 years more than 80 technology collaborations have been approved. State Bank of India is opening its commercial branch in Tel Aviv by March this year. SBI has also signed a 10-year lease agreement with Israel Diamond Exchange Ltd; Diamond trade constitutes over 60% of Indo-Israeli trade. Apart from this SBI will also extend its other financing products in this country. Israel has a 5% annual GDP growth (despite the war in Lebanon).

Israel Aerospace Industries Ltd. has tied up with Hindustan Aeronautics Ltd. in areas of aerospace and Avionics. IDE Technologies Ltd. a subsidiary of Israel Chemicals Ltd. first entered India in 1990 but it was in 1994 that they completed the first project for EID Parry, Chennai. The project was a small desalination plant with a capacity of 15000 mld. In 1996 they also set up multi effect distillation plants (MED) for Essar Group and Sanghi Industries in Gujarat. In 1998 Reliance Industries set up 4 MED units for its petroleum plant in Jamnagar and a 5th one in 2005. Tata Projects also set up a fully automatic mechanical vapor compression (MVC) plant for the Nuclear Power Corporation of India at Kudankulam. IDE will continue to play an important role in the area of water technology as the demand for water keeps growing. Finolex Group (India) and Plasto Gvat and Plasson Ltd. of Israel have signed a JV for micro and sprinkler systems, in the area of irrigation.

Real estate: Israeli real estate companies are also keen on doing business with India and have entered in JVs and partnerships with India companies in this regard. Azorim Investments Company, Tel Aviv has entered into and equal partnership with Indian real estate majors Omaxe Ltd. to build a 20-acre township at Surajkund in Haryana. It has also tied up with another Indian company for a housing project and commercial center in Ludhiana for \$250 million. Ambuja Realty Group of Kolkata and Elbit Medical Imaging of Israel has tied up to set up a specialty hospital on the Eastern Metropolitan Bypass. The investment is worth \$230 million. It is planned as a mega project and will have the most state-of-the-art facilities from the point of view of healthcare. It will be spread across 2.5 million square feet of land.

Italy

India will be the `focus country' for Italy in 2007, making it the preferred destination for investments by Italian industry, according to Mr. Vittorio Mecozzi, Italian Trade Commissioner. Focus areas of the industry include infrastructure, automobile, food and food processing, entertainment and lifestyle. After China, Italy is looking at India as an investment base.

United Kingdom

Bilateral trade between UK and India is just 1% of World trade but UK is the 4th largest investor in India and India is the 3rd largest in UK. 2500 new Indo-British joint ventures have been approved since India chose to join the globalization regime in 1991. At least 30 British blue-chip companies and several small companies have off-shored work to India in the past few years thereby creating 60,000 jobs in India. India is the second largest contributor of FDI projects to London as Michael Charlton, CE, Think London. In 2006 there was a 111% increase in Indian investments into UK amounting to over £1 billion. UK provides Indian business with a gateway for the European market. In this process UK attracts 60% of Indian investment to Europe. Almost 400 Indian companies in the UK are from the knowledge-based economy.

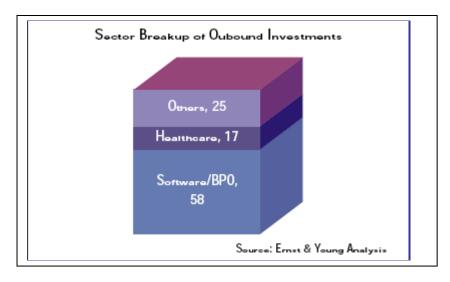
London's AIM has emerged to be one of the most popular exchanges for Indian companies to raise funds. Nearly a dozen Indian companies have raised about \$1.25 billion through the AIM in recent months. They include real estate majors such as the Hiranandani group (through its subsidiary Hirco Plc), which raised over \$750 million; Unitech (about \$700 million); K. Raheja Corp (through its subsidiary, Ishaan Real Estate), which raised \$340 million; and West Pioneer Properties (about\$40 million). Tetley Tea, the company that invented the teabag and remains the world's second largest producer of tea bags was brought by the Tata group for £270 million in year 2000. Apeejay

International bought Typhoo for £80 million from Premier Foods. Tata also bought Incat International, a British software company for £53 million in 2006. Indian liquor tycoon Vijay Mallya's united Breweries plans to buy Whyte & Mackay for around £400 million. Nicholas Piramal has acquired Pfizer's manufacturing facility in Northumberland. Apart from these companies – Ontrack, Rolta, Wockhardt, Wipro, Mind tree, HCL, Infosys & Bharat Forge all plan to have tie-ups with British firms and also some of them plan to pursue the acquisition route too.

United States of America

Indo-US bilateral ties are continually rising. This strategic partnership includes the historic agreement on "civil nuclear co-operation", high technology co-operation, FICCI and US-India Business Council partnership, US-India CEO forum, India-US Economic & Commercial Dialogue, enhancement of bilateral trade and support in economic reform processes.

In terms of outbound investments by the Indian economy in U.S.A., software/BPO sector accounted for the largest share (58%) in terms of the number of deals into the US during 2004-06. Healthcare (comprising Pharmaceuticals, Biotech and Healthcare Services) accounted for 17% while the remaining 25% deals were in other sectors such as telecom, textile, automotive and financial services. Software/BPO sector accounted for the largest share (58%) in terms of the number of deals into the US during 2004-06. Healthcare (comprising Pharmaceuticals, Biotech and Healthcare Services) accounted for 17% while the remaining 25% deals were in other sectors such as telecom, textile, automotive and financial services.



In pharmaceutical and biotech sector, Jubilant Organosys Ltd. acquired 100% equity in Target Research Associates a CRO, For USD 33.5 mn in an all cash deal. This enables Jubilant to increase it presence in the US . In the chemicals sector, Gujarat Heavy Chemicals Ltd. (GHCL) acquired Dan River for USD 17.5 mn primarily for marketing. In the software / BPO sector with USA the following deals materialized:

Areas of Improvement

This brings us to the areas of improvement that India needs. Let us take a look at the statistics. India still has a long way to go to become a superpower. In fact the country needs to spend approximately Rs 1,000,000 crores to fulfill the minimum requirements for social and physical infrastructure.

Sectors	Figures in Rs. 1000 crore
Power sector	Rs 450
Telecom	Rs 100
Roads	Rs. 180
Healthcare	Rs 135
Ports	Rs. 10.7
Water	Rs 80
Airports	Rs 40

India is a large but very diverse consumption market - she is a conglomerate of many nations rolled into one from a Purchasing Power Parity (PPP) perspective. Expanding rural employment, and thus consumption, will be a key challenge, to be met by increasing education levels and skill enhancement.

India is a country with approximately 70% of its population being rural. The growth witnessed post globalization has mostly been from the urban population. The government's rules and policies also have to be revised from time to time to give impetus to global standards and requirements. The three areas of discussion as cited in the abstract are:

- Banking and financial systems
- Infrastructure
- Education

Banking and Financial Services

The system is under the control of the government which channels a considerable amount of domestic savings into the public sector. As per data sources of 2005, almost 57% of commercial credit was extended to public sector enterprises, agriculture and small household enterprises (State-owned enterprises – SOE). This affects growth of the economy. The SOEs are only half as productive as private ones and require twice as much investment to achieve the same additional output. The productivity in agriculture and un-organized sector is 1/10 of private sector. Indian equity markets finance shares of private companies and these accounts for almost 70% of India's market capitalization. But new equity issues account for only 2% of the gross funding as compared to other countries. So, most of the companies rely heavily on retained earnings for financing their investment needs.

India is a land of diverse cultural heritage. It is one of the largest consumers of gold in the world. The savings generated by Indian households (28% of disposable income) is quite a high rate as per international standards; but these households invest only half of these savings in bank deposits and other financial assets. The other half is invested in housing or gold. Indian dowry systems and the fascination of Indians for gold ornaments and gold deities is what create this demand for gold. This investment in gold diverts the investment into non-financial assets, which is not siphoned into the private sector.

The financial system is inefficient in mobilizing savings and allocating capital. As a result Indian borrowers pay more for capital and Indian depositors receive less as compared to the other economies. Regulations require that banks must hold 25% of their assets in government bonds, with state owned banks holding even more than 25%. Banks are instructed to direct 40% of their Adjusted Net Bank Credit (ANBC) or credit equivalent amount of Off-Balance Sheet Exposure; whichever is higher to agriculture, household business and other priority sectors. Indian banks lend 60% of their deposits as compared to 83% for Thai, 90% for South Koran and 130% for Chinese banks. 90% of pension funds assets and 50% of life insurance assets are to be held in government bonds and related securities. 13% of the Indian workforce has pension coverage and 20% of households have insurance. The bond market in India accounts for 2% of the GDP. So the Indian companies are resorting to other means of financing instead of tapping the domestic long-term debt market.

Infrastructure

Despite impressive growth in services such as IT, manufacturing and retail; infrastructure continues to lag far behind, and is an area focus for the country. It will be the next growth driver because of a huge demand-supply mismatch - estimated at US\$320 billion. The Indian Infrastructure Development Fund has been set up to augment this need. As per the Economic Survey: "The Indian road network is the largest in the world, aggregating 3.32 million km consists of 65,569 km of National Highways, 1,28,000 km of State Highways, 4,70,000 km of major district roads and about 26,50,000 km of district and rural roads." This translates into a huge traffic density of 400 vehicles per km of NH. And of the total length of the NH, 35 per cent is still single-lane, 53 per cent double-lane and only 12 per cent is four- lane. The Golden Quadrilateral of 5,846 km linking the four metros of Delhi, Mumbai, Kolkata, and Chennai to be taken up in the First Phase of the National Highways Development Project (NHDP) still requires huge cash flows. Phase II of the NHDP project, which involves linking Srinagar to Kanyakumari and Silchar to Porbander, an extent of 7,300 km, would require more resources. Of equal importance is port connectivity. There is also pending conversion requirements from single to two and four lane highways. The capital requirements continue to be huge.

Education

India has a billion people, half of them less than 25 years of age. Yet there is a major shortage of skilled workers in the country. As per a recent Goldman Sachs report the country is still trying to scale up its investment on education to 6% of GDP from 3.8% at present. The education industry requires funding on a massive scale; but the existing funds also need to be used efficiently to reach the intended beneficiaries. Primary education needs to be pervasive. The dropout rate at schools for children in the age group 6-14 years has dropped from 13.4 million in 2005 to 7.06million in end-March 2006. Vocational training also has to be increased; but social systems in India create a barrier, a technical staff feels hesitant to roll up his sleeves and work with his hands. The country has 6500 Industrial Training institutes that impart vocational training which cater to 100-120 trades as compared to 4500 trades in China. A recent Knowledge Commission report in 2006 found that only 8% of our population, in the 18-24 years of age group reaches higher education. India has 350 universities and 17700 undergraduate colleges.

Labor policy today is among the chief impediments to doing business in India, with the country ranking among the highest in the World Bank's Rigidity of Employment Index. What is more disconcerting is that labor legislation has seen little change in the past few decades.

The "talent shortage" in parts of the economy probably reflected a fundamental conflict of the Indian economy. Despite its relatively developed high education system, India is still a low-income country, with two-thirds of the population residing in the countryside, 35% being illiterate and 25% living under the poverty line. Meanwhile, outsourcing services and relatively advanced manufacturing lead India's current economic growth. A shortage of skilled workers occurred in the engineering, textile, aviation, telecom and retail sectors.

DISCUSSION

The Indian government can reduce the level of state ownership in banking and allow more private and foreign investments. Also relax the restrictions, which do not allow foreign banks already established in India from opening unlimited branches across the country. Long-term debt market also needs to be streamlined from regulatory viewpoint. Legal framework for protecting investors should be strengthened. By lifting the 26% cap on foreign ownership of insurance companies, the insurance industry should be deregulated. Also the pension and provident firms should be allowed to invest in the private equity markets. India can take learning's from China and separate the regulatory and central bank functions of RBI. Also India is a country where politics plays a significant role in designing the budget, policies and regulations with the aim of keeping voters satisfied. Financial inclusion is also a must for the country considering its rural-urban demographics.

More schools, colleges and universities need to be set up. All colleges should be having accreditation by Indian bodies or foreign bodies so that there are some standards in the pedagogical methods. Salaries need to be increased to motivate people to join from the industry into academics. Foreign investments can also be allowed into this sector for funding. One suggestion is to adopt the

corporate route wherein firms can train the new entrants to make up for the lack of skills, which they have. Many of the IT sector firms and BPOs have adopted this practice. The knowledge Commission is also working on this impediment to further growth and submitted its recommendations on e-governance and also constructed a National Knowledge Index that aims to measure India's performance as a knowledge economy. The reservations for other backward classes and labor laws need to be re-considered and amended.

The country's road development cannot be left to building National Highways alone. Building and maintaining district and rural roads are often the prerogative of local bodies and district administration, which are most often starved of funds. Effective government intervention and national policy direction could pave the road to prosperity for Rural India. Potholed and in disrepair the rural roads might be, but they constitute 80 per cent of the road network. Sensible policy directives, if not financial incentives in the Union Budget, would help in re-building rural roads. And they are arteries of Rural India, bringing in the agricultural products to urban markets and providing market for manufactured goods.

These arteries can prove to be the principal inflation targeting tools for fighting demand-push and supply-pull inflation, which, unlike other monetary measures, can prove far more resilient and useful in the Indian context. CRISIL believes private sector participation in infrastructure requires an environment that includes a congenial legal and policy framework, a robust institutional structure, commercially viable user charges, a competitive market structure and fixation of commercially viable user charges. Some of these pre-requisites to private sector investment are already in place in certain sectors and are yielding expected results.

Strong need for investments in infrastructure, increased appetite of private sector for infrastructure investments, relatively easy availability of capital and government focus on limiting its role to policy making and facilitation shall be the key factors driving infrastructure development in India.

Limitations of the study

Like any other research paper, time was a constraint. Also, the list of acquisitions within and abroad is not a comprehensive list. It is just an overview to bring to light the growth which India has witnessed in the past few years. Also the cases were selected at random according to convenience. More literature review could have been done with a broader time span.

There is much scope for further research by delving into the economy on the basis of various sectors in order to study the growth already witnessed and the future possibilities. On the basis of countries across the globe, the tie-ups and bilateral trade can also be analyzed on a more detailed methodology.

CONCLUSIONS

This brings us to the conclusion of this study after looking into some of the inbound and outbound acquisitions which India has/shall witness. Today, India faces the challenge of sustaining this level of growth by addressing its bottlenecks and continuing to fuel its economy with the appropriate reforms, policies and strategic tie-ups. Sectors like IT, biotechnology, real estate, telecommunications, energy and financial services have considerable scope for growth in the coming years provided the Indian government extends the right kind of support through its control and regulatory steps.

REFERENCES

Newspapers:

- Economic Times dated 25.1.07
- Economic Times dated 15.1.07
- Economic Times dated 29.1.07
- Business Line dated Nov. 15, 2006, Chennai Edition
- Economic Times dated 16.1.07

- Economic Times dated 1.3.07
- ➤ Business Line dated 15.3.07, Chennai edition, pg 1
- ➤ Business Line dated 26.2.06, Chennai edition, pg 1
- ➤ Business Line dated 16.3.07, Chennai edition

Reports:

- ➤ World Investment Report 2006 by United Nations. UNCTAD
- ➤ Background note of ministry of finance for economic editors conference 2006
- ➤ BCG report-What's next for India
- ➤ KPMG report dated February 2007
- ➤ Goldman Sachs-Global Economic, Paper 99
- E & Y report (FICCI) on FDI by US in India, 2005
- ➤ Schroders BRIC report February 2007
- ➤ New Economist January 2007 edition
- ➤ Govt. of India, press Note February 2007
- Economic & market analysis, Citigroup, December 2006
- Mc Kinsey report on Indian Financial System, August 2006
- ➤ China & India: the reality beyond the hype A Deloitte research study
- ➤ Grant Thorton report on "Doing business in India 2006-07" updated 1st January, 2007
- ➤ Chathan House Briefing paper, IEP BP 07/01, January 2007 on "Infrastructure and Indian development Reform First, Invest later"

ORGANIZATIONAL INNOVATION ADOPTION: DEVELOPING AND TESTING OF AN ENHANCED MODEL OF INNOVATIONS ADOPTION BY INDIVIDUAL EMPLOYEES WITHIN AN ORGANIZATION

Majharul Talukder Howard Harris Gido Mapunda University of South Australia, Adelaide, Australia Email: <u>majharul.talukder@unisa.edu.au</u>

ABSTRACT

The purpose of this study is to assess factors affecting the adoption and usage of technological innovation by individual employees within an organization. Using data collected from an Australian organization, the paper provides an enhanced model of innovation adoption that embodies the components influencing the individual employees' adoption of innovation. Ten constructs were considered to study their effect on individual's adoption and usage of technological innovation: training, managerial support, incentives, perceived usefulness, personal innovativeness, prior experience, image, enjoyment with innovation, peers and social network. The proposed model is largely supported and validated. Despite much research on organizational adoption of innovation, little is currently known about the adoption of innovation by individual employees within the organization. The purpose of this research is to investigate empirically the determinants and provide a framework that addresses the adoption decision by individual employees in an organization. The enhanced model is based on related prior theories. Evidences of reliability and criterion-related validity are examined using responses from 275 technology users. Theoretical and practical implications are offered.

INTRODUCTION

Information technology offers the potential for substantially improving the performance of the organization. But performance gains are often obstructed by users' unwillingness to accept and use of the available systems. Because of the persistence and importance of this problem, explaining users' acceptance of technology has been a long time study issue in the organizations and information systems research (Davis, 1989). According to Frambach, Barkema, Nooteboom and Wedel, (1998, p.161) "environmental conditions increasingly force organizations to innovate and bring new products and services to the market. Because only a fraction of new product ideas are successful, a through understanding of factors underlying the innovation adoption decision by potential adopters is necessary." Klein and Sorra (1996) mention innovation adoption within an organization is the process of gaining targeted employees' appropriate and committed use of an innovation. The decision of innovation adoption is typically made by the top management in the organization. The mangers think that employees within the organization will use the innovation in their work. Implementation of the innovation failure occurs when employees use the innovation less frequently, less consistently and less assiduously than required for the potential benefits of the innovation to be realized.

Organizations continue to invest heavily in new technologies. Organizational innovations that need to be incorporated in the work processes of an organization are of little value if they are not used or complied with by employees (Venkatesh, Morris, Davis, & Davis, 2003). Therefore, it is important to examine the adoption of innovations by individual employees within organizations. Leonard-Barton (1990) mentioned that scholarly investigation has usually stopped at the point where top management had decided to adopt the innovation, and the studies have not proceeded to investigate its subsequent diffusion throughout the organization. The current state of literature indicates that we know relatively little about the ways in which individuals adopt and the factors that influence individual adoption of innovation (Bhattacherjee, 1998; Frambach & Schillewaert, 2002; van Everdingen & Wierenga, 2002; Venkatesh & Davis, 2000). Hence, further research is required regarding the role of organizational, individual and social processes affecting individual adoption of innovation (Frambach & Schillewaert, 2002). The purpose of this study is to investigate (using both actual and self reported data on use) the factors which affect the adoption and continued use by

individuals of advanced and voluntary elements of a technological innovation (Microsoft Outlook) in an organization where the use of core elements is compulsory. Specifically, the review focuses on determining the relative importance of organizational, individual and social factors that affect individual adoption of innovation. The identification of these factors is important to organizations that seek to create a work environment that is conducive to individual implementation of innovation and thereby gain the expected benefits from innovations. This study seeks to answer the following research questions: (1) What is the impact of organizational influences such as training, managerial support and incentives on individual adoption of innovation? (2) Do individual factors such as perceived usefulness, personal innovativeness, prior experience, image and enjoyment with innovation affect individuals' adoption of innovation? (3) What is the impact of social factors such as peers and social network on individual adoption of innovation?

LITERATURE REVIEW

The theoretical framework for this study is based on the theory of reasoned action, the technology acceptance model and the conceptual framework provided by Frambach and Schillewaert (2002)). The models are explained below.

Theory of Reasoned Action

Theory of reasoned action (TRA) is a widely studied model from social psychology which is concerned with the determinants of conscious intended behavior. The foundation of the TRA conceptual framework is provided by the distinction between beliefs, attitudes, intentions and behaviors (Al-Gahtani & King, 1999). The ultimate goal of the theory is to predict and understand an individual's behavior. According to TRA, an individual person's performance of specific behavior is determined by his or her behavioral intention to perform the behavior and behavioral intention is jointly determined by two basic determinants: the person's attitude toward the specific behavior and subjective norms concerning the behavior in question (Ajzen & Fishbein, 1980, p.6). Individuals are usually more likely to perform a behavior if they possess positive attitude toward this behavior and vice versa (Kwok & Gao, 2006). Attitude simply refers to the person's judgment that performing the behavior is good or bad, that he or she is in favor of or against performing the behavior (Ajzen & Fishbein, 1980, p.6). TRA theorizes that a person's attitude toward a behavior is determined by his or her salient beliefs about consequences of performing the behavior and an evaluation of the outcome of that behavior (Davis, Bagozzi, & Warshaw, 1989, p.984). Behavioral beliefs are defined as the individual's subjective probability that performing the target behavior will result in consequences and the evaluation term refers to an implicit evaluative response to the consequence (Ajzen & Fishbein, 1980).

Subjective norms are also function of beliefs, but beliefs of different kind, namely the person's beliefs that most people who are important to him or her specific individuals or groups think he or she should or should not perform the behavior (Ajzen & Fishbein, 1980, p.7). These beliefs underlying a person's subjective norm are termed normative beliefs. Therefore, individuals are more likely to perform an act if they perceive the existence of greater social pressure from salient referents to perform that act (Lam, Cho, & Qu, 2006, 2007). Ajzen and Fishbein (1980, p.8) state that "from our point of view, external variables may influence the beliefs a person holds or the relative importance he attaches to attitudinal and normative considerations". It follows from these considerations that external factors may indeed influence behavior. The external variables will be related to behavior only if they are related to one or more of the variables specified in the theory (Ajzen & Fishbein, 1980, pp.82-86). We intend to extend the model by including external factors which affect individual employees' behavior by influencing employees' attitude toward adoption of an innovation. In an organizational context, individual employees' attitudes are influenced by organizational, individual and social factors. These external factors were not specifically included in the TRA model but suggested as important as (Ajzen & Fishbein, 1980, p.9) mention "investigation of the effects of external variables can enhance our understanding of a given behavioral phenomenon".

Technology Acceptance Model

The Technology Acceptance Model (TAM) first introduced in 1986 is an adaptation of the theory of reasoned action specifically tailored for explaining user acceptance of information technology (Davis, Bagozzi, & Warshaw, 1989). "The goal of TAM is to provide an explanation of the determinants of computer acceptance that is general, capable of explaining user behavior across a broad range of end-user computing technologies and user populations, while at the same time being both parsimonious and theoretically justified" (Davis, Bagozzi, & Warshaw, 1989, p.985). A key purpose of TAM is to provide a basis for tracing the impact of external factors on internal beliefs, attitudes and intentions (Davis, Bagozzi, & Warshaw, 1989). TAM postulates that two particular beliefs, perceived usefulness and perceived ease of use, are of primary relevance for computer acceptance behaviors (Bruner & Kumar, 2005; Davis, 1989). Among the many variables that may influence system use, previous research suggested two determinants that are especially important. First, people tend to use or not to use an application to the extent they believe it will help them perform their job better. We refer to this variable as perceived usefulness. Second, even if potential users believe that a given application is useful, they may, at the same time, believe that the system is too hard to use and that the performance benefits of usage are out-weighed by the effort of using the application. That is, in addition to usefulness, usage is theorized to be influenced by ease of use".

As note above, the foundation of the TRA conceptual framework is provided by the distinction between beliefs, attitude, intentions and behavior (Al-Gahtani & King, 1999, p.278). TAM does not include TRA's subjective norms as determinants of behavioral intention since this is one of the least understood aspects of TRA (Davis, Bagozzi, & Warshaw, 1989, p.986). There have been a number of studies on IT adoption (Ahuja & Thatcher, 2005; Jasperson, Carter, & Zmud, 2005; Lewis, Agarwal, & Sambamurthy, 2003) many using TAM. Although many of these studies provided insight into the acceptance of IT or a new system using TAM, their research focused only attitudinal and behavioral intentions as determining factors of system usage. Recent studies on IT adoption are generally based on the TAM or extensions to it by including one variable for instance enjoyment as one of the predictors (Chang & Cheung, 2001, p.2; Huang, 2005). TAM does not test as many variables compared to the model provided by Frambach and Schillewaert (2002). Therefore, an enhanced model is required which will include a combination of variables found in different elements of the technology adoption literature.

Conceptual Framework Provided by Frambach and Schillewaert (2002)

The research model for this study is also based on the theoretical framework provided by Frambach and Schillewaert (2002) who argue that individual acceptance of innovation is based on perceived beliefs and affects held towards the focal innovation. These beliefs and affects are reflected in an individual's attitude towards a particular innovation. "Attitude can change and be influenced and there is evidence that a person's attitudes mediate the influence of external variables and stimuli (Frambach & Schillewaert, 2002, p.171)". Therefore, this model shows the effect of external influences such as organizational facilitators, personal innovativeness, and social usage, as indirect, working through attitudinal components (Frambach & Schillewaert, 2002, p.171). Frambach and Schillewaert's model indicates that individual usage of innovations not only depends on attitudes but also on management strategies, policies and actions; and these factors include training, social persuasion and organizational support. "Organizations will try to influence subordinates' attitudes toward adoption of an innovation and some individuals more readily accept certain innovations while others do not" (Frambach & Schillewaert, 2002, p.171). This concept refers to as personal innovativeness - "the tendency of a person to accept an innovation within a product class, independently of the communicated experience of others" (Frambach & Schillewaert, 2002, p.171). Personal innovativeness influences individual acceptance both indirectly, through attitudes and directly. The model further proposes that personal innovativeness is determined by various personal characteristics such as demographics, tenure, product experience and personal values (Frambach & Schillewaert, 2002, p.171). According to the model individual acceptance of innovations is driven also by the usage of a focal innovation within their social environment. Such social influences may stem from two sources-network externalities and peers (Frambach & Schillewaert, 2002, p.171). These two variables are categorized under social usage.

Research Model

The present study is about the adoption of a technological innovation by individual employees within an organization. One of the significant features of this research project is the use and testing of an enhanced model developed from the theory of reasoned action (Ajzen & Fishbein, 1980), the technology acceptance model (Davis, 1989) and the conceptual framework of individual innovation acceptance by Frambach and Schillewaert (2002) while introducing several modifications which were not in these models. The model for this study maintains the basic structure of the theory of reasoned action and incorporates the elements of the technology acceptance model. However, Frambach and Schillewaert (2002) proposed a longer list of factors which determine attitude and recommended a study testing those factors. The composite model used in this study adopts that list. Figure 1 presents the proposed enhanced research model of innovation adoption for this study. Demographic characteristics are introduced as they were shown above to impact directly on individual attitude towards adoption of innovation even though these demographic factors were not included in the theory of reasoned action and the technology acceptance model. Frambach and Schillewaert (2002) mention that demographic characteristics affect individual beliefs and attitude toward innovation.

ORGANIZATIONAL FACTORS -Training -Managerial Support -Incentives INDIVIDUAL FACTORS -Perceived Usefulness -Personal Innovativeness ATTITUDE INDIVIDUAL -Prior Experience ADOPTION OF **TOWARDS** -Image INNOVATION INNOVATION -Enjoyment with innovation SOCIAL INFLUENCE -Social Network DEMOGRAPHICS -Gender -Age -Academic Divisions -Occupation Category -Tenure -Academic Qualifications

Figure 1
Enhanced Research Model of Innovation Adoption

Individual factors- perceived usefulness, personal innovativeness, prior experience, image and enjoyment with innovation- are introduced and placed corresponding to the main belief constructs of the technology acceptance model and the theory of reasoned action. Perceived usefulness and personal innovativeness are belief constructs under TAM and the Frambach and Schillewaert (2002) model respectively. Although prior experience, image, and enjoyment with innovation were not among beliefs incorporated in TAM or TRA, Bruner and Kumar (2005) and Igbaria, Parasurman and Baroudi (1996) and used enjoyment as a belief variable in their research models which were built based on TAM, while Frambach and Schillewaert (2002) and Venkatesh and Davis (2000) used prior experience and image respectively as belief variables in their research models. Therefore, five belief variables are included in the model: perceived usefulness, personal innovativeness, prior experience, image and enjoyment with innovation. Frambach and Schillewaert (2002, p.171) point out that training, managerial support and incentives are external influences that "affect an individual's awareness of the functioning and application of innovations, their usefulness and their fit with the

job". Therefore, external variables training, managerial support and incentives are incorporated in the model as they directly affect individual attitude toward innovation.

According to Lam, Cho and Qu (2006), TRA theorizes that an individual's subjective norm (which affects intention to use) is determined by the functions of his or her normative beliefs and his or her motivation to comply with these expectations (Ajzen & Fishbein, 1980). Consequently, individuals are more likely to perform an act if they perceive the existence of greater social pressure from salient referents to perform that act. The technology acceptance model did not include the theory of reasoned action's subjective norms construct as it was non-significant in the specific circumstances of TAM and one of the least understood aspects of the theory of reasoned action (Davis, Bagozzi, & Warshaw, 1989, p.986). Frambach and Schillewaert (2002, p.172) point out that "organizational members will exhibit more positive attitudes if people in their social environment also use the focal innovation". Therefore, social factors such as peers and social network are included in the model as directly affecting the individual attitude toward innovation.

Factors in the Research Model

Organizational factors: Several studies have indicated that an individual's adoption of innovation not only depends upon individual attitudes but also on management policies, strategies and actions (Peansupap & Walker, 2005). Organization need to provide facilitating conditions which include the extent and type of support provided to individuals that influence their use of technology. Facilitating conditions are believed to include the availability of training and provision of support. Facilitating conditions have been identified as having an effect on infusion or adoption of a number of new information system innovations (Lu, Yu, & Liu, 2005). These factors include training (Al-Gahtani & King, 1999), managerial support (Ahuja & Thatcher, 2005) and incentives (Bhattacherjee, 1998). These influences affect an individual's awareness of the functioning and application of an innovation, its usefulness and fit with the job which leads to its adoption (Frambach & Schillewaert, 2002). Organizational influence can motivate individual employees adopting an innovation. Igbaria, Zinatelli, Cragg and Cavaye (1997) mention that training promotes greater understanding, favourable attitude, more frequent use, and more diverse use of applications. Several studies have reported that training positively influences an individual's adoption of innovation (Igbaria, Parasuraman, & Baroudi, 1996; Jasperson, Carter, & Zmud, 2005). By training, educating and assisting employees when they encounter difficulties, some of the potential barriers to adoption can be reduced or eliminated (Burgess, Jackson, & Edwards, 2005). Individual adoption of innovation is positively influenced by the amount of relevant formal training. Such training enhances individual's belief, possession of skills and knowledge that permit successful task performance (Yuan et al., 2005). Managerial support which includes top management's help and encouragement, sufficient allocation of resources and technical help are considered as important factors for adoption of innovation by individual employees (Cho, 2006; Igbaria, 1993). It is found that managerial support is associated with greater adoption and usage and lack of organizational support is considered as a critical barrier to the adoption and effective utilization of the new innovation (H. Y. Lee, Lee, & Kwon, 2005). Incentive is often considered powerful motivators of employee behavior in adopting an innovation (Nilakant & Rao, 1994). Mangers must provide individual employees either incentives such as commissions, recognition and praise for the adoption and penalties such as threat and demotion for non adoption of innovation (Bhattacherjee, 1998). Thus, there are three organizational factors such as training, managerial support and incentives have influence on the individual's adoption of innovation. Individual factors: According to Lewis, Agarwal and Sambamurthy (2003) individual factors are one of the important determinants of adoption of technological innovation. Several studies found that individual factors such as perceived usefulness, personal innovativeness, prior experience, image and enjoyment with innovation have stronger influence on individual's adoption of technological innovation (Davis, 1989; Lewis, Agarwal, & Sambamurthy, 2003). Studies have shown perceived usefulness is one of the strongest predictor and remains significant at all point of measurement (Venkatesh, Morris, Davis, & Davis, 2003). If an individual thinks that the new system usage will enhance the efficiency and effectiveness or offer greater control over the job, the innovation is more likely to be adopted (J. Lee, 2004). All organizations try to influence their employees' attitudes towards adoption of an innovation. However, some individuals more readily adopt certain innovations while others do not. Frambach and Schillewaert (2002) mentioned that personal innovativeness is the innate tendency of a person to adopt an innovation. Innovativeness may influence perception regarding a new technology (Yi, Wu, & Tung, 2006). Prior experience and familiarity with technology reduce anxiety and provide confidence (Fuller, Vician, & Brown, 2006). Hill, Smith and Mann (1987) mentioned that previous experience positively influences behavioral intentions. In the typical work environment, with high degree of interdependence with other employee in carrying out one's duties, increased image and status within the group is important to many individuals. An individual may thus perceive that using a system will lead to improvement in his or her image in job performance (Venkatesh & Davis, 2000). According to Venkatesh and Brown (2001) individual adoption decision is influenced by hedonic outcomes. Research described hedonic outcomes as the pleasure driven from the consumption or use of innovation (Babin, Darden, & Griffin, 1994). Thus, there are five individual factors which are personal innovativeness, prior experience, image and enjoyment with innovation that have influence on the individual's adoption of innovation.

Social factors: Individual employees' adoption of innovations is driven by their social environment. Innovation usage by others in the individual employees' social environment is likely to play an important role in adoption of innovations. Social influence is the extent to which members of a social group influence one another's behavior in adoption (Konana & Balasubramanian, 2005; Venkatesh & Brown, 2001). It is the perceived pressure and influence that peers feel to adopt an innovation and this influence is exerted through messages and signals that help to form perceptions of the value of a technology or activity (Fulk & Boyd, 1991). Ajzen and Fishbein (1980) refer to such influence as normative beliefs about the appropriateness of the adoption of innovation. According to this perspective, individual employees may adopt a new technology not because of its usefulness but because of the perceived social pressure. Such pressure may be perceived as coming from individuals whose beliefs and opinions are important, including peers and people who are in the social networks (Igbaria, Parasuraman, & Baroudi, 1996). Abrahamson and Rosenkopf (1997) mentioned that it is largely internal influence that potential adopters exert on each other that persuade them to adopt.

RESEARCH METHODOLGY

The empirical study examined the extent to which individuals within a single organization, the University of South Australia, have adopted a specific technology. The study examined the use of selected advanced features of Microsoft Outlook (such as calendar applications). Microsoft Outlook will be a good test because it has been in widespread use for many years, and is the university's preferred email application but it has many advanced features beyond the core (email) function, there is a large variation in the usage of these advanced features, and the university is anxious to increase the use of them. The primary procedure for obtaining the data for the study was through an online survey questionnaire. The online questionnaire has been available to all full-time academic and administrative staff of the university. The questionnaire is based on the research model described earlier in this paper and includes questions designed to measure each of the ten factors shown to affect attitude and hence usage.

The first stage after the design of the questionnaire was to obtain IT experts' opinions and comments regarding the questionnaire, sentence structure relevant to the type of the questions and technical aspects of the questionnaire. This was followed by a pilot study in which the research instruments were pre-tested to identify and modify the items which the respondents tended to misinterpret, skip over or answer improperly. The purpose of this pilot study was to examine the validity and the reliability of the instrument. The questionnaire was then distributed to all staff using the university's weekly all-staff email, and followed up with invitations to participate in the study to individual schools or disciplines. The online survey tool used required respondents to log in using their university password, thus preventing multiple submission and ensuring the integrity of the sample.

To test the proposed model, multiple regression analysis was performed on the collected data. Multiple regression analysis, a form of general linear modeling, is a multivariate statistical technique that can be used to analyze the relationship between a single dependent (criterion) variable and several independent (predictor) variables (Hair, Anderson, Tatham, & Black, 1998). Each independent variable was weighted by the regression analysis procedure to ensure maximal prediction from the set of independent variables. The weights denote the relative contribution of the independent variables to

the overall prediction and facilitate interpretation as to the influence of each variable in making the prediction. The set of weighted independent variables will form the regression variate (also referred to as the regression equation or regression model), a linear combination of the independent variables that best predicts the dependent variable (Hair, Anderson, Tatham, & Black, 1998). In the context of this study, with ten independent variables, the regression model can be shown in the following equation: $Y=b_0+b_1X_1+b_2X_2+b_3X_3.....+b_{10}X_{10}$ where, Y, the dependent variable is a measure of the usage of the advanced features; b_0 is a constant; b_1 , b_2 , $b_3.......b_{10}$ are coefficients; and X_1 , X_2 , $X_3.....X_{10}$ ate the ten independent variables shown in the model to affect usage.

RESULTS

The study is interested in more accurately predicting the level of new technology usages by individual employees in the organization in the attempt to develop a theoretical construct that brings/correlate individual innovation adoption issues into a coherent model and promote management awareness, understanding and support in technology adoption by individual employees within organization. To this end, multiple regression analysis was attempted to provide an objective means of assessing the predictive power of a set of independent variables. The following ten variables were included as independent variables: Training, managerial support, incentive, perceived usefulness, personal innovativeness, image, prior experience, enjoyment with innovation, peers, social network and usage as dependent variable. The sample of 275 observations meets the proposed guideline for the ratio of observations to independent variables with a ratio of 15 to1 (Hair, Anderson, Tatham, & Black, 1998). This sample assures not be in danger of over fitting the results and helps to validate the results to ensure the generalizability of the findings to the entire population.

Demographic Information about the Respondents

This section contains the analysis of demographic data and explains the descriptive statistics which is used to describe information about a population or sample in the form of frequency table. Table 1 presents the summary of the respondent demographics.

Table 1
Demographic Information about the Respondents

Characteristics		Frequency	Percentage
Gender	Male	100	36.4
	Female	175	63.6
Age	20-30	53	19.3
-	31-40	56	20.4
	41-50	86	31.3
	51-60	67	24.4
	61 and above	13	4.7
Division	Business	66	24.0
	Education, Arts and Social Sciences	69	25.1
	Health Science	71	25.8
	IT, Engineering and Environment	32	11.6
	Not in a division	37	13.5
Classification	Academic Staff	177	64.4
	Professional (Administrative) staff	94	34.2
	Missing Values	4	1.5
Employed as	Full time	213	77.5
	Part time	61	22.2
	Missing Value	1	.4
Qualification	PhD or other doctorate	86	31.3
	Master degree	56	20.4
	Grad. Diploma	29	10.5
	Bachelor degree	60	21.8
	Under-Grad. Diploma	16	5.8
	Missing Values	28	10.2
Total		275	100.0

The male constitutes 36% where as female respondents are 64%. This distribution of gender reflects university's total employee distribution which is the female employees is greater then male employees. Nineteen percent of them belong to the 20-30 age group and 20% to the 31-40 age group. Those aged between 41-50 make up the most 31% of the respondents, whereas respondents between 51 to 60 are 24%. Respondents aged 60 and above make up only 5%. Twenty four percent of the respondents are from Division of Business and 25% of them are from Division of Education, Arts and Social Sciences. Division of Health science constitutes the highest respondent 26% where as respondents from the Division of Information Technology, Engineering and Environment are 12%. Respondents not in a division represent only 13%. The majority of the respondents (65%) are academic staff whereas only 35% are professional (administrative) staff.

Almost 78% of the respondents are full time employed and 22% are part time employees. The survey results reveal that 31% of the respondents are Ph.D. holders and 20% are master degree holders. Eleven percent of the respondents have graduate diploma where as 22% of the respondents are bachelor degree holders. Only 6% of them have undergraduate diploma. This information tells us that most of our respondents are middle age, moderate to highly educated, academic staff and full time employed. Such information may prove significant when the adoption and usage level of these respondents are investigated. Table 1 summarizes demographic information about the respondents.

Intercorrelations among Study Variables

A Pearson correlation analysis was conducted to find out the relationship among the study variables. The correlations among all research variables are presented in table 2. Pearson's correlations coefficients (r) of the various variables were significant at level of 0.01. From the Pearson's r analysis, the correlation matrix table shown that there is a significant, positive correlation between dependent and independent variables. The table shows that usage is significant and positively related with three organizational variables such as training (r=.196, p<.01), managerial support (r=.475, p<.01) and incentives (r=.624, p<.01).

Table 2
Intercorrelations among Study Variables

	Usag	Train	Mans	Incen	Usefu	Innov	Exper	Imag	Enjoy		Socia
Variables	e	i.		t.	1.	•	i.	e		Peers	1.
1. Usage	1										
2. Training	.196* *	1									
3.Managerial Sup	.475*	.569* *	1								
4. Incentive	.624*	.191* *	.423*	1							
5. Usefulness	.658* *	.253*	.424*	.809*	1						
6.Innovativenes s	.331*	.053	.059	.289*	.313*	1					
7. Experience	.279*	.229*	.157*	.318*	.332*	.348*	1				
8. Image	.528*	.352*	.504*	.627* *	.622*	.230*	.290*	1			
9. Enjoyment	.546*	.230*	.360*	.726* *	.707* *	.255*	.274*	.616* *	1		
10. Peers	.215*	.259*	.385*	.331*	.300*	066	.104	.359*	.333*	1	
11. Social Net	.367*	.326*	.496* *	.471*	.438*	.055	.281*	.596* *	.458*	.547*	1
12. Attitude	.727*	.256*	.488*	.780* *	.789* *	.227*	.304*	.683*	.786* *	.361*	.533*

n=275; ** Correlation is significant at the 0.01 level (2-tailed).

The data shows that the level of adoption or usage is significant and positively related to five individual or personal factors such as perceived usefulness (r=.658, p<.01), personal innovativeness (r=.331, P<.01), prior experience (r=.279, p<.01), image (r=.528, p<.01) and enjoyment with innovation (r=.546, p<.01). The analysis also demonstrate that usage also significant and positively related to two social factors such as peers (r=.215, p<.01) and social network (.367, p<.01). The data also indicates that attitude has strong and positive correlation (r=.727, p<.01) toward the usage.

The table shows correlations among dependent and independent variables ranged from r=.196 to r=.658 and correlations among all variables ranged from r=.053 to r=.809, indicating no multicollinearity problems among the variables. "The simplest and most obvious means of identifying collinearity is an examination of the correlation matrix for the independent variables and the presence of high correlations (generally .90 and above) is the first indication of substantial Collinearity (Hair, Anderson, Tatham, & Black, 1998, p.191)".

Reliability and Validity of the Instruments

A reliability test was performed to determine the internal consistency of the instruments. The reliability coefficient in the form of Cronbach's alpha for dependent and independent variables are presented.

Table 3
Variable Means, Standard Deviations and Scale Reliability

Variables	Maar	CD	Cronbach's
Variables	Mean	SD	Alpha
Organizational Factors			
Training	2.59	.86	.88
Managerial Support	3.28	.79	.82
Incentive	3.33	.86	.82
Individual Factors			
Perceived Usefulness	3.31	.94	.96
Personal Innovativeness	3.62	.76	.85
Prior Experience	2.69	.87	.70
Image	3.02	.79	.86
Enjoyment with innovation	3.26	.79	.92
Social Influence			
Peers	2.89	.70	.76
Social Network	3.03	.71	.75
Usage (Dependent variable)	2.91	1.06	.91

Table 3 represent means, standard deviations and reliability coefficients for all independent and dependent variables. The reliability scores of the independent and dependent variables range from .70 to .96. The scales show good reliability with Cronbach's alphas greater than .70. The higher reliability range indicates high internal consistency of the collected data. "The diagnostic measure is the reliability coefficient that assesses the consistency of the entire scale, with Cronbach's alpha being the most widely used measure. The generally agreed upon lower limit for Cronbach's alpha is .70, although it may decrease to .60 in exploratory research (Hair, Anderson, Tatham, & Black, 1998, p.118)".

According to DeVellis (2003) reliability values between .70 to .80 are considered "respectable" while reliability values between .80 to .90 are considered "very good". As all of the reliability scores for the independent and dependent variables exceed .70, the instruments are regarded reliable in measuring individual's adoption of innovation across independents variables.

Estimation of the Regression Model and Assessment of Overall Model Fit

Meeting the assumptions of regression analysis is essential to ensure that the result obtained will be truly representative of the sample and the analysis obtained the best result possible. The data were tested to see if there are any serious violations of the assumptions that could be detected and corrected. Several assumptions are addressed for the variables are linearity, outliers, normality, multicollinearity, homoscedasticity/ heteroscedasticity and independence of residuals. For linearity, scatterplots of the individual variables did not indicate any nonlinear relationships between the dependent variables and the independent variables. Test for multicollinearity shows that there is no problem with multicollinearity. The following output describes the overall model and provides very important information about the model: the values of R, R² and the adjusted R². In the column labeled R are values of multiple correlation coefficient between the predictor and the outcome. R squire (R²) is the correlation coefficient squired (.729²=.531) also referred to as the coefficient of determination. This value indicates the percentage of total variation of Y (dependent variable) that is explained by the independent variables or predictor variables. In this case 53.1 percent of the variance in usage or the individual acceptance can be explained by the ten variables.

Table 4
Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.729(a)	.531	.513	.73963

The next part of the output contains an analysis of variance (ANOVA) that tests whether the model is significantly predicting the outcome. Specifically the F-test represents the contribution to prediction accuracy as a result of fitting the model relative to the inaccuracy that still exists in the model. The model is a significantly better predictor of dependent variable than intercept alone: F(10, 264) = 29.912, p<0.001. From the data it can be concluded that the model is highly significant (p<0.001) in predicting the outcome variable.

Table 5 ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	163.631	10	16.363	29.912	.000(a)
	Residual	144.421	264	.547		
	Total	308.052	274			

The following table (coefficients) indicates B-values (Unstandardized coefficient) and constant for regression equation and significance of each independent variable in the model predicting the dependent variable. Unstandardized coefficient B values indicate the individual contribution of each predictor to the model. If we replace the significant B values into our equation $(Y=b_0+b_1X_1+b_2X_2+b_3X_3.....+b_{10}X_{10})$ we find that we can define the model as in equation: Individual Acceptance of Innovation (Usage) = -.879 + (-.149 * Training) + (.401 * Managerial Support) + (.367 * Perceived usefulness) + (.180 * Personal Innovativeness).

The standard or simultaneous multiple regression indicated that ten independent variables accounted for 53.1% of the variance in the individual acceptance of innovation (F (10, 264) =29.912, p<0.001). Perceived usefulness was an important predictor (β = .327, t (275) = 4.213, p<0.001) followed by managerial support (β = .299, t (275) = 5.035, P<0.001), personal innovativeness (β = .130, t (275) = 2.738, p<0.007) and Training (β = -.122, t (275) = -2.304, p<0.022). All are statistically significant. Other independent variables are not statistically significant and they are not contributing much for the overall prediction. All the assumptions have been met and the model would be generalizable to the population. We investigated non significant variables in personal interviews which discussed later section.

Table 6 Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta (β)		
1	(Constant)	879	.320		-2.744	.006
	Training	149	.065	122	-2.304	.022
	Managerial sup	.401	.080	.299	5.035	.000
	Incentive	.158	.098	.129	1.602	.110
	Usefulness	.367	.087	.327	4.213	.000
	Innovativeness	.180	.066	.130	2.738	.007
	Experience	.039	.058	.032	.662	.508
	Image	.102	.086	.077	1.186	.237
	Enjoyment	.100	.089	.075	1.129	.260
	Peers	072	.078	048	924	.357
	Social Network	022	.091	015	245	.807

Hierarchical Regression Model with Impact of Demographic Variables

The following tests will show what impacts of demographic characteristics have on regression model and how demographic variables affect individual acceptance of technological innovation. Output in table 7 shows that there are two models and how well each model fits the data. Model 1 refers to the first stage in the analysis where all the demographics are used as predictors. All categorical (demographics) variables were recoded as dichotomous variable (0 and 1) before they can be entered into the regression model. Model 2 refers when all demographics and other independent variables are used as predictors. For the first model R^2 value is .332, which means those demographic variables accounts for 33.2% of the variation in usage. However, when other independent predictors are included as well in the analysis (model 2), this value increases to .606 or 60.6% of the variance in usage. Therefore, if demographics accounts for 33.2%, other independent variable account for an additional 27.4%. So, inclusion of other independent variables has explained quite a large amount of the variation in usage. The model 1 is significant at F (7, 263) =18.705, p<0.001. The model 2 is significant at F (10, 253) = 17.617, p<0.001. The change statistics shows the significance difference made by adding other predictors to the model.

For the first model the F-ratio is 18.705 (F (7, 263) = 18.705) which is significant at p<0.001 level and for the second model the F-ratio is 22.932 (F (17,253) = 22.932) which is significant at p<0.001 level. We can see that the second model is significantly improved our ability to predict the outcome and model with other independent predictors is better because the F-ratio is significantly higher.

Table 7 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.577(a)	.332	.315	.87747	.332	18.705	7	263	.000
2	.779(b)	.606	.580	.68690	.274	17.617	10	253	.000

Table 8
Analysis of Variance (ANOVA)

		Sum of	Ì	Mean		
Model		Squares	df	Square	F	Sig.
1	Regression	100.814	7	14.402	18.705	.000(a)
	Residual	202.498	263	.770		
	Total	303.312	270			
2	Regression	183.939	17	10.820	22.932	.000(b)
	Residual	119.374	253	.472		
	Total	303.312	270			

When all ten independent variables regressed with demographic variables the table 9 shows that gender (male and female); classification (academic and professional staff); employed as (full time and part time); Business; Education, Arts and Social Sciences were significant in addition to three independent variables such as managerial support, perceived usefulness and personal innovativeness. If we replace the significant B values into our equation then we can find our model as in equation: Individual Acceptance of Innovation (Usage) = .068 + (.212 * Gender) + (.244 * Classification) + (.417 * Employment Status) + (-.375 * Business) + (-.528 * EduArtSS) + (.220 * Managerial Support) + (.362 * Perceived Usefulness) + (.225 * Personal Innovativeness).

Table 9 Coefficients

		Unstand	ardized	Standardized		
Model		Coeffi	cients	Coefficients	t	Sig.
			Std.			
		В	Error	Beta (β)		
1	(Constant)	3.058	.177		17.308	.000
	Gender	.299	.118	.136	2.529	.012
	Classification	.678	.128	.305	5.312	.000
	Employed as	601	.132	236	-4.555	.000
	Business	527	.190	211	-2.773	.006
	EduArt and SS	814	.192	335	-4.245	.000
	Health Science	253	.191	104	-1.324	.187
	ITEndEnv	306	.214	093	-1.432	.153
2	(Constant)	.068	.352		.193	.847
	Gender	.212	.098	.097	2.173	.031
	Classification	.244	.110	.110	2.218	.027
	Employed as	417	.106	164	-3.933	.000
	Business	375	.153	150	-2.448	.015
	EduArt and SS	528	.156	217	-3.391	.001
	Health Science	143	.152	059	937	.350
	ITEndEnv	297	.173	091	-1.719	.087
	Training	108	.061	088	-1.757	.080
	Managerial sup	.220	.079	.164	2.780	.006
	Incentive	.111	.094	.090	1.180	.239
	Usefulness	.362	.085	.325	4.260	.000
	Innovativeness	.225	.062	.164	3.639	.000
	Experience	.007	.056	.006	.121	.904
	Image	.062	.082	.047	.753	.452
	Enjoyment	.070	.084	.053	.835	.404
	Peers	052	.073	035	708	.480
·	Social Net	032	.085	022	373	.709

From the hierarchical regression analysis, the first model which used only demographic characteristics accounted for 33.2% of the variance in the individual acceptance of innovation. In the second model demographics were used as a control variables and with other independent variables together accounted for 60.6% of variance in the individual acceptance of innovation (F (17, 253) =22.932, p<0.001). In this model perceived usefulness was an important predictor β = .325, t (275) = 4.260, p<0.001) followed by Education, Art and Social Science (β = -.217, t (275) = -3.391, P<0.001); employment status (full time) (β = -.164, t (275) = -3.933, p<0.001); personal innovativeness (β = .164, t (275) = 3.639, p<0.001); managerial support (β = .164, t (275) = 2.780, p<0.006); Business (β = .150, t (275) = -2.448, p<0.015); classification (professional staff) (β = .110, t (275) = 2.218, p<0.027) and gender (female) (β = .097, t (275) = 2.173, p<0.031). All these variables are statistically significant. Other demographics and independent variables are not statistically significant and they are not contributing much for the overall prediction. All the assumptions have been met and the model would be generalizable to the population.

DISCUSSION

Findings of the study contribute to a better theoretical understanding of the factors that influence individual adoption of innovation and provide practical implications for the management in the organization. From a theoretical point of view, this research has served to broaden our understanding of the factors affecting new technology adoption from the perspective of individual employees in an organizational context. The main theoretical contribution of this research is the development of an enhanced model for innovation adoption useful for understanding the adoption by individual employees within an organization. The research posited predictors explained between 50 to 80 percent of the variance in attitude and usage, suggesting that the model serves as an adequate conceptualization of the phenomenon of interest. This research involves the combination of multiple variables found in different IT adoption related studies into a single study context. Besides, this study addressed a list of factors identified by Frambach and Schillewaert (2002), tested their significance and assessed the difference between the factors and therefore, contributes to knowledge and the broader theoretical understanding of the phenomenon.

Findings of the study provide insights into the relative effects of organizational and individual factors on usage but did not show effect of social factors. These predictors influence individual attitude toward the innovation which consequently lead to the adoption. Two belief variables-perceived usefulness and personal innovativeness which were introduced and placed corresponding to the main belief constructs of the technology acceptance model and the theory of reasoned action, shown significant impact toward the acceptance of innovation. The fifth variable- prior experience was not significant on usage. Out of three external variables such as training, managerial support and incentives were incorporated in the model since the theory of reasoned action, the technology acceptance model and Frambach and Schillewaert (2002) suggested external factors in their models to affect the attitude and consequently usage. Two external variables training and managerial support were significantly affecting toward adoption but the training was negatively associated. Consistent with study conducted by Lewis, Agarwal and Sambamurthy (2003), two subjective norms variable-peers and social network were tested but both were non significant. As we know that the technology acceptance model did not include the theory of reasoned action's subjective norms construct as it was non-significant and was one of the least understood aspects of the theory of reasoned action.

Testing the effects of demographic variables in this study is another contribution. Most of the IT related studies did not include demographic characteristics into their models and they have not tried to examine the effect these moderating or controlled variables in usage. The theory of reasoned action also acknowledges the importance of demographic variables. As Ajzen and Fishbein (1980, p.8) mention that "our analysis of behavior has made no reference to various factors other than attitudes toward targets that social and behavioral scientists have invoked to explain behavior. Among these factors are personality characteristics such as demographic variables and external variables". There is plenty of evidence that such factors are sometimes related to the behavior of interests (Ajzen & Fishbein, 1980). This study included demographic variables in the research model and assessed their relative contribution toward adoption. Among the demographic variables female, professional (administrative) staff, full time employees and the Division of Information Technology, Engineering

and Environment; and Division of Health Sciences significantly affect individual attitude toward acceptance of new technology.

The result of this study confirmed that perceived usefulness has a strong effect on usage. This suggests that the functionality of a system must be emphasized to potential users. The model indicates that efforts should focus initially on greater management support. Organization should aim to increase awareness of potential applications and emphasize the benefits and advantages of using the system. Findings suggest that managers need to focus careful attention on exhibiting commitment to a new technology for smooth process of adoption. Unless individual employees perceive strong support and specific resources they are unlikely to develop positive attitude toward the technology and its usage. It is also important for organization to assist individual employees in developing positive perceptions about their ability to use the new technology. Individual employees who are personally more innovative are more inclined to use the technology and management can utilized them as an important agent of change because they are likely to exhibit favorable attitude toward adoption and can influence others to create a positive belief toward acceptance of new technology.

Research Contribution to Knowledge and Practice

This study has contributed to knowledge and practice in the following ways:

Developed a Theoretical Construct that Brings/Correlate Individual Adoption of Innovation Issues into a Coherent Model: The general lack of research on individual adoption and the scattered research in the area using with few variables, it was imperative to derive a simple, combination of variables and a coherent model to examine the individual adoption in the organizational context. The combination of variables in this study goes beyond previous research in an attempt to bring together all the relevant factors which can influence adoption into a coherent model to find out the relationship between individual adoption and the factors which affect and determine the adoption and continue usage of innovation by individual employees within an organization. This study involves the combination of multiple variables found in various information technology adoption related literature into a single study context. The organizational, individual and social factors influence individual attitude which consequently lead to adoption. Concisely, this study addresses a long list of factors, tested whether they are significant and addressed the differences between factors and therefore contribute to knowledge and the broader theoretical understanding of the phenomenon. The model also serves as the framework for future research on the innovation adoption. Further investigation can be undertaken adopting this theoretical model.

Promote Management Awareness, Understanding and Support in Technology Adoption by Individual Employees within Organization: In addition to the academic interest, the finding from this research is useful for various groups of management and practitioners engage in the introduction of new technology in the organization. With the trend towards end-users applications, the result of this study is crucial for guiding management toward more effective adoption and usage of technological innovation in the organization. The study revealed the extent of how existing and emerging technology can be used to support organizational needs and improve the work environment within the organization. Moreover, it attempted to understand the factors that affect individual employees to uptake the adoption of technological innovation. For the management and practitioners, this research findings will help to reduce new technology implementation related cost and the ability to react faster and more efficiently in the individual uptake of technological innovation in the organization. Finding of the study will assist management to identify the problem areas within their individual employees and improve upon their level of technology adoption and usage accordingly.

Limitations of the Study and Recommendations for Future Research

This study represents a careful and systematic effort to examine the enhanced model of innovation adoption by individual employees within an organization. It incorporates a number of features including combination of variables found in different IT and management literature, a moderately large sample size, actual measure of behavior and a realistic setting which lead significant strength to the study. However, the study is not without its limitations. The following section will present limitations of the study followed by recommendations for future research.

This study encompasses only a single Australian educational institution. The same research carried out in another setting might generate a different result as organizational, interpersonal and social factors could very according to cultural context. Further, since the data were collected from a single organization in Australia, the findings may not be generalizable to other organizations or countries with different environmental settings and factors. However, the result of this study should be treated, at best, until replicated in other organizations.

Due to practical constraints this study was cross-sectional in that all measurement was done at a single point in time. Nevertheless, this research tested a model based on theories and literature on innovation adoption and supported by other empirical research. It is believed that approach in this research is a logical extension of these work and that the variables and relationship tested were appropriate. The study derived a set of ten variables, not all would be equally important in a specific organizational settings. In addition, the study may have ignored some moderating effects related to the considered variables. Future research may incorporate more moderating effects. Other variables such as organizational size, age, structure and other factors may affect beliefs and usage, should also be included in future studies. It might also be useful to examine the relationship between the adoption of technological innovation and organizational performance.

The study was conducted in a single point in time. Future work could use longitudinal research design to explain similar issues. A longitudinal study would allow for the use of growth as a measure of performance. Longitudinal study need to be undertaken to fully investigate the casual effect of various factors and their relationships over time. Further research studies may address the difference of technological innovation between developed and developing nations. A cross cultural study on the adoption of innovation will help us to understanding the attitudinal and perceptual differences between the countries. The sample was chosen to represent individuals who use system in practice but more research is needed to investigate other employees who do not use system regularly. Future research studies could also focus on identifying more determinants of innovation adoption such as ethnicity, lifestyle and psychological factors.

This research provides some useful development of the individual innovation adoption in an organizational context. While the result reported here would seem to be generalizable to other organizations that have similar characteristics, the scope and the context are somewhat limited. The interpretation and implications of the findings of this research are subject to the constraint and probably dependent on the nature of the organization. So, further research is needed to broaden and confirm the result and implications of this work. It is possible to extend the research into other industry settings for example manufacturing or production industries. It is also possible to conduct similar research in other countries either in same or different organizational settings. This might provide more insight into the different organization or cultural context. The model of this research can be applied potentially to a large number of information technology and management problems in innovation adoption areas. Future research efforts may be directed at identifying research areas in information technology or management that can be potentially benefit from the use of this model.

REFERENCES

Abrahamson, E., & Rosenkopf, L. 1997. Social network effects on the extent of innovation diffusion: A computer simulation. *Organization Science*, 8(3): 289-309.

Ahuja, M. K., & Thatcher, J. B. 2005. Moving beyond intentions and toward the theory of trying: Effects of work environment and gender on post-adoption information technology use. *MIS Quarterly*, 29(3): 427-459.

Ajzen, I., & Fishbein, M. 1980. *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice-Hall.

Al-Gahtani, S., & King, M. 1999. Attitudes, satisfaction and usage: factors contributing to each in the acceptance of information technology. *Behaviour & Information Technology*, 18(4): 277-297.

Babin, B. J., Darden, W. R., & Griffin, M. 1994. Work and/or fun: Measuring hedonic and utilitarian shopping value. *The Journal of Consumer Research*, 20(4): 644-656.

Bhattacherjee, A. 1998. Managerial influences on intra-organizational information technology use: A principal-agent model. *Decision Sciences*, 29(1): 139-162.

- Bruner, G. C., & Kumar, A. 2005. Explaining consumer acceptance of handheld Internet devices. *Journal of Business Research*, 58(5): 553-558.
- Burgess, A., Jackson, T., & Edwards, J. 2005. Email training significantly reduces email defects. *International Journal of Information Management*, 25(1): 71-83.
- Chang, M. K., & Cheung, W. 2001. Determinants of the intention to use Internet/WWW at work: a confirmatory study. *Information & Management*, 39(1): 1-14.
- Cho, V. 206). Factors in the adoption of third-party B2B portals in the textile industry. *Journal of Computer Information Systems*, 46(3): 18-31.
- Davis, F. D. 1989. Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3): 319-340.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. 1989. User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8): 982-1003.
- DeVellis, R. F. 2003. *Scale development: Theory and applications*. Thousand Oaks, CA: Sage Publications.
- Frambach, R. T., Barkema, H. G., Nooteboom, B., & Wedel, M. 1998. Adoption of a service innovation in the business market: an empirical test of supply-side variables. *Journal of Business Research*, 41(2): 161-174.
- Frambach, R. T., & Schillewaert, N. 2002. Organizational innovation adoption: a multi-level framework of determinants and opportunities for future research. *Journal of Business Research*, 55(2): 163-176.
- Fulk, J., & Boyd, B. 1991. Emerging theories of communication in organizations. *Journal of Management*, 17(2): 407-446.
- Fuller, R. M., Vician, C., & Brown, S. A. 2006. E-learning and individual characteristics: The role of computer anxiety and communication apprehension. *Journal of Computer Information Systems*, 46(4): 103-115.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. 1998. *Multivariate Data Analysis*. Upper Saddle River, NJ: Prentice Hall.
- Hill, T., Smith, N. D., & Mann, M. F. 1987. Role of efficacy expectations in predicting the decision to use advanced technologies: the case of computers. *Journal of applied psychology*, 72(2): 307-313.
- Huang, E. 2005. The acceptance of women-centric websites. *The Journal of Computer Information Systems*, 45(4): 75-83.
- Igbaria, M. 1993. User acceptance of microcomputer technology: an empirical test. *Omega (Oxford)*, 21(1): 73-90.
- Igbaria, M., Parasuraman, S., & Baroudi, J. J. 1996. A motivational model of microcomputer usage. *Journal of Management Information Systems*, 13(1): 127-143.
- Igbaria, M., Zinatelli, N., Cragg, P., & Cavaye, A. L. M. 1997. Personal computing acceptance factors in small firms: A structural equation model. *MIS Quarterly*, 21(3): 279-305.
- Jasperson, J., Carter, P. E., & Zmud, R. W. 2005. A comprehensive conceptualization of the post-adoptive behaviors associated with IT-enabled work systems. *MIS Quarterly*, 29(3), 525-557.
- Klein, K. J., & Sorra, J. S. 1996. The Challenge of Innovation Implementation. *The Academy of Management Review*, 21(4): 1055-1080.
- Konana, P., & Balasubramanian, S. 2005. The Social-Economic-Psychological (SEP) model of technology adoption and usage: An application to online investing. *Decision Support Systems*, 39(3), 505-524.
- Kwok, S., & Gao, S. 2006. Attitude towards knowledge sharing. *Journal of Computer Information Systems*, 46(2), 45-51.
- Lam, T., Cho, V., & Qu, H. 2007. A study of hotel employee behavioral intentions Towards adoption of information technology. *International Journal of Hospitality Management*, 26(1), 49-65.
- Lee, H. Y., Lee, Y. K., & Kwon, D. 2005. The intention to use computerized reservation systems: the moderating effects of organizational support and supplier incentive. *Journal of Business Research*, 58(11), 1552-1561.
- Lee, J. 2004. Discriminant analysis of technology adoption behavior: A case of internet technologies in small business. *Journal of Computer Information Systems*, 44(4): 57-66.

Lewis, W., Agarwal, R., & Sambamurthy, V. 2003. Sources of influence on beliefs about information technology use: An empirical study of knowledge workers. *MIS Quarterly*, 27(4), 657-678.

Lu, J., Yu, C., & Liu, C. 2005. Facilitating conditions, wireless trust and adoption intention. *Journal of Computer Information Systems*, 46(1): 17-24.

Nilakant, V., & Rao, H. 1994. Agency theory and uncertainty in organizations: An evaluation. *Organization Studies*, 15(5): 649-672.

Peansupap, V., & Walker, D. 2005. Exploratory factors influencing information and communication technology diffusion and adoption within Australian construction organizations: a micro analysis. *Construction Innovation*, 5(3): 135-157.

van Everdingen, Y., & Wierenga, B. 2002. Intra-firm adoption decisions: Role of inter-firm and intra-firm variables. *European Management Journal*, 20(6): 649-663.

Venkatesh, V., & Brown, S. A. 2001. A longitudinal investigation of personal computers in homes: Adoption determinants and emerging challenges. *MIS Quarterly*, 25(1): 71-102.

Venkatesh, V., & Davis, F. D. 2000. A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2): 186-204.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. 2003. User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3): 425-478.

Yi, Y., Wu, Z., & Tung, L. 2006. How individual differences influence technology usage behaviour? Toward an integrated framework. *Journal of Computer Information Systems*, 46(2): 52-63.

Yuan, Y., Fulk, J., Shumate, M., Monge, P., Bryant, J., & Matsaganis, M. 2005. Individual participation in organizational information commons. *Human Communication Research*, 31(2), 212-240.

Co-marketing: Another Marketing Success Factor in Entrepreneurial Firms

Samar Mohammaed Baqer Kuwait University, Kuwait

Email: sbaqer@cba.edu.kw

ABSTRACT

The concept of customer co-marketing was misrepresented in the marketing literature at several occasions. This study aims to define co-marketing and discuss its importance in entrepreneur firms. Also, this conceptual paper discusses the co-marketing as a success factor that the social entrepreneurs need to attain. The focus on entrepreneur firms stems from the innovative and interactive nature of the business of such firms. In addition, the effect of entrepreneurs' learning process is discussed as a facilitator of the relationship between entrepreneurs' attitude toward social networks and co-marketing.

Introduction

The importance of customers involvement in the production and marketing processes is not a new perspective in the literature (von Hippel 2001; Thomke & von Hippel 2001; Kristensson et al 2004). Based on the previous literature and the intensive competition between firms, a deeper level of customer involvement is required for the success of products in the market.

This conceptual piece attempts to provide a thorough explanation of the importance of the concept of customer co-marketing as a growing concept in the marketing field. Adopting this concept could change firms' perspective of customers. Customers are no longer considered as passive receivers of the values provided by products, rather; customers are active partners in the production process (Bettencourt, 1997; Wind & Ramaswamy, 2000).

Although this is a growing and promising concept, it lacks the attention from the managerial side. Entrepreneurial firms are supposed to benefit from such concept; especially that it is going to help them reduce their marketing costs substantially. Gaining better competitive position and satisfying wider ranges of customers are among the most important implications that such firms could gain from the adoption of the concept of co-marketing. Building social networks with customers could be considered as one way of understanding their needs at a deeper level and, as a result, convincing them to market the products and recommend them to other customers.

This paper focuses on the importance of entrepreneurs' attitude towards building social networks in order to adopt the process of co-marketing. In addition, the moderating effect of the entrepreneurs' learning process on the previous relationship is suggested.

LITERATURE REVIEW AND RESEARCH PROPOSITIONS

Co-marketing as a concept

The concept of co-marketing was misrepresented in the marketing literature at many occasions. Co-marketing was sometimes misrepresented in the literature as customer participation or customer involvement (Petty, Cacioppo, & Schumann, 1983, Cermak & File 1994, Dabholkar 1990, p. 484, Bendapudi & Leone 2003). Actually, co-marketing involves higher level of communication between firms and customers. That type of communication could incorporate customers' involvement and participation.

Participation and involvement: Cermak and File (1994) found a strong association between participation and repurchase. In addition, they found that participation has a strong positive effect of the probability customers' recommendation and referrals in some service settings. The authors explained the distinction between involvement and participation in terms of attitude and actual behavior (involvement as the attitude or state and participation as the actual involvement as a behavior (Cermak & File 1994, p.95). Another definition of customer participation is concerned with the degree of customer's involvement in the production and delivery processes (Dabholkar 1990, p. 484, Bendapudi & Leone 2003). The previous explanations focused on the post-purchase situations neglecting other stages of the customers' involvement. The marketing literature explained that

customer's involvement takes place at the pre-purchase, post-purchase and re-purchase stages while customer participation appears at the point of purchase (Petty, Cacioppo & Schumann, 1983, Cermak & File 1994).

Based on the above, one could argue that higher levels of customers' involvement in marketing products are going to increase their commitment to purchase these products and, as a result, convince others to buy them. This means that co-marketing is needed by firms that value higher levels of customers' participation and involvement.

For more clarifications, this paper attempts to define co-marketing in a way that fits the context in hand and at the same time minimizes the confusion about this concept. This paper defines co-marketing as the customers' willingness and ability to commit to the process of marketing firms' products starting from the stages of ideas' generation until the products are commercialized in the market.

Co-marketing as a Process

The process of customer co-marketing should take place in three major stages (pre-purchase, product development, post-purchase). Bettencourt 1997 introduced a very interesting model that would be an essential building block in the customer co-marketing concept. In his study, he argued that the customers have three important roles as partial employees of the firm: 1) customers as promoters, 2) customers as human resource, and 3) customers as consultants (Bettencourt 1997).

Co-marketing at the pre-purchase stage: At this stage, customers act as a very essential source of information for the firm. Developing new ideas for creating new products and service or even enhancing (extending) existing services and products are among the important information that could be provided by customers (Bettencourt, 1997).

Co-marketing at the post-purchase stage: The customer's role as a partial employee does not stop; rather it continues to take a new direction that is critical to the success and competitiveness of the firm. At this stage, customers can act as promoters of the firm's activities (Bettencourt, 1997). In his paper, Bettencourt (1997) linked this role to the concept of customer loyalty.

Recommending the firm to other consumers and spreading positive word of mouth can be indicators of customer loyalty and at the same time it servers the purpose of promoting the firm's activities to the public (Boulding et al. 1993, Zeithaml et al. 1996, Bettencourt 1997). This could also mean that the firm is gaining a cost reduction benefits in terms of saving some of promotion activities expenditures. It is also reasonable to think of customers as consultants at this stage. The firm relies partially on customers' feedback, complaints and suggestions in order to improve its current offerings or introduce new products/services to the market (Plymire, 1991, Bettencourt 1997).

Actual participation in the service encounter: At this stage, customers participate in the delivery of services. Also, customers participate in improving the quality of the service provided whether through interactions with the firm's employees or by performing their own roles as co-producers (Bitner et al. 1994, Bettencourt 1997). Bettencourt (1997) description of customers' cooperative role as human resources would fit the purpose of this stage of the co-production process. At this stage, customers have the strongest need for understanding their responsibilities and their level of accountability.

Entrepreneurship and its link to customer co-production

Entrepreneurs are people of visions (and creative ideas) and they try their best to gather all or most of the resources required to bring their visions into reality (Thompson et al 2000). Based on Thompson et al (2000), an entrepreneur is a person with vision, leadership skills, and a will to start business from scratch and watch it grow and nourish. Thompson et al 2000 thought that the following elements are important for the growth of entrepreneurial business as well. The three elements are:

- 1- Envisioning a future opportunity in the changing environment.
- 2- Enacting this vision by obtaining the required resources to bring it into reality.
- 3- Enabling this vision to come into reality by seeking the support of other individuals or entities.

Among the commonalities that exist between entrepreneurship and marketing is their continuous search for market opportunities and environment changes (Shaw 2004). In order to identify these opportunities and co-create the values with customers, entrepreneurs need to have the necessary resources which include technology and information (Shaw 2004, Bjerke & Hultman 2002).

Innovation and creativity are important factors of success for entrepreneurs but these factors cannot rely on traditional marketing concepts that are based on traditional market segmentation for the purpose of opportunity hunting. Rather, entrepreneurs should rely on more aggressive approaches to gain deep understanding of what customers and to compete with rivals in the market (Boussouara & Deakins 1999). More of tailored and customized products and services should be offered by these entrepreneurial businesses and that's why careful marketing activities should be considered (Boussouara & Deakins 1999). In addition, more customer involvement is required to be able to deliver the right services/products to the right people at the right time.

Social Entrepreneurs

Social entrepreneurs are just like the other entrepreneurs in terms of their skills, leadership qualities, and availability of limited resources but they differ in their commitment to help others and innovate. Social entrepreneurship needs to establish networks in order to identify market opportunities and understand customers and suppliers. Credibility, reliability, and trust are among the issues that could entrepreneurs in building solid networks with their customers (Shaw 2004). This type of credibility could be based on the frequent involvement in social communities and deep understanding of customers' concerns and needs (Shaw 2004).

It is very essential to understand the interactive nature of the entrepreneur's businesses. This personal and interactive way of doing business (which could be associated with lower levels of risks) allows entrepreneurs to understand individual needs and concerns of customers and based on that they will be able to tailor products and services that correctly fit the customers' needs and wants (Carson et al 1995, Zontanos & Anderson 2004). Geursen (1998) showed that the successful entrepreneurs rely on close and personal relations with their customers. In addition, the author argued that innovations are not going to contribute to the success of entrepreneurs unless these innovations are related t and attached o what customers really need and want (Geursen 1998). Using the personal and social networks could be a good start for recruiting the right customers who are going to participate in the co-production process especially that a certain level of trust and comfort is already established between the entrepreneur and his/her networks' members.

Networks

Networks are good tool for exchanging resources and information and whatever is gained from these networks can be considered as competitive advantages that help the firm to success in the market (Sawyerr et al, 2003). Building social networks could be considered as one of the skills required for entrepreneurs to be able to compete in the market because they require special strategies for the entrepreneurs to position themselves in the social networks they participate in (Provan & Milward, 1995, O'Donnell et al, 2001). In conclusion, one should not neglect the importance of networks and networking as basic tools for the enhancing the marketing success of entrepreneurs (O'Donnell et al., 2001, Sawyerr et al, 2003, Shaw, 2004).

There are several types of networks that the small businesses run by entrepreneurs can participate in. These networks could include social networks, business networks, and/or marketing networks (Gilmore et al, 2001). In this study the focus will be on social networks that include personal contacts with other individuals. The characteristics of networks tend to change over time because they might become bigger or smaller in size, they might serve new needs of customers, and/or they might respond to external events such as economic and political changes (Gilmore et al, 2001). Also the role of the network members may change over time. Some people might become more active in terms of the nature of their participation in the network's activities (Gilmore et al, 2001).

Based on the above, it is suggested that the attitude towards building social networks in entrepreneurial firms is going to help these firm in benefiting from the positive outcomes of adopting the co-marketing process. Without such attitude it will be hard for any entrepreneur to reach for customers and listen to their needs carefully, hence:

Proposition1: Entrepreneurs who are willing to involve (and/actively involved already) in social networks will be able to apply the co-marketing concept.

When customers socialize with the firm, they get to learn more about their new role as coproducers and co-marketers. In addition, customers will be more satisfied with the firm if the roles that they have to perform match their expectation (Kelley, Donnelly and Skinner 1990). Customers need to feel that they were treated fairly in order to become committed to their roles as partners and co-producers with the firm (Bettencourt 1997). Other benefits that customers may receive as result of co-marketing include faster delivery and reduced prices (Kelley, Donnelly & Skinner 1990). To be able to reach the desired outcomes of socialization between the firm and its customers, it is important to understand what those customers are willing and able to offer to the firm (Kelley, Donnelly & Skinner 1990). In addition, when the firm succeeds in socializing with its customers and treating them as partners, gaining a better competitive position could be one of the benefits that the firm would gain (Kelley, Donnelly & Skinner 1990, Bettencourt 1997).

Based on the above, it is clear that the process of co-marketing has a lot of benefits to the firm that include satisfaction, trust, competitive advantage and many more, hence,

Proposition2: Entrepreneurs who are willing to apply the customer co-marketing concept believe that it is going in help in the growth of their firms.

Learning and Entrepreneurship

Learning is another important aspect that should be discussed in this research. As we know, people learn from their culture, the historical events, and social and economic encounters (Minniti & Bygrave 2001). Entrepreneurs running small firms learn just like ay other individuals. One should not neglect the importance of learning from customers as well (Taylor & Thrope, 2004). Taylor and Thrope (2004) argued that learning can take place within the networks that a person belongs to.

The concept of learning cannot be separated from entrepreneurship although the link was not fairly discussed in the literature (<u>Cope & Watts, 2000</u>, <u>Minniti & Bygrave, 2001</u>, Cope 2005). One way to view the learning process of entrepreneurs is to adopt the behavioral prospective proposed by Gartner (1985). In this perspective we would looking at what entrepreneurs actually do (their functions and activities) instead of investigating their personal traits (Gartner 1985; Gartner, 1988; <u>Bygrave & Hofer, 1991</u>; Cope, 2005).

Minniti and Bygrave (2001) argued that knowledge (specific or general) is an essential factor for the success of entrepreneurs since they rely on this knowledge in their decision making process. Entrepreneurs can either rely on existing knowledge to make a current decision or they can build a new knowledge by exploring the outcomes of a new decision. Also, entrepreneurs can learn from the success and failure and from negative and positive experiences (Postle, 1993; Hines & Thorpe, 1995; Minniti & Bygrave, 2001). Finally, entrepreneurs need to be more proactive in their learning process. They have to sense detect opportunities and threat so that they can develop what Cope (2005) called as "early warning system" that helps them in their anticipation of future events and incidents.

The 4I Dynamic Learning Model

Dutta and Crossan 2005 discussed a learning model called the 4I framework that was used for organizational learning. The 4I's stand for intuiting, interpreting, integrating, and institutionalizing. These elements of the learning framework could be used for feedback and feed forward links and that's what makes them important for this study which views entrepreneurs and customers as colearners (Dutta & Crossan, 2005). The following is a brief discussion of the each of each of the four (I's) based on the definitions introduced by Crossan et al 1990:

<u>Intuiting</u>: It includes the individual intuitive behavior towards an opportunity or threat in the market and how other people react to his/her intuition. It could be based on the person's experiences and recognition of certain patterns of specific events.

Interpreting: It includes explanation of ideas to one's self and to other people as well. Dialogue, conversations, and language developments are important at this stage.

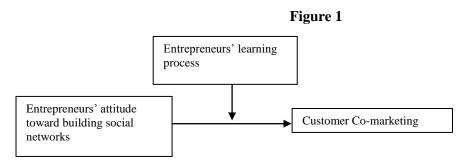
<u>Integrating:</u> It includes the development of shared understanding and coordination of actions. The developed interpretations now shared by a group of people for further explanation and understanding. <u>Institutionalizing</u>: It includes organizing tasks and actions among individuals. At this stage the knowledge gained in the learning process is used to set the organization's strategy, structure, and processes.

The 4I learning process can be applied for the context in hand especially that entrepreneurs need to be always alert for continues change in customers' taste and needs. Entrepreneurs should be able to sense the opportunity and then try to interpret it and make is a meaningful window for growth and after that share it with his/her employees and customers in order to bring it into reality.

Having mentioned that, one could suggest that the 4I learning model is going to help social entrepreneurs in understanding customers in a better way and, as a result, convince them to become co-marketers, hence:

Proposition 3: Applying the 4I learning process for entrepreneurs will encourage them to apply the co-marketing concept

The following figure depicts the model suggested by this study:



CONCLUSIONS

This study suggests that entrepreneurs with social orientation are going to understand the importance of co-marketing. Also, the study proposes that when entrepreneurs use a proactive process of organizational learning, they will be able to apply co-marketing and benefit from it more efficiently. It is important to gain an active customer participation which through achieving a desired level of interaction in order to create unique value. Prahalad and Ramaswamy (2003) argue that companies need to create different experiences rather than a variety of products and services. The variety of experiences would accommodate different situations at different times and customers' heterogeneity. The personalization is for the experience in making unique for individuals (Prahalad & Ramasawamy, 2003; Solomon, 2003).

In the traditional approach, managers used to focus on the efficiency of the value chain to control the flow of products and services that are supposed to meet customers' demand (Bendapudi & Leone, 2003; Prahalad & Ramaswamy, 2003). Basically, the value was created by the firm. The new approach, on the other hand, is to create unique value through the interaction with individuals. Firms need a variety of co-created experiences and then break it down into several unique and context-specific experiences with the help of customers' involvement in specifying the desired experience (Prahald & Ramaswamy, 2003).

Limitations and Future Research

As any other research, this study has its own limitations. First, the most obvious one is that it lacks the empirical investigation. Second, this study didn't investigate the effect of other factors on the possibility of adopting co-marketing. Some of these factors include: customer loyalty, product quality, size of organization, entrepreneurs' personal traits and special skills, etc... Third, the process of co-marketing needs to be operationalized in a standard way that could be used in future research.

Future research projects would include the investigation of cultural differences among consumers in different parts of the world and their perceptions of the concept of customer comarketing and whether they have the trust in local and foreign companies to partially be employed and take responsibilities with them. Issues such as customers' relationship with firms the degree of strength that this relationship could reach is going to be investigated.

Another project will focus on business customers and their willingness to co-produce products and whether this perception is going to differ when it comes to co-producing services. Also, we need to understand this perception based on the type of product/service and the time by which

customers are going to be more comfortable to enter the process of co-marketing (e.g. at the creation stage vs. at the production phase).

REFERENCES

Bendapudi, N. & Leone, R. 2003. Psychological implications of customer participation in coproduction. *Journal of Marketing*, 67: 14-28.

Bettencourt, L. A. and S. W. Brown. 1997. Contact employees: Relationships among workplace fairness, job satisfaction and pro-social service behaviors. *Journal of Retailing*, 73: 39-61.

Bettencourt, L. A. 1997. Customer voluntary performance: Customers as partners in service delivery. *Journal of Retailing*, 73: 383.

Bitner, M. J., Booms, B. & Mohr, L. 1994. Critical service encounters: The employee's viewpoint. *Journal of Marketing*, 58 (10): 95.

Bjerke, B., Hultman, C.E. 2002. Entrepreneurial marketing: The growth of small firms in the new economic era. *Edward Elgar: Aldershot*.

Boulding, W. et al. 1993. A dynamic process model of service quality: From expectations to behavioral intentions. *Journal of Marketing Research*, 30 (2): 7.

Boussouara, M. & Deakins, D. 1999. <u>Market-based learning</u>, entrepreneurship and the high technology small firm. *International Journal of Entrepreneurial Behavior and Research*, 5(4): 204-223.

Bygrave, W. D. & Hofer, C. 1991. Theorizing about entrepreneurship. *Entrepreneurship: Theory & Practice*, 16: 13-22.

Carson, D.J. 1985. The evolution of marketing in small firms. *European Journal of Marketing*, 19(7).

Cermak, D. S. P. & File, K. 1994. Customer participation in service specification and delivery. *Journal of Applied Business Research*, 10: 90.

Cope, J. & Watts, G. 2000. Learning by doing: An exploration of experience, critical incidents and reflection in entrepreneurial learning. *International Journal of Entrepreneurial Behaviour and Research*, 6(3): 104–124.

Cope, J. 2005. Toward a dynamic learning perspective of entrepreneurship. *Entrepreneurship Theory and Practice*, 29 (4): 373.

Crossan, M.M., Lane, H.W., & White, R.E. 1999. An organizational learning framework: From intuition to institution. *Academy of Management Review*, 24 (3): 522–537.

Dabholkar, Pratibha, 1990. How to Improve Perceived Service Quality by Improving Customer Participation. In *Developments in Marketing Science*, B.J. Dunlap, ed. Cullowhee, NC: Academy of Marketing Science, 483-87.

Dutta, D. K. & Crossan, M. M. 2005. The nature of entrepreneurial opportunities: Understanding the process using the 4I organizational learning framework. *Entrepreneurship Theory and Practice*, 29(4): 425.

Gartner, W. B. 1985. A conceptual framework for describing the phenomenon of new venture creation. *Academy of Management Review*, 10(10): 696-706.

Geursen Gus M. 1998. Marketing, Small Business and Entrepreneurship: Some Issues for the future," *ICSB Singapore Conference Proceedings*, International Council For Small Business.

Gilmore, A. & Carson, D. 1999. Entrepreneurial marketing by networking. *New England Journal of Entrepreneurship*, 12(2): 31-38.

Hines, T. & Thorpe, R. 1995. New approaches to understanding small firm networks—the key to performance, managerial learning and development. *Proceedings of the 18th ISBA National Small Firms Policy and Research Conference*, Paisley.

Kelley, S. W., S. J. Skinner, and J. H. J. Donnelly 1992. Organizational Socialization of Service Customers. *Journal of Business Research*, (25): 197-214.

Kelley, Scott W., James H. Donnelly Jr., and Steven J. Skinner 1990. Customer Participation in Service Production and Delivery. *Journal of Retailing*, (66): 315.

Kristensson, P.; Gustafsson, A.; and Archer, T., 2004. Harnessing the Creative Potential among Users. *Journal of Product Innovation Management*, 21 (1): 4-14

Minniti, Maria, Bygrave, William, 2001. A Dynamic Model of Entrepreneurship Learning *Entrepreneurship: Theory & Practice*, 25 (3)

O'Donnell, Aodheen et al. 2001. The Network Construct in Entrepreneurship Research: A Review and Critique. *Management Decision*, (39): 749.

Petty, Richard E., John T. Cacioppo, and David Schumann 1983. Central and Peripheral Routes to Advertising Effectiveness: The Moderating Role of Involvement. *Journal of Consumer Research*, 10 (9):135.

Plymire, Jerry 1991. Complaints as Opportunities. *Journal of Consumer Marketing*, 8 (39)

Postle, D. 1993. Putting the heart back into learning. In D. Boud, R. Cohen, & D. Walker (Eds), *Using experience for learning*. Buckingham: SRHE & Open University Press: 33-45.

Prahalad, C. K. & Venkat Ramaswamy, 2004. Co-Creation Experiences: The Next Practice in value Creation. *Journal of Interactive Marketing*, (18): 5-14.

Prahalad, C. K. and Venkatram Ramaswamy 2000. Co-Opting Customer Competence. *Harvard Business Review*, 78 (1): 79

Prahalad, C. K. 2003. Future of Competition: Co-Creating Unique Value with Customers (Hardcover). *Harvard Business School Press Books*, 10(1).

Prahalad, C. K 2003. The New Frontier of Experience Innovation. *MIT Sloan Management Review*, 44 (12): 8.

Prahalad, C. K., Venkatram Ramaswamy, and M. S. Krishnan 2000. **Consumer Centricity.** *InformationWeek*, 4(10): 67

Provan, Keith G. and H. B. Milward 1995. A Preliminary Theory of Inter-organizational Network Effectiveness: A Comparative Study of Four Community Mental Health Systems. *Administrative Science Quarterly*, 40 (3):1-33.

Sawyerr, Olukemi O.; McGee, Jeffrey; and Peterson, Mark 2003. Perceived Uncertainty and Firm Performance in SMEs. *International Small Business Journal*, 21(3): 269-290

Shaw, E. 2002. Networking. In Warner, M. (Eds), *International Encyclopedia of Business and Management*, 2nd ed., Thomson Learning, Boston, MA, pp.4667-73.

Shaw, Eleanor 2004. Marketing in the Social Enterprise Context: Is it Entrepreneurial? *Qualitative Market Research: An International Journal*, (7): 194.

Solomon, Michael R. et al. 1985. A Role Theory Perspective on Dyadic Interactions: The Service Encounter. *Journal of Marketing*, 49.

Solomon, M.R. 2003. Conquering Consumer space: Marketing Strategies for a Branded World. AMACOM, New York, NY.

Solomon, Michael R., 2004. For services, the play's (still) the thing. *Managing Service Quality*; 14 (1).

Taylor, D. & Thorpe, R. 2004. Entrepreneurial learning: a process of co-participation. *Journal of Small Business and Enterprise Development*, 11(2).

Thomke, S. and von Hippel, E., 2001. Customers as Innovators: A New Way to Create Value. *Harvard Business Review*, 80(4): 5–11.

Thompson, John, Geoff Alvy, and Ann Lees 2000. Social Entrepreneurship--a New Look at the People and the Potential. *Management Decision*, (38): 328.

von Hippel, E., 2001. User Toolkits for Innovation. *Journal of Product Innovation Management* 18(4): 247–257.

Wind, Jerry & Arvind Rangaswamy, 2001. Customerization: The Next Revolution in Mass Customization. *Journal of Interactive Marketing*, (15): 13-32.

Zontanos, Grigorios and Alistair R. Anderson 2004. Relationships, Marketing and Small Business: An Exploration of Links in Theory and Practice. *Qualitative Market Research: An International Journal*, (7): 228.

Zeithaml, Valarie A., Leonard L. Berry, and A. Parasuraman 1996. The Behavioral Consequences of Service Quality. *Journal of Marketing*, 60 (4): 31

MANAGING KNOWLEDGE TRANSFER: FROM MNCS IN NEWLY INDUSTRIALIZED ECONOMIES TO SUBSIDIARIES IN DEVELOPING COUNTRIES (Working Paper)

Wei-Li Wu Ryh-Song Yeh

National Chi Nan University, Taiwan E-mail: wuweili0709@yahoo.com.tw

ABSTRACT

To date, lots of multinational corporations (MNCs) in newly industrialized economies (NIEs) (e.g. Taiwan and Korea) are eager to move their manufactures into developing countries (e.g. China and Vietnam) for the purpose of reducing production cost. In general, MNCs need to offer their own assets to help their subsidiaries to operate well in the host countries, especially for the asset of knowledge. Therefore, it's important to know how to make NIEs' MNCs to perform knowledge transfer well (from headquarters to foreign subsidiaries) when they conduct foreign direct investment (FDI) toward developing countries. As a result, this proposal aims to explore what are the determinants of a successful knowledge-transfer activity for NIEs' firms which consider investing overseas in developing countries.

INTRODUCTION

Depending on the sharing of knowledge, organizations could effectively utilize and manage their own knowledge, and employees could access the in-need knowledge fast in the workplace. Consequently, organizations could meet the goal efficiently and increase their performances (O'Dell & Grayson, 1998). The asset of knowledge is different from material assets. Knowledge would not decrease because of sharing; further, a company can lever its stock of knowledge to reach a better performance through effective management on knowledge transfer. Knowledge transfer is one of the most important issues when MNCs want to increase subsidiary's competitive advantage in the host country. It has been a long time scholars recognize that the importance of knowledge transfer for MNCs' oversea operation (Mansfield & Romeo, 1980; Davidson, 1983; Lyles & Salk, 1996). Through effective knowledge transfer, MNCs could increase the competitive advantage of subsidiaries, and also decrease subsidiaries' learning cost. Unfortunately, since there are many obstructers for knowledge transfer, it is hard to perform knowledge transfer well in the practice. After initially literature review, this proposal conclude four factors which may influence the effectiveness of knowledge transfer, there are nature of knowledge, motivation, absorptive capacity, and interaction activities. In the following, this proposal starts to discuss how those factors influence the performance of knowledge transfer.

Antecedents of Knowledge Transfer

The nature of knowledge: In general, knowledge could be distinguished into tacit knowledge and explicit knowledge, this classification is first addressed by Polanyi (1966). Of these two types of knowledge, tacit knowledge is personal and context-specific. On the other hand, explicit knowledge could be codified easily (Winter, 1987; Kogut & Zander, 1992; Nonaka & Takeuchi, 1995). When MNCs perform the activity of knowledge transfer, it would be more difficult to transfer tacit knowledge to their subsidiaries since tacit knowledge is embedded in certain people and specific contexts. Conversely, when the sharing knowledge is explicit knowledge, since explicit knowledge could be easily codified, it might be not so hard for MNCs to transfer their explicit knowledge from headquarters to subsidiaries.

Hypothesis 1: The nature of knowledge has an effect on knowledge transfer.

Motivation: An activity of knowledge transfer involves two subjects: one is knowledge owner, and the other is knowledge receiver (Davenport & Prusak, 1998; Hendriks, 1999). Sometimes, knowledge owner has willingness to share knowledge, but knowledge receiver does not have willingness to learn (Argyris, 1991; Quinn et al., 1996); or knowledge receiver has strong willingness to learn, however, knowledge owner does not want to share his or her valueable knowledge (Koskinen et al., 2003). Either of above two situations may lead to a failure knowledge transfer (Beckman, 1999). Therefore,

if we want to purchase a successful knowledge transfer, we must be sure both subjects have strong motivation to proceed with knowledge transfer. It means that knowledge owner must have intense motivation to share while knowledge receiver must have intense motivation to learn.

Hypothesis 2: The motivations of both knowledge owner and receiver have a positive effect on knowledge transfer.

Absorptive capacity: Cohen and Levinthal (1990) address the concept of absorptive capacity which means the level of an organization could recognize and absorb external knowledge, and apply it into commercial ends. For MNCs, subsidiaries like members within a global network and subsidiaries can learn from the activities of knowledge transfer among affiliations. However, if the received-knowledge subsidiary has poor absorptive capacity, it might ruin the progresses of knowledge transfer due to its poor capabilities to value, assimilate and apply new knowledge into daily operations. Therefore, poor absorptive capacity for a subsidiary might lead to the failure of knowledge transfer (Szulanski, 1996). On the contrast, if the subsidiary could have a higher level of absorptive capacity, maybe it could proceed with activities of knowledge transfer better.

Hypothesis 3: The absorptive capacity of the subsidiary has a positive effect on knowledge transfer.

Interaction activities: In fact, organizations cannot really learn, they learn through its employees. Some interaction machines like frequently communications, meetings, and visits etc. offer very good chances for employees to learn from each other during the process of knowledge transfer activity (Kogut & Zander, 1992; Szulanski, 1996). Therefore, increasing frequency of social interaction among employees who are from knowledge owner units and knowledge receiver units might thus be benefit for the performance of knowledge transfer. In addition, interaction activities could be more important for transferring tacit knowledge (Bresman et al., 1999), because absorbing tacit knowledge needs to spend more time on the learning activities in person.

Hypothesis 4: Interaction activities (e.g., Communications, meetings and visits) have a positive effect on knowledge transfer.

Moderator of industry type: Moreover, we expect that there exist different patterns of knowledge transfer between high-tech industry and traditional industry. In the recent years, both industries' MNCs are enthusiastic to set up new manufactories from NIEs to developing country. Due to the different nature of industry characteristics, they must have varied way to perform their knowledge transfer activities, and face different problems and impediments; however, current studies still lack of well discussing with this issue.

Hypothesis 5: There exit different patterns of knowledge transfer between high-technology industry and traditional industry.

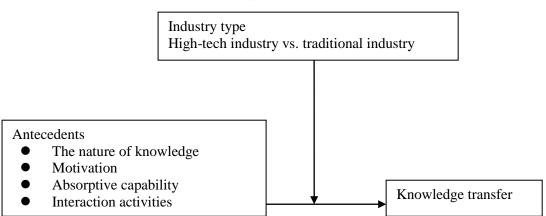
We propose a conceptual model as figure 1 for the future work.

DISCUSSION

In the field of international business, knowledge transfer has become a very important issue for researchers to study (Foss and Pedersen, 2004). In this proposal, we consider our conceptual model has three contributions comparing to previous studies. First, we discuss the antecedents of knowledge transfer with a more comprehensive view. Actually, each of antecedents of this study maybe has been discussed in the previous studies (e.g., Lyles & Salk, 1996; Gupta & Govindarajan, 2000). However, none of these previous studies have discussed the four knowledge-transfer antecedents together in the context of transferring knowledge from headquarters to foreign subsidiaries. Therefore, depending on the effort of previous studies, we further sum up and propose a more complete model for the future studies. Second, we propose that industry type should be considered as an important moderator for the relationship between knowledge transfer and its antecedents. In fact, the moderating effect of industry type has always been ignoring by previous studies. We suppose that there exist different patterns of knowledge transfer between High-tech industry and traditional industry. For example, maybe a subsidiary's absorptive capability would be more positive related to the performance of knowledge transfer if the subsidiary is belonged to High-tech industry compared to traditional industry. Third,

since most of previous studies related to cross-country knowledge transfer are using MNCs in developed countries as the empirical samples, when we use NIEs' MNCs as the empirical sample in the future, it can also let us to more generalize and confirm the causal relationships of knowledge transfer and its antecedents.

Figure 1 Conceptual Framework



REFERENCES

Argyris, C. 1991. Teaching smart people how to learn. *Harvard Business Review*, 69(3): 99-110. Beckman, T.J. 1999. The current state of knowledge management. In J. Liebowitz (Ed.), *Knowledge management handbook*: 17-22. Florida: CRC Press LLC.

Bresman, H., Birkinshaw, L., & Nobel, B. 1999. Knowledge transfer in international acquisitions. *Journal of International Business Studies*, 30(3): 439-462.

Cohen, W.M., & Levinthal, D. 1990. Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35(1): 128-152.

Davenport T.H., & Prusak, L. 1998. *Working knowledge*. Boston Massachusetts: Harvard Business School Press.

Davidson, W.H. 1983. Structure and performance in international technology transfer. *Journal of Management Studies*, 20(4): 453-466.

Foss, N.J., & Pedersen, T. 2004. Organizing knowledge processes in the multinational corporation: An introduction. *Journal of International Business Studies*, 35(5): 340-349.

Gupta, A.K., & Govindarajan, V. 2000. Knowledge flows within multinational corporations. *Strategic Management Journal*, 21: 473-496.

Hendriks, P. 1999. Why share knowledge? Knowledge and Process Management, 6: 91-100.

Kogut, B., & Zander, U. 1992. Knowledge of the firm, combinative capabilities and the replication of technology. *Organization Science*, 3(3): 383-397.

Koskinen, K.U., Pihlanto, P., & Vanharanta, H. 2003. Tacit knowledge acquisition and sharing in a project work context. *International Journal of Project Management*, 21(4): 281-290.

Lyles, M.A., & Salk, J.E. 1996. Knowledge acquisition from foreign parents in international joint ventures: An empirical examination in the Hungarian context. *Journal of International Business Studies*, 27(5): 877-903.

Mansfield, E., & Romeo, A. 1980. Technology transfer to overseas subsidiaries by U.S.-based firms. *Quarterly Journal of Economics*, 95: 737-750.

Nonaka I., & Takeuchi H. 1995. The Knowledge-creating company. NY: Oxford University Press.

O' Dell, C., & Grayson, J. 1998. If only we knew what we know: The transfer of internal knowledge and best Practice. NY: Free Press.

Polanyi, M. 1966. *The tacit dimension*. London: Routledge & Kegan Paul.

Quinn, J.B., Anderson, P., & Finkelstein, S. 1996. Managing professional intellect: Making the most of the best. *Harvard Business Review*, 74: 71-80.

Szulanski, G. 1997. Exploring internal stickiness: Impediments to the transfer of best practice within the firm. *Strategic Management Journal*, 17: 27-43.

Winter, S. 1987. Knowledge and competence as strategic assets. In D.J. Teece (Ed.), *The competitive challenge: Strategies for industrial innovation and renewal*: 159-184. NY: Harper and Row.

REVISITING INFORMATION AS BUSINESS ASSET IN THE GLOBALIZED ECONOMY: LEGAL AND JUDICIAL NOTES

Sonny Zulhuda Multimedia University, Cyberjaya, Malaysia sonny@mmu.edu.my

ABSTRACT

In today's globalized economy, the way people store, reformulate and process information – and eventually generate revenues out of it, had marked the shift of attention from a raw material-based and labor-exploiting business to the information and knowledge-based entrepreneurship. Information is increasingly becoming not only a buzz-word for executives but also the goose that lays the golden eggs. In response to this trend, this paper attempts to do two things; first, revisiting the notion of information as a business asset, and secondly, analyzing how this notions is responded by the law. The first part seeks to reconfirm that information is the new big thing in today's business that is characterized by globalization, digitization and deregulation of rules. The second describes and analyzes how the law – notably at the judges' hands– contributes to the strengthening of this notion by tendency to recognize the proprietary status of information – something that is not so well established just yet. The thesis here is that the law is in a changing mode. International and Malaysian cases are referred. It is argued that the lawmakers and all law stakeholders should give a serious thought about this so as to reshape the law into the more information age-friendly one.

INTRODUCTION

"Today, the defining character of a rich or poor is based on its economic wealth and the state of its industrialization. In the future, the determining character may be the accessibility to information resources and the use they are put to... informatization rather than industrialization may be a better reflection of the development of nation." (Mahathir Mohammad).

In today's globalized economy, information has become the lifeblood of the organizations: government, private, commercial and non-commercial entities alike. The way people store, reformulate and process information – and eventually generate revenues out of it, had marked the shift of attention from a raw material-based and labor-exploiting business to the information and knowledge-based entrepreneurship. These intangible assets, known as information assets, are due to generate more potential, such as the goose that lays the golden eggs.

The subsequent sections seek to do two things; first, revisiting the notion of information as a business asset, and secondly, analyzing how this notions is responded by the law. The first part seeks to reconfirm that information is the new big thing in today's business that is characterized by globalization, digitization and deregulation of rules. The second describes and analyzes how the law – notably at the judges' hands—contributes to the strengthening of this notion by tendency to recognize the proprietary status of information—something that is not so well established just yet.

The laws discussed here are mainly those which are shaped by judges in various jurisdictions, including Malaysia. While most of arguments are clearly inn favor of protecting information assets, it is however not clear as to whether or not information is regarded as *property* that deserves proprietary legal rights. The law is somewhere at the crossroad. It is further argued that the lawmakers and all law stakeholders should give a serious thought about this so as to reshape the law into the more information age-friendly one.

The Information Age

The term 'Information Age' supposedly brings along simple equation. In the Information Age lives information society, where the information becomes the main asset of business and the most valuable property of individuals. It is where the politicians battle to control the source of information, and as such where the technologists race to create the most powerful tools and devices to keep, store, process and exploit the information. It is where professionals are known as information workers, and

furthermore in macro level, it is where the society is demographically divided into the information-rich and information-poor. That is the equation of information age.

Indeed, the equation is simple, but the reality is more complex. The discussion of Information Age in this paper is nevertheless limited to the economic perspective: a fundamental proposition here is that information is regarded as a commodity. Like other commodities, information is an object of trade, and can therefore generate profits. In other words, the economic approach is used to define the economic aspects of information age, namely the rise of new wealth resource for any individuals or any given society.

In information age economy, the fundamental sources of wealth are knowledge and information rather than natural resources and physical labor. As Thomas Stewart (1997: p.12) commented, in this new economy, "Knowledge has become primary ingredient of what we make, do, buy and sell. As a result, managing it – finding and growing intellectual capital, storing it, selling it, sharing it – has become the most important economic task of individuals, businesses and nations." At a macro level, this phenomenon leads governments worldwide to redefine the direction to which they shall focus more for growth. In the United States, for example, the Americans are made aware that their economy has been shifting from agrarian base to industrial and now into an information base. As a scholar observed (Gomez-Meja, et.al., 2004: 439), in industrial economy, production processes are the focus of concern. In an information economy, on the other hand, the production and transmission of information is the focus.

This concern is commonly shared by many other governments, not less by Malaysia. Former Prime Minister Mahathir Mohammad (2000: 65) strongly acknowledged the crucial role of the information and knowledge being the new basis for power, wealth and influence in the Information Age. Besides, the visionary leader also argued that this information and knowledge becomes a new parameter in economic advancement and social progress. His observation cited in the beginning of this paper may serve important reminder for present and future leaders.

Information as Intangible Asset

As Thomas Stewart observed, the new Information Age is shifting the fundamental source of wealth from natural resources and physical labor to information and knowledge. He believes that success comes to companies that have the best information or wield it most effectively. In other words, information is a very powerful asset.

The same view has also formed the presumption in this paper. It is believed that information is an invaluable asset for individuals and organizations alike. In general, good information reduces costs and saves time by avoiding duplicative efforts and preventing unproductive activities. Good information also helps and improves decision making, which proves very crucial for corporate life. When it comes to business perspectives, information is needed to establish strong and fruitful relationship between businesses and customers.

As it was noted by Hand and Lev (2003: 1) some scholars, wealth and growth in modern economies are driven primarily by intangible asset. 'Assets' are everything owned economically by a company that has monetary value (Daum, 2003: 16). Thus, an 'intangible asset' is 'everything that is not physical or investment, but is of value to the company'. They are 'claims to future benefits that do not have a physical or immediate financial form' that include patents, bio-engineered drugs, brands, strategic alliances, customer data lists, a proprietary cost-reducing Internet-based supply chain (Hand & Baruch, 2003).

Intangible asset is therefore a company's intangible resources and in contrast to tangible assets and financial capital, this class of assets is becoming an ever more important basis for the creation of economic value and increasingly creates a competitive advantage for companies and economies. And this is all just a logical consequence of the tremendous change of the information economy. The driving factors to the emergence of these intangible assets are neatly summed up by Professor Baruch Lev from the New York University and his colleague as an intensified competition brought about by the globalization of trade, far-reaching deregulation, and ever faster technological changes.

Thus, firms are radically changing their business model, and many of these changes involve or create intangibles. What happens next, one can guess, is that the firms decided to substitute intangibles for physical assets and accelerate the pace of innovation by exploiting more on these

intangible assets. The increasing commercial value that develops over personal data may provide the best example. Businesses, for instance, do value highly information about their customers and the consumption patterns of those customers.

At organizational and corporate levels, intangible assets are no more than just accountants' businesses; they naturally become among top-level management's issues. Intangible assets are now important topic of the corporate boardroom (Haller & Spicer, 2002). The reasons for this are because the intangible assets can generate additional revenue streams and the fact that poorly managed intangible assets prove costly and very risky for the company. It was noted that the American Society for Industrial Security and PriceWaterhouseCoopers (PWC) indicated that the cost of the theft of trade secrets to Fortune 1000 American business was over US \$ 45 billion in 1999. Ironically, it turns out that due to the fact that such information assets are so economically and commercially valuable, they are then subject to malicious attempts of fraud and abuses.

This emergence of the intangible assets is also felt at macroeconomic level. In 2002, the then US Federal Reserve chairman Alan Greenspan testified that intangibles are also playing a major macroeconomic role, 'changing the growth and cyclical dynamics of national economics'. Thus, not surprisingly that today in the US, as reported in the Economist (7 October 2006), intangible assets account for more than half of the market capitalization of America's public companies, and another analyst has calculated that the intangibles have shot up from 20% of the value of companies in the S&P 500 in 1980 to around 70% today.

In Malaysia, there has been a strong indication that the Government is redirecting its focus to new emerging technologies to form a strong knowledge base and human capital. Having realized the value of intangible assets including information assets and human capital, the present administration of the Government of Malaysia's has geared up a more evident concern over the development of human capital. It made it clear that the country's economy will become more centered on human capital, particularly with increasing competition from globalization and progressive market liberalization. With the Ninth Malaysia Plan, the development of human capital is made one of key thrusts of the ongoing development plan. All these policies are strong evidence that the intangibles are already a big thing in the country and must not be overlooked.

The Characteristics of Information Assets

The recognition of value in information calls for the need to understand unique characteristics of information assets (Oliver-Pascual, 2002). Without such understanding, the information owners may risk loosing the advantages of the asset due to inability to control the access to such information. To describe how different its characteristics is from the traditional assets, Daum (2003: p.35) for instance showed that the traditional economics theory of 'the law of diminishing returns' does not apply to information asset. Instead, the opposite applies, i.e. 'the law of increasing returns'. Thomas Stewart (1997: 170-173) is more particular as to the unique characteristics of knowledge and information assets compared to the traditional ones. His observation is summarized as follows:

- Information is a public good; it exists independent of space, and it does not prevent two or more people from obtaining the same information. It is noted that this chance of easy duplication can pose a serious threat to the integrity of information asset.
- Abundance factor, which means, that information increases in value because it is abundant, not because it is scarce.
- Unique cost structure: producing the first copy is disproportionately high compared to the cost of further copy, e.g. books, software or movie. On this point, Rubin and Lenard (undated: 11) observed that 'an important economic property of information is that, once produced, it can be used multiple times at a low marginal cost without any decrease in its value.'
- There appears to be no meaningful correlation between knowledge input and knowledge output; i.e. the value of information asset is not necessarily related to the cost of acquiring it. For instance, the benefits of training are unrelated to its expenditure, or the competitive advantage gained by an invention may be unrelated to its creation spending.

With a handful of uniqueness discussed above, it is highly desirable that the corporate entities reexamine the resources at their disposal. They should be able to recognize and identify the value of their intangible assets. Only when they are clear with the amount of those values, it is possible to

quantify the needs for information security, and therefore it enables them to take relevant steps actions to protect their assets. As one information security expert (Pipkin, 2000: 13) rightly put it, 'it is the use of information which primarily distinguishes one organization from another, which will determine its success or failure, and which must be protected so that the organization will survive.'

Imposing the Legal Perspective: Is Information a Property?

One mounting problem is there to be resolved: is information property? Can information be 'legally' owned and traded? These questions quickly arise primarily because information is intangible and it is difficult to control its spread (Heverly, 2003). Clarity on this issue is necessary because it may critically determine what the information owners/users can or cannot do. From the opposite side, it may clear the border of liabilities such as that of illegal acquisition, intrusion, infringement and abuses.

The proprietary status under the property right regime may also serve as an incentive for the information owner and information developer. It is argued that the proprietary right helps to regulate the consumption and use of the information, and to guarantee the efficient use of the works by allowing their commercialization (Elkin-Koren & Salzberger: 52). This issue requires examination of the basic concept of property and ownership and its relation with 'information'. Property is something which can be owned, or an aggregate of rights having money value, which includes 'money and all other property, real or personal, including things in action and other intangible property' (Curzon, 1995). Property is also known as a bundle of right, which describes what people may and may not do with the resources they own. Roger J. Smith (2000: 3) from Magdalen College, Oxford wrote that there are two principal elements in a property. The first concerns the attribute of property that it can be owned, i.e. it can be bought and sold. And the second element concerns the right to exclude others.

It follows that if one can establish that an information asset is legally speaking his property, thus he can rightfully trade such information assets and he also has the right to exclude or stop others from using or misusing his information asset. It also follows that whoever uses or attempts to use the information that belongs to someone else can be held legally liable for either civil or criminal actions.

When it comes to information, such proposition poses certain problem. Due to its intangibility, can information be owned? This does not seem able to comply with the earlier attributes of a property. Nevertheless, there is an established embodiment of proprietary status for certain types of information, that is, those which are attributed as intellectual property (IP) (Bainbridge, 1999). IP is a property in legal sense: it is something that can be owned and dealt with. IP rights give rise to a form of property that can be dealt with just as with any other property, and which can be assigned, mortgaged and licensed.

'Information is Not a Property' - the Opposing View

There are certain qualifications where information turns to become an intellectual property, thus eligible for legal protection under IP law regime. If eligible, the information becomes a property, i.e. intellectual property. Having said that, question remains as to the remaining types of information which are not necessarily eligible to the protection of IP. Can these non-IP information assets be given a proprietary status? Or in other words, can they be protected under a property law? This is the focal area where the proprietary status of information seems unsettled, if not sharply debated. Such concern was pronounced by Latham C.J. in a 1943 case of *Federal Commissioner of Taxation v. United Aircraft Corporation*:

"I am unable to regard the communication of information as constituting a transfer of property. Upon such a communication the transferor still has everything that he had before, and the transferee continues to hold what he has received... Knowledge is valuable, but knowledge is neither real nor personal property. A man with a richly stored is not for that reason a man of property."

The tendency to refuse a proprietary right in information has been shared by many other judges in various jurisdictions with various reasons and consideration. It was argued that 'information is not property in normal sense because it is normally open to all who have eyes to read and ears to hear'. Due to this, it is not possible to steal information. In a Canadian court, the absence of deprivation to the owner was also one of the reasons to deny the proprietary status of information in

question thus provided no ground for conversion and theft. Pamela Samuelson (1991) from the University of Pittsburgh noted that this attitude had been traditionally followed by American judges in many criminal and civil laws alike. This idea of non-proprietary nature of information is seen as a logical consequence owing to its intangibility (Barlow).

The Proponent Views

From the above judicial reluctance, it can be commented as following: firstly, there is a tendency of courts to overlook the special nature of information asset. To hold a property perspective under a traditional nature of physical property may just lead to reluctance to recognize the value in its intangibility. By right, being intangible does not preclude another importance aspect that may well provide stronger reason for according a proprietary status, i.e. the labor put in creating such information and the utility it has over the owner specifically and to the economy in general. Obviously, the labor and utilitarianism theories apply here.

Furthermore, it is noted that because of the fact that many types of information are not eligible for protection under intellectual property right, there is a least favor law can do: by assigning a proprietary status, those information assets can effectively be protected under other grounds such as conversion, contract, confidence and even a criminal law.

Is there any hope? One may wonder – and may be relieved that there is. In the absence of statutory initiatives on this aspect of law, judges, across several common law jurisdictions, are using several competing taxonomies to grant recognition to the proprietary status of information amid with various reasons and approaches. The earliest of them can be found in the words of Lord Cottenham LC in an 1849 English case of Prince Albert v. Strange. The court in this case liberally employed notions of property in fashioning the basis of an action to protect confidences. It was held that both the work and the information represented in the work belonged to the owner. Other judges' decisions and judicial notes look into this issue with various approaches and for various purposes. It is observed, for example in an English case, trade secret may not be taken away by a servant because they constitute his Mater's property. Know-how has also been treated by another English court as a discrete form of corporate property for the purpose of taxation. Meanwhile, the majority of law Lords in the case of Boardman v. Phipps cited before was prepared to consider confidential information about share prices obtained by the trustees as property of the trust.

In certain situations, court had also entitled proprietary right to information based on the manner such information is generated or used by its owner while carrying out his affairs. On this basis, certain information becomes property because of the confidentiality being imposed by the owner to receiver of such information, for example in the context of employment. As touched earlier in the case of Boardman v Phipps, Lord Hodson in delivering the majority view noted that information of its nature can properly be described as property. He observed that 'know-how' in the commercial sense is property which may be valuable as an asset. Nevertheless, his lordship emphasized that this proprietary nature is associated with the confidentiality acquired by such information.

The Position in Malaysia

In Malaysia, there was a breakthrough legal reform introduced by the court in 1998. They had initially come up with a spectacularly loose approach in determining the proprietary status of information. It is spectacular for two reasons: first, this case came from Malaysian court which is relatively new to the debate of proprietary nature of information as such. Secondly, the judge's observation was considerably liberal and encouraging. Kamalanathan Ratnam J. examined the proprietary nature of information in order to form basis for a claim for conversion. The important quote is as follows:

"I do not see why a claim for conversion cannot be upheld in respect of information. Although I note that there has been reluctance by the courts to treat information as property, it is my conclusion that due to the rapid and highly volatile revolution in technology and with the concept and subsequent incept of the Multimedia Super Corridor (MSC) that our country has embarked upon to launch a clear vision 2020, the courts must take a broader view of the meaning of property and include information as such... I am therefore willing to hold that

information can form the basis of an action of conversion whether or not it is technically a part of intellectual property."

In another important note, the judge explained the ratio behind such decision: that a mere dealing with property in a way inconsistent with the rights of owner is sufficient, hence the possession of property or deprivation of use may be irrelevant.

It is encouraging that the court had expanded the meaning of property to include information as such: so, not only IP will be protected as 'property' but also other types of information. It also helped by redefining infringement of the right to information property so as to include inconsistent use of such information against the owner's right, regardless the absence of deprivation to the owner of such information.

Even though the Electro Cad Australia's case had initially considered issues involving confidential information, yet the above decision has taken the discussion of whether information is property to another level: broader and more flexible. It is submitted that the court's decision, observation and ratio given in this case are very important for the proliferation and protection of information asset. In Malaysia, this development of property law can be taken further to establish better protection to information assets in this country.

CONCLUSIONS

To sum up with the preceding sections, the multiplicity of approaches and ratios taken by courts in various jurisdictions above could be indicative that the meaning of property is far from fixed and certain. Nevertheless, one thing is quite certain, which is the flexibility of the notion of property, especially in respect with information (Lipton, 1999). It is argued that not only the law needs to regulate people behavior towards the use and exploitation of information, but also it needs to redefine the concept of property itself, and moving beyond the concern over intellectual property. In the very age where information completes the equation of life, it is very important to accord proprietary status on information assets. We are indeed witnessing the concept of property law evolves and expands due to this societal and technological demands. Apart from that, the writer also argued that the law on confidential information should also be readily modified to accommodate the myriad of amorphous mass of information asset, as long as they can be properly called an asset which deserves some protection for the owners.

Having said that, one finds the situation is not completely satisfactory. Even though later judgments examined earlier indicated the overall change of courts' attitude towards recognizing information as property, this development warrants some parliamentary initiatives too. To some extent, case law is nevertheless insufficient to ensure a stable long-term protection. Case law is by nature sporadic, centered at solving case by case on its own contexts and circumstances. It is therefore reactive rather than proactive, thus this aspect of law without statutory basis may be lagging behind the fast pace of information technology revolution.

In the context of Malaysia, our statutes are also silent as to the applicability of property concept to the information. The most that we have is laws that regulate people's behavior to the information, but not on the nature of the information itself (See, for example, the Malaysian Computer Crimes Act 1997 and Communications and Multimedia Act 1998). Therefore it is rather unfortunate to leave the development of this legal aspect in the hands of court. For this reason, one needs to relook at our legal landscape – both existing and upcoming ones – to see where statutes can help and promote more protection to the information assets; hence more works and research in this area are warranted. At the end, this paper strongly recommends further initiatives to be taken by law stakeholders to provide practical legal framework to ensure the information asset flourish in the more globalized business world.

REFERENCES

Bainbridge, D.I. 1999. *Intellectual property*. London: Financial Times-Pitman Publishing. Barlow, J.P. Selling wine without bottle: The economy of mind on the global net. Available at http://homes.eff.org/~barlow/EconomyOfIdeas.html. (Accessed April 24, 2007). Curzon, L.B. 1995. *Dictionary of law*. Kuala Lumpur: ILBS.

Daum, J.H. 2003. Intangible assets and value creation. West Sussex: Wiley.

Elkin-Koren, N., & Salzberger, E.M. 2004. *Law, economics and cyberspace: The effect of cyberspace on the economic analysis of law*. Cheltenham, UK: Edward Elgar.

Gomez-Meja, L.R. (Ed.). 2004. Managing human resources. New Jersey: Pearson.

Haller, M.W., & Spicer, L. 2002. Beyond IP: The intellectual and intangible boardroom. In Wild, J. (Ed.), *Building and enforcing intellectual property value: An international guide for the boardroom* **2003**: 33-37. London: Globe White Page.

Hand, J.R.M., & Lev, B. 2003. *Intangible assets: Values, measures and risks*. Oxford: Oxford University Press.

Heverly, R.A. 2003. The information semicommons. *18 Berkeley Technology Law Journal*, 18 (1127).

Lipton, J. 1999. A revised property concept for the new millennium? *International Journal of Law and IT*. 7 (171).

Mahathir Mohamad. 2000. **Regional cooperation and the digital economy**. Kuala Lumpur: Pelanduk Publications.

Olivar-Pascual, G. 2002. Intangibles: an interdisciplinary approach. In Wild, J. (Ed.), *Building and enforcing intellectual property value: An international guide for the boardroom 2003*: 386-389. London: Globe White Page.

Pipkin, D.L. 2000. *Information security: Protecting the global enterprise*. New Jersey: Prentice Hall. Rubin, P.H., & Lenard, T.M. undated. *Privacy and the commercial use of personal information*. Boston: Kluwer Academic Publisher.

Samuelson, P. 1991. Is information property? (Legally speaking). *Communications of the ACM*, 34, No. 3: 15(4).

Smith, R.J. 2000. *Property law*. Harlow, England: Pearson Education Ltd.

Stewart, T.A. 1997. *Intellectual capital*. New York: Doubleday/Currency.

Wooldridge, A. The battle for brainpower. Article in *The Economist*, October 7th, 2006.

Case Laws

Boardman v. Phipps [1966] 3 All ER 721, and [1967] 2 AC 90.

ELECTRO Cad Australia Pty Ltd & Ors v Mejati RCS Sdn Bhd & Ors [1998] 3 MLJ 422

Federal Commissioner of Taxation v. United Aircraft Corporation {1943-1944) 68 CLR 525.

Herbert Morris Ltd. v Saxelby [1916] 1 AC 688

Oxford v. Moss [1978] Cr App R 183.

Prince Albert v. Strange [1849] 1 Mac & G 25.

R v. Stewart [1988] 50 DLR (4th) 1.

Rolls Royce Ltd. v Jeffrey [1962] 1 All ER 801.

Technopreneur Development Framework In Malaysia

Mohd Abdullah Jusoh
Universiti Pendidikan Sultan Idris, Tanjong Malim, Perak
E-mail: mabdullah@upsi.edu.my
Hazianti Abdul Halim,

Sultan Idris Education University, Malaysia

ABSTRACT

In recognizing the need to enhance the MSC's efforts to develop Malaysian SMEs and entrepreneurs in the ICT and multimedia industry and other strategic high technology industries, the government launched the Technopreneur Development Flagship Application in November 2001. In this case, even though this Flagship Application was introduced in 2001, the strategy to develop Malaysian ICT and multimedia SMEs to become world-class companies has been formulated since 1996 when the government launched the MSC. In this regard, it can be said that the launch of Technopreneur Development Flagship Application is done in timely manner that is in tandem with global trends where nations are embracing ICT to accelerate their public and private processes to a greater efficiency and effectiveness. As there is need to have a more concentrated effort nationwide to support entrepreneurs around the country, Technopreneur Development Flagship Application acts as one of the important measures in doing so.

INTRODUCTION

In this world of accelerating economic globalization, advances in science and technology continue in the blink of an eye, and knowledge is recognized as a core competence in accumulating wealth (Lalkaka, 2002). From a business perspective, the shift toward increasingly automated business process and communication based on for instance the transfer of electronic data is designed to achieve greater efficiency and effectiveness in business processing (Hall, 2001). Around the world, we can see that nations have embraced information and communication technology (ICT) as a means to enrich public and private sector processes, while providing citizens with easier access to these services (Fang, 2002). The emphasis on ICT has also boosted Internet penetration and literacy rates as well as investments in research and developments. The emergence of technological innovations has opened up to new opportunities and challenges to a nation's economic development (Yunos, 2002). It is worth to mention that information technology has becoming an important fact to the business community as it helps improve the business processes.

The manifestation of information technology among business community in the global market has encouraged Malaysia to secure ICT as a means of modernization of the business process. The advent of Internet and its related high tech industries has also introduced new avenues for entrepreneurship in Malaysia. It is not uncommon nowadays for multinational corporations or small and medium-sized businesses to opt for the new technology as both categories of firms act as driving force in catalyzing nation's economic growth. Realizing the involvement of small and medium-sized enterprises (SMEs) in the economic development, Malaysia has introduced a special Flagship Application that acts as a mechanism to realize the benefits of SMEs to the nation. Being unique and distinguished from other countries, Technopreneur Development Flagship Application was introduced with the underlying objective to develop a robust SMEs sector in Malaysia to make strong contribution to GDP. Technopreneur Development Flagship Application acts as a mechanism to improve domestic productivity and provide access to new market as well as to increase innovation through information technology adoption (www.mdc.com.my). This Flagship Application is associated with the Multimedia Super Corridor (MSC) that was being developed in 1996 to help diversify the economy that will be able to transform Malaysia into knowledge-based society to meet the challenges of an ICT-driven future (Huff, 2002).

In Malaysian perspective, the term "technopreneurs" means technology entrepreneurs, which are represented by ICT and multimedia SMEs, seed level ICT and multimedia companies and start-ups ICT and multimedia companies. Hence, the introduction of Technopreneur Development as the

new Flagship Application has demonstrated that the government has extended the opportunity especially among SMEs to participate in the local ICT market. By focusing on the technology-based SMEs, technological adoption and ICT advancement will act as channels to expand and accelerate the business as well as the people. This new Flagship Application bears vital importance to the growth and development of entrepreneurs in the knowledge-based economy. Besides, new structures and strategies are being explored and formulated to help technology-based SMEs grow and to offer a promising future within the global marketplace. In this case, SMEs will be able to expand themselves to compete in this borderless world, at the same time create, and add value to their business in order to achieve sustainability.

LITERATURE REVIEW

Entrepreneurs and Technology

As technological advance enables the economy to obtain more products and services, the innovations from entrepreneurs have resulted in the introduction and commercialization of a new product or process. According to McConnel and Brue (1999), technological advance is a three-step process of invention, innovation, and diffusion, which are explained below:

(i) Invention

It is the most basic element of technological advance. It is the first discovery of a product or process by imagination, ingenious thinking, and experimentation and the first proof that it will work.

(ii) Innovation

It is a second element of technological change, draws directly on invention. Innovation is the first successful commercial introduction of a new product, the first use of a new method, or the creation of a new form of business enterprise. Innovation can be in the form of product innovation or process innovation.

(iii) Diffusion

It is the innovation through imitation or copying. In this case, to take advantage of new profit opportunities or slow the erosion of the profit, new and existing firms imitate the successful innovations of others.

In this case, technological advance arises from intense rivalry among individuals and firms, which motivates them to seek and exploit new profit opportunities or to expand existing opportunities.

The Importance of Technology to SMEs

The emphasis on information and communication technology (ICT) has boosted investments in research and developments as well as Internet penetration and literacy rates. The emergence of technological innovations has opened up to new opportunities and challenges to businesses. Lalkaka (2002) defined technological innovation as the process that drives a concept towards a marketable product or service. This holds true as it contributes towards raising productivity and competitiveness (Lalkaka, 2002). In this regard, technological adoption and advancement act as channel to expand and accelerate the businesses as well as the people. Businesses will be able to expand themselves to compete in this borderless world, at the same time create, and add value to their business in order to achieve sustainability.

The rapid advancement of technology has encouraged small and medium-sized businesses (SMEs) to utilize the opportunity to establish, expand, as well as prosper their businesses. Extensive involvement of SMEs in generating revenue to the nations have shown that they are capable of generating employment opportunities, mobilizing the local resources, creating a balanced and affluent society and playing a significant complementary role to large firms and eventually strengthening the economic development of the nation as a whole (APEC, 2001). However, the brisk movement of technology has not always been good for some. This is because those who are already strong are prospering and others falling behind. As such, it is important for SMEs to plan their business carefully so that the changes in the technology and environment will always bring in positive returns.

Entrepreneurs versus Technopreneurs

McConnel and Brue (1999) defined entrepreneurial ability as the human resources that combine the other resources such as land, labor and capital to produce a product, make non-routine decisions, innovative and bear risks. Entrepreneurship is a field studied by economist, psychologists, and sociologists whose paths rarely cross (Leibenstein, 1987 in Michail, 2000). Stevenson et al. (1994) in Suzuki et al (2002) defined entrepreneurship as the pursuit of opportunity with regard to resources currently controlled. Drucker (1985), a management theorist in Yarzebinski (1992) notes that entrepreneurs see change as the norm and as healthy and they always search for change, respond to it and exploit it as an opportunity. In simple term, Drucker, (1985) believed that entrepreneurs act as agents of change and defined entrepreneurs as individuals that create a new market with a new customer.

This motion is supported by Schumpeter (1947), an economist in Miller and Garnsey (2000) that "...the entrepreneur and his function are not conceptualize: the defining characteristic is simply the doing new things or doing of things that are already being done in new way (innovation)...". These innovations can be in the forms of new products, new production methods, new markets or new forms of organization. Innovation is the tool all entrepreneurs utilize across their environments and exploitation of change is firmly rooted in innovation (Yarzebinski, 1992). Quite often, entrepreneurs form small new companies called start-ups: firms focused on creating and introducing a particular new product or employing a specific new production or distribution technique (McConnel and Brue, 1999). By adopting new technologies in an inherent organized, purposeful, systematic manner, the entrepreneur innovates (Yarzebinski, 1992).

By looking at the various definitions of entrepreneurs, it can be said that entrepreneurism is well documented in the literature but less for technical entrepreneurs (Foo & Foo, 2000). The issues of entrepreneurship are receiving the attention of government especially in Asia. In fact, entrepreneurship in parts of South and South East Asia has recently undergone rapid revitalization (Burnett, 2000). For instance, the government of Singapore has fostered technology-based entrepreneurs or popularly referred to as "technopreneurs" (Foo and Foo, 2000). The term technopreneurs arose from within Singapore culture to describe entrepreneurs who combine entrepreneurial skills with technology.

Various literatures use the term "technology-based entrepreneurs", "technical entrepreneurs", "high technology entrepreneurs" or even "high tech new ventures" to describe new business that combine entrepreneurial skills and technology (Florida & Kenney, 1988; Dahlstrand & Lindholm, 1999; Renko, Autio & Tontti, 2002; Oakey, 2003; Kakati, 2003). For instance, the United States emphasizes labels like high tech small firm or new technology-based firm for venture business while Japan legally recognizes new ventures as a firm that invest more than 3% of total sales in R&D (Sung et al. 2003). Other example includes technical entrepreneur, who originally trained as professional engineers but instinctively taught him or her to become expert business managers (Oakey, 2003). Technology-based entrepreneur is a process and formation of a new business that involves technology and these "technopreneurs" use technological innovations and translate such technology into successful products or services. Based on this perspective, the culture of innovation as discussed in the earlier section was nurtured but in this case, it is more focused on technological innovation.

The social context in which the entrepreneur operates also plays an important role in nurturing the culture of entrepreneurship. One of the ways is through embeddedness, where entrepreneurs are being embedded within the social structure of the area they operate. According to Jack and Anderson (2002), being embedded within the area provided the entrepreneurs with intimate knowledge, contacts, and sources of advice, resources, information, and support. By being embedded, it was easier to recognize and understand what was required and available. Hence, Jack and Anderson (2002) believed that being embedded in the social structure creates opportunity and improves performance of entrepreneurs because embeddedness enabled the entrepreneurs to use the specifics of the environment.

To make the creation process of technology-based entrepreneurs successful, a right and favorable environment is needed. For instance, to encourage the formation of technology-based entrepreneurs, business incubators are needed to act as the catalyst (Sung et al. 2003). Services offered by incubators such as office space and technical expertise are said as a means to promote the

formation of new technology-based small business (Yunos, 2002). Other instance includes Silicon Valley that has become a role model for many countries as a successful entrepreneurial habitat for a New Economy (Suzuki et al. 2002). As such, entrepreneurs play a vital role in realizing the benefits of the activities or processes such as incubated business, new technologies transferred and new manufacturing lines. The talent that entrepreneurs have to innovate makes them important in making the activities a success. Thus, entrepreneurs can innovate provided the correct environment exists (Yarzebinski, 1992).

TECHNOPRENEUR DEVELOPMENT FLAGSHIP APPLICATION

Objectives of Technopreneur Development Flagship Application

The Flagship Application is spearheaded by the Ministry of Energy, Communication, and Multimedia as the Lead Agency and is supported by the Multimedia Development Corporation (MDC) as the Implementation Agency. The Flagship Application is guided by the National Technopreneur Advisory Committee (NTAC) which comprise industry business leaders, academia and government representatives as its members. These members provide expertise in the area of finance, marketing, talent development and provide advice on the implementation, development, and progress of the Flagship Application. Technopreneur Development Flagship Application was formulated with a mission to develop "role model" companies in the MSC that will trigger the ultimate creation of a competitive cluster of ICT SMEs.

In addition to the major attributes that companies must posses, Technopreneur Development Flagship Application has formulated core objectives to be achieved. These objectives include:

- i) To spawn a critical mass of SMEs in the ICT and multimedia industries
- ii) To facilitate the growth of world-class ICT and Multimedia companies
- iii) o create the nuclei for the physical rollout of the MSC nationwide through the National Incubator Network
- iv) To spur the growth of the venture capital industry

These objectives are important to further help cultivate start-up companies and encourage the growth of existing ICT SMEs. As a by-product, this Flagship Application will create the nuclei for the physical rollout of the MSC nationwide through the National Incubator Network and will help spur the growth of the venture capital industry in Malaysia. With these objectives, Technopreneur Development Flagship Application will develop more talent through skill-based training programs, identify budding entrepreneurs, and avail the seed funds and grants for the SMEs. In relation to this, the government through Multimedia Development Corporation (MDC) has already undertaken development initiatives for entrepreneurs long before the introduction of this new Flagship Application. It is just that the Flagship Application is aimed at having effort that is more rigorous by various stakeholders to drive the growth of SMEs as they need the right talent and environment to prosper.

Technopreneur Development Framework

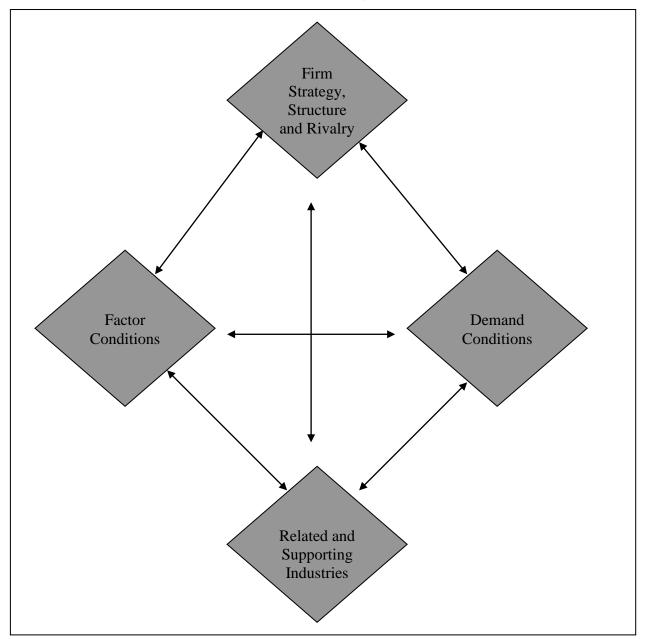
Various nations use various theories and frameworks to develop and grow the countries to their vision of success. Most importantly, various strategies are formulated to bring the nation to a higher economic growth and to accelerate the wealth creation process. In doing so, Malaysia has also come out with policies that employ convincing theories behind it. In developing Technopreneur Development Flagship Application, the underlying theory plays an important role as it shows more concentrated effort are put in place. In order to develop this Flagship Application, Malaysia has adopted Michael E. Porter's model of Determinants of National Competitive Advantage or popularly known as Porter's Diamond of National Advantage. Under this model, Porter (1990) argued that a nation could create new advanced factor endowments such as skilled labor, a strong technology and knowledge base, government support and culture. With diamond-shape diagram, Porter introduced factors that play significant role in establishing competitive advantage of a nation. The four

determinants are (1) factor conditions, (2) demand conditions, (3) firm strategy, structure and rivalry, and (4) related and supporting industries.

Figure 1 illustrates the determinants of national competitive advantage. From the figure, it can be seen that the four determinants are interrelated.

Figure 1

The Determinants of National Competitive Advantage



Source: Porter, Michael E., The Competitive Advantage of Nations (1990)

The four determinants are:

(1) Factor Conditions

Factor conditions concern with a motion that a country creates its own important factors such as knowledge resources, technological base, and infrastructures. To improve factor conditions, human and knowledge resources are needed. With human and knowledge resources, critical mass of innovation can be spurred. Besides human resources, capital resources and infrastructures are also important in developing technology-based entrepreneurs. For instance, business incubators provide infrastructures such as office space and professional services to help develop technopreneurs.

Therefore, the effectiveness of incubators as factor condition is important in ensuring the success of thetechnopreneurial process.

(2) Demand Conditions

A demanding local market leads to national advantage as indicated in Figure 1. Hence, it is important for a nation to develop a strong local market or internal market demand to expect global development. Various efforts have been put to align and improve local demand conditions. For instance, to support the local ICT industries, the nation has to address the perception that foreign-made products are superior to homegrown products. This is where the roles of technopreneurs as equilibrator and disequilibrator come in. If technopreneurs are able to introduce products or services to cater the local demand, the demand conditions could be improved.

(3) Related and Supporting Industries

This determinant of national competitive advantage concerns with competitive local supporting industries so that firms enjoy cost effective and innovative inputs. To improve these industries, research and development, and technology-based enterprise are needed. For instance, when business incubators provide infrastructures to technopreneurs, these technopreneurs still need capital to proceed. This is where the venture capital industry, which acts as supporting industries, comes in to enhance the development process. In this case, it is important to note that related and supporting industries are important in improving the factor conditions and these factors interact with each other to bring the benefits to the nation as a whole.

(4) Firm Strategy, Structure, and Rivalry

The last factor in Figure 1 concerns with industry structure where local conditions affect firm strategy and this strategy determines in which types of industries the firms will succeed. At this point, changes in firm structure and strategy are needed as local conditions affect firm's strategy. This is where the government influences the development of the technopreneurs. Incentives, procedures, and regulation set by the Malaysian government play significant roles in developing technopreneurs. For instance, there are certain rules—imposed by the government to protect local industry to improve economic conditions.

The four factors in Figure 1 indicate that the effect of one point depends on the others. In fact, the diamond is a self-reinforcing system where government plays an important role as a motivator to help firms improve their performances in bringing the nation to a competitive edge. Even though the government is not part of the diagram, the government does play an important role as an influencer. In Malaysian case, government policies, procedures, and regulations can influence all four factors in bringing the nation to its own place.

Based on Porter's (1990) model, the Flagship Application has formulated concentrated programs in developing technology-based entrepreneurs and ICT SMEs. These programs concern about organizing and providing necessary resources to facilitate and support ICT SMEs' rapid growth and long-term sustenance. Besides, these programs were introduced to make full use of the roles that technopreneurs play so that the roles can bring the benefits to the society and entrepreneur community at large. The programs that are available under this Flagship Application are associated with the four determinants of national competitive advantage.

Key Programs of Technopreneur Development Flagship Application

The key programs under the new Flagship Application are being developed and implemented to address both newly formed enterprises as well as existing technopreneurs to improve all the four determinants of national competitive advantage as presented in Figure 1. The programs are:

(1) Lead Generation Programs

This program focuses on two sectors i.e. public/commercial and institutions of higher learning (IHLs). As for public/commercial, this program aimed at finding a critical mass of innovation in local enterprises through research and development. These ideas and concepts will be turned into viable new ventures. These programs are further supported by the IHLs where program such as National Unipreneur Development Program that addresses the university entrepreneurs is being developed. The programs at the university also concentrated on research and development to be commercialized. In Malaysian case, the lead generation programs play important roles in improving the factors outlined in

Figure 1. This could be the reason why the lead generation programs focus on idea enrichment, research, and development to commercialize the products. Obviously, the lead generation programs act as the first step in achieving the objective of developing a critical mass of technopreneurs in Malaysia in the area of ICT and multimedia and other high tech industries.

(2) Funding

Technopreneur Development Flagship Application ensures that funding is available for the start-ups to grow by offering seed capital, venture capital, grants, and working capital loans. Seed capital and venture capital are available for companies that just have ideas or concepts that require fund for prototyping or viability testing. Venture capitalist also provide funds, management and networking assistance to encourage the formation of new business as this is one form of investment to the venture capitalist. In Malaysian scenario, venture capital industry is important in improving the related and supporting industry as shown in Figure 1. Therefore, to some extent, the funding programs could lead to the growth of venture capital industry and the success of technopreneur development process.

(3) National Incubation Development Program

Business and technology incubations system is important in promoting the setting-up of sustainable incubators, which act as catalyst to the start-up companies. These incubators help to "capture and cluster" technopreneurs throughout the country and at the same time help to generate a larger number of technopreneurs, ICT SMEs as well as start-up companies involved in ICT. National incubation programs serve purpose such as:

- i) Providing incubators with access to acceleration services such as business plan development, mentoring, training, and business advisory.
- ii) Managing the development of policies and sharing of strategies/best practices relevant to successful business acceleration.

Among the benefits of incubation programs are:

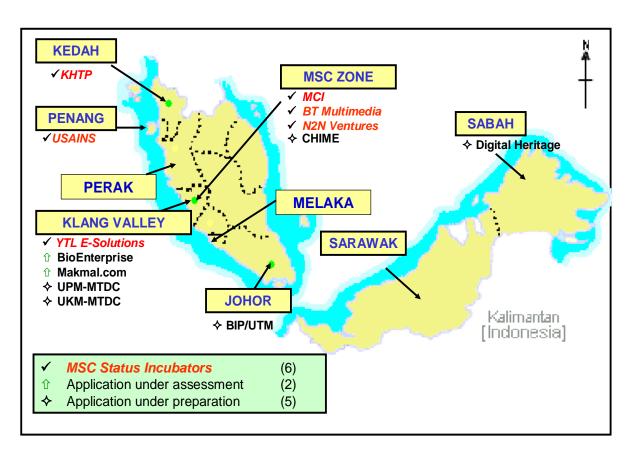
- i) Incubators that are members of the National Incubator Network (NIN) would present technopreneurs with the perfect place to develop and enrich their ideas and transform them into successful business. This could be because incubators provide proper place and various professional services to technopreneurs to develop their business.
- ii) Technopreneurs within and outside MSC will enjoy the same incentives under the Bill of Guarantees to ensure their competitiveness. In this regard, technopreneurs who are outside the range of MSC can also benefit from the incubation programs as the incubators are distributed throughout the country to cater the needs of technopreneurs.
- iii) Incubation programs allow technopreneurs to leverage from the community network through knowledge sharing. One of the ways to share the knowledge could be done through technopreneur portal that allows technopreneurs to interact with each other to discuss their problems or share new knowledge.
- iv) Technopreneurs would be able to gain benefit in terms of resources, knowledge and market access through joint effort and strategic partnership with international incubators.

As discussed earlier, incubators are important in developing Malaysian technopreneurs because they provide the factor conditions such as knowledge resources and infrastructures to develop technopreneurs successfully. Therefore, factor conditions as shown in Figure 1 could be improved to strengthen the Malaysia's competitive position. The progress of the incubation programs can be seen from the number of MSC Status incubators as shown in Figure 2. The MSC Status incubators are well distributed throughout the country as it can facilitate the formation and sustenance of technopreneurs around the country. To qualify for MSC Status incubators, there are certain criteria that need to be fulfilled such as the incubators must house tenants that are involved in ICT and multimedia business. The other eligibility criteria are appended in Appendix 3. The MSC Status incubators also enjoy the benefits such as network sharing platform in National Incubator Network (NIN) and incentives under Bill of Guarantees.

Based on Figure 2, there are six MSC Status incubators as at January 2003 with seven applications under assessment and preparation. The latest figures as at July 2003 are nine MSC-Status incubators, which include the three incubators that have completed the preparation and assessment process. The incubators are:

- 1) MSC Central Incubator
- 2) Kulim Technology Park Corporation Sdn Bhd
- 3) MT Multimedia (Malaysia) Sdn Bhd
- 4) N2N Venture Solutions Sdn Bhd
- 5) YTL E-Solutions Bhd
- 6) Makmal.com Sdn Bhd
- 7) Usains Tech Services Sdn Bhd
- 8) BioEnterprise Asia Sdn Bhd
- 9) Bureau of Innovation & Consultancy (BIP)

Figure 2
MSC Status Incubators as at January 2003



Source: Firdaus Abdullah, MDC, MSC Nationwide Roadshow, Kuching, Sarawak. 16 January 2003.

(4) Communication Programs

Communication programs concern with updating knowledge resources so that technopreneurs can communicate to improve their performance. The knowledge could be developed through network of interest group whereby this interest group shares their knowledge regarding the technopreneur development through skill-based training programs. The programs concern with:

- (i) Public, government and industry relation
- (ii) Technopreneur Portal

Under these programs, various services are provided to the entrepreneurs including business advisory and mentoring as well as group training for existing technopreneurs. Besides training, this program also presents platform for technopreneurs to share their experience to strengthen the business capabilities. Participants include public and private organizations as well as industry key players. In addition to training, communication programs establish a portal (www.technopreneurs.net.my) for technopreneurs around the country to communicate and exchange their knowledge.

(5) Market Access and Special Projects

Market access programs concentrate on market expansion for Malaysian technopreneurs. The purpose of this program is to ensure rapid market growth and penetration from within. This is done through strategic partnership between Malaysian and foreign companies. These programs aim at encouraging foreign companies to operate in Malaysia to represent Malaysia globally. Particularly, the process of strengthening the market base depends on both international representatives as well as strategic partnership as these programs enlarge the market. Most importantly, under these programs, technopreneurs would be able to sustain themselves to become a role model start ups by utilizing resources provided by the Flagship Application such as market development assistance to secure their growth. Therefore, the programs facilitate the growth of ICT and multimedia companies thus achieve the objective of the Flagship Application in the end.

The market development and expansion programs are suitable for both start-ups and existing technopreneurs because the programs aim at strengthening their market base in local market. Therefore, with strong internal market demand, the demand conditions could be improved in order to support the local ICT industries.

In summary, the Technopreneur Development Flagship Application has adopted the four determinants of national competitive advantage to formulate the programs. The programs can be linked together with the government that acts as influencer to ensure the competitive position remains. It looks like that various programs outlined by the Technopreneur Development Division tries to ensure the nation's competitiveness by taking into consideration the Porter's model as a guideline. By adopting Porter's model to design the programs, the importance of the programs in ensuring the success of technopreneurs can be enhanced. Therefore, the programs could bring benefits to technopreneurs and the society directly.

CONCLUSIONS

The findings indicated that the introduction of this new Flagship Application was associated with globalization and Eighth Malaysia Plan whereby the government has decided to create and nurture technology entrepreneurs. Under the Eighth Malaysia Plan, the government has decided to boost the growth of SMEs in information and communication technology industry through its various assistance programs. Besides, the findings demonstrated that the government has placed equal opportunities for technology-based entrepreneurs and ICT SMEs to participate in the local ICT market as the government realized the importance of SMEs in growing the nation. In addition to that, it is evidenced by the commitment put by the government to support entrepreneurial activity around the country by having various "farming" programs such as incubation programs and communication programs for technopreneurs to grow. Launched in 2001, there was still lack of information and insufficient knowledge about the opportunities, issues, and challenges underlying this new initiative as the information were kept private, limited, and confidential. This study has shed some light for the public as well as the SMEs of the importance of this Flagship Application in nurturing and growing the technopreneurs by providing the right environment so that materials technology research can be transformed into advanced products for local and international markets. Study might be extended in several directions. Future research could comprehensively examine the effectiveness of the development process by comparing the technopreneurs who undergone the process until graduation with the technopreneurs who do not go through the process. With this comparison, it is easier to evaluate the progress and effectiveness of the programs such as incubation system and funding to start-ups companies. In fact, the extended research could examine the influencing or contributing factors to assess the effectiveness of the programs by developing reliable and valid measures of the dependent variables in order to devise and empirically test measures of venture success.

REFERENCES

Abetti, P.A., 1992. Planning and building the infrastructure for technological entrepreneurship. *International Journal of Technology Management*, 7 (1-3): 129-139.

Amit, R., Brander J., & Zott, C. 1988. Why do venture capital firms exist? Theory and Canadian evidence. *Journal of Business Venturing*, 13: 441-466.

Burnett, D. 2000. *The supply of entrepreneurship and economic development*. Available at: http://www4.ibm.com/software/developer/library/su-sing.html (Accessed April 3 2003).

Cumming, Douglas J., MacIntosh, & Jeffrey G., 2001. Venture capital investment duration in Canada and US. *Journal of Multinational Financial Management*, 11: 445-463.

Dahlstrand, L.A. 1999. Technology-based SMEs in the Goteborg region: Their origin and interaction with universities and large firms. *Technovation*, 33 (4).

Fang, Z., 2002. E-government in digital era: Concept, practice and development. *International Journal of the Computer, Internet and Management*, 10 (2): 22.

Florida, K., & Kenney, M. 1988. Venture capital and high technology entrepreneurship. *Journal of Business Venturing*, 3(4): 301-319.

Foo, Check-teck, & Foo, Check-tong. 2000. Socialization of technopreneurism towards symbiosis in corporate innovation and technology strategy. *Technovation*, 20:551-562.

Hall, J. A. 2001. *Accounting information system*. (3rd ed.). South Western College Publishing.

Jack, S.L., & Anderson, A.R., 2002. The effect of embedded-ness on the entrepreneurial process. *Journal of Business Venturing*, 17: 467-487.

Kakati, M., 2003. Success criteria in high tech new ventures. *Technovation*, 23: 447-457.

Kazanjian, R.K. 1988. Relation of dominant problems to stages of growth in technology-based new ventures. *Academy of Management Journal*, 31 (2): 257-279.

Lalkaka, R. 2002. Technology business incubators to help build an innovation-based economy. *Journal of Change Management*, 3 (2): 167–176.

Landskroner, Y., & Paroush, J. 1995. Venture capital: Strategy and incentives. *International Review of Economic and Finance*, 4 (4): 317-322.

McConnel, C.G., & Brue, S.T., 1999. *Economics: Principles, problems and policies* (14th ed.), International edition: Irwin McGraw-Hill.

Michail, K. 2000. Exploring perceptions of a priori barriers to entrepreneurship: A multidisciplinary approach, theory and practice, 24 (2).

Miller, D. & Garnsey, E., 2000. Entrepreneurs and technology diffusion: How diffusion research can benefit from a greater understanding of entrepreneurship. *Technovation*, 22: 445–465.

Oakey, R. P. 2003. Technical entrepreneurship in high technology small firms: Some observations on the implication for management. *Technovation*, 23 (8): 679 - 688.

Porter, Michael E. 1990. The competitive advantage of nations. New York.

Renko, H., Autio, E., & Tontti. V., 2002. Social capital, knowledge and the international growth of technology-based firms. *International Business Review*, 11 (3): 279 – 302.

Sapienza, H. J. 1992. When do venture capital add value? *Journal of Business Venturing*, 17 (1): 9-27.

Sung, T. K., Gibson, D.V., & Kang B.S., 2003. Characteristics of technology transfer in business ventures: The case of Daejon, Korea. *Technological Forecasting and Social Change*, 70: 449 – 466.

Suzuki, K., Kim S.H., & Bae, Z.T., 2002. Entrepreneurship in Japan and Silicon Valley: A comparative study. *Technovation*, 22: 595 – 606.

Timmons, Jeffry A., & Bygrave, W. D. 1986. Venture capital's role in financing innovation for economic growth. *Journal of Business Venturing*, 1 (2): 101-176.

Yarzebinski, J. A. 1992. Understanding and encouraging the entrepreneur. *Economic Development Review*, 10 (1).

Yunos, M. G. 2002. Building an innovation-based economy: The Malaysian technology business incubator experience. *Journal of Change Management*, 3 (2): 177-178.

AN EXPLORATORY STUDY OF WOMEN ENTREPRENEURS IN QATAR: THEIR MOTIVES, FINANCING PREFERENCES AND PROBLEMS

Abdelgadir Mohammed A. Abdalla

Qatar University E-mail: <u>akder@qu.edu.qa</u>

ABSTRACT

The purpose of this paper is to identify the characteristics of women entrepreneurs in Qatar in terms of their motivation for start up, their sources of financing and the problems they face. The analysis of these aspects has been undertaken in the light of what is found in the literature and in the context of the Qatari society and its features. A total of fifty six women entrepreneurs were surveyed using a questionnaire that covers in addition to the aspects mentioned the demographics of the entrepreneurs and their firms. The results of the survey revealed that women entrepreneurs started their business at an early age and some of them manage their firms on a part time basis. The motivation for start ups were mainly independence, self-fulfillment and wealth accumulation. Women rely on their personal savings and the support of the family in securing their financial needs. The lack of experience, the absence of government support and the business competition were cited as the main constraints facing women entrepreneurs. The main contribution of this paper rests with fact that it is the first study on women entrepreneurs in Qatar and the concept of entrepreneurship has to be looked at differently from what prevails in the west.

INTRODUCTION

Small firms play an important role in a world characterized by technological advancement, intensive global competition, and market uncertainty and fragmentation. They provide employment opportunities with less costs, serve as agents for change because of their entrepreneurial activity and act as a source of innovation and economic growth (Acs, 1992, Orhan & Scott 2001). In this changing economic or market environment new avenues have emerged for developing skills and energies of women all over the world and in fact the firms owned by women are growing steadily (Davidson & Burke, 2004). Qatar is no exception. In the past some of the social factors that limited equal participation of women in entrepreneurship included the consolidated distribution of roles between sexes and the stereotypes for the role of women in the family, in nurturing of children. Another factor related to the insufficient structures supporting women in nurturing of children and other dependent family members (Sarri & Trihopoulou 2005).

However, in the recent time things have changed. In Qatar today women have the formal right to own properties and they enjoy the full and independent use of their assets and income. They are allowed to enter into different types of business activities and to engage in economic contracts. The state supports women endeavors through rules and regulations that encourage women to practice their full rights in doing business and getting access to financing and markets. Moreover, women receive institutional support from a number of organizations that include: Qatar Chamber of Commerce and Industry, Women's Investment Company of Oatar and the Business Women's Club.

The importance of addressing the issue of women entrepreneurs is enforced by a number of factors: women represent a potential untapped human resource reserve. Qatar like many Arab Muslim countries is a male dominant society that traditionally limits entrepreneurial endeavor by women. Therefore, their role in the economic contribution is constrained and complicated by coded unwritten social norms (McElwee & Al-Riyami 2003). Recently, Qatar was advocating a strategy whereby the dependence on gas and oil should be supplemented by more diversification in the economy. This has led to the exploration of other activities and to the focus on human resources with the drive to "Qatarization" to reduce the high percentage of expatriates. And as women represent more than 50% of the population, they are expected to play an important role. In addition to that, there is a lack of empirical evidence that documents the profile, motivation and problems facing Qatar business women and there are no available empirical studies in the areas of business startup in Qatar in general and by women in particular.

This paper is intended to look into the personal characteristics, motivation, financing preferences and problems of women – owned businesses in Qatar in order to assist in bringing up the issues related to this particular category so that policy makers may address them in the future. The

data analyzed to explore the above mentioned issues was drawn mainly from a designed questionnaire drawn from the literature. The paper consists of four parts: the first part reviews the status of women in Qatar labor market, the second part lays the methodology of the research, the third part analyses the empirical results with respect to the demographics of respondents, motives for start up, financing and the problems they face, the results of which are compared to those found in the literature; and the fourth part concludes the paper.

LITERATURE REVIEW

Women in Qatar workforce

One of the key elements of the State of Qatar's economic development strategy is to develop the human resources of the country as a tool and an objective for achieving sustainable development. As women constitute more than 50 % of the Qatari population at the work age, therefore the development of the country is not possible without proper participation and mobilization of women in the labor force. According to the statistics of the Planning Council in Qatar, 47% of the Qatari population at the age of work is economically active. Of the total female population at the age of work, only 28% are economically active, whereas about 67% of the male population is economically active. It indicates that the participation of women is, by far, less than that of men in economic activities of the entire society.

However, during the last decade, particularly in the last 5 years, there has been a drastic increase of the Qatari women participation in the labor force and the number of the Qatari Women entrepreneurs in the State of Qatar. In, 1986, the share of women in the total Qatari labor force was 14% which then increased to 25% in 1997, and then jumped to 30% in 2004 (Refer to Table 1 below).

The activities and jobs occupied by most of the Qatari women are limited to the public sector in general and to the educational, public services and the health sectors in particular. Table 2 indicates the jobs occupied by Qatari women which show that the total number of employed women was 15163 in 2004. Out of that number, 12928 (85.2%) were in government departments, 1541 (10.2%) were in public sector companies and 347 (2.3%) women each were in mixed and private sectors. Education, public services and health organizations employed about 95% of the working Qatari women in 2004.

Table 1
The Share of Women in the Labor Market

Year	Total work force	Economically Active Qatari women	% of women in labor force	Rate of participation
1986	201182	3029	1.5	14%
1997	258404	9606	3.4	25%
2004	444133	16034	3.6	30%

Source: The Planning Council, State of Qatar. 2004. 12th Issue.

Table 2
Percentage of Women Employment by Sector

Sector	government	Public	Mixed	private	total
Activity		companies			
Public services	29	0	0	0	29
Education	52	0.4	0.06	0.4	53
Health	3	6.5	0.03	0.1	9.5
Gas, oil, electricity and water	0	2.5	0.7	0.03	3
Financial services	0	0.2	0.8	0.9	2
Transport	0.4	0.5	0.6	0.11	1.5
Others	0.8	0.1	0.11	0.76	2
Total	85.2	10.2	2.3	2.3	100

Table 3
Percentage Women Enterprises based on the Licenses Issue Up to 2005

Sector	Total licenses	% of Women- owned firms
Beauty saloons	185	100
Pharmacies	89	29
Nurseries	12	33
Fashion	1518	16
Construction material	2879	14
Real Estate	1565	17
Electrical	2344	12
Jewelries	307	7.5
Manpower services	58	22
General trading	202	15

Source: Qatar Chamber of Commerce. 2005.

Based on the number business licenses issued in 2005, the number of women entrepreneurs who were active in their businesses accounted for about 16.8% of total entrepreneurs in the country (Refer to Table 3). These businesses, which are micro and small enterprises in nature, have a crucial role to play in the regeneration of Qatar. It can be seen from the table that the firms owned by women entrepreneurs are concentrated mainly in, fashion, beauty industries, cosmetics and beauty shops, nurseries, pharmacopoeias, manpower and fashion activities However, it has to be noted that owning a business by a Qatari woman does not mean that the owner is running or managing the business herself. Some of these firms may be rented or run fully by non - Qatari expatriates. The regulations do not allow employed Qatari nationals in the public sector to own private firms. To go around theses regulations these employees register these firms under their spouses who in fact do not own or manage the businesses. Nevertheless, there are business women who run many firms and are active members of the business women association within the Chamber of Industry and Commerce.

RESEARCH METHODOLOGY

This research is exploratory in nature and the results were analyzed using content analysis. Primary data were collected using a self- administered questionnaire. The targeted respondents were selected from the list published in the Qatar Chamber of Commerce and industry Directory. From the list of 500 female licensed firms, 280 respondents (65 per cent) from different types of industries were selected using a systematic random sampling. The questionnaires were distributed via fax after a telephone call with the respondent. The respondents were given a month to answer and return the questionnaire but only 30 responded within a month. That compelled the researcher to make a follow up telephone calls, and in certain cases, to fill the questionnaire on the phone, while in other cases, direct visits were made to business ladies by a female MBA student because most of the business ladies were not familiar and had difficulties in filling the questionnaires. After intensive efforts a total of 56 questionnaires were completed and used in the analysis and that represented a response rate of a 20%. It should be mentioned here that women entrepreneurs in this study were either owners, or they hold a controlling interest in the enterprise and manage it on full time or part time basis.

The design of the questionnaire was based on the objectives of the research discussed which aimed at identifying the characteristics and the profiles of the female – owned businesses, their motives, start-up financing preferences and their problems. The questionnaire was divided into five parts. The first two parts deal with the demographics of the respondents and their organizations. The last three parts address the motives of start ups, the financing preferences and the problems facing women enterprises. Each respondent was required to state her opinions to each of the last three issues using a five – point Likert scale.

The data were processed and analyzed using the Statistical Package for Social Science (SPSS/PC) for Windows software. The analysis was mainly qualitative where use is made of descriptive analysis. Frequencies, means and standard deviations were used to support the descriptive analysis. The analysis of the various issues relating to motives, financing and problems was done by

assigning the rating scale employed by Zain (2003). The rating system reflects the agreement among the respondents with issue being addressed. According to that system the rating of +++ indicates that more than 70% of the respondents either agree or strongly agree on the importance of the statements or the factor, ++ indicates 50-60% of the respondents either agree or strongly agree on the importance of the statements or the factor and + indicates that less 50% of the respondents either agree or strongly agree on the importance of the statements or the factor.

RESULTS AND DISCUSSION

In this section of the paper we present the empirical results of the survey. It should be noted that, due to the small size of the sample we rely on simple descriptive statistics in our analysis of data. Table 4 shows this profile of women business owners in terms of their age, education, marital status and experience. More than 70% were married when they started their business. This is consistent with the strong family orientation prevalent in the Arab Muslim culture and the existence of institutional agreements that support the working mother model. A surprising result indicates that about 27% were single at startup. A vast majority (80%) were holding a bachelor's degree when they started their firms and about 85% of the women involved had previous experience in the public service sectors, mainly in education, health and finance. According to research finding, 63% of the women entrepreneurs created their business by themselves, 9% purchased and owned an existing enterprise while 18% inherited the business. About 60% of the women work full time in their firms which means they took self employment as an alternative to paid jobs. And for those who work part time they have some one to manage the business on their behalf and this is a common practice in the oil rich countries in the GCC countries. About 60% limit themselves to only one firm while the remaining percentage is divided evenly between those who own more than one firm in the same industry or in different lines of business.

The demographics of the respondent organizations are summarized in Table 5. We can see from the table that about 72 per cent of the organizations were sole proprietorships and approximately 24 per cent were organized as partnerships. The advantage of sole ownership is the full control over the decision to be taken. At the same time, being a sole owner means having nobody else to depend on, less experience in decision making and sometimes lack of capital. 85 per cent of the enterprises were less than 10 years old. The size of the organization was based on both capital and on the number of employees. The majority (73%) of the women owned enterprises has a starting capital of less than \$600 thousands and about 80% were employing less than 15 employees who were exclusively non Qatari. The enterprises market their products and services in the local market only. The activities of the enterprises cover a wide range of sectors that include fashion, food, education, health, real estate and financial sectors. However, the fashion and food activities represented more than 60%.

Table 4
Demographics of the Respondents

		N= 56	%	Cumulative %
Age at start up	Less than 30 years old	16	28.6	28.6
	Between 31 to 40 years	32	57.1	85.7
	More than 40 years	8	14.3	100
Level of education	Secondary and below	5	8.9	8.9
	Diploma	2	3.6	12.5
	Bachelor	45	80.4	92.9
	Graduate	4	7.1	100
Marital status	Single	15	26.8	26.8
when owned the	Married	40	71.4	98.2
business	Divorced	1	1.8	100
Creation of the	Created as a new business	35	62.5	62.5
business	Purchases	5	8.9	71.4
	Inherited	10	17.9	89.3
	Franchised	4	7.1	96.4
	Other	2	3.6	100
Nature of the	Education	39	69.6	69.6
experience before	Health	3	5.4	75
started business	Commercial	4	7.1	82.1
	Financial	5	8.9	91
	Industrial	1	1.8	92.8
	Other	4	7.1	100
Commitment	Full time	33	58.9	58.9
	Part time	23	41.1	100
Why part time?	Having a full time job in the public sector	9	39.1	39.1
	Someone manages the business on my behalf	9	39.1	78.3
	Other	5	21.7	100
No. of business	Only one	32	57.1	57.1
owned	More than one firm in the same	12	21.4	78.6
	industry			
	More than one firm in different industries	12	21.4	100

Table 5
Demographics of Respondents' Organizations

		Total No. of N	%	Cumulative
		= 56		%
Legal	Sole proprietorship	39	72.4	72.2
structure	Partnership	13	24.1	96.3
	Other	4	3.5	100
Age of the	Less than 5 years	23	41.1	41.1
business	5 to 10 years	24	42.9	84.0
	11 to 15 years	5	8.9	92.9
	More than 15 years	4	7.1	100
Capital	Less than QR 2 millions	41	73.2	73.2
	QR 2 to QR5 millions	9	16.1	89.3
	QR 6 to QR 10 millions	4	7.1	96.4
	QR 10 millions and more	2	3.6	100
No. of	Less than 5 employees	8	14.3	14.3
employees	5 to 10	22	39.3	53.6
	11 to 15	10	17.9	71.5
	16 to 20	5	8.9	80.4
	21 to 25	6	10.7	91.1
	More than 25	5	8.9	100
Marketing	Local market only	49	87.3	87.3
	Export only	1	1.8	89.1
	Both	6	10.9	100
Nature of	Fashion and cosmetics	21	37.5	37.5
business	Food services	14	25	62.5
	Education	5	9	71.5
	Health	4	7	78.5
	Financial service	5	9	87.5
	Construction and real estate	5	9	96.5
	Tourism	2	3.5	100

Note: $1 \text{ US} = QR \ 3.65$

Motives for startup

A great deal of research into female business owners has focused on what motivates women to start business activities. In this area use has been made of McCelland's (1961) theory of need to achieve, and Rotter's (1966) locus of control. According to McCelland's theory, individuals with a strong need to achieve find their way to entrepreneurship and success. According to Rotter's theory, individuals with internal locus of control are most likely to possess entrepreneurial characteristics than those with external locus of control. Another way to explain the motives of startups is based on the push/pull model. Push (negative) factors include unemployment, redundancy, and frustration in paid jobs, flexible work schedule that accommodates work and home roles and economic reasons. The pull (positive) factors behind starting a business relate to need for independence, need for achievement, financial reasons, self fulfillment and social status (Brush 1999). However, it is quite possible that the most important factors that stimulate women to start their business include both pull and push factors.

When queried regarding their motivation for starting their businesses the answers are reported in Table 7. It can be observed from the table that self fulfillment, independence and economic are the

most important motives behind starting their own business. It could be argued that women in Qatar are motivated more by pull than push factors.

Table 6
Perceived Importance of Start-up Motives in Percentages

Motive	1	2	3	4	5	Mean	SD	Rating
Independence	-	-	-	2	98	4.98	0.13	+++
Self fulfillment	-	-	-	-	100	5	0.0	+++
Hobby	43	4	9	11	33	2.9	1.8	+
Skills exploitation	-		14	23	63	4.5	0.74	++
Increasing wealth	15	2	9	19	54	4.1	0.82	+++
Being frustrated in work	52	10	13	11	14	2.3	1.5	+
Playing family role	39	12	20	11	18	2.6	1.5	+
Flexible work schedule	39	18	20	14	9	2.4	1.4	+

The findings are similar in those reported in other countries. For example in most European countries, women are motivated by being in control of the choice of the work they undertake to apply their skills and knowledge (Orhan & Scott 2001). The main motivation for women in New Zealand who started their own business is to meet their need for challenge, flexibility and career advancement (McGregor 2004). Therefore, it is important to notice that women in Qatar cannot be considered "accidental" entrepreneurs pushed only by unemployment or job insecurity. On the contrary, Qatar is heavily depending on expatriates in both the public and private sectors. We have to realize that half of the women interviewed are working part time in their businesses. This can be explained by the fact that women would like to explore the opportunities available to them without sacrificing their job which are mainly in the public sector. This early entry of women into the private business can be a step for independence when they decide to quit their public jobs and manage their own businesses at a later stage in which the businesses may become relatively mature.

However, it should be noted that the motives for startup that lie in the heart of the concept of entrepreneurship should be looked into it with reservation. In developing countries in general and in Arabic and Muslim world in particular, entrepreneurs operate within the context of an extended family and male dominated society. This is in contrast to the characteristics associated with entrepreneurs in the west which relate to liberalism and non conformism. Moreover, the motive of women to go into business is affected by the role model played by the members of the family.

Small firms and sources of finance

Obtaining quantitative data on the type of finances used by small enterprises is hard to find in Qatar. However, the amount of finance invested in small firms is expected to be minimal due to their inability to raise funds due to the limited access to capital which is referred to as the equity gap or hard capital rationing. In general, personal savings and finance from family represent an initial source of finance. Also commercial banks are considered one of the important sources of finance for small businesses seeking financing due to the competitive nature of services they offer. Start-up capital should be viewed as an important resource that dictates the growth rate of firms.

Start –up capital can be a difficult resource for business owners to acquire in general and for women in particular. This is attributed to many factors or problems. The first problem relates to the fact that women may be disadvantaged in their ability to raise start up finance (Van Auken et al 1993). The second problem relates to the fact that guarantees required for external financing may be beyond the scope of most of women's personal assets. The third problem is the inability of women to penetrate informal financial networks (friends and cooperatives). The fourth problem is the poor relationship between women entrepreneurs and bankers because of sexual stereotyping and discrimination (Hisrich & Brush, 1986).

Previous studies have shown that women who want to start their own businesses may face difficulties in accessing bank loans because of gender differences (Hisrich & Brush 1986) or because of the male model of business which is still being the prevalent perception in the traditional finance sector (Fielden et al. 2003) or because of women's propensity to start and operate with low personal equity financing (Fay & Williams, 1993) or because of perceived risk of required skills and attributes.

Table 7-a reported the perceived importance of the possible sources of financing at the start up stage for women owned businesses. It can be observed from the table that personal savings and families are the dominant sources of financing of startups with 80% and 70% respectively. On the other hand other sources like friends, banks and venture capital play a minimum role in financing women entrepreneurs.

Table 7-a
Perceived Importance of Sources of Start-up Capital in Percentages

referred importance of Sources of Start up Capital in 1 creentages								
Source	1	2	3	4	5	Mean	SD	Rating
Personal savings	4	6	10	10	70	4.01	2.01	+++
Family	16	7	7	11	59	2.6	1.8	+++
Friends	96	2	2	-	-	1.05	0.3	+
Trade credit	80	4	4	7	5	1.5	1.2	+
Bank loans	63	4	2	7	25	2.3	1.8	+
Overdraft facilities	87	4	2	5	2	1.30	0.90	+
Hire purchase	93	4	-	3	-	1.2	0.59	+
Venture capital	77	2	4	11	6	1.7	1.3	+

This is not a surprising result for a country with a high per capita income of more than \$40000 that ranks third after Luxembourg and Norway. These results are also consistent with what had been reported in the developed and developing economies. For example, the empirical studies of Carter and Anderson (2001) and Perfect and Hurrel (2003) revealed that men use more overdrafts and more personal collateral than women, while women business owners are less likely to use all sources of credit facilities. The use of business loan does not seem to form a major source of financing. This could be due to the fact that because most women have small businesses so they rely on the use of personal loans despite the fact that the interest on personal loan is higher than that on business loans. Moreover, business loans have an overdraft where personal loans do not have.

When asked about the main factors that determine their ability to secure their financing needs and form, their capital structure, profitability, size and relationship with the bank manager emerge as the most important factors. Profitability allows firms to rely on their internal sources of financing through the use of the generated profits in financing their activities. Size of the firm plays an important role as collateral, and it therefore may help women entrepreneurs in obtaining the funds needed from external sources of financing, whether they are formal or informal. The relationship with the bank manager represents an example of a network that women entrepreneurs need to develop. In a small country like Qatar where almost all people in the business community know each other, keeping a good relationship with decision makers in the financial institutions can be of great support to women entrepreneurs. This support may come in the form of overdraft facilities, line of credit or debt rescheduling.

Table 7-b
Perceived Importance of Determinants of Capital Structure in Percentages

Factor	1	2	3	4	5	Mean	SD	Rating
Profitability	-	ı	-	2	98	4.98	0.13	+++
Size	2	1	13	18	67	4.5	0.8	+++
Relationship with bank manager	4	7	14	25	50	4.1	1.1	+++
Age of business	4	ı	7	37	52	4.4	0.77	++
Seasonality	13	5	30	27	25	3.5	1.3	++
Collaterals required	68	21	5	2	4	1.5	0.95	+
Nature of business	64	9	4	7	16	2	1.6	+
Preference/ attitudes of business	66	5	14	11	4	1.8	1.24	+
owner								

Other factors that may have an impact on the capital structure of business-owned firms are the age and seasonality of the business. More established firm have a good chance and ability to secure financial support from different external sources of financing compared to newly established firms. Seasonality is also considered to be an important factor in affecting the capital structure of the women

owned firms. During certain period of the year the activities of these firms are huge and this requires financing that may be beyond the capacity of the owners, causing them to look for external sources of finance either from the commercial banks or from trade creditor in the form of goods (suppliers). Both sources mean firms have to borrow to finance its operations.

Problems

Being a business woman in what looks to be a conservative. male- dominated society may pose a big problem for women entrepreneurs. However, when queried about the most problems facing them, lack of experience, declining profit, lack of government support and business competition emerged as the main problems. The lack of experience means that women entrepreneurs have to rely on paid employees who are mainly expatriates.

The lack of experience is due to the fact that they started their business without prior experience in the area of business or they are running the business on a part time basis. Another problem facing women entrepreneurs is attributed to the lack of profit which also relates to the stiff competition. This competition is a direct consequence of mitigation among the business firms. A third problem which faces the women entrepreneurs relates to the support received by women entrepreneurs provided by the government. Being inexperienced Qatari business women they need training in different areas of business management skills. Most of these business ladies started their firms without proper skills assuming that some of these skills can be acquired later. There are no institutional facilities whether public or private, that can assist women entrepreneurs in the planning and running their firms. However, recently, a business ladies association was established and a business lady was elected as a member of the board of directors. This development is expected to boost the prospects of women owned and ease some of the difficulties they face.

TABLE 8
Perceived Importance of Problems Facing Women-owned Enterprises

Problem	1	2	3	4	5	Mean	SD	Rating
Insufficient capital	34	9	14	27	16	2.82	1.54	+
Lack of experience	10	18	7	20	45	3.69	1.46	++
Declining profit	16	13	5	27	39	3.6	1.51	++
Lack of government support	23	13	9	39	16	3.13	1.45	++
Business competition	5	7	23	38	27	3.73	1.10	++
Globalization	30	28	27	11	4	2.29	1.12	+
Networking difficulties	25	29	29	5	12	2.51	1.28	+
Social attitudes towards business	44	2	46	4	4	1.73	0.92	+
women								

CONCLUSIONS

This study addressed the role of the Qatari women entrepreneurs, their profiles, motives for starting business, financing sources and the obstacles hindering their progress and expansion. The majority of women entrepreneurs are concentrated in the fashion, food and services sectors. Their firms are small in size producing mainly for the local market. They entered the business because they either have previous experience or the knowledge they acquired from their previous jobs or academic specialization. Their age of the majority women entrepreneurs ranged between 30 and 40 years at the inception stage and many of them created their firms as new ones. Moreover, some of the women entrepreneurs have tertiary education not necessarily related to the sector in which they operate.

The women- owned firms are small, both in terms of the number of employees and the capital employed. This limits their ability to apply for personal loans on which they have to pay interest and to make use of overdraft facilities. Instead, they depend on their personal savings and their families as the main sources of finance. They rarely approach banks for financial support because most banks require personal guarantees and collateral which they lack.

The majority of women entrepreneurs venture for personal reasons. The main motives for starting their ventures are attributed mainly to independence, self fulfillment and wealth. However, their motives are constrained by many problems. The insufficient capital, lack of government support and the increasing competition were cited as the main problems facing women entrepreneurs.

It should be noted that the environment under which the Qatari women entrepreneurs operate influences their objectives, personalities and their future endeavors. The dominant factors here are mainly the Arabic and Islamic culture which may affect our understanding about the concept of entrepreneurship. In other words in a collectivist society characterized by an extended family, the family network is paramount. In this respect the characteristics of entrepreneurs cannot be looked at the same way as the concept of entrepreneurs in the western world.

Limitations and Suggestions for Future Research

The issue of women entrepreneurs in the Middle East in general and GCC in particular is hard to research empirically due to the culture and the nature of the society that is mainly male dominance prevails. This study is no exception. The sample on which this exploratory research is based is small due to the difficulty of getting direct access to the participants. Moreover, the statistics on women activities is incomplete. These limitations forced the researcher to apply descriptive statistical techniques. As the number of women who enter the business world continues to grow, further research is needed to expand the findings from this study and to provide more conclusive answers to the issues addressed. Despite its attempt to be exhaustive and cover a broad area of research, there are many areas in which future research is needed. One area that may be investigated relates to the issue of shadow chief executive officer. Moreover, there is a need to empirically testing and refining the critical factors affecting the effectiveness of women entrepreneurs in the state of Qatar. The sample has been confined to female in all small enterprises, regardless of type of business. A research sample focusing on specific activities would provide a further valuable contribution to the findings of this study. It may also be informative and valuable to conduct a comparative study with other developing countries inside and outside the region.

REFERENCES

Acs, Z.J. 1992. Small business economics: A global perspective. *Challenge*, 35: 38-44.

Brush, C. 1999. Research on women business owners: Past trends, a new perspective and future directions. *Entrepreneurship Theory and Practice*, 16 (4): 5-30.

Carter, S. Anderson, S & Shaw, E. 2001. Women's Business Ownership: A Review of the Academic, Popular and Internet Literature. *Report to the Small Business Services*,

August, London: Small Business Service.

Davidson, J.M. & Bruke, J.R. 2004. *Women in Work Worldwide: Facts, Figures and Analysis*. Aldershot: Ashgate Publishing Company.

Fay, M. & Williams, L. 1993. Sex of applicant and the availability of business 'start-up' finance. *Australian Journal of Management*, 16(1): 65-72.

Fielden, S., Davidson. M., Dawe, A. & Makin, P. 2003. Factors inhibiting the economic growth of female-owned small businesses in North West England. *Journal of Small*

Business and Enterprise Development, 10(2): 152-66.

Hisrich, R., Bruch, C. 1986. *The Woman Entrepreneur: Starting, Financing and Managing a Successful New Business*. Lexington, MA: Lexington Books.

McClelland, D. 1961. *The Achieving Society*. New York: Collier/Macmillan.

McGregor, J. 2004. Women in Management in New Zealand. In Davidson, J.M. &

Bruke, J.R. (Eds). *Women in Work Worldwide: Facts, Figures and Analysis*, Aldershot: Ashgate Publishing Company:211-24.

McElwee,G. & Al-Riyami, R. 2003. Women entrepreneurs in Oman: Some barriers to success, *Career Development International*, 8(7): 339-346.

Orhan, M. & Scott, D. 2001. Why women enter into entrepreneurship: An exploratory model. *Women in Management Review*, 16(5): 232-47.

Rotter, J. 1966. Generalized expectations for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, 80(1):1-27.

Sarri, K. & Trihopoulou, A. 2005. Female entrepreneurs' personal characteristics and motivation: A review of the Greek situation. *Women in Management Review*, 20(1): 24-36.

Zain, M., Kassim, N. & Mokhtar, E. NA. Use of information technology and information systems for organizational agility in Malaysian Firms. *Singapore Management Review*, 25(1): 69-83.

WHY ENTREPRENEURSHIP AND NOT EMPLOYMENT? AN INITIAL INVESTIGATION

Ernest Cyril de Run Nordiana binti Ahmad Nordin Dr. Rabaah Tudin Universiti Malaysia Sarawak, Malaysia

Email: drernest@feb.unimas.my; annordiana@feb.unimas.my; trabaah@feb.unimas.my

ABSTRACT

This study aims to explore the reasons why micro and small business owner/operators become entrepreneur and choose not to be employed. This study is an exploratory research utilizing indepth interviews. 25 respondents were randomly selected on the basis of availability and convenience. The results of the interviews show that entrepreneurs are driven by pull factors to become entrepreneur. The reason for them for not being employed is mainly because of the perceived high profit they could gain by doing business instead of perceived limited income if being employed. This research is expected to contribute towards the understanding of the reasons for becoming an entrepreneur and for further development of entrepreneurship programs in Malaysia.

INTRODUCTION

Malaysia has enjoyed rapid growth with rising per capita income and price stability. Economic growth has been accompanied by rising living standards, greater urbanization and access to health and education, and an improvement in the distribution of income, improving the twin problems of poverty and racial imbalances (Athukorala, 1996). Although Malaysia has grown up significantly, the historical business practices utilized by the British which were to divide economic activity along racial lines is still evident (Ariff & Abubakar, 2002; Gomez & Hsioa, 2001). As workers were historically separated, so was the attitude toward business generation and entrepreneurial activity.

Entrepreneurs are seen as individuals acting independently or as part of an organization, who create a new venture or develop an innovation and take risks entering them into the marketplace (Sharma & Chrisman, 1999). Entrepreneurship is described with such terms as innovative, flexible, dynamic, risk taking, creative, and growth oriented. On the other hand, the popular press often defines the term as starting and operating new ventures (Sahlman & Stevenson, 1991). It has been acknowledged that entrepreneurship plays a significant role within an economy that can lead to economic growth (Dana, 2001). Interest among policy-makers in motivating start-ups in small and medium scale enterprises (SMEs) has increased drastically, especially in Malaysia, with the establishment of various Ministries and bodies to encourage entrepreneurship (Dana, 2001) examples include the establishment of Ministry of Entrepreneurial Development, Majlis Amanah Rakyat (MARA), Ministry of International Trade and Industry (MITI), Ministry of Rural Development, Ministry of Youth and Sport, Federation of Malaysian Manufacturers, Chambers of Commerce, Malaysian Industrial Development Finance Berhad (MIDF), National Entrepreneur Corporation (PUNB), Malaysian Development Bank, Bank of Industry , Agriculture Bank, Credit Guarantee Corporation (CGC), and other related agencies.

Nevertheless, there has been limited attention given to understanding the reason why someone chooses to become an entrepreneur, especially in the context of Malaysian. Thus this research explores the reasons why micro and small business owner/operators become entrepreneur and choose not to be employed. The study is set in a multicultural Asian country, namely Malaysia. It utilizes interviews of micro and small business owner/operators and further analyzed. In addition to contributing to the academic literature, this study also has implications for policy makers and practitioners, as well as for entrepreneurs and those interested to be entrepreneur. The rest of the paper is organized as follows: first, discussion of the relevant literature is presented; followed by a discussion of the methodology used, thirdly, the findings are presented and then discussed, followed by the conclusions that look at academic and managerial implications, limitations, and areas for future research.

LITERATURE REVIEW

The word "entrepreneurial" has become a common term used to describe people who are innovative, creative and open to change. Entrepreneurial individuals also have the ability to identify opportunities to achieve their goals (O' Connor & Fiol, 2002; Stevenson & Gumpert, 1983). The modern interpretation of entrepreneurship derives from the French verb *entrepredre*, which means 'to undertake', 'to take in one's own hands', or to adventure, to try (Schaper & Volery, 2004). During the Industrial Revolution, entrepreneurship was used to describe a new phenomenon of the individual who had formulated a fabulous idea, developed it, assembled resources and then created a new business venture (Schaper & Volery, 2004).

Entrepreneur applies to someone who establishes a new entity to offer a new or existing product or service into a new or existing market, whether for a profit or not-for-profit outcome. Being an entrepreneur, one who is self-employed and who starts, organizes, manages, and assumes responsibility for a business, offers a personal challenge that many individuals prefer over being an employee working for someone else (Campbell, 1992). Successful entrepreneurs have a high tendency to make decisions on their own, to be action-oriented, to assume risk, and to persevere in the face of uncertainty and adversity. Entrepreneurs accept the personal financial risks that go with owning a business but also benefit directly from the potential success of the business (Campbell, 1992). Lately, academics and governments appear to be concentrating on encouraging entrepreneurship because it symbolizes innovation and a dynamic economy.

The function of entrepreneur was quite clearly define as to buy the country produce from those who bring it or to order it to be brought on their account and they pay a certain price and to resell wholesale or retail at an uncertain price (Cantillon, 1931 cited in Hamilton and Harper, 1994). The entrepreneur was motivated to engage in entrepreneurial activities by gaining a potential profit. The entrepreneurs buys a product at a known price and sell to an uncertain price and thus risks to loose money because of uncertainty with the sales price (Cantillon, 1931 cited in Hamilton and Harper, 1994).

People would become entrepreneurs if the expected rewards better than the wages of employment (Praag, 2001). Research indicates that individuals become entrepreneurs primarily due to "pull" factors such as independence, self-fulfillment, wealth, and other desirable outcomes, rather than "push" factors which is job dissatisfaction, difficulty finding employment, insufficient salary, or inflexible work schedule (Keeble, 1992; Orhan, 2001). Entrepreneurship research has also attempted to identify the situational and environmental factors that predict entrepreneurial activity, such as job displacement, previous work experience, availability of various resources, and governmental influences (Krueger, 2000). However, the "push" theory argues that individuals are pushed into entrepreneurship by negative external forces, such as job dissatisfaction, difficulty finding employment, insufficient salary, or inflexible work schedule while the "pull" theory contend that individuals are attract into entrepreneurial activities seeking independence, self-fulfillment, wealth, and other desirable outcomes (Gilad, 1986).

RESEARCH METHODOLOGY

The population of this study consists of micro and small business owner/operators in Sarawak, Malaysia. In order to develop descriptive terms for reasons why these entrepreneurs entered into business and reasons why they did not gain employment, in-depth interviews were conducted. 25 micro and small business owner/operators were interviewed. Previous research has suggested that the widest accepted range for sample size for in-depth interview to be four to fifteen (Perry, 1998). Respondents were selected on the basis of availability and convenience. The interview utilized a modified word association technique, where respondents were asked questions and asked to respond with their initial thoughts, which are often considered to be the most salient and valid (Friedman, 1989; Stafford, 2003; Weeks, 1987). The average length of the interviews was about thirty minutes. Respondents were asked for their demographic details and two main questions; 1.Why did you become an entrepreneur? and 2. Why did you choose to open up your own business instead of being employed? Data collected was analyzed in the form of frequency and cross tabulation using Statistical Package for Social Science (SPSS) Version 14.0.

RESULTS

A profile of the respondents is presented in Table 1. Table 2 depicts as to why they do not wish to be employed.

Table 1 Demographic of Interview Respondents

Demographic of interview								
			Frequenc					
Factor			\mathbf{y}	Percent				
Gender		Male	18	72				
		Female	7	28				
Ethnic		Malay	9	36				
		Chinese	12	48				
		Bumiputera	4	16				
Age		20-26	3	12				
		27-32	6	24				
		33-38	6	24				
		39-44	2	8				
		45-50	1	4				
		51-56	4	16				
		57 above	3	12				
Income	per	1000 below	1	4				
month		2000-10000	13	52				
		11000-20000	4	16				
		21000 above	3	12				
		Not stated	4	16				

Table 2 Why do business?

Factor	Frequency	Percent
Interest to do business	7	28
Profit	5	20
Encourage by family and friends	4	16
Family business	3	12
Source of income	3	12
Want to be boss	3	12
To gain extra income	3	12
To improve life	2	8
Yearns to have own business	2	8
Chinese way	1	4
Comfortable life	1	4
Business has potential	1	4
Like the challenge	1	4
Want to apply skills	1	4
To share knowledge	1	4
Flexibility	1	4
No other work	1	4
Don't have high education	1	4
Have the spirit	1	4
To test capabilities	1	4
To try other avenues	1	4

To help student who face problem	1	4
Self satisfaction	1	4
Personal development	1	4
More challenging	1	4
Fed up working with people	1	4
Confidence with own skills	1	4
Urge to do something different	1	4
Improve financial	1	4

Table 3 Why not Employment?

Factor	Frequenc y	Percent
Business can earn more money	9	36
Being employed cant earn more money	2	16
Father had a business	1	4
Learn from father	1	4
Business is same as being employed	1	4
Retire	1	4
Factory closed	1	4
To be own boss	1	4
Not govern by others	1	4
Free to make own decision	1	4
Being employed gain limited income	1	4
Will do business even if given a choice	1	4
Flexibility	1	4
Get rich	1	4
Have skills	1	4
To prove capabilities to operate own business	1	4
Not free to explore own creativity	1	4
No self satisfaction	1	4
Have full control of life and decision	1	4
Interest	1	4
Do business is much more easier	1	4
Fed up working for people	1	4
Want people to be subordinate	1	4
To like to take order	1	4
Want to compete with other ethnic	1	4
Have many friends for business		
information	1	4
Don't have to follow rules	1	4
Don't like to work under people	1	4
Only know to do business	1	4

DISCUSSION

This research has successfully gained data from entrepreneurs that started their business in 1969 to 2005. Respondents source of capital for their ventures was by own saving, saving and family, saving, financial institution, family and friends. Respondents do not see banks or the government as major sources of funding. Instead, they turn to savings for money to start business. Entrepreneurs tend

to be risk averse relying firstly on personal savings and then family money followed by friend's support and then financial institution. They are more easily frustrated with bureaucracy preferring informal relationships and a minimum of paperwork (Adam, 2007).

Why Do Business?

Previous studies suggest independence, money, and challenge or to get recognition, and work and family reasons are the reasons why people become entrepreneurs (Gilad, 1986; Keeble, 1992; Orhan, 2001). Respondents here indicated interest, profit and to gain extra income as reasons that they decided to do business. Statements such as "...because this is my interest..." owner of a retail shop; "...I am very interested in doing business. I don't like to do any other job other than doing business..." owner of a combustion coal company while the owner of a supermarket stated "...the main purpose for me to involve in my own business is to earn a profit and I also believe that, most of us will do business is due to make money..."

Why not employed?

The preliminary findings from this study indicate that "business can earn more money" ranked as the most important reason for not being employed, followed by "being employed can not earn more money". Statements from respondents sum it up nicely; "The reason why I don't want to be employed as we will only get a fixed salary every month,... the profit earned is more than the salary that we get from our company that we are being employed. That is the reason why I want money and people to work for me..." owner of supermarket, "....if work for other people the salary is constant, not enough to spent..."; "....to gain profits and salary compare to other field. Gaining profits become flexible when having own business rather than work with other...."; "...because to earn money. I can buy anything that I like, the most importance thing is the money is belongs to me and I earn it...." owner of a saloon.

CONCLUSIONS AND IMPLICATION FOR FURTHER RESEARCH

The decision to become an entrepreneur instead of being employed is often a complex and multi-faceted phenomenon (Marlow, 1997; Shane, 1991) and has been the focus of many studies over time (Hamilton, 1987; Mazzarol, 1999; Segal, 2005). The findings here indicate that the main reasons for becoming an entrepreneur are interest, money, family and friends. As for why respondents preferred not to be employed, the lure of money ranked highest.

There are many reasons and factors that trigger the involvement in entrepreneurship. This research provides a platform for future research for academia in entrepreneurship. In addition, it can contribute to the development of excellent entrepreneurship programs by the government and private agency as well as better understanding of the reasons to involve in entrepreneurship. There are limitations in this research, such as theory application and sample constraint, due to the nature of study. Expanding the sample or improvement of knowledge and understanding of the relationships between gender, business owner networks and challenges can be carried out as further research.

REFERENCES

Adam, R. Z. 2007. *SMEs believe it's hard to get bank loans: Survey*. Available at: http://www.btimes.com.my/Current_News/BT/Wednesday/Nation/BT607588.txt/Article/ (Accessed December, 20, 2006)

Ariff, M., & Abubakar, S. Y. (2002). *Strengthening entrepreneurship in Malaysia*. Available at: http://www.mansfieldfdn.org/programs/program_pdfs/ent_malaysia.pdf (Accessed 20 September, 2006). Athukorala, P. C., &. (1996). *Globalization, employment and equity*: The Malaysian experience. Available at:

http://www.ilo.org/public/english/region/asro/bangkok/paper/malaysia.htm#Intro (Accessed December, 20, 2006)Campbell, C. A. 1992. A decision theory model for entrepreneurial acts. Entrepreneurship Theory and Practice, 17(1): 21-27.Dana, L. P. 2001. The education and training of entrepreneurs in Asia. Education and Training, 43(8/9): 405-416. Friedmann, R. F., R. 1989. On the internal organization of consumers' cognitive schemata. Gilad, B., Levine, P. 1986. A behavioral model of entrepreneurial supply. *Journal of Small Business Management*, 24(4): 45-54.

Gomez, E. T., & Hsioa, M. 2001. *Chinese business in southeast Asia, contesting cultural explanations, researching entrepreneurship.* London: Routledge.

Hamilton, R. T. 1987. Motivations and aspirations of business founders. *International Small Business Journal*, *6*(1): 70-78.

Keeble, D., Bryson, J., Wood, P. 1992. The rise and fall of small service firms in the United Kingdom. *International Small Business Journal*, 11(1): 11-22.

Krueger, N. F. J., Reilly, M.D. & Carsrud, A.L. 2000. Competing models of entrepreneurial intentions. *Journal of Business Venturing*, *15*(5/6): 411-432.

Marlow, S. 1997. Self-employed women: New opportunities, old challenges? *Entrepreneurship and Regional Development*, *9*: 199-210.

Mazzarol, T., Volery, T., Doss, N., & Thein, V. 1999. Factors influencing small business start-ups: A comparison with previous research. *International Journal of Entrepreneurial Behaviour & Research*, *5*(2): 48-63.

O' Connor, E. J., & Fiol, C. M. 2002. Mindful over mindless: Learning to think like an entrepreneur. *The Physician Executive*, 28(4): 18-23.

Orhan, M. a. S., D. 2001. Why women enter into entrepreneurship: An explanatory model. *Women in Management Review*, 16(5): 232-243.

Perry, C. (1998). Processes of a case study methodology for postgraduate research in marketing. *European Journal of Marketing*, 32(9/10): 785.

Praag, C. M., Cramer, J.S. 2001. The roots of entrepreneurship and labor demand: Individual ability and low risk. *Economica*, 68(269): 45-62.

Sahlman, W. A., & Stevenson, H. H. 1991. *The entrepreneurial venture*. Boston: Harvard University Press.

Schaper, M., & Volery, T. 2004. *Entrepreneurship & small business: A Pacific Rim perspective*. Australia: John Wiley & Sons.

Segal, G., Borgia, D., & Schoenfeld, J. 2005. The motivation to become an entrepreneur.

International Journal of Entrepreneurial Behaviour & Research, 11(1): 42-57.

Shane, S., Kolvereid, L., & Westhead, P. 1991. An exploratory examination of the reasons leading to new firm formation across country and gender. *Journal of Business Venturing*, 6: 431-446.

Sharma, P., & Chrisman, J. J. 1999. Toward a reconciliation of the definitional issues in the field of corporate entrepreneurship. *Entrepreneurship Theory and Practice*, 22: 43-68.

Stafford, T. F., & R., S. M. 2003. Industrial buyer's perceptions of industrial salespersons. *Journal of Business and Industrial Marketing*, 18(1): 40-58.

Stevenson, H. H., & Gumpert, D. E. 1983. *The heart of entrepreneurship*. MASS: Harvard Business Review.

Weeks, W. A., & Muehling, D.D. 1987. Students' perception of personal selling. *Industrial Marketing Management*: 145-151.

ENTREPRENEURIAL QUALITY: A THEORETICAL CONFIGURATION (Special Session: Emerging Market Entrepreneurship)

Sserwanga Arthur Orobia Laura Makerere University Business School, Uganda

Email: <u>lauraorobiah@yahoo.com</u> / <u>lorobia@mubs.ac.ug</u>

ABSTRACT

In the year 2003, Uganda emerged the most entrepreneurial country in the world and second to Peru as the most entrepreneurial country in the year 2004 (by Total Entrepreneurial Activity Index), surpassing all the developed countries and Asian economic giants. However, Uganda and other developing countries have continuously posted unfavorable economic development indicators, hence bringing to question the quality of entrepreneurial undertaking in Uganda and other developing counties, on and off the African continent. Attempts have been made to study entrepreneurial quality, although there is limited scholarly works on the concept of entrepreneurial quality, especially in Africa coupled with substantial lack of clarity as to what is meant by entrepreneurial quality. This paper intends to elaborate a theoretical model that explains entrepreneurial quality, basing on the analysis of scholarly entrepreneurship doctrines, theories and entrepreneurial functions. The paper proposes a theoretical framework that can be used to investigate entrepreneurial quality in developing economies.

INTRODUCTION

Economic science, psychology, sociology, history and other disciplines have over time witnessed a wide agreement about the basic and indispensable functions of an entrepreneur, i.e. the capitalistic/financial function, the managerial function and the booster function (Guzman and Santos, 2001, Cumplido and Alcalde, 2002). The main non–economic contributions about entrepreneurial functions stem from Leibensteinm (1966) who established the concept on "internal inefficiency". He envisaged the entrepreneur to posses the managerial functions and a certain psychological capacity, which he may use to stimulate or boost his business. The capitalistic and managerial functions (which are emphasized by the Fisiocrats, Classical and Marxist doctrines) enable the establishment and running of business undertakings. While on the other hand the booster function, which has been acknowledged by the dynamic economy scholars (Schumpeter 1934 and Knight 1948) as well as the non-economic approach scholars (McClelland 1961 and Hagen 1962), implies performance of certain essential initiatives which are not limited to starting business, but which enable it survive the environmental forces and achieve growth.

Unlike the capitalistic and managerial functions, which are routine in character and subordinate to the booster function, the booster function is dynamic in nature and difficult to formalize since it does not necessarily depend on technical knowledge, but on the qualities of the entrepreneur (Guzman & Santos, 2001, Cumplido & Alcalde, 2002). The booster function has two major subdivisions, the promoter sub function and the energizer sub function. The promoter sub function is manifested when the entrepreneur creates a business and this is common to all entrepreneurs. However, the energizer sub function manifested along the lifespan of the business, with the objective of boosting the development and growth of the business, enhancing it's continued existence or survival, demonstrates entrepreneurial quality among entrepreneurs (Guzman & Santos, 2001 and Cumplido and & Alcalde, 2002).

Constructs of entrepreneurial quality are perceived to be those qualitative aspects that constitute the energizer sub function of an entrepreneur. At the moment it is not so clear what these constructs are (Guzman & Santos, 2001). However, some important conclusion can be drawn from some of the existing scholarly works. Many businesses especially in the developing economies have their growth and survival interrupted by the "glass ceilings", and it takes special efforts and qualities to break through such glass ceilings. Not only does entrepreneurial quality decide whether an entrepreneur will genuinely break through the "glass ceiling", it also ensures success and continued survival of business concerns. Bewayo, (1995), using the study of Ugandan entrepreneurs, concludes that African entrepreneurs tend to emphasize economic survival or making a living as reasons for entrepreneurship, hence they either do not bother to energize their businesses as long as the business

provides for their survival or they lack capacity and conducive environment to energize their businesses.

The entrepreneurship literature has not extensively covered entrepreneurial quality, however the available strains of the literature indicate that entrepreneurial quality has been studied basing on the preliminary index developed by Cumplido and Alcalde, (2002). However, there appears to be no one generally accepted and reliable set of variables that consistently describe entrepreneurship quality.

Overtime Uganda and other developing countries like Peru have been rated as one of the most entrepreneurial countries in the world (Walter, et al 2004; 2005). Despite being one of the most entrepreneurial countries in the world, Uganda and other developing countries are still among the poorest countries in the world. However, in spite the above contradiction, there is growing popularity in the thinking that entrepreneurship is the engine that drives the economies across nations. Recent studies have attempted to explain the above inconsistency using entrepreneurial quality. Appreciating the fact that there is substantial lack of clarity as to what is meant by entrepreneurial quality, there is need to investigate and explain entrepreneurial quality its constructs and factors that influences it. At the moment it is not so clear what these constructs are, and what they mean especially in the Ugandan or developing world setting. This paper intends to elaborate a theoretical model that explains entrepreneurial quality and its constructs, based on the analysis of entrepreneurial functions, in order to understand the factors that define entrepreneurial quality and what influences it.

LITERATURE REVIEW

Before we embark on the profiling entrepreneurial quality, we need to understand what underlies the term quality. The term quality bears different meaning to different people. Quality is an elusive and indistinct construct. It has been defined as superiority or excellence (Zeithaml, 1988), while Ghobadian et al (1992), define quality as transcendent, i.e., being an innate excellence or as conformance to desired requirements or standards. It is also important to note that quality is not singular, but a multi-dimensional phenomenon.

Correspondingly, the extant entrepreneurship literature does not provide an agreed upon definition of entrepreneurial quality, but several authors attempt to provide a list of the most important entrepreneur qualities. A number of authors have attempted to define entrepreneurship quality although there is little agreement either on the definitions or on the measurement of entrepreneurial quality (Isobel, 1998). Gibb, (1993), broadly defines entrepreneurial quality as those skills and competencies that constitute the basis, necessary and sufficient conditions for pursuit of effective entrepreneurial behaviour, individually, collectively or in society. He also contends that there is substantial lack of clarity as to what is meant by entrepreneurial quality, but he broadly summarizes entrepreneurial quality as the capacity to understand and cope with an entrepreneurial lifestyle, developing entrepreneurial organizations, managing business development processes, networking with stakeholders among others.

In contrast, Global Perspective (2000) predominantly defines entrepreneurship quality to include: - ambition, independence, innovative and alertness to new business opportunities, while Salvisberg (2002) identifies entrepreneurial quality using four dimensions; innovativeness, skill, abilities and drive. Drayton (2002) in his empirical assessment of entrepreneurial quality asserts that a factor that distinguishes the average from successful entrepreneur is entrepreneurial quality. According to him entrepreneurial quality is a very special and scarce trail, much more than altruistic motivation, and previously mentioned entrepreneurial traits. It is the relentless motivation to change the whole society shared by only a very small percentage of the population. Similarly, Kevin (2005) perceives entrepreneurial quality to include motivation, innovation propensity, growth orientation, and entrepreneurial activity of the human resources of the business.

Though there have been attempts to define entrepreneurial quality, the majority of these attempts focused on attributes that describe and differentiate entrepreneurs from non entrepreneurs, which is an erroneous focus. Entrepreneurial quality is not about behaviors exhibited by those starting a business, but rather behaviors possessed by entrepreneurs that energize or boost their businesses to enable them compete, grow and survive the environmental forces. Entrepreneurial quality does not differentiate entrepreneurs from non entrepreneurs, but rather may be used to differentiate progressive (those who boost or energize their businesses) from non progressive entrepreneurs (those who do not).

Many researchers treat entrepreneurship qualities and managerial qualities as one and the same. They integrate entrepreneurial qualities with managerial qualities; which is erroneous (Isobel, 1998), because entrepreneurial quality refers to those behaviors that entrepreneurs exhibit when trying to energize or boost their enterprises. Further more, entrepreneurial qualities and success are mistakenly concluded as synonymous. It is necessary to refer to the incidence of entrepreneurial success or failure as a consequence of a given entrepreneurial quality, but not its measure. Success is an outcome of a combination of entrepreneurial quality behaviors and the right business environment (Guzman & Santos, 2001 and Cumplido & Alcalde, 2002), but not necessarily a measure of entrepreneurial quality. Frese (2000) a renowned psychologist affirms that success is determined by behaviors or actions of the entrepreneur. However it is also worth noting that pursuance of entrepreneurial quality is no guarantee for success, though if entrepreneurial quality is pursued it increases the likelihood of success.

Constructs of entrepreneurial quality

As noted in the prior parts of this paper, a number of scholars have attempted to define and isolate constructs of entrepreneurial quality. These include; skills, competencies or entrepreneurial capacity and networking (Gibb, 1998), ambition, independence, innovativeness and alertness (Global Perspective 2000), innovativeness, skills, abilities and drive (Salvisberg, 2002), relentless to change the whole society (Drayton, 2002), ambitions, innovation capacity, networking, and initiative (Guzman & Santos, 2001) and motivation, innovation propensity, growth orientation, and entrepreneurial activity of the human resources of the business (Kevin, 2005).

However, some of constructs listed above do not tone with the definition of entrepreneurial quality and there is a lot of similarity in constructs suggested above by various scholars. Eliminating similarities among constructs suggested by several authors and those that do not subscribe to the pragmatic definition of entrepreneurial quality, we focus on the following constructs as a measure of manifest entrepreneurial quality. These include; motivation, ambition or capacity to grow, innovation capacity, the spirit of collaboration or networking, and initiative, which form we used in our theoretical model.

Motivation

Entrepreneurial quality is revealed by motivation of an entrepreneur. It is generally accepted that one of the unmistakable and psychological description of entrepreneurs is their desire and need for independence. However, this description belongs to both entrepreneurs and non-entrepreneurs, and it would be assumed that all entrepreneurs exhibit this feature, which is not always the case. In addition, empirical research has proved that there are some entrepreneurs who preferred to work for others, demonstrating the initial manifestation of entrepreneurial quality, which has an influence on real economic indicators like unemployment, income levels etc, (Guzman & Santos, 2001). One's preference to remain as an entrepreneur is a necessary, but not sufficient condition to be a good or quality entrepreneur; however it's the first necessary element to be considered when examining entrepreneurial quality.

Motivation is perceived as a determinant of behaviour or action. Entrepreneurial motivation entails a set of factors that influence the emission of a given behaviour in a concrete entrepreneurial situation. It influences the manifestation of an entrepreneurial behaviour in a specific setting.). Motivation influences the actions and behaviors of entrepreneurs. As the individual interacts with the environment, his or her motivational structure under go certain changes. Motivation results from the influence of the factors both in the personal and global environment. The personal environment is closer to the energizer sub-function of the entrepreneur and it directly affects the exponents of the energizer sub function of the entrepreneur by interacting with his/her immediate environment. While the global environment is a little far away from the energizer sub function of the entrepreneur and it affects all entrepreneurs and provide opportunities and information (Guzman, 1995). Entrepreneurial motivation influences energizer behaviors; intrinsic motivation greatly influences adoption of appropriate energizer behaviors that define entrepreneurial quality (Fontela, n.d).

What motivates a person into improving entrepreneurial quality is a question easier asked than answered. Motivation entails entrepreneurial drive and the ability to make a commitment (Nootebom, Jong & Vossen, 1998). Entrepreneurial motivation basically entails factors responsible

for an individual's initiation into and continuance in entrepreneurship. Some scholars therefore argue that it is the internal psychological impulses rather than external push and pull factors that have the ultimate bearing on the individuals' decision to take the entrepreneurial plunge. However other scholars put equal emphasis on both the personal factors and the external push and pull factors in respect to fostering entrepreneurial quality, emphasizing the fact that entrepreneurial motivation is multidimensional. Motivated entrepreneurs turned out with superior entrepreneurial quality through innovations, than those with lower motivation (Hancock & Bager, 2001).

Ambition

The literature on ambition is wide, much of it relates to the initial concept of achievement motivation propagated by McClelland (1961). Ambition is exhibited by the interest the entrepreneur has to reach higher levels of growth, not only in regard to profits, but also in market power and share, social status etc. The ambitious entrepreneurs demonstrate non-conformist behaviour and take on decisions that propel their undertakings into more competitive positions (Guzman & Santos, 2001).

Ambition refers to the restlessness in pursuing evolution, not only growth of profits, but also, in other complementary fields of market power, social status etc. Ambitious entrepreneurs possess non-conformist behaviour; avoid passivity and maintaining a status quo. Indicators for ambition include interest for self-financing the enterprises and the zeal to expand the enterprise's productive capacity (Cumplido & Alcalde, 2002).

Innovation

Entrepreneurial quality may be measured by considering the innovative behaviour of an entrepreneur (Guzman & Santos, 2001, Cumplido & Alcalde, 2002; Gibb, 1998). Literature on innovation is also wide, analyzed by many researchers over decades (Schumpter, 1944; Hagen, 1962; Hoselitz 1962; Baumol, 1990), all recognizing its critical importance to entrepreneurial activities. Innovation is perceived differently by various disciplines. Economists emphasize its impact on economic growth and competitiveness, while sociologists are more concerned with its interaction with social forces. Others perceive innovation as a process of commercialization of a newly developed or adopted product or practice (Dickson & Hadjimoalis, 1998). Innovation implies newness, resulting to the increasing focus on the concept of newness in every definition of innovation as a starting point, means to create and maintain a competitive edge and is looked at as a key element of business success.

Salvisberg, 2002, broadly perceives innovativeness as creativity, fantasy, openness towards new situations, courage, mental agility and initiative. The ability to innovate is considered to be at the heart of competitiveness. Successful management of innovation is critical, especially to firms' where competition is much stronger and diverse (Dickson & Hadjimoalis, (1998).

Zhao (2005) clears the confusion about invention and innovation, concluding that invention is the narrowest definition of innovation, innovation is thus more than invention and does not have to be technical, but may be social or economic in nature. Innovation is a proposed theory or design concept that synthesizes extant knowledge and techniques to provide a theoretical basis for a new concept. Innovativeness implies to possess and practice ideas about new products, services and technological processes (Frese, 2000). Zhao, (2005), believes that innovations by entrepreneurs hold key business sustainability in periods of rapid change and non-linear dynamics.

Jong, Kemp and Snel (2001) perceive innovation as the development and successful implementation of a new or improved product, service, technology, and work process or market condition, directed towards gaining a competitive advantage. Innovatively implies that the entrepreneur must have the ability to produce solutions in new situations (Littunen, 2002).

Roepke (1998) profiled entrepreneurs along innovation into four categories, namely, routine entrepreneurs, arbitrageurs, innovators and evolutionary entrepreneurs. Routine entrepreneurs re-do what they have always done; reproduce their business, producing the same product employing the same technology and combination of resources, contributing little to economic development. While arbitrageurs profit out of discrepancies in the price of products or resources, innovators are seen by Roepke, (1998) as "doers" of new things, who put new and creative ideas in practice and contribute significantly to economic development. Both routine and arbitrageur entrepreneurs keep the economic

system in equilibrium, whereas innovative entrepreneurs lead to creative destruction of the equilibrium which leads to evolution in economies and sustainable economic development catapulted by evolutionary entrepreneurs.

Schumpeter (1949) assumed that economic change can be understood as the result of response to changing conditions and he differentiated between two kinds of reaction, the adoptive response and creative response. While the adaptive response follows the well known paths within an existing practice, creative response on the other hand opens up fundamentally new ways of economic and social development. The discovery and realization of creative responses are the characteristic functions of the entrepreneur, either doing new things or things already done, but in a new and different way (innovation).

Following the Schumpeterian approach, innovative entrepreneurs are viewed as agents of economic evolution. Entrepreneurs drive economic evolution. However, routine and arbitrage entrepreneurship are considered secondary, as they merely maintain the economic status quo, keeping the economy at the equilibrium. Innovations not only drive the economy away from a stationary state, they keep the system away from it. Evolutions enable the economy to operate beyond the equilibrium (Roepke, 2002). Economic evolution involves irrevocable changes in the economic process brought about by innovation, which are non linear and self-amplifying in order to change the environment (Schumpeter, 1934). Schumpeter (1934) lists five kinds of innovation including: introduction of a new good or quality of a good, introduction of a new method of production, opening of a new market, utilization of some new sources of supply for raw materials or intermediate goods and carrying out of some new organizational form of the industry.

In developing countries like Uganda, characterized with low technological development, the concept of innovation should be very close to a certain creative sense, which is beyond the technological creativity. In this way, it is possible, with regard to innovation, to distinguish mere routine attitude from a more dynamic attitude of the entrepreneur (Guzman & Santos, 2001). Although the traditional view of innovation was initially limited to technological innovation, neglecting innovations in handling, packaging, distribution, marketing and logistics, which generally can do without expensive technological components are hard to patent in developing countries like Uganda, it is increasingly recognized that innovation is a learning process that is developmental, cumulative, collective, strategic and uncertain (Engelen, 2002).

Innovativeness is the backbone of entrepreneurial orientation, whose main function is to keep entrepreneurs alert and prepare them for the aggressive market (Lumpkin & Dess, 1996). In addition, there is little an entrepreneur can gain by operating in a market characterized by little or no dynamism at all (Cumplido & Alcalde, 2002). Society in general and entrepreneurs in particular, gain from an innovative and highly competitive business environment, through consumption of more innovative and competitively priced consumer and capital goods and services (Frese, 2000).

Collaboration or networking

Entrepreneurial quality is also revealed by collaborating or networking behaviors of entrepreneurs. Collaboration or Net working has not got the importance it deserves in entrepreneurship literature. Collaboration is manifested through those behaviors that are undertaken with the objective of relating or cooperating with other companies, organizations and individuals, so that the organizations attain higher levels of growth and development (Guzman & Santos, 2001). Collaboration refers to networks the entrepreneurs build among fellow entrepreneurs and other stakeholders in the environment.

Entrepreneurs manifest collaboration or networking behaviors through the establishment of formal agreements with other businesses in the same sector (Costa & Fornieles, 1992), creation of cooperation networks (Curran et al., 1993; Johannisson, 1995; Monsted, 1995), which among other things include participation in entrepreneur associations, trade associations or any other association formally or informally that promote their undertaking. Collaboration is also manifested by favorable disposition of membership with certain entrepreneurial support institutions, to establish agreements with other entrepreneurs and to develop common projects (Cumplido & Alcalde, 2002).

Entrepreneurial networks can be defined as the sum of total relationships in which an entrepreneur participates, and which provide an important resource for his, or her, activities. These

networks provide psychological and practical support, of access to opportunities, and a host of other resources including finance and information. It is for entrepreneurs to compete, grow and succeed without effective networking relationships (Dodd & Patra, 2002).

Entrepreneurial networks are categorized into two types, informal and formal networks. Informal networks consist of personal relationships, families and business contacts. Formal networks consist of legal agreements with venture capitalists, banks, accountants, creditors, lawyers and trade associations (Litttunen, 2002). Verheul and Thurik, (2000) proposed four measures of entrepreneurial networking that is, tendency to network, the size of the network, the composition of the network and the time spent on networking.

The collaborative behaviors reinforce the competitive abilities and position of the business in the market, allowing it to grow (Guzman & Santos, 2001). In addition, networking initiates competition, productive specialization through externalization of activities, hence achieving flexibility in the entrepreneur's production process (Costa, 1992).

Empirical findings support the view that connections to informal networks are very important for the success of business (Global Perspective, 2000). Empirical findings further emphasis that the use of personnel networks, which in some cases is purely informal provides information, technical advice, abilities, and financial and physical resources. It is hypothesized that entrepreneurs who maintain a high number of contacts within the communication network have a greater quality, because their contacts take place with specialized stakeholders (Cumplido and Alcalde, 2002).

Initiative

Initiative is another energizer behaviour, which reveals entrepreneurial quality and contributes to the entrepreneur's competitiveness, survival and growth. These behaviors are challenging to delineate and they refer to a venturesome inner self of an entrepreneur, which ought to impregnate any decision made by an entrepreneur inside his or her business, when pursuing to energize it (Guzman & Santos, 2001 and Gerber, 1997). Such dynamic and not routine behaviors include: the establishment of a formal planning system, versus excessive improvisation or establishment of an employee development system (Cumplido & Alcalde, 2002).

Planning entails the ability to undertake and put into practice certain ideas that transform activities linked with the usual operations of the business, which are instrumental in boosting its capacity to growth and orienting it to innovation. The lack of long-term view and excessive improvisation behaviors demonstrates lack of initiative, which prevents entrepreneurs from crafting a competitive edge in the market and enjoying the benefit of the edge, especially in the long term. Planning capacity possessed by the entrepreneurs shows initiative. It involves possessing a long-term view and avoiding excessive improvisation (Guzman & Santos, 2001).

Interrelatedness of entrepreneurial quality constructs

Several authors agree that many of entrepreneurial qualities are interrelated, but the results of their studies are mixed, (Isobel, 1998). Besides, these studies do not explicitly show how these are interrelated and what these relationships imply for testing these qualities.

Effective innovation calls for planning (initiative), pursuance of ambitious behaviour in the competitive world calls for innovation in order to survive, while innovation and ambition can only be effectively and efficiently attained through effective networks. In support of the above, Littunen, (2002) asserts that, irrespective of the nature and size of business, an entrepreneur cannot undertake major innovations alone and partly over come any resource barriers to innovation. There has been an increasing trend in strategic collaboration and alliances (networking) among innovative entrepreneurs.

The proposed model

As discussed in the foregoing, there is no generally accepted model that can be used to explain entrepreneurial quality. We fill that gap by proposing a conceptual model that can be employed to explain and investigate entrepreneurial quality based on the entrepreneurship literature review. This model explains, in the authors' opinion, the constructs that define entrepreneurial quality, which include: qualitative aspects like motivation, innovation, networking, ambition and initiative as presented below:

Ambition Innovation

Initiative Networking

Source: Extant Literature

The proposed model exhibits a wide range of interdependence among the constructs of entrepreneurial quality. However many on these inter-relationships are yet to be confirmed by empirical evidence, especially in relation to the Africa continent. It should also be noted that the proposed model is multi-dimensional considering economic, psychological and sociological factors relating to the entrepreneur and needs to be meticulously tested before its confirmed and accepted in the entrepreneurship discipline.

CONCLUSIONS

Entrepreneurial quality should not be confused with managerial quality, but rather envisaged as venture some initiatives and behaviors entrepreneurs exhibit and use to energize their businesses. It is also important to note that entrepreneurial quality behaviors are not innate, but rather a phenomenon where combination of social, economic, personal variables are examined using a multi-disciplinary methodology.

One reason why entrepreneurial quality has been given so little regard is that quite often entrepreneurship is closely equated to self-employment. Opening up a business may improve unemployment statistics and is an important step in an economy. However, if they are not productive, as evidenced by their failure rates and, replication, such undertakings will have little effect on economic development (Cumplido & Alcade, 2002, and Sserwanga 2004). It is also worth noting that the little data and theories on entrepreneurial quality have been mainly developed in developed economies, which need to be modified and tested in the developing economies in order to fully explain and understand entrepreneurial quality.

REFERENCES

Cumplido, F. & Acalde, L. 2002. Towards an empirical methodology for the measurement of the quality entrepreneur: The case of Sevilian entrepreneurs, 42nd ERSA Conference Paper, Dortmund. Dickson, K. E. & Hadjimanalis. 1998. Innovation and networking amongst small manufacturing firms in Cyprus. International Journal of Entrepreneurial Behaviour and Research, 4(1): 5-17.

Dodd, S. D., & Patra, E. 2002. National differences in entrepreneurial networking. *Entrepreneurship and Regional Development*, 14: 117-134.

Drayton, W. 2002. The citizen sector: Becoming as entrepreneurial and competitive as business. *California Management Review*, 44 (3): 120-132.

Engelen, E. 2002. How innovative are Dutch immigrant entrepreneurs? Constructing a framework of assessment. *International Journal of Entrepreneurial Behavoiur and Research*, 8(1/2): 69-92.

Gibb, Alan A. 1993. The enterprise culture and education: Understanding enterprise education and its links with small business, entrepreneurship and wider educational goals. *International Small Business Journal*, 3(11): 11-34.

Guzmán, J & Santos, F.J. 2001. The booster function and the entrepreneurial quality: An application to the province of Seville. *Entrepreneurship and Regional Development*, 13(3): 211-228.

Hagen, E. 1962. *On the Theory of Social Change: How Economic Growth Begins*. Massachusetts Institute of Technology: The Dorsey Press Inc.

Hebert, Robert F. & Link, Albert N. 1989. In search of the meaning of entrepreneurship. <u>Small</u> *Business Economics*, 1: 39-49.

Isobel, K. 1998. *Early Development of Entrepreneurial Qualities: The Role of Initial Education*. EIM: Zoetermeer.

Johannesssen, J. Oslen, B. & Lumpkin, G. 2001. Innovation as newness: what is new, how new, and new to whom? *European Journal of Innovation Management*. 4(1): 20-31.

Jong, J. Kemp, R. & Snel, C. 2001. Determinants of innovative ability: An empirical test of a casual model. *Research Report 0010/A*, Zoetermeer.

Kevin, H. 2005. A measurement Framework for International Entrepreneurship Policy Research: From Impossible to Malleable Matrix. Un-published.

Knight, F. 1948. *Risk, Uncertainty and Profit*. (1ª edición .Houghton Mifflin Company. The Riberside Press Cambridge. 1921) The London School of Economic and Political Science: Hoghton Street, Aldwich, London.

Leibenstein, H. 1966. Allocative efficiency X-efficiency. American Economic Review, 56.

Littunen, H. 2000. Entrepreneurship and the characteristics of the entrepreneurial Personality. *International Journal of Entrepreneurial Behaviour & Research*, 6(6): 295-309.

McClelland, D. C. 1961. *The Achieving Society*. London: The Free Press.

Roepke, J. 1981. The underdeveloped freedom, managerial activity and economic development. The case of Indonesia.

Ropke, J 1998. The Entrepreneurial University Innovation, Academic Knowledge Creation and Regional Development in a Globalised Economy.

Salvisberg, A. 2002. Towards the emergence of an employed entrepreneur: Shifting soft skill requirements in the second half of the second century. *The Enterpenruerial Scoceity*, Barisbane, Zurich.

Santos, F. J. 1998. La Teoría de la Función Empresarial: Una Aproximación Cualitati

Schumpeter, J. 1934. *Theory of Economic Development*. Cambridge: Harvard University Press.

Sserwanga, A. 2004. Entrepreneurial Quality in Uganda, PhD Proposal, Unpublished.

Verheul, I., and Thurik, R. 2000, Start-up capital: Differences between male and female entrepreneurs. *Research Report 9910/E*, Zoetermeer.

Zeithaml, V. A. 1988. Consumer perceptions of price, quality and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52: 2-22.

Zhao, F. 2005. Exploring the synergy between entrepreneurship and innovation. *International Journal of Entrepreneurial Behaviour and Research*, 10(5): 25-41.

ENTREPRENEURIAL LEADERSHIP AND ENTERPRISE DEVELOPMENT IN EMERGING MARKETS (TRADITIONAL SOCIETIES)

Gido Mapunda PhD

University of South Australia
Email: gido.mapunda@unisa.edu.au

ABSRACT

This paper argues that in order for emerging markets to achieve economic development the establishment of a robust business sector is critical. In the quest to establish such a sector the focus has to be the development of viable and successful small to medium size business enterprises. It further argues that entrepreneurial leadership will be the main determinant for success of such enterprises. The challenge for emerging markets then is to identify and nurture entrepreneurial leadership in the hope that such leadership will embark on the establishment of viable small business enterprises. Once these businesses are successful they will not only provide employment to the people but can also act as role models for other prospective business entrepreneurs. In the quest to identify entrepreneurial leadership, some form of training and mentoring may be necessary. This is premised on the notion that entrepreneurship is not natural, which means people learn to be entrepreneurs and entrepreneurship. In other words, there is no such thing as 'born' entrepreneurs. This article explores the role of entrepreneurial leadership in the development of Indigenous business enterprises in Tanzania and South Australia. The study focuses on ten Indigenous business enterprises in South Australia and in Tanzania that are small in orientation and are considered successful businesses, promoting individual and family holistic development in the process. The research explores the processes, issues and challenges Indigenous entrepreneurs face in developing business enterprises. In addition to entrepreneurial leadership, it also examines other factors that influence practice and success in Indigenous entrepreneurship and enterprise development.

INTRODUCTION

This paper explores entrepreneurial leadership and its role in Indigenous enterprise development in six business enterprises located in South Australia and four business ventures located in Tanzania that are traditional in orientation and are considered successful businesses, promoting individual and community holistic economic development and social advancement. The research explores the processes, issues and challenges facing group-based traditional entrepreneurs and their enterprises face. It also examines the factors that influence entrepreneurial leadership practice and success in Indigenous enterprise development.

Leadership, in particular, entrepreneurial leadership in Indigenous business and enterprise development is an area that has not been given due attention and focus. In the context of Indigenous economic development and social advancement, this article argues that Indigenous enterprise development is a must, and that for such development to be realized, entrepreneurial leadership is a critical factor. In examining entrepreneurial leadership and Indigenous enterprise development there is another factor addressed in the article, albeit briefly-the myth that men are leaders as opposed to women. The truth appears to be that much of the leadership is provided by women. Often men are the mouth pieces of women who provide leadership in the background. In an indirect way the statement by Dubois (date unknown) that 'if you educate a man you educate an individual, whereas if you educate a woman you educate a family', is relevant and of critical significance in this research effort. The potency of this statement is premised on the perception that by educating a woman an entire family will benefit because women are the mainstay of many a family. Women will provide for their families. It also underlines the view that women are inclined to use socialised power to empower others and to benefit a community, whereas men are likely to use power for their own personal ends (Kreitner & Kinicki, 2006). Similarly, educating a man is likely to benefit the man himself and not the family. In traditional societies, for example, men are likely to be away from home with other men, during and after work, while women look after and provide for the wellbeing of the family – children, grandparents and extended family relations.

At another level, in examining Indigenous enterprises and entrepreneurship there may be some specific types of business ventures whereby Indigenous entrepreneurs can have a competitive advantage if supported by competent entrepreneurial leadership. For example, as owners and custodians of Indigenous cultural resources and heritage, Indigenous entrepreneurs should be able to influence and determine how these resources are used. In addition, within the Australian and Tanzanian communities there is now a growing realization and recognition of the distinctive roles and contributions that entrepreneurial leadership provided by male and female entrepreneurs can make to the growth of small business enterprises and how in turn, the business sector can be used to serve the holistic economic development and social advancement of Indigenous peoples.

The purpose of this research project was to study and analyze the role of entrepreneurial leadership in the development of Indigenous business enterprises and entrepreneurship. Additionally the project aimed at investigating the impact of entrepreneurial leadership on the successful establishment of Indigenous business enterprises and how Indigenous peoples/communities responded to it, understand the nature and structure of Indigenous business enterprises, and highlight issues and challenges facing Indigenous business enterprise development.

LITERATURE REVIEW

Indigenous entrepreneurship in emerging markets

While business operation and entrepreneurship is a relatively old, well-established discipline, modern Indigenous business enterprises and entrepreneurship is a relatively new area by comparison. Its growing prominence in recent times can be explained by the awakening of Indigenous peoples around the world coupled with international shifts toward First Nations rights and self-determination. Indigenous business enterprises and entrepreneurship is potentially a powerful tool that can be used to promote economic independence, self-determination and cultural preservation within Indigenous or traditional societies (Buttler & Hinch, 1996). In principle Indigenous enterprise and entrepreneurship in areas such as small to medium size business enterprises (SMEs) is accessible to individuals and groups, it requires limited capital and skills, and appears to easily accommodate values and environmental concerns shared by many Indigenous groups (Hall, 1996). Furthermore, Indigenous entrepreneurship in tourism, for example, is potentially capable of rejuvenating local economies, minimize the impact of negative tourism through local intervention, and strengthen, support and value Indigenous cultural heritage (Brokensha, 1992).

Despite potential benefits, the growth of Indigenous business enterprises is not immune from controversy. In the case of tourism for example, critics see Indigenous tourism as a 'double edged sword' that promises prosperity on the one hand while potentially exploiting Indigenous people and their cultural heritage on the other. Commercial contact almost inevitably gives rise to the threat of abuse, the risk that external business interests will dominate local needs and that through commercialization, Indigenous culture will be irreversibly contaminated (Butler & Hinch, 1996), even compromised. I think part of the solution lies in Indigenous business enterprises owned and operated by Indigenous entrepreneurs not only in tourism but in other areas.

Arguably, there are negative and positive impacts of Indigenous business enterprise and entrepreneurship. Some of these have been documented (Brokensha, 1992; Kesteven, 1988; Sofield, 1996) are summarized in Table 1 below:

Table 1
Positive and Negative Impacts of Indigenous business Enterprise and Entrepreneurship

POSITIVE	NEGATIVE			
Economic base to revive Indigenous communities	Increased cost of living for local residents			
Maintenance and growth of income generating	Risk of decline in artistic quality and authenticity			
products, e.g. arts and craft.				
Job creation; Indigenous entrepreneurship and	Domination of external interests and control of			
small business development	managerial and decision-making processes			
Cultural revival and preservation	Exploitation of human and cultural resources			
Investment in environment conservation	Risk and actual desecration of sacred sites and			
	natural resources			
Development enterprises in remote communities	Exploitation of remote communities and			
	increasing incorporation into mainstream society			

While the positive factors may encourage aspiring Indigenous entrepreneurs into the establishment of business enterprises, the negative factors may have the reverse effect - they may discourage and even undermine the involvement of Indigenous peoples into the sector.

Effective entrepreneurial leadership is a critical factor in the Indigenous quest for economic development through enterprise development. There is a dearth of literature on entrepreneurial leadership in general, let alone indigenous entrepreneurial leadership. Operating and developing business enterprises require leadership. What is leadership? There several definitions and perspectives of leadership. For the purpose of this paper, the definition by Mariotti (2007: 279) is used' "A leader is someone who has the confidence and energy to do things on his or her own. Leadership comes from self-esteem. If you believe in yourself, you can do things with confidence and you will inspire confidence in others. Develop a positive attitude and you will become a leader. Great leaders are optimists - they have trained themselves to think positively, no matter what.

I think another important aspect of effective leadership is the ability to train people such that they ultimately become independent of the leader and not dependent on the leader. As Lao Tzu (in Mariotti, 2007: 279) puts it: "Give a man a fish and you feed him for a day, teach a man to fish and you feed him for a lifetime." It can be argued that this is even more critical when canvassing entrepreneurial leadership and enterprise development in traditional or indigenous societies. This is because these societies were colonized and one of the major downsides of colonialism to these societies was the fact that it destroyed traditional peoples' self confidence. Let me illustrated by citing a Tanzanian example: when Tanzania mainly (formerly Tanganyika) became independent in 1961 the local population, having had their self confidence and self-esteem systematically undermined by their British colonial rulers could not bear the thought of having one of their own sons take charge of governing the country as Prime Minister. They did not believe it was possible or even desirable for an African person to govern the country. It took a long time for traditional people to gradual reclaim self confidence and also confidence in their own people's ability to govern the country. Fortunately, Mwalimu Julius Kambarage Nyerere, who became Tanganyika's first Prime minister and Tanzania's first President proved them wrong (Mwalimu is a Swahili word for teacher. Prior to embarking onto politics Nyerere was a Secondary School teacher. Tanzanians affectionately referred/refer to him as President Mwalimu Julius Nyerere because they regarded him as both their president as well as their teacher). His excellent leadership and good governance laid the foundation for Tanzania's political stability for decades to come. Today Tanzania remains one of the most politically stable countries not only in Africa but in the world.

Indigenous entrepreneurial leadership

There is dearth of literature on entrepreneurial leadership in economically developed societies let alone in Indigenous communities. It seems that the role and contribution of entrepreneurial leadership in operating a successful business enterprise is taken for granted and hence not in need of special treatment. I think it needs special treatment because its role is so critical to business survival and success. According to Herron (1990), in order to operate a successful business product/service design, business, industry, leadership, networking, administrative, and entrepreneurial are necessary.

In addition to this list, Baum and Locke (2004) have also suggested that entrepreneurs need the ability to acquire entrepreneurial resources. However, the focus of this paper is entrepreneurial leadership. This focus is in line with the generally accepted view that training and education can sharpen aptitudes and therefore provide individuals with usable skill set (Sriram & Mersha, 2006). This is even more critical in developing societies because of limited education and training opportunities. It can be argued that leadership education and training underpins each of other skills listed above.

The benefits of entrepreneurial leadership training in Indigenous and developing societies in particular would include: provision of entrepreneurial leadership models; exhibiting high entrepreneurial behaviour; entrepreneurship and enterprise mentoring for budding and aspiring entrepreneurs; improved self-efficacy for entrepreneurs; increased entrepreneurial passionate and determination to make a positive influence in people's wellbeing. This last point is significant because unlike the Western economic system, which is abstract because it tends to focus on objects, the Indigenous system primarily focuses on people, hence the need for a holistic approach to entrepreneurship.

Clearly, for many Indigenous groups in developing societies the problem with regard to entrepreneurial skills and behaviour thereof is far more critical. In Africa, for example, low literacy rates (estimated to be 38% in Ethiopia in 2000) and low levels of secondary and tertiary school enrolment, coupled with insufficient government spending on education and training, mean that would-be African entrepreneurs face serious challenges (Sriram and Mersha, 2006). In fact, the poor state of the labor and human capital in most of Sub-Sahara Africa (e.g. Malawi, Mali, and Zambia) is a major reason why they are ranked near the bottom by the United Nations Economic Commission for Africa (UNECA) in regards to their Trade Competitive Index (TCI). Consequently, the higher skill levels needed by entrepreneurs are a low priority for African governments in view of the basic education and training challenges these governments face. The situation is further compounded by brain drain. The United Nation's Commission on Private Sector and Development (CPSD) reports that brain drain for Africa has been 6% since 1990, with over 300,000 African professionals living in Europe and (http://www.undp.org/cpsd/documents/report/english/chapter2.pdf). It is probable that these are potential entrepreneurs who leave their countries and become successful in more entrepreneurshipconducive countries, further robbing Africa of much needed skilled personnel. To give an example of how serious the brain drain problem is the World Health Organization reports (in New Internationalist, 2005) that today there are more doctors from Benin working in France than there are in Benin, West Africa, and there are more Ethiopian doctors in Washington DC than in the whole of Ethiopia. It also shows that South Africa loses almost half its qualified doctors to Canada, Britain and Australia. In order to fill the gap, it recruits staff from poorer countries like Kenya, Malawi and Zimbabwe which now account for 80% of South Africa's rural doctors. Additionally, Zambia's public sector retained only 50 out of 600 physicians trained in medical school from 1978 to 1999, while Britain has saved \$117 million in training costs by recruiting Ghanaian doctors since 1998.

Arguably the role of government for new enterprise and indeed entrepreneurial leadership is especially important in Africa. This can be explained by three reasons: first, in order for appropriate foundations to be put into place for a robust private sector to take shape and contribute to economic development and for entrepreneurship to flourish in developing nations, governments have to play an active and major role. Second, many of the necessary reforms can only occur as a result of specific actions by the state, such as introducing and enforcing legal and regulatory changes to spur entrepreneurship. Third, and arguably the most important reason, the history of many African countries is one of post-colonial socialism where the government was and continues to be a powerful player (Sriram and Mersha, 2006). Almost in each developing country the government provides much of the employment and investment opportunities and has created massive bureaucratic public sector enterprises that still dominate economic activity.

African governments need to develop the internal capacity to help potential entrepreneurs gain the necessary entrepreneurial skills to recognize opportunities, start and operate successful business enterprises. A study by Ladzani and van Vuuren (2002) on content and training methods of SME service providers in South Africa found that business skills were emphasized to emerging entrepreneurs rather than entrepreneurial skills. This suggests, indirectly or otherwise, that

governments need to recognize the importance of education and training in entrepreneurial leadership for successful establishment of business enterprises and must put strategies into place to facilitate the competitiveness of their budding entrepreneurs.

RESEARCH METHODOLOGY

In-depth, semi-structured interviews were conducted with a total of ten business enterprises in South Australia and in Tanzania, which collected data on the role of entrepreneurial leadership in the development and operation of these enterprises and which provided a narrative used to extrapolate the success factors, entrepreneurial problems and challenges encountered.

In the quest to identify entrepreneurial leadership, some form of training and mentoring may be necessary. This is premised on the notion that entrepreneurship is not natural, which means people learn to be entrepreneurs and about entrepreneurship. In other words, there is no such thing as 'born' entrepreneurs. As Barringer and Ireland (2006: 10) put it, "One of the myths about entrepreneurship is that entrepreneurs are born, not made. This is based on the mistaken belief that some people are genetically predisposed to be entrepreneurs. No one is born an entrepreneur. Everyone has the potential to become one".

Apart from conceptual aspects that inform this study, data from interviews and the examination of literature on entrepreneurial leadership was used to develop a narrative, which facilitated the identification of Indigenous entrepreneurial leadership characteristics and how such characteristics influence enterprise development in Indigenous communities. A comparative analysis of the outcomes of the case studies from the two study areas was also undertaken.

The research was conducted in the second half 2006. This is a qualitative (case study) research project that I believe is most suited to this kind of investigation. As Merriam (1988: 10) points out, this approach is especially suited to situations where it is impossible to separate the phenomenon's variables from the context. I believe Indigenous entrepreneurship and enterprise development fits the bill. The case study method (Fielding, 1988; Lincoln & Guba, 1985; Stake, 1978); is advantageous and enables, a) an analytical focus on Indigenous entrepreneurs' construction of their experiences and attitudes related to their entrepreneurial leadership and enterprise development, b) a conceptual framework of economic and holistic development for Indigenous people, c) the provision of contextual thick description which is essential for transferability of application and comparative analysis within the case study, a grounded assessment of the impact of Indigenous entrepreneurial leadership and enterprise development within an Indigenous context and in terms of self confidence, self efficacy and identity.

Six Australian Indigenous business enterprises were identified through networking with Indigenous entrepreneurs and the Business Unit of the State (South Australia) Indigenous Affairs Department, Adelaide. Three of the six are community-run business ventures owned and operated by Indigenous communities. Each of the three communities came up with the idea of establishing a cultural (tourist) center in their respective communities as a business arm designed to tap on the growing tourism and hospitality industry. These cultural centers provide a whole range of artifacts for sale to international as well as local tourists. They also provide cultural workshops to schools and tourists. The tourism business arm compliments other business arms of the three communities such as market gardening, bush food, dairy farming, and crop farming.

The remaining three case studies are individual-run privately owned and operated Indigenous business enterprises – a tourist tour operator for schools, international and local tours; human resource consultancy; and catering service. Each of these business ventures collaborate and network with Indigenous communities within and outside the larger Indigenous community in an effort to capitalize on cultural and other resources for the benefit of both the communities and the owners of these business enterprises.

In regard to Tanzania's contribution to the study, four privately owned and operated business enterprises were identified through the process of snowballing – a transport company; a restaurant; a general store; and a tour guide and excursions company. Note that unlike Australia, Tanzania does not have an Indigenous community structure for historical and political reasons, the discussion of which is outside the scope of this study.

Once the ten business enterprises were identified, formal arrangements were made to contact them in order to request their participation in the study. The requests were granted and both participants and the researcher duly signed consent forms.

Data collection

In-depth interviews were employed as the main method to collect data. Data collection techniques included open-ended semi-structured interviews. These techniques were designed to collect data on the conditions for success in establishing Indigenous business enterprises, the significance of Indigenous business enterprises to Indigenous economic development and social advancement, the role of leadership in Indigenous entrepreneurship, and the role of entrepreneurial leadership in Indigenous enterprise development. A semi-structured interview format allows the interviewee a great deal of freedom, while covering a given set of topics in a more or less systematic fashion (Moser and Karlton, 1973). Such a format gets away from the inflexibility of fixed and formal questions, yet gives the interview a set form and ensures that all relevant topics are discussed.

To ensure that the research aims were met, participants were treated as co-researchers. The term *participant* is used instead of the conventional term *subject*. This is an acknowledgement that the participants are the experts not the researcher. Treating participants as co-researchers facilitated their participation in common learning with the researcher in which action, reflection, and theorizing are part of the same process and take place as a dialogue between equal partners (Karlsen, 1991: 148). Ultimately, however, the task of analyzing data and writing the findings into a coherent finished product rests with the researcher.

ANALYSIS AND FINDINGS

Data from the case studies and interviews were collated and recorded in the form of narrative description based on the main concept cues provided during interviews. Further interpretation focused on the significance of Indigenous entrepreneurial leadership in the development of business enterprises and the social advancement of its communities. In order to minimize the risk of misinterpretation and trivialization of the results by some readers, this qualitative interpretation transcended the "merely descriptive" (Merriam, 1998:131).

Where relevant, discourse analysis was used to analyze documents essential to this study. These were mainly government policy statements on Indigenous economic development. According to McHoul (1986, in Fisher and Todd (eds): 187-202) this process acknowledges that a social fabric is constituted and saturated by discursive formations; that policy, policy-making, policy writers, policy studies, and so on effects of determinate techniques of signification, and that these techniques of signification provide the 'rules', the conditions of possibility for policy.

This is a qualitative study, which is essentially a type of interpretive research. This type of research presupposes that reality is holistic, multidimensional, and ever-changing; it is not a single, fixed, objective phenomenon waiting to be discovered, observed, and measured (Erickson, in Merriam, 1988: 165). Put another way, this is a study about real people with real challenges. Order in their society is often unstable and changeable. Cause and effect are artificial concepts, which oversimplify complex, continuous processes of metamorphosis and ambiguity (Kellehear, 1993: 26-27). From a qualitative researcher's viewpoint, social science should go out into the world but with only a desire to listen and participate and not to impose a pre-structured theory onto the world. Quantitative researchers may have reservations (as this approach forces them out of the 'comfort zone' which revolves around quantitative methods). One must bracket one's former understanding about particular social phenomena and attempt to understand these processes from the point of view of the experience (Kellehear, 1993: 27). Most importantly, the researcher is essentially telling or reporting the participants' story (knowledge), be it in a sophisticated and scholarly manner. Arguably, unlike in the past, this approach gives Indigenous participants a voice in shaping the way their stories (knowledge) is communicated and articulated inside and outside their communities.

The researcher found that, in both study areas entrepreneurial leadership, played a pivotal role in the success of Indigenous business enterprises both in community-run Indigenous business enterprises as well as individual-run (privately owned and operated) Indigenous business enterprises. The research participants saw entrepreneurial leadership as a critical factor in the development of

viable and hence successful business enterprises. There is also one finding, what I regard as a 'cultural bend' which is that: participants observed that their entrepreneurial leaders had to bear in mind that providing for and maintaining family relationships took priority over profit maximization. To both types of business enterprises, that is, community-run, and individual-run, preserving and maintaining the 'soul and spirit' through relationships was more important than maximizing profit. The latter was seen as merely a tool or a means to an end not an end in itself.

When asked: What role did entrepreneurial leadership play in the development and operation of their business? Both community-run and individual-run business enterprises responded that "leadership is absolutely critical for our business activities to succeed. We do not take it for granted either. You see, most of our people do not have self confidence. Consequently, those who are confident and possess leadership qualities are valued commodities to us. Our communities are in desperate need of entrepreneurial leaders". When asked: Is there a correlation between entrepreneurial leadership and successful operation of your business enterprise? The answer was unequivocally clear. They said "The situation is very simple for us: no entrepreneurial leadership equates to business failure. That is precisely why we do not take it for granted. Several would be Indigenous business enterprises have failed mainly because of lack of entrepreneurial leadership. We also believe that there can be no establishment and development of successful Indigenous business enterprises without quality entrepreneurial leadership. When asked: What outcomes did they want from their business? There was a definite pattern in the responses from participants. Community-run Indigenous enterprise one responded, "The biggest outcome for us would be to provide employment for Indigenous people. Given a choice between maximizing profit and providing employment for our people the choice is very clear to us - employment". Community-run Indigenous enterprise two responded, "Our main aim, sometimes at the cost of making a dollar, is providing employment for our people; developing and nurturing relationships within our community and also with the local non-indigenous community".

The entrepreneurs from the two individual-run Indigenous business enterprises gave similar responses. One of them responded, "Oh, now this is a tricky one. I want to be able to accomplish and sustain achievable goals or objectives; improved quality of life and the general wellbeing of Indigenous people. Seriously though, the main outcome for me would be to have the capacity to employment Indigenous people. For example, it would be rewarding to be able to take Indigenous students on board for work experience because they need it to position themselves in the job market". The entrepreneur/owner-manager of the remaining enterprise responded, "It would be great for the business to make money. This would allow us to employ to employ Indigenous people. It would be good if we were able to provide jobs to our people, especially our youth so they can look forward to a bright future".

From an Indigenous standpoint, these responses have one major entrepreneurial leadership implication: the driving force in Indigenous entrepreneurship is not profit maximization but making a positive difference to members of the community. However, in the process of doing so, money is an important tool – a means to an end rather than an end in itself. A similar pattern emerged in the four Tanzanian business enterprises. One entrepreneur responded, "You know, many of our people are doing it tough these days. It would be very rewarding to be able to provide employment to our people. God only knows that our people desperately need jobs. We want to make money so we can make a positive difference by creating jobs for people".

These responses provide testimony to the earlier observation about Indigenous peoples' perception on money and its role in Indigenous entrepreneurship and enterprise development. It is significant to note that when the Tanzanian entrepreneurs were asked what drove them into starting a business: a common response was, "I had no choice but to start a business in order to survive. I had difficulty making ends meet, this led me to start my own business". This response is consistent with previous studies which show that most Africans who start their own business do so as something of a last resort and as a means of survival rather than a preferred pathway to wealth accumulation and become rich. These are 'necessity' entrepreneurs. In fact, it is often said that there are many 'necessity entrepreneurs' in Africa, that is, people who start micro businesses to supplement their income or open small retail shops because that is the only way for them to earn a living or make ends meet (Sriram and Mersha, 2006). According to Charmes (1999) many of these businesses are informal and subsistence-level, with the informal sector in some African nations accounting for a substantial

portion of the non-agricultural Gross Domestic Product (GDP). Mitchell (2004), referring to a study by Kuiper (1993), reports that this economic to start a business is especially significant among African women entrepreneurs.

Historically, entrepreneurship has not been a career path for many Africans, especially for the educated elite (Sriram and Mersha, 2006). In other words, those who are educated prefer public sector employment because of job security. However, because there are increasingly fewer jobs compared to applicants there is need for governments to motivate people to pursue entrepreneurship as a viable economic and career option. This is where entrepreneurial leadership and successful entrepreneurs as role models for aspiring entrepreneurs is critical for enterprise development.

Indigenous communities generally sanction and approve the business activities that are undertaken in their respective communities. Community involvement was critical for the success of Indigenous business enterprises. In the case studies researched in this paper positive and harmonious relations between Indigenous business enterprises and the wider Indigenous community were evident in situations where the Indigenous community was actively involved in their consensus decision making processes and accrued tangible benefits from the Indigenous business operations. Participants in the study regarded these aspects as part and parcel of Indigenous entrepreneurial leadership. Occasionally, however, friction or conflict can surface over unresolved kinship and quasi-kinship issues, resource allocation, and competing individual or group interests.

There is something empowering about entrepreneurial leadership in these Indigenous business enterprises. In general, the leadership style tends to be participative and inclusive of staff and community members. Staff and community members actively participate in making decisions especially on new business developments. This approach enhances commitment by all to the success of the business activities because people seemingly identify themselves with the projects and take pride in their success. It is also empowering in that the participative, consensus processes make it possible for communities to identify champions who have good skills and capabilities, and have the potential to become excellent entrepreneurial and community leaders. Self-efficacy is another critical trait in Indigenous and developing societies. The participative and consensus processes mentioned above do facilitate self-confidence as well as enhance self-efficacy. One of the many downsides of colonialism was the destruction of the colonized peoples' self-confidence, which also had a negative effect on their self-efficacy. According to Kreitner and Kinicki (2007, P. 144) self-efficacy is a person's belief about his or her chances of successfully accomplishing a specific task.

It can be argued that models in entrepreneurial leadership and behaviour can play a major role and will enable colonized peoples to re-claim their confidence and Self-efficacy - a belief in themselves and their own abilities. These are critical traits and play a pivotal role in entrepreneurship and enterprise development.

When asked: what were the benefits of operating business? Participants identified the building confidence, being your own boss, doing something people said you cannot do. Enhancing 'can do' attitude, building friendships and networks, financial independence, providing business role models for aspiring Indigenous entrepreneurs, supporting and giving family member a head start in life, teaching Indigenous people to be proud of themselves, their culture and heritage, enhancing self determination, and leaving your mark, your legacy as some of the benefits.

When asked: what was the role and impact of (entrepreneurial) leadership in Indigenous business enterprises? There was a common pattern in the responses of participants from the two study areas: "Indigenous businesses are increasingly acknowledging the important role leaders (champions) play in the running of our business enterprises. As one entrepreneur put it, 'I guess we have always known how valuable they are, only that we have not openly acknowledge them. We are now changing and are beginning to openly acknowledge the important role these champions play in our society. It is time we talk up the significant contribution they make and give credit where it is due".

The participants in this study felt that the outcomes of operating a business were just as important as entrepreneurial leadership, both of which were to be considered carefully in any enterprise development efforts When participants were asked: 'what outcomes they wanted from their involvement in business operation for themselves, the Indigenous society and the wider society in general?' Several animated responses were given. The following is a summary of their outcomes:

Table 2
Outcomes of Indigenous Participation in Business

GROUP	OUTCOMES					
INDIVIDUAL PARTICIPANTS	Self-confidence, self-esteem, financial security, respect, educational and skills development, professional advancement, personal growth.					
INDIGENOUS SOCIETY	Increased employment opportunities. Community skills development.					
	Identify and nurture community champions/leaders					
	Local and national communities networking and cooperation.					
	Promoting Indigenous peoples' achievements and positive images. Talking up Indigenous success stories.					
	Empowerment of Indigenous peoples.					
	An Indigenous 'entrepreneurship renaissance.'					
	Promoting Indigenous communities as a vital business resource for the use and benefit of Indigenous peoples.					
THE WINER GO CHETH	Dissemination of knowledge.					
THE WIDER SOCIETY	Economic growth through business start-ups and enterprise development.					
	Cross-cultural training in entrepreneurship and enterprise development.					
	A meeting place to learn, reflect, and develop networks and friendships.					

DISCUSSION

Challenges facing entrepreneurial leadership and enterprise Development in emerging markets

Entrepreneurial leadership and enterprise development in emerging markets are faced with different types of challenges. Participants in this study identified several challenges, some of which are discussed below.

External forces: The dominance and control by government agencies in particular, was seen as a major challenge. While government funding was regarded as necessary and inevitable for entrepreneurship and enterprise development, participants had reservations about the stringent conditions on funding contracts that are administered by government agencies. This is especially relevant in the case of community business enterprises.

Creation of an environment that fosters entrepreneurial behaviour and leadership: There is ample literature on this topical issue such as the need for governments to streamline the bureaucracy, fight corruption, ease burdensome regulatory structures on new and small businesses, and tax reform in developing societies. Bureaucratic and regulatory bottlenecks not only complicate the ease with which new enterprises are established and operated but also increase the cost of doing business, decrease a business enterprise's ability to respond to market needs and thus reduce its competitiveness and profitability. Arguably, however, the major challenge for developing societies in Africa and elsewhere is for governments to create an environment that fosters entrepreneurial behaviour and leadership. Such an environment will strengthen entrepreneurship and enterprise development with increased

business start-ups and stronger small business enterprises. Governments in these societies have to minimize administrative red tape and provide a positive business entrepreneurship climate.

There are a few 'best practices' models that come to mind. For example, one-stop shops such as the Tanzanian Business Registration and Licensing Agency have dramatically reduced the time it takes to register a business. In Kenya, the introduction of a single permit to start and operate a business has reduced costs for small businesses while increasing the government's revenues. Zambia's unified tax authority has eliminated duplication and unnecessary delay. All of these are examples of the types of administrative reforms that will help entrepreneurs and can be implemented easily if there is strong political will and resolve by the polity of the day (Sriram and Mersha, 2006).

Creation of business networks that seek to promote the interests of the private sector by influencing government policy (McDade & Spring, 2005) may help improve the business climate. Business networks are part and parcel with the creation of an environment that can foster entrepreneurial behaviour and leadership.

Initiate 'social or community entrepreneurship' through public-private partnerships: There are signs that the traditional approach of providing aid whereby donor countries provide funds and technical assistance to governments in developing societies is giving way to a new model. This is a new social entrepreneurship model whereby 'wealth creation is increasingly seen as a vehicle for social change' (Bridges.org, 2002, p.28) and donors seek to support and strengthen SMMEs through partnership with governments, companies and NGOs in order to bring about the desired social change. A study by Bridges.org also shows that several social entrepreneurship initiatives that assist SMMEs in developing societies have been launched based on public-private partnerships. These initiatives emphasize the application of fundamental business principles, accountability and performance measurement and take different forms - they can be local initiatives established at the community level, national initiatives, or international initiatives established at the community or national level. Such efforts are designed to help create and strengthen new start-ups by providing them with a variety of valuable services including planning assistance, management support, financial support, business incubation facilities, networking and relationship building (Bridges.org, 2002) and can be invaluable to SMMEs in developing societies.

Lack of education and training in entrepreneurial leadership and enterprise development:

Participants unanimous expressed the view that in general Indigenous peoples had limited formal education and training in general let alone in entrepreneurship, lacked self-confidence, had low self-esteem. There was consensus among participants that these factors helped explain their disadvantage and disempowerment. Australian participants also asserted that the 'handout mentality' perpetuated by welfare had given rise to an attitude of entitlement at an individual as well as community level. Consequently, some Indigenous organizations had to deal with problems of absenteeism. Traditional society dynamics: In Australia, in particular, the Indigenous community framework or structure is an anomaly! Often a community is made up of different tribal groups, naturally a recipe for friction between groups. Indigenous communities are a government construct conveniently designed to deal with a particular group of people. As Mapunda (2003: 30) puts it,

"Indigenous society is heterogeneous, complex and diverse. Yet many non-Indigenous bureaucrats and politicians have treated Indigenous society as homogenous. On their part (non-Indigenous government officials), one might suggest, it has been convenient to do so because it then becomes easier to deal with a 'homogenous' group than a heterogeneous, diverse group".

Participants cited Indigenous community politics as another challenge. Conflicts within Indigenous communities can stem from competing interests of kinship and quasi-kinship groups – competing for scarce community resources, land and counter land claims. Participants also stated that the widespread 'tall poppy syndrome' affected Indigenous communities as well. Successful individuals or groups may attract envy and resentment from those who are less successful. At another level, participants explained that traditionally, Indigenous communities do not see the need for aggressiveness (that seems to be the norm in non-Indigenous business) and in fact resent it – they consider it to be arrogance, which to them is quite unnecessary. Western business convention would see self-promotion and marketing as central to business success. However, Indigenous peoples have

problems with both concepts. As one Indigenous entrepreneur put it, "Self-promotion and marketing is not culturally appropriate for us. Self-promotion is a hard thing for Indigenous people to do. It does not come naturally. Sometimes I am embarrassed when I have to do it, but we have to change the way we think". (C. Thyer & Pers Comm, 2005).

There is what the researcher refers to as a 'cultural bend' or an Indigenous business worldview which is premised on the belief that Indigenous business entrepreneurship can and should be successfully promoted and marketed without aggressiveness.

Lack of capital and the cost of capital: In general there is a dearth of resources in Indigenous or traditional societies. Even when capital is available, for example, often its cost is unaffordable to most Indigenous peoples. Participants cited securing capital and other resources necessary to keep abreast with innovation and the development of infrastructure as one of the main obstacles facing indigenous business enterprises and entrepreneurship. Shortage of capital severely restricts business capacity. Limited financial resources made it difficult to promote and market their products and hence unable to expand their business operations.

Coming to terms with operating a business: Generally, while the thought of running one's own business is exciting, venturing into it was not an instant success for Indigenous entrepreneurs. They quickly learned it demanded perseverance, patience, changing their thinking, and being able to 'keep family away from the business.' Indigenous entrepreneurs realized that 'mixing' family and business made it difficult to succeed in operating a business enterprise. Yet, from an Indigenous cultural standpoint, it was hard not to 'mix' business with family, which posed a real challenge for those Indigenous business enterprises and entrepreneurs who wanted to be successful business operators. Above all, the business did not offer immediate returns on capital invested. Most of the participants realized that rewards had to be a long-term proposition. As one participant put it, "We had to come to terms with operating a business: what is it? It calls for a lot of hard work and training. Many of our people are not up to it because we are shy we have got disadvantages in certain areas. Many cannot read, cannot write, cannot spell, and lack self-confidence. We also had to keep the business separate from family, which is a difficult thing to do in Indigenous culture" (D. Walker, & Pers comm, 2002).

Participants reported that their business enterprises had to adjust and cope with seasonal fluctuations, increased competition, and pressure to innovate regularly. Employees had to come to terms with business protocols, overcome personal insecurities and generate enough self-confidence to deal with (often) an intimidating (or discerning) public, especially those participants who had to deal with the public for the first time.

Managing the challenges

Clearly, Indigenous business enterprises examined in this study have to deal with several challenges. However, they all had made steady progress and are becoming success stories. Their success is due to a combination of factors such as the provision of a quality product and a supportive management approach, which empowers staff resulting in their commitment and determination to succeed. The traditional Indigenous consensus decision-making approach and providing for the people is still the preferred way of doing business. This also informs their perception of entrepreneurial leadership and enterprise development – the Indigenous way of entrepreneurship. In regard to community-owned and managed business ventures, the injection of capital through government and joint venture partnerships has contributed to infrastructure and market development giving rise to positive outcomes to respective communities and the wider Indigenous society.

Individual-owned and managed Indigenous business enterprises tend to remain small and focused. This is mainly because of scarce financial resources and limited support. At any rate, success has also come as a result of strategic partnerships, which allow them to build their products while at the same time cutting on their overheads. They heavily rely on word of mouth for the promotion and marketing of their products.

There are three limitations with the study: first, given that the research is based on a total of ten four case studies from the two study areas, it is limited in that the study can not be generalized to the larger Indigenous societies of the world. Second, entrepreneurial leadership is still an uncharted territory and there is limited literature especially on Indigenous and developing societies. Third, more

time is required to explore other similar societies for a comprehensive comparative study of entrepreneurial leadership and enterprise development in developing societies.

There is scope for future research into entrepreneurial leadership in Indigenous business enterprises and entrepreneurship. A qualitative study, using grounded theory that would focus on business enterprises from other developing societies would be appropriate. In addition, a study examining other forms of Indigenous business enterprises and entrepreneurship would allow the research effort to discover forms or styles of entrepreneurial leadership in Indigenous business enterprises and entrepreneurship. This will enable the research effort to determine which styles work and under what conditions.

REFERENCES

Barringer, B. R. & Ireland, R. D. 2006. *Entrepreneurship: successfully launching new venture.* New Jersey: Pearson-Prentice Hall

Baum, J. A. & Locke, E. A. 2004. The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth. *Journal of Applied Psychology*, 89(4): 587-598.

Bridges.org. 2002. Supporting entrepreneurship in developing countries: Survey of the field and inventory of initiates.

Brokensha, P & Gulberg, H. 1992. *Cultural tourism in Australia*. Canberra: Australian Government Publication Service.

Butler, R. & Hinch, T. 1996. **Tourism and indigenous peoples**. London: International Thomson Business Press.

Charmes, J. 1999. Micro-enterprises in West Africa. In King, K. and McGrath, S. (Eds.), *Enterprise in Africa: Between poverty and growth*: 71-82, London: Intermediate Technology Publications.

Freese, M. 2000. Success and failure of micro business owners in Africa: A psychological approach. Westport, CT: Quorum.

Herron, L. A. 1990. *The effects of characteristics of the entrepreneur on new venture performance*. Doctoral Dissertation, University of South Carolina.

Kiggundu, M. N. 2002. Entrepreneurs and entrepreneurship in Africa: what is known and what needs to be done. *Journal of Development Entrepreneurship*, 7(3): 239-259.

Kreitner, R. & Kinicki, A. 2007. *Organizational behavior*, 7th Edition. New York: McGraw Hill.

Kuiper, M. 1993. Women entrepreneurs in Africa. *Discussion Paper No.68*, Geneva: International Labour Office.

Ladzani, W. M. & van Vuuren, J. J. 2000. Entrepreneurship training foe emerging SMEs in South Africa. *Journal of Small Business Management*, 40(2): 154-161.

Mapunda, G. K. 2003. *Indigenous peoples' business*. Unpublished PhD Thesis, RMIT University, Melbourne, Australia.

Mariotti, S. 2007. *Entrepreneurship: Starting and operating a small business*. New Jersey: Pearson Prentice Hall

McDade, B. & Spring, A. 2005. The new generation of African entrepreneurs: Networking to change the climate for business and private sector-led development. *Entrepreneurship and Regional Development*, 17(17-42).

Mitchell, B. C. 2004. Motives of entrepreneurs: A case study of South Africa. *Journal of Entrepreneurship*, 13(2): 167-183.

Moser, C. A. & Kalton, G. 1973. Survey methods in social investigation. London: Heinemann.

New Internationalist. 2005. The people, the ideas, the action in the fight for global justice. June.

Sriram, V., & Mersha, T. 2006. Facilitating entrepreneurship in Sub-Sahara Africa: What governments can do. *Paper presented to the Leadership and Management in Sub-Sahara Conference, Zanzibar*, June-July, 2006.

STRENGTHENING ENTREPRENEURSHIP IN AFRICA

Tigineh Mersha
Ven Sriram
University of Baltimore, MD, USA
Email: vsriram@ubalt.edu

ABSTRACT

Strengthening entrepreneurship is seen as key to employment generation and economic growth in many emerging markets. Based on a literature review of African entrepreneurship, this paper identifies the factors that are seen as driving business start-ups and examines the challenges faced by entrepreneurs in that continent. It then presents the results of data collected from an exploratory sample of Ethiopian entrepreneurs and suggests a set of interventions that may help overcome the challenges faced by these start-ups. Interestingly, the findings show that the nature of these assistance programs have to recognize that the needs of "necessity" entrepreneurs are different from those of the "high potential" ones.

INTRODUCTION

Definitions of entrepreneurship vary somewhat, but for purposes of this paper entrepreneurship is defined "as the act and process by which societies, regions, organizations, or individuals identify and pursue business opportunities to create wealth" (2002, p. 5). While the starting of a new business venture is among the important distinguishing attributes of the entrepreneur, many researchers and theorists see entrepreneurship as a way of thinking and believe that one does not have to start a new business to be an entrepreneur, nor does starting a new business *per se* make one an entrepreneur. According to Herron (1994), entrepreneurship is a state of mind or a set of behaviors, characterized by innovation, flexibility and creativity.

Entrepreneurs are often thought of as people who have the ability to identify and exploit new opportunities for creating wealth. Such wealth creation benefits not only the entrepreneur but also society and the nation as a whole. In some cases, the entire society stands to benefit from the entrepreneurial endeavors of individuals and organizations as illustrated by the impact entrepreneurial firms in the high tech industry have had on societal productivity and quality of life.

There is ample evidence that entrepreneurship drives economic growth and job creation in any nation (Berger, 1991; Reynolds and White, 1997), and studies have shown strong association between entrepreneurship, poverty reduction and economic growth (Bridges.org, 2002). Convinced of entrepreneurship's role as a vehicle for economic growth in developing nations, the United Nations (UN) formed a Commission on the Private Sector and Development in 2002 for the purpose of reducing the various obstacles faced by small businesses in developing nations. The primary goal of the Commission is to promote entrepreneurship by reducing bureaucratic bottlenecks, providing micro finance and strengthening property rights.

Based on a review of entrepreneurship literature in Africa, this paper will identify the dominant characteristics of African entrepreneurs. It will also identify the primary challenges encountered by African entrepreneurs and will then, based on an exploratory survey of Ethiopian entrepreneurs, propose strategies that can strengthen entrepreneurial initiatives in Africa.

The paper will be organized as follows: In the next section we will identify the characteristics of African entrepreneurs and the drivers of entrepreneurship in Africa. This is followed by an examination of the challenges encountered by African entrepreneurs. The findings of the survey are then presented and we conclude with proposals to enhance entrepreneurial success in Africa.

LITERATURE REVIEW

Characteristics of African Entrepreneurs

It was shown above that entrepreneurs have certain personality traits that distinguish them from non-entrepreneurs. In this section, the characteristics of African entrepreneurs are identified and the barriers they encounter are highlighted based on a review of the literature. Studies have found that entrepreneurs tend to have similar innate characteristics across nations Shane (1992). Typically,

entrepreneurship is associated with innovation and creativity. However, African entrepreneurs often provide a limited range of services and are not innovative in creating new products or new markets (Kiggundu, 2002). Most entrepreneurial activities in Africa are retail or service oriented. Entrepreneurial activities in Africa may be grouped into two broad categories (Kiggundu, 2001).

- a. *Micro enterprises and individual entrepreneurs*: These are typically one-person operations and they comprise the dominant group of entrepreneurs in Africa. Most small and micro enterprises (SMEs) are owned and managed by women. In West Africa most of these types of businesses are located in rural areas where much of the population lives. Failure rates of these entrepreneurs are high. A large proportion of entrepreneurs in this category are "necessity entrepreneurs", i.e., the owners go into business for themselves because they don't have any other employment options. These types of entrepreneurs have very low start-up capital and their organizational and managerial skills are very limited. Further, the level of their business activity is low and their record keeping is poor. As a result, they have difficulty obtaining bank loans and they often remain poor.
- b. *Small and medium size enterprises (SMEs):* Compared with micro enterprises and individual entrepreneurs, the SMEs are relatively larger in size and are managed better. Compared to micro enterprises and individual entrepreneurs, they have better capital endowments and greater potential for growth. The success rate of SMEs is higher than that of the previous group although failure rates during the first three years are very high (Kiggundu, 2002). Many are started by better educated and trained entrepreneurs and as a result, are managed better and their owners' connections allow them to navigate the bureaucracy more easily than the "necessity" entrepreneurs.

The dominant organization form among African entrepreneurs is sole proprietorship with corporations being the least known. This may be due to ignorance of how such entities are formed and managed, and also due to limited legal knowledge about forming such entities (Kiggundu, 2002). The fact that most entrepreneurial firms are small and that they operate independently impede their access to important business networks, limits their innovativeness in creating new products and services, and weakens their competitiveness (Ramachandran & Shah, 1999). Due to their inability to establish effective networks and clusters, African entrepreneurs use an organization form dubbed the "octopus" whereby the firm invests in different types of businesses with the purpose of distributing risk and uncertainty, and to involve different family members (Jorgensen et al., 1986). While this may help minimize risk and uncertainty, the use of the octopus form of organization scatters the available resources, reduces the firm's ability to focus on its core competencies for competitive advantage, and inhibits its growth. As a result, their access to critical resources is very limited, their potential for innovation and efficiency curtailed, and their competitiveness is weakened. Eventually, most entrepreneurial firms in Africa run out of business (Kiggundu, 2002).

Factors that impact entrepreneurial success in Africa

Entrepreneurial success in Africa is impacted by several factors. These include: personal/behavioral characteristics, training and education, entrepreneurial competency, gender, ethnicity and culture. In a study of South African entrepreneurs, Mitchell (2004) identified six dominant reasons for starting own business. In order of importance, these are: "survival, financial independence and security, to escape a negative situation, and to enable personal growth." Further, based on factor analysis, Mitchell identified the following factors common to entrepreneurs in South Africa: "external approval, personal development, recognition, need for independence, influence in community and benefits and security". Most of the above personal/behavioral factors are consistent with entrepreneurs elsewhere.

Entrepreneurial competency: Includes "attitudes, values, beliefs, knowledge, skill, abilities, personality, wisdom, expertise (social, technical, managerial, mindset, and behavioral tendencies)" required to successfully launch and sustain the entrepreneurship (Kiggundu, 2002, p. 242). The extent to which these variables will be required to ensure success varies with *demographic, psychological, work behavior* and *core competencies*.

Training and education: Empirical studies show mixed results regarding the effect of training and education on entrepreneurial success in Africa. Some studies demonstrated that those who lacked technical skills and had low education were less successful, and that higher education, work experience and exposure to foreign environments positively impacted success (Trulsson, 1997). Even completion of primary education was found to have a positive impact on enterprise management and growth. A study based on World Bank data showed that Asians and Europeans in Africa who were better educated had competitive advantage over less educated black Africans (Ramachandran and Shah, 1999).

Gender and entrepreneurship: There is evidence that the number of women entrepreneurs is growing around the world. According to Global Entrepreneurship Monitor (GEM), one out of 11 women in the world today is an entrepreneur ("Global 360", T&D, 2004). It has been shown that necessity often prompts women to start their own business -- nearly half of the women surveyed indicated that they went into their own business because they had no other job options. This suggests that in developing countries where job opportunities for women are less favorable, the potential for generating even more female entrepreneurs is very strong. To foster economic growth in Africa, therefore, effort must be redoubled to enhance the participation of women entrepreneurs.

Ethnicity: Ethnic and kinship links can strengthen entrepreneurial success by providing favorable labor and capital resources as well as continued customer relationships (Masurel et al., 2002).

Culture: Culture may be defined as a set of shared values, beliefs and expected behaviors (Hofstede, 1980). The influence of national culture on entrepreneurial success has long been of paramount interest in the study of entrepreneurship. Researchers from diverse disciplines including economics, psychology and sociology have shown keen interest in the role of entrepreneurship and the impact of culture on entrepreneurial success. The relative success of new business start-ups is influenced by a nation's cultural traits (Baugn & Neupert, 2003). Entrepreneurship is facilitated by highly individualistic and masculine cultures with low uncertainty avoidance and low power distance (Hayton et al., 2002). Typically, entrepreneurial success is positively correlated with individualism and negatively correlated with uncertainty avoidance. Cultures that grant high social status to entrepreneurs also promote entrepreneurship. African societies are characterized by high power distance (i.e., hierarchical and authoritarian social structure) and collectivism which tend to weaken entrepreneurship (Takyi-Asiedu, 1993). In addition, many social norms practiced in Africa are not compatible with entrepreneurial success. For example, entrepreneurs close their shops to attend funeral services and wedding ceremonies, as well as observe religious and other social obligations. Thus, social acceptance may come at the expense of the enterprise.

Dia (1996) and Kiggundu (2001) argue that entrepreneurs in Africa are generally respected members of their community with extensive social and community involvement. However, Takyi-Asiedu (1993) argues that the social status granted to entrepreneurs is generally lower compared to that accorded to public servants and that this may change only when the entrepreneur becomes very rich. Further, the extensive social network and community involvement enjoyed by African entrepreneurs may be both a blessing and a curse. On the one hand, broad community involvement and social network may help generate new business to the entrepreneurs as well as sustain them by bringing repeat business. On the other hand, some studies suggest that such community involvements take too much of the entrepreneurs' time which causes the business to suffer (Sam, 1998). These arguments are consistent with those of Takyi-Asiedu's who argued that social acceptance of African entrepreneurs may come at a price.

Challenges of African Entrepreneurs

Launching a successful business enterprise can be challenging, but it is even more so to sustain and grow the business. Even in industrialized countries, the failure rate for new businesses is very high. For example, about 50% of all new business start-ups fail by their third anniversary in Canada. Based on the experiences of entrepreneurs in Canada, the following conditions are important

for starting and succeeding in a new business venture (Ward, 2005): (1) Strong commitment to the new business which requires believing in the product or service that the entrepreneur sells or provides; (2) readiness to work long hours; (3) strong desire, drive, discipline and determination to succeed; (4) knowing how to operate and market the business; (5) people management skills; (6) adequate start-up and working capital; and (7) social support (from families, friends and relatives). These conditions also have validity in any environment.

Commonly encountered challenges by African entrepreneurs in launching, sustaining and growing their business ventures include the following (Kiggundu, 2002):

- 1. Transitioning from informal business practice to formal business operations.
- 2. Adjusting to external threats such as the advent of new technologies, political change, or macroeconomic change.
- 3. Effective transfer of ownership due to succession.
- 4. Reacting to competitive pressures.
- 5. Availability of financial resources.

Each of the above may be critical to entrepreneurial success in Africa. Most entrepreneurial businesses in Africa start as informal enterprises. When the businesses that once started informally grow and mature, it is necessary to structure them as formal organizations. Inability to complete this transition may be detrimental to those businesses. Another challenge often encountered by African entrepreneurs is the capability to adapt to changes in the political, social and technological environment.

RESEARCH METHODOLOGY

The sample

As indicated earlier, 20 Ethiopian entrepreneurs were asked to participate in an exploratory survey in 2006 concerning entrepreneurial pursuit in Ethiopia. The entrepreneurs who participated in the study were relatively well educated. All have completed high school, 35% have earned a college degree and 30% have some college education. Most went into business in an area related to their work experience and nearly two-thirds started a business related to their education. The enterprises they created included garment production and distribution, handicrafts, information technology, and import/export operations. As a group, the average length of time they were in business exceeded 10 years; thus, they are relatively well-established businesses, having passed the critical threshold of the formative years during which time many new entrepreneurial ventures fail.

About 50% of the participants reported that their profits grew just 1-5% on average during the previous three years, and about 32% indicated that that their profitability grew at about 5 -10% per year. Nearly 13% of the respondents reported annual profit growth of more than 10%, and nearly 55% reported average annual sales growth of 5% or more. The average number of workers they employed was about 18 and 40% of the respondents reported annual employment growth of at least 5%.

Resources to start a new business venture: The respondents indicated that lack of adequate financial resources was the most important challenge they encountered when they launched their new business ventures, and that there were no family members or financial institutions that were able and willing to provide the financial support they needed. About 90% of the respondents reported that there were no government programs or community-based financial resources to provide them with the required funds. However, most of them received encouragement and moral support from their communities and had family members who were willing to work for them. Table 1 presents a list of critical support received by the entrepreneurs during the start-up phase of their business ventures. It can be seen from the table that no strong support was available from any source. The best support seems to have come in the form of encouragement and moral support from the community (on a 5-point scale where 5 = Strongly Agree, and 1 = Strongly Disagree.)

Table 1
Support Received During Start-up

Support	Mean	s.d.
Personal financial resources	3.00	0.267
Family members' resources	2.23	0.301
Government programs	1.55	0.246
Community-based financial networks	1.76	0.284
Family members willing to work for me	2.91	0.335
Encouragement and moral support from my community	3.25	0.347
Debt financing	2.81	0.281
Equity financing	2.64	0.268

Problems/challenges encountered in starting own business: The respondents indicated that they were satisfied with their decision to start their business and that they were able to get the information they needed with relative ease since they were familiar with the workings of the bureaucracy in contrast to "necessity" entrepreneurs who find navigating the bureaucracy a severe challenge (see Table 2).

Table 2
Problems/challenges experienced while starting a new business

Type of Challenge	Number of times mentioned
Lack of finances	13
Space and location limitations	8
Lack of training/planning	5
Lack of qualified and honest employees	4
Difficulty in entering a new market	3
No government protection	2
Others	12*

^{* (}This includes a list of 12 problems/challenges mentioned just once. These problems include market saturation due to competition, identifying suppliers of machinery and raw materials, rent cost, lack of information, lack of customers, lack of mentors, etc.)

When asked to list specific problems they encountered in starting their business, the participants again identified lack of adequate financing to be the most significant problem. Other challenges mentioned by the respondents include lack of adequate space, lack of training for their employees, lack of qualified and honest employees, and market saturation due to competition. In launching a new business they cited getting financing, self-determination and persistence, effective marketing, networking, finding a market niche, good location, hard work and persistence, and quality control as important problems they had to reckon with. On the other hand, the data suggests that getting loans from a bank or family, self-motivation, hard work, proper marketing, networking and finding a market niche were important factors that contributed to the successful launch of new business ventures by the participants.

DISCUSSION

One key finding from our exploratory data collection reinforces the point we made earlier about the difference between "necessity" entrepreneurs that are the prevailing type in Africa and the SMEs like the ones we surveyed, ones we consider "high potential" entrepreneurs, given their latent strengths. Any strategies put in place have to recognize the differences between these two as their needs and the kinds of assistance they require are different. A "one size fits all" approach to entrepreneurship capacity building and enhancement is unlikely to yield optimal results.

Table 6
Characteristics of "necessity" entrepreneurs and "high potential" entrepreneurs

Characteristics	"Necessity Entrepreneurs"	"High potential" entrepreneurs		
1. Primary driver	Entrepreneurship is pursued by "push factors" as a last ditch initiative for economic survival	Entrepreneurial endeavor is initiated by "pull" factors to attain wealth accumulation, greater personal satisfaction and to create employment opportunities for others		
2. Skill level	Generally unskilled	Skilled		
3. Education level	Generally very low education or no education at all	At least secondary school education; many have attended or completed college		
4. Ease of navigating the bureaucracy while starting a business	Difficult since they often have little knowledge of the bureaucratic requirements and do not know how to navigate the systems.	Navigating the bureaucracy is generally easy; they are aware of the expected process and are often able to get around with ease.		
5. Geographical location of operations	Both in rural and urban areas	Primarily in urban centers		
6. Employment size	Often solo operators	May hire several employees, often upwards of 10		
7. Financial resource availability	Extremely limited; best source is micro finance where such opportunities are available	Have limited financial resources which they need to augment to start the business venture; do not qualify for micro finance and leveraging their resources with bank loans often difficult.		
8. Community/family support	Available	Available		
9. Growth potential	Limited	High		
10. Nature of business	Small retail, unskilled services	Light manufacturing, skilled services, technology		

Based on the preliminary evidence from Ethiopia and our review of the literature on African entrepreneurship, we present several propositions aimed at strengthening entrepreneurial initiative and success in Africa. These include the following:

- 1. Improve corporate structure and governance
- 2. More active and supportive government role
- 3. Capacity building
- 4. Provide special assistance to women entrepreneurs
- 5. Increase financial resources
- 6. Improve Business climate

Most of the above strategies are based on best practices that have been successfully used to spur entrepreneurial endeavors in different nations. However, these strategies should be tailored to the African environment to ensure implementation success. Further, as shown in the table above, "necessity entrepreneurs" and "high potential entrepreneurs" have different needs. Thus, for each of the above categories of African entrepreneurs, this paper will propose appropriate strategies that are grounded on the cultural, social, political and economic realities prevailing in Africa. If effectively implemented, there are indications that entrepreneurship can thrive in Africa and become a potent engine that drives much needed economic growth and development in the continent.

REFERENCES

Baugn, C. C. & Neupert, K. E. 2003. Culture and national conditions facilitating entrepreneurial startups. *The Journal of International Entrepreneurship*. 1 (3): 313 –324.

Berger, Brigette 1991. Introduction. In B. Berger (Ed.), *The Culture of Entrepreneurship*: 1-12. San Francisco: Institute of Contemporary Studies, p. 1-12.

Bridges.org. 2002. Available at http://bridges.org (accessed April 10, 2005).

Dia, M., 1996. African management in the 1990s and beyond: Reconciling indigenous and transplant institutions. Washington, D.C.: The World Bank.

and transplant institutions. Washington, D.C., The World Bank.

George, G., & Shaker, Z. A. 2002. Culture and its consequences for entrepreneurship. *Entrepreneurship Theory and Practice*. Baylor University, 5-8.

Global 360. 2004. *Training and Development*, 58 (1): 13-17.

Hayton, J.C., George, G. & Zahra, S.A. 2002. National culture and entrepreneurship: A Review of Behavioral Research. *Entrepreneurship theory and practice*: 33-52.

Herron, L. 1994. *Do skills predict profits? A study of successful entrepreneurship*. New York: Garland Publishing Inc.

Hofstede, G. 1980. *Culture's consequences: International differences in work related values*. Beverly Hills, CA: Sage

Jorgensen, J.J, Hafsi, T., & Kiggundu, M.N. 1986. Towards a market imperfections

theory of organizational structure in developing countries. *Journal of Management Studies*, 23 (4): 417-442.

Kiggundu, M. N. 2002. Entrepreneurs and entrepreneurship in Africa: What is known and what needs to be done. *Journal of Developmental Entrepreneurship*, 7(3): 239-259.

Kiggundu, M. N. 2001. Management in Uganda. In M. Warner (Ed.), International

Encyclopedia of Business and Management: 6611-6618. London: Thompson Learning.

Masurel, E., Njikamp, P., Tastan, M., & Vindgini, G. 2002. Motivations and performance conditions for ethnic entrepreneurship. *Growth and Change*, 33 (2): 238-260.

Mitchell, B.C. 2004. Motives of entrepreneurs: A case study of South Africa. *Journal of Entrepreneurship*, 13(2): 167-183.

Reynolds, P. D. & White, S.B. 1997. *The entrepreneurial process: Economic growth, men, women, and minorities*. West Port, CT: Quorum Books.

Ramachandran, V. and Shah, M.J. 1999. *Minority entrepreneurs and private sector growth in Sub-Saharan Africa*. Discussion paper. RPED, #086, The World Bank, Washington, DC.

Sam, M.A. 1998. Exploring the link between customary inheritance practice and discontinuity of indigenous enterprises in Nigeria. *Canadian Journal of African Studies*, 32 (2): 349-377.

Shane, S. 1992. Why do some societies invent more than others? *Journal of Business Venturing*, 7: 29-46.

Takyi-Asiedu, S. 1993. Some socio-cultural factors retarding entrepreneurial activity in Africa. *Journal of Business Venturing*, 8: 91-98.

Trulsson, P. 2002. Constraints of Growth-oriented enterprises in the Southern and Eastern African Region. *Journal of Developmental Entrepreneurship*, 7 (3): 331-339.

Ward, S. 2005. Five resources you need to succeed to start a business: Your guide to small business. (Accessed April 2005).

ENTREPRENEURSHIP THROUGH AN ISLAMIC LENS: THE INFLUENCE OF SHARI' A AND ISLAMIC INSTITUTIONS ON FEMALE ENTREPRENEURS IN THE MIDDLE EAST

John C. McIntosh

Email: JohnMcIntosh@BoiseState.edu Samia Islam

Boise State University, USA
Email: SamiaIslam@BoiseState.edu
Gregory S. Winter, Assistant Professor
Barry University, USA
E-mail: scrippy@aol.com

ABSTRACT

Much current entrepreneurship research is grounded in a Western context largely underpinned by the Protestant ethic. Protestantism professes strong individualism, pursuit of self-interest, and the accumulation of capital. Islam, in contrast advocates collectivism, the pursuit of the common good, and a distribution of economic benefits based partly on individual needs. We contend that the almost diametrically opposed assumptions of Protestantism, which undergirds much entrepreneurship research, may yield misleading conclusions in an Islamic setting. As a result we propose a study of female entrepreneurship through an Islamic lens. Women were chosen because Islamic institutions are designed to yield distinct results across men and women thus giving highly contrasting results when compared to a Western interpretation. The study proposes to test the link between religiosity and access to Islamic funding and government authorities; and the connection between human and social capital on growth aspirations, business choice, and source of funding.

INTRODUCTION

Much research on female entrepreneurship has been conducted in a Western context and from a philosophical standpoint based on the Weberian Protestant ethic. Seminal works such as Tawney's (1926) Religion and the Rise of Capitalism and Weber's (1984) The Protestant Ethic and the Spirit of Capitalism have expounded the heavy influence of religion on economic behaviour and the role played by Protestantism in creating conditions favourable to the types of entrepreneurial activity necessary for economic progress. Indeed, researchers in development studies largely believe that religion exerts an influence on economic progress. For example, Guiso et al. (2003), concluded that Protestantism and Catholicism support property rights favouring private ownership while Islam does not. Barro and McCleary's (2003) study of religion and per-capita income growth discovered that Catholic countries perform better than Hindu, Protestant, and Islamic counterparts, while Sala-i-Martin *et al.* (2004) and Noland (2005) in studying Islamic countries come to the opposite conclusion.

This paper has two aims. First, it advances the argument that the study of entrepreneurship in Islamic countries, characterized by political, legal, and cultural antecedents very different from those that shaped Western nations, may be more effectively conducted through a culturally appropriate lens. Second, it outlines several hypotheses that explore the role of religion, human capital, and social capital on entrepreneurial behaviour and outcomes concerning venture financing, choice of business type, growth aspirations, and access to business networks. This working paper, although largely conceptual in orientation, sets forth hypotheses that may yield important insights into the way entrepreneurship is practiced in Islamic contexts.

The preceding aims of this paper are important because in Islamic countries religion imbues much of civil and economic life. Indeed, marked contrasts in conceptions of success and attendant economic behaviour between Protestantism and Islam suggest a keen need for conducting research through a culturally appropriate lens. Such a lens becomes especially relevant because institutions in Islamic countries are shaped by Shari' a (Islamic law). These institutions, in turn, not only script the "rules of the game" but also enforce societal norms that sculpt economic interactions.

It is likely that prescriptions arising from contemporary research, much of it based on the Western experience, may be out of step with the economic, social, legal, and cultural environment of Islamic countries. This mismatch may result in policies that either fail or visit undesirable consequences on intended beneficiaries. Toward this end, we propose a study of the motivations for

new venture creation and the institutional context that influences the behaviours and choices of female entrepreneurs in an Islamic country. Female entrepreneurs were selected because, in contrast to their Western counterparts who operate under the aegis of institutions designed to yield similar results across the sexes, Islamic institutions are designed to create distinctly different results between men and women. Differential outcomes partly arise from the following Islamic precepts that shape gender roles.

- 1. The centrality of the family, rather than the individual as the main unit in society.
- 2. Recognition of the man as the sole breadwinner of the family.
- 3. A code of modesty that rests on family dignity and the reputation of the woman.
- 4. An unequal balance of power in the private sphere that is anchored in family laws. Metcalfe (2006): 97.

The remainder of this paper is organized as follows. The first section below briefly examines key differences between Islamic and Western thought concerning the pre-eminence of moral behaviour in economic pursuits. The second section, through selected examples, examines the evolution of female entrepreneurship research to highlight gaps that led to this paper's focus on the impact of institutional factors on Moslem female entrepreneurs' decision processes. The third section presents the theoretical rationale for this study and presents hypotheses. The fourth section details conclusions.

LITERATURE REVIEW

Differences between Islamic and Western Thought

Some Islamic practices are very different from Western customs and may logically be expected to give rise to different economic behaviors and choices. For example, Islamic Economics rejects the practice of speculation and charging interest on loans. Rewards to investors are based on the risks they assume and the assistance they extend to the ventures they take a stake in (Tripp, 2006). From an Islamic perspective economic actors are enjoined from engaging in profit maximizing behaviors and are instead required to balance such pursuits by acting in ways that benefit society Kavossi (2000).

Another difference arises from the foundation precept in Islam that requires Moslems to conduct economic activities in ways consistent with the teachings of the Quran. Siddiqi (1972) illustrates the strong link in Islamic thought between success and moral behaviour.

"Success lies in being virtuous. The more one's behaviour is in accord with moral standards and the higher the level of his goodness, the more successful he is...in each and every phase of existence, at every step, the Islamic individual is endeavoring to act in harmony with moral values." Siddiqi (1972).

One inexorable conclusion from the preceding is that intractable differences between Christianity and Islam exist. The Western belief in the separation of church and state and the primacy of the rights of the individual directly contrasts with the Muslim view of an all-encompassing divine law that implies the fusion of religion, business, and politics. One would therefore expect social norms and institutional practices to support very different conceptions of economic behaviour and that these in turn impose different expectations and rules on entrepreneurs. Consequently, studying Islamic entrepreneurship through a Western lens would lead to erroneous conclusions which in turn may lead to policies and programs that are out of step with social norms and business practices.

Overview of Female Entrepreneurship Research

Over the past twenty five years, research on female entrepreneurs has gained greater and greater interest among researchers. Following prior studies on largely male samples of entrepreneurs, researchers focused on individual attributes of women to uncover sources of motivation. Brush and Hisrich (1991) demonstrated that women's choice of business sector was influenced by gender socialization and human capital variables such as education, business experience, and managerial

skills. In a study of determinants of business choice, Carter and Allen (1997) discovered that women owned ventures tended to be smaller at founding. In addition, Carter et al (1997) demonstrated that women owned ventures exhibited a higher probability of mortality partly because female entrepreneurs tended to posses less human capital-typically industry experience.

The bulk of research on women entrepreneurs in international settings occurred within the past decade with most studies conducted in Western countries. Holmquist and Sundin's (1988) study of Swedish entrepreneurs discovered that female entrepreneurs were motivated by a desire for greater job flexibility and often founded ventures in more "traditional" businesses. Studies by Belcourt (1990) and Collerette and Aubrey (1990) of the relationship between business choice and human capital among Canadian female entrepreneurs supported Holmquist and Sundin's (1988) findings that women owned businesses tended to be small and in "traditional areas." Among high technology firms in the U.K., Westhead and Cowling (1995) found no gender-based influences on choice of business and growth aspirations among male and female entrepreneurs. Similarly in Poland, Zapalska (1997) discovered no gender-based differences between male and female entrepreneurs in regard to education. However, regarding human capital, women were equally or better educated than male counterparts.

Despite the burgeoning international literature, comparatively few studies were conducted in non-Western contexts. Notable exceptions are studies by Ahwireng-Obeng (1993) in South Africa; Shabbir and D' Gregorio (1996) and Azam Roomi (1999) in Pakistan; Cooper and Goby (1999) in Singapore; Singh et al (2001) in Indonesia; Mc Elwee and Al-Riyami (2003) in Oman; Nearchou-Ellinas and Kountouris, (2004) in Cyprus, and Dechant and Lamky (2005) in Bahrain and Oman.

Overall, international research suggests that striking similarities exist among female entrepreneurs with many commonalities concerning the connection between human capital and business choice. Obstacles such as gender-based perceptions and limited access to venture funding face women entrepreneurs despite country context. In most studies cultural and country context appeared to be mitigating variables. Nevertheless, the importance of cultural and country context suggests that the study of entrepreneurship may be advanced by examining the phenomenon in countries that are very dissimilar to the West. Toward this end we propose the following hypotheses to aid such an undertaking.

HYPOTHESES

Role of Religion, Tradition, and Culture

Sahri'a influence in business life is expressed through *urf* (custom) which stipulates protection of women through the creation of a moral business environment. Preservation of female modesty requires that women conceal their sexuality by wearing hijab or a scarf which covers their hair. By wearing hijab women signal fidelity to the precepts of Islam and are in turn are afforded respect, social status, and all of the privileges accorded the faithful. It is therefore likely that female entrepreneurs who wear hijab will receive preferential treatment from Islamic banks. Thus the following hypothesis:

H1: Female entrepreneurs who publicly demonstrate a commitment to Islam are more likely to secure funding from Islamic banks.

The principle, *qiwama*, stipulates patriarchal responsibility towards women along with their support and protection (Kavossi, 2000). Men are therefore required to assume a protective posture towards women and to also safeguard/advance their economic well-being. In addition, the principle of *wasta* which places emphasis on the dominance of male networks and the importance of informal connections require men to assist women by permitting entrée to those networks (Ahmed, 1998). This is of particular importance for female access to business networks because in conservative Islamic settings, women may not directly approach men. Thus the following hypothesis:

H2a: Female entrepreneurs who secure funding from Islamic banks are more likely to gain access to business networks.

Although *qiwama* and *wasta* convey large advantages to women, it is likely that the traditional benefits of protection, preferential treatment, and access to business networks are accompanied by expectations that women behave in traditional ways. It is therefore likely that

institutional pressures determined by societal norms and the policies of the state, would select for traditional behaviors among female entrepreneurs. Hence the following hypothesis is proposed.

H2b: Female entrepreneurs who secure funding from Islamic banks are less likely to engage in a non-traditional business.

Human Capital

New ventures piloted by high quality management teams-those with industry relevant experience, a business or technology education, and prior experience in a startup-are more likely to receive venture funding (Bruderl et al. 1992; Carter et al. 1997). In other words, human capital is an important variable for seeking funding and subsequent business success. Human capital, based on education and industry work experience (Carter et al. 1997), provides entrepreneurs with superior judgment, keen insight into customers and markets, and strategic vision (Dollinger 1994; Pennings et al. 1998). It is therefore likely that female entrepreneurs with high human capital are more likely to seek equity funding than debt funding. Hence the following hypothesis is laid out.

H3: Female entrepreneurs with higher human capital are more likely to use non-bank funding at startup than women with lower human capital.

Although Middle Eastern women have tended to pursue degrees in traditionally female areas such as liberal arts, nursing, and teaching, EI Guindi, (1985) reports an increasing number of Gulf women pursuing advanced degrees in professional and technical fields. Female entrepreneurs with graduate degrees, a variety of work experiences, and managerial responsibility are likely to have greater confidence in their abilities and the success of their business endeavors including non-traditional businesses. Such women may be more optimistic about the survival and growth of their enterprises. Therefore the following hypotheses:

H4a: Female entrepreneurs with higher human capital are more likely to report above average growth aspirations than women with lower human capital.

H4b: Female entrepreneurs with higher human capital are more likely to engage in a non-traditional business than women with lower human capital.

Social Capital

Social capital arises from the norms, practices, and relationships in the structure of a particular society that translate into conventions concerning individual behaviour, expectations, and obligations. An individual's social networks are important generators of social capital. Networks in turn give individuals entrée to resources, broadly defined, that contribute to business success. For example, through networks an entrepreneur may access technical expertise, potential customers, and vital market information. Although talent and ability are important prerequisites for success, social networks offer advantages summed up in the old adage "it's not so much what you know, it's who you know." Middle Eastern societies place heavy emphasis on relationships and connections (Nomani & Rahnema, 1994; Ahmed, 1998). This, in conjunction with the Islamic concept of *wasta*, which places great emphasis on informal relationships and vertical connections, imply that social networks confer significant advantages to entrepreneurs. Hence the following hypothesis:

H5a: Female entrepreneurs with higher social capital are more likely to access business networks than women with lower social capital.

Admission to business networks may reduce obstacles to doing business, allow entrepreneurs to enlist the help and advice of powerful members of business and government, and provide access to important information concerning technologies and markets. These advantages may dramatically improve the chances of success of a business and may also incentivize entrepreneurs to undertake riskier ventures. Hence the following hypotheses:

H5b: Female entrepreneurs with higher social capital are more likely to report above average growth aspirations than women with lower social capital.

H5c: Female entrepreneurs with higher social capital are more likely to engage in a non-traditional business than women with lower social capital.

CONCLUSIONS

The preceding sets forth the outline of research paper designed to introduce key elements of Shari' a to the study of entrepreneurship. We proposed this study because much research, based on the Western experience, fails to account for the profound and unique role that Islam plays in the day-to-day actions and economic decisions in Islamic countries. It is only through a multifaceted view of the phenomenon can entrepreneurship research become more relevant for the large variety of countries in today's global economy.

REFERENCES

Ahmed, A. S. 1998. *Islam today*. London: I. B. Tauris Publishers.

Ahwireng-Obeng, F. 1993. Gender, entrepreneurship and socioeconomic reparation in South Africa. *Review of Black Political Economy*, 22 (2): 151-165.

Azam-Roomi, M. 1999. Women entrepreneurs in Pakistan: Profile, challenges and practical recommendations.

Barro, R.J., & McCleary, R.M. 2003. Religion and economic growth across countries, *American Sociological Review*, 68 (1): 760-81.

Belcourt, M. 1990. A family portrait of Canada's most successful female entrepreneurs. *Journal of Business Ethics*, 9 (4/5), 435-438.

Bruderl, J. Preisendorfer, P. & Ziegler, R. 1992. Survival chances of newly founded business organizations. *American Sociological Review*, 57: 227-242.

Brush, C. G., & Hisrich, R. D. 1991. Antecedent influences on women-owned businesses. *Journal of Managerial Psychology*, 6 (2): 9-16.

Carter, N. M., & Allen, K. R. 1997. Size-determinants of women-owned businesses: Choice or barriers to resources. *Entrepreneurship and Regional Development*, 9 (3): 211-220.

Carter, N. M., Williams, M., & Reynolds P.D. 1997. Discontinuance among new firms in retail: The influence of initial resources, strategy and gender. *Journal of Business Venturing*, 12 (2): 125-145.

Collerette, P., & Aubry, P. G. 1990. Socio-economic evolution of women business owners in Quebec (1987). *Journal of Business Ethics*, 9 (4/5): 417-422.

Cooper Maysami, R., & Goby, V. P. 1999. Female business owners in Singapore and elsewhere: A review of studies. *Journal of Small Business Management*, 37 (2): 96-105.

Dechant, K., & Al-Lamky, A. 2005. Toward an understanding of Arab women entrepreneurs in Bahrain and Oman. *Journal of Development Entrepreneurship*, 10 (2): 123-140.

Dollinger, M. 1994. Entrepreneurship: Strategies and Resources. Boston, Mass: Irwin.

Guiso, L., Sapienza, P., and Zingales, L. 2003. People's opium? Religion and economic activities. *Journal of Monetary Economics*, 50 (1): 225-282.

Holmquist, C., & Sundin, E. 1990. What's special about highly educated women entrepreneurs. *Entrepreneurship and Regional Development*, 2: 181-193.

Kavossi, M. 2000. *The globalization of business and the Middle East: Opportunities and constraints*. Westport, CT: Quorum Books.

Metcalfe, B., 2006. Exploring cultural dimensions of gender and management in the Middle East. *Thunderbird International Business Review*, 48(1): 93–107.

Mc Elwee, G. & Al-Riyami, R. 2003. Women entrepreneurs in Oman: Some barriers to success. *Career Development International*, 8 (7): 339-346.

Nearchou-Ellinas, L. & Kountouris, L. 2004. Women entrepreneurs in Cyprus: A new dynamic in Cyprus economy. *Women in Management Review*, 19 (6): 325–332.

Noland, M. 2005. Religion and economic performance. World Development, 33 (8): 1215-1232.

Nomani, F., & A. Rahnema, 1994. Islamic economic systems. London & New Jersey: Zed

Pennings, J.M., Lee, K. & Witteloostuijn, A.V. 1998. Human capital, social capital and firm dissolution. *Academy of Management Journal*. 41, 425-440.

Sala-i-Martin, X., Doppelhofer, G. & Miller, R.I. 2004. Determinants of Long-Run Growth: A Bayesian Averaging of Classical Estimates (BACE) Approach, *American Economic Review*, 94 (4): 813-835.

Siddiqi, M.N. 1972. Some aspects of the Islamic economy. Delhi: Markazi Maktaba Islami.

Shabbir, A., & Di Gregorio, S. 1996. An examination of the relationship between women's personal goals and structural factors influencing their decisions to start a business: The case of Pakistan. *Journal of Business Venturing*, 11 (6), 507-529.

Singh, S.P., Reynolds, R.G., & Muhammad, S. 2001. A gender-based performance analysis of micro and small enterprises in Java, Indonesia. *Journal of Small Business Management*, 39 (2): 174-182. Tawney, R.H. 1926. *Religion and the rise of capitalism: A historical study*, reprinted at London: Penguin Books (1987).

Tripp, C. 2006. *Islam and the moral economy –The challenge of capitalism*. Cambridge: Cambridge University Press.

Weber, Max. 1984. *The Protestant ethic and the spirit of capitalism*, trans. T. Parsons (London: Unwin Paperbacks, 1984).

Westhead, P., & Cowling, M. 1995. Employment change in independent owner-managed high technology firms in Great Britain. *Small Business Economics*, 7 (2): 111-140.

Zapalska, A.M. 1997. A profile of women entrepreneurs and enterprises in Poland. *Journal of Small Business Management*, 35 (4), 76-82.

BUSINESS TYPE AND START-UP CAPITAL: EXPLORING GENDER DIFFERENCES IN UGANDA THROUGH AN INTERNATIONAL COMPARISON

Laura Orobia A Arthur Sserwanga

Makerere University Business School, Uganda Email: lauraorobjah@vahoo.com

ABSTRACT

Entrepreneurship is a crucial activity boosting economical growth. This study seeks to explore the gender differences in the relation to type of business and size of start-up capital in Uganda as compared to other countries. Data for this study was the Global Entrepreneurship Monitor (GEM) 2003 datasets of the countries that participated in GEM. This allows us to make an international comparison. Our results show that much as there are gender differences in respect to type of businesses across all countries under study, the majority of male and female entrepreneurs were found to be involved in the consumer- oriented business sectors. In relation to amount of personal start up capital invested, the Ugandan males invested far more in trade and business sectors as compared to their female counterparts. The results are different for other GEM countries, in that the males invested far more in extraction and manufacturing sectors. Therefore, among other recommendations, policy makers should sensitize females about viability of business start-ups and encourage women access to ownership of property so as to enable them to have convertible assets.

INTRODUCTION

In this paper we focus on new venture types. By now, most scholars agree that entrepreneurship is a driving force of economic development (Wong, Ho & Autio, 2005). The relevance of entrepreneurship is reflected in the large literature on the subject. This entrepreneurship literature can be classified into two schools: the supply-side and the demand side perspective (Thornton, 1999). The supply side focuses on the availability of suitable individuals to occupy entrepreneurial roles, while the demand side focuses on the entrepreneurial roles. In this study we take the perspective of the individual who decides whether or not to start a new venture, hence we study entrepreneurship from the 'supply-side'.

Previous literature has investigated the determinants of capital structure/ composition around business start-ups. In particular, the influence of size, asset structure, growth orientation, organization type and owner's characteristics have been examined (Titman & Wessels (1998), Harris & Raviv (1991), Williamson (1988), DeAngelo & Masulis (1980), Rajan & Zingales (1995), Jensen (1986), Bevan & Danbolt (2000), Hutchinson et al. (1990), Chittenden et al. (1996) and Van der Wijst & Thurik (1993).

Many of these researches have not adequately addressed the factors that determine the size of start-up capital, let alone the gender differences in relation to size of start-up capital. It has been observed over time that female entrepreneurs differ from male entrepreneurs in the way they finance their businesses with respect to start-up capital (Carter & Rosa, 1998; Verheul & Thurik, 2001; Hisrich & Brush, 1987 and Reynolds et al., 2002). A number of factors have been suggested to explain these differences, including type of business start-ups. Female entrepreneurs are often involved in consumer-oriented businesses compared to their male counterparts. Further still, none of the above papers have made an international comparison in their study.

In our contribution we explore whether the relation between type of business and the amount of start-up capital differs between the male and female entrepreneurs. We specifically focus on the size of personal savings invested in a business as start up capital. This is because most starting entrepreneurs use their own personal savings for financing their business.

The paper is structured as follows. We first review literature on start up capital of entrepreneurs, after that, we review the literature on type of business and gender differences in type of business. After formulating our research questions, we present our data and measurements. Next we

present the results of our statistical analysis. Finally we conclude, and reflect on limitations of the study and identify policy recommendations.

LITERATURE REVIEW

Empirical researches indicate that most small business start-ups are financed by internal sources before resorting to other sources. This behaviour could be explained by the pecking order theory (Myers, 1984; Myers and Majluf, 1984). The theory states that firms follow a financing hierarchy: internal funds are preferred above external financing and if the latter becomes necessary, safe debt is preferred over risky debt and equity issues are at the lowest end of the pecking order. The main sources of start-up capital are owners' savings, gifts from relatives and friends (business angels), loans from relatives and friends, bank loans and other suppliers' credit.

According to Holtz-Eakin, Joulfaian & Rosen, (1994) and Jurik (1998) financing through bank loans or investors can be difficult and disadvantageous for the small business owner for many reasons. For those with little or no wealth, financing through institutional loans may exact a high price in the long term. Because small businesses seem to be high-risk clients for potential financiers, lenders often compensate by increasing the financial costs associated with the loans, making this a less appealing path to gaining business capital in comparison to personal savings.

Groshen (1991), Carrington and Troske (1998) and Bayard *et al.* (1999) find that females are concentrated in low paying occupations, industries, establishments and occupations within establishments. They add that gender segregation accounts for a sizeable portion of the overall gender pay gap and hence affecting the females' personal wealth. In the same spirit, Reily and Wirjanto (1999) provide the Canadian evidence of gender segregation at the establishment level and its effects on the gender wage gap. They found that the proportion of females in the establishment has a negative impact on the wages of both male and females and hence their resultant personal wealth.

Many scholars have pointed out that female entrepreneurs have smaller start-up capital than their male counterparts. Verheul and Thurik (2001) explain this occurrence in the context of the type of business start-ups. The types of businesses started by females differ from those started by males. Female entrepreneurs work in the service sector more often than their male counterparts. Such businesses are less capital intensive and hence require a smaller start-up capital. The researchers also established that type of business is related to amount of start-up capital.

In the same spirit, Coleman (2000) asserts that females prefer to start businesses that are small and concentrated in service sectors, such that they can effectively integrate work and family concerns. He adds that because capital requirements for such businesses are small, the owners can finance the business with personal resources. Prior research has shown that females are less likely to finance their business with external debt and equity. This fact has been attributed to females being more risk averse than males, and therefore less likely to put personal collateral at risk (Brophy, 1989; Cavaluzzo, Cavalluzo & Wolken, 1990).

Type of business

Uxem and Bais (1996) pointed out that female entrepreneurs are often found in supporting jobs or occupations. The businesses of female entrepreneurs can be characterized as 'supporting services', like secretarial, translation and processing activities. Furthermore, female entrepreneurs dominate the retail and service sectors, in particular, personal services, while male entrepreneurs dominate the manufacturing, wholesale trade and financial services (OECD, 1998).

Similarly, the findings of Subrahmanian (2002) indicated that males have high representation rates in manufacturing as well as construction, transportation, wholesale and storage. He adds that females are predominantly concentrated in retail services and are more likely to work in small firms (less than 20 employees). Machaira (1998) asserts that women tend to operate in restricted number of business sectors which in turn tend to be those with marginal rates of return, easy entry conditions and hence susceptible to high levels of competition and market saturation, for example; street trading, garments, food preparation, personal, trade and business services.

The type of businesses run by female entrepreneurs is characterized by relatively small sizes requiring a small amount of start-up capital (Uxem & Bais, 1996). The service sector in particular is generally associated with low investments in tangible assets like machines and buildings, and high investments in intangibles assets, like human capital and customer relations.

In this study we empirically want to shed more light on the relation between gender differences in respect to type of small businesses and start up capital of entrepreneurs in Uganda as compared to other countries. This leads to the following research questions.

Research questions

Primary research questions include:

- 1. What is the level of gender differences in type of businesses in Uganda as compared to other countries?
- 2. Is the influence of type of business on the amount of start up required the same for female entrepreneurs and their male counter parts in Uganda as compared to other countries?
- 3. Is the influence of type of business on the proportion of personal start up capital invested in a business start-up the same for female entrepreneurs and their male counter parts in Uganda as compared to other countries?

RESEARCH METHODOLOGY

The main source of data used in the study was based on the 2003 Global Entrepreneurship Monitor (GEM) datasets of the different countries that took part in the GEM adult population survey. The data collection process was standardized and 31 countries took part. However, for this study, we used datasets from 17 countries because these were the countries that had the complete data sets for our analysis. This source was used because the datasets were accessible enabled an international comparison.

Description of the Ugandan Survey

The sample of the GEM Uganda 2003 Adult population survey consisted of 1000 individuals aged 18-64. The method employed in most GEM countries was telephone interviews, but due to the relatively low telephone coverage in Uganda, face-to-face interviews were conducted. The response rate of the Ugandan survey was 100%.

In order to assure a representative sample of the Ugandan population, two districts were selected with probability proportional to size in each of Uganda's four regions (north, east, west, central), leaving out certain areas where the security situation was too unstable. One parish was sampled per sub-county, one sub-county per county, and one county per district with probability proportional to size. In each parish several enumeration units were covered. The Uganda Bureau of Statistics provided detailed maps of number, location and composition of households in each parish. A systematic random sampling technique was employed to select a household from the enumeration area.

Sampling Method

The following method was employed to choose a respondent in a selected household at random: the family members were numbered according to their age, assigning number 1 to the oldest and the highest number to the youngest household member. The respondent was selected according to a random number chosen from a random table: the second oldest person was selected if the random number chosen was a two, the fifth oldest if the random number was a five and so on. If the selected person was not available, two-call -backs were made before another household was chosen randomly. The Ugandan sample we used composed of 468 entrepreneurs who were involved in starting a new business in Uganda and 2,364 entrepreneurs in other GEM countries.

Measurement of variables

For the construction of our empirical variables we relied on scales that were developed by GEM (Reynolds et al., 2000). Below we discuss the respective variables and the questions in the questionnaire they were based upon. All questions were asked after the respondent indicated that he or she was starting a business, was already self-employed/owning a business, or had experienced a failed attempt to create a new business in the past 12 months.

Type of Business: Type of business start-ups was measured basing on the following questions:

The respondent could answer the first two questions by marking one of the four possible categories: 1 = Yes; 2 = No; 3 = Don't know; and 4 = Refused. The categories 'don't know and 'refused' were recoded as missing values. For the last question, a verbatim response was recorded. These responses were later categorized on a nominal scale of 1 to 4 as follows:

- 1. *Agriculture*: agriculture, forestry, fishing and hunting.
- 2. Extractive & manufacturing: mining, construction and manufacturing.
- 3. Trade & business services: wholesale, motor vehicle garages, other business services.
- 4. *Consumer-oriented service firms*: retail, restaurants, bars, lodging and social recreation services.

Start up capital: Start up capital was measured by two variables, one in terms of the amount of start-up capital required for a business, and the other in terms of the amount of personal start-up capital invested in a new business. The variable Start-up capital required was based on answer to the question: 'How much money, in total, will be required to start this new business?' The variable Personal start-up capital invested was based on the question: 'How much of your own money, in total, do you expect to provide to this new business?' A verbatim response was recorded. These responses were later categorized on a ratio scale.

ANALYSIS AND DISCUSSION

The level of gender differences in type of business start-ups was analyzed using Pearson chi square and the influence of type of business start-ups on start-up capital was analyzed by a two-way analysis of variances. In this section we present the results of our analysis. We start with a descriptive analysis of the data, and subsequently present the results of the statistical analysis to answer our research questions.

Description of the Data

Figures 1 and 2 show the distribution of gender and age distribution in Uganda.

Figure 1
Gender Distribution of Entrepreneurs in Uganda

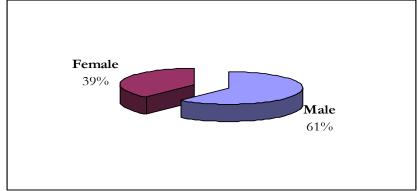
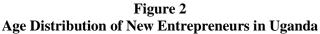


Figure 1 shows that 61% of the males were involved in starting a new business whereas 39% of the females in Uganda were involved in starting a new business. More males are involved in starting businesses, which can perhaps be attributed to fact, that most males are the 'bread' earners hence they have to look for means of supporting their families. One way of doing this is by starting up income generating activities to be able to satisfy their needs.

[&]quot;You are, alone or with others, currently trying to start a new business, including any selfemployment or selling any goods or services to others"

[&]quot;You are, alone or with others, currently trying to start a new business or a new venture for your employer- an effort that is part of your normal work"

[&]quot;What kind of business is this?"



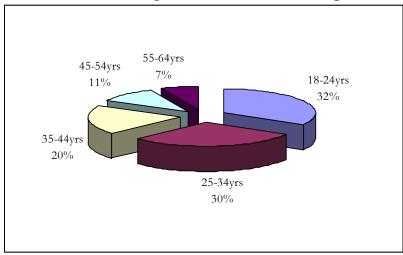


Figure 2 shows that the majority of entrepreneurs in Uganda belong to the 18-24 years age group implying that young people are more involved in entrepreneurial activity. Such an age group is ideally meant to be in schools acquiring higher education. They seem to resort to starting businesses as a last choice. This can possibly explain the poor quality of businesses and why the business startups fail after twelve months of operation. According to Zoltan *et a.l* (2005), there may be difficulties in sustaining or increasing the level of entrepreneurship in a country where there is a predominantly a young or ageing population. Such difficulties Zoltan *et al.* (2005) identified are vivid in the high rate of business failures, a 30% shut down for Ugandan business start-ups Walter *et al.* (2004).

As a first step in our analysis, we the level of gender differences in type of business start-ups in Uganda as compared to other countries. The findings are presented in the table 1 below:

Table 1
Gender differences: Type of business

Type of business	Gender	Uganda	GEM
Agriculture	Male	18.4%	10.3%
	Female	19.6%	6.1
Extractive & Manufacturing	Male	6.1%	29.8%
	Female	7.1%	19.0%
Trade & business services	Male	19.1%	14.4%
	Female	7.1%	5.9%
Consumer-oriented	Male	56.3%	45.5%
	Female	66.1%	69.0%
Pearson chi square		0.007	0.000

The findings show that majority of Ugandan males (56.3%) compared with 66.1% of the Ugandan female are involved in starting up consumer oriented businesses. An explanation for this could be attributed to the characteristics of consumer-oriented businesses, i.e. they are relatively easy to set up, require less start capital and are easy to run. The least percentage of Ugandan males (6.1%) and Ugandan females (7.1%) are involved in extractive & manufacturing businesses, implying that Uganda relies on imports instead of manufacturing its own products. The chi² test shows a significant result in Uganda.

A similar finding was also established in the case for other GEM countries where by, the majority of the males (45.5%) and females (69% are involved in the consumer oriented businesses. The chi² test is also significant. The findings are in support of many researches that indicate that businesses started by females are more often started in service sectors (Johnson & Storey, 1993, Miskini & Rose, 1990 and Verheul & Thurik, 2001).

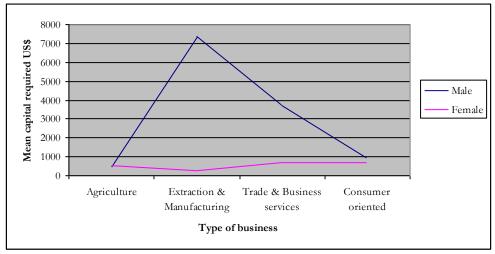
We further sought to establish the relationship between gender differences in respect to type of business and amount of start-up required in Uganda comparing with other countries. The findings are presented in Table 2 below:

Table 2
ANOVA: Type of Business and Amount of Start-up Capital Required

		F	sig	R	Adj R2
Uganda	type of business	3.135	0.025		
	gender + type of busines	3.281	0.021	0.311	0.081
GEM	type of business	0.182	0.909		
	gender + type of busines	0.216	0.885	0.055	0.005

The results show that there is a significant influence of type of business on amount of start-up capital required in Uganda (F=3.135, p=0.025), implying that the amount of start-up capital required significantly depends on the type of business start-ups. However in other GEM countries, there is insignificant effect of type of business on start-up capital required (F=0.182, p=0.909). Type of business start-ups explains 8.1% of the variance in the amount of start-up capital required in Uganda and 0.5% in other GEM countries. This is further illustrated in figure 3 below:

Figure 3
Type of Business and Amount of Start-up Capital Required in Uganda



The findings show that in Uganda, males require far more start-up capital (by US\$6,800) in extraction & manufacturing businesses and in trade & business services by (US\$ 3,000) but about slightly the same in agriculture and consumer oriented businesses. This can perhaps be explained by the size of business start-ups. Big businesses require more start-up capital. Males tend to start-up big businesses (male ego) as compared to females as reported by Verheul and Thurik (2001). Females fear the consequences of business failure and that is why they opt for small businesses. Given that agriculture is Uganda's economic backbone (Background to the Uganda's budget 2004), the findings indicate that this is not sophisticated. The majority of farmers still uses rudimentary tools such as hoes and practice subsistence agriculture, which does not call for large capital inputs. This could have a negative impact on the country's economy. This situation needs to be addressed by the policy makers for the benefit of the country.

The findings in other GEM countries are quite different as illustrated in figure 4 below:

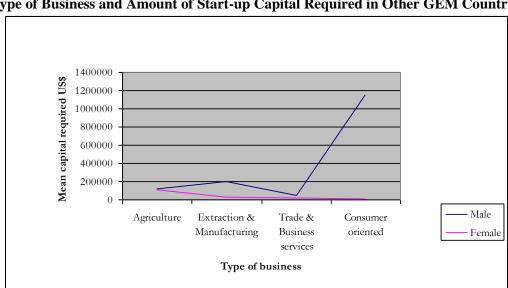


Figure 4
Type of Business and Amount of Start-up Capital Required in Other GEM Countries

The figure above shows that males require far more start-up capital (by US\$ 1,080,000) than females in consumer-oriented businesses and slightly more (by US\$ 160,000) in extracting and manufacturing business. They require about the same in other types of businesses. The findings indicate that females require about US\$ 10,000 in consumer-oriented businesses. This could be attributed to the sizes of the businesses started by females, that is, they are smaller than those started by males, hence requiring less start-up capital.

We also sought to establish the relationship between gender differences in respect to type of business and amount of personal start-up capital invested in Uganda comparing with other countries. The findings based on a two-way analysis of variance are presented in table 3 below:

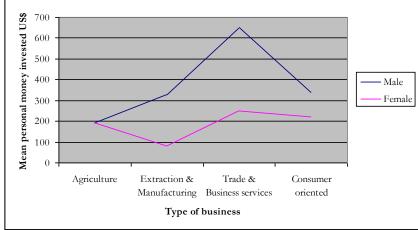
Table 3
ANOVA: Type of Business and Amount of Personal Start-up Capital Invested

		F	sig	R	Adj R ²
Uganda	type of business	6.137	0.000		
	gender + type of business	0.428	0.733	0.319	0.086
GEM	type of business	3.043	0.081		
	gender + type of business	1.401	0.241	0.152	0.014

There is a significant influence of type of business on amount of personal start-up capital invested in Uganda (F=6.137, p=0.000). This implies that the amount of personal start-up capital invested is significantly influenced by the type of business start-ups. However, in other GEM countries, there is insignificant influence (F=3.043, p=0.081). This is further illustrated in figure 5 below.

Figure 5

Type of Business and Amount of Personal Start-up Capital Invested in Uganda

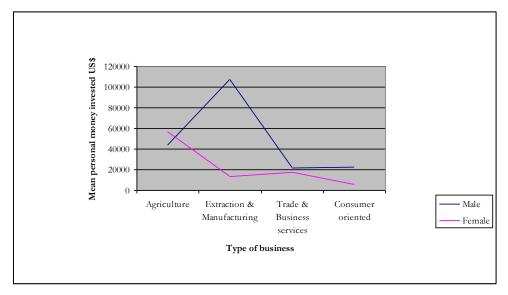


In Uganda, males invest more personal start-up capital than females in all types of businesses except in agriculture. This can be attributed to the fact that males usually have more start-up capital than females, which is consistent with the findings of Verheul and Thurik (2001). Another explanation is that perhaps, females start small size businesses as compared to males hence require less capital that can be covered by personal resources, even when they start the same kind of business with males (Uxem and Bais, 1996).

The results for other GEM countries are quite different as illustrated in figure 6 below:

Figure 6

Type of Business and Amount of Personal Start-up Capital Invested in Other GEM Countries



The findings reveal that in other GEM countries, males invest more of their personal start-up capital in extraction & manufacturing and consumer oriented businesses than females. On the other hand, females invest more start-up capital than males in agriculture.

CONCLUSIONS

We explored the relationship between gender differences in respect to type of business and start-up capital in Uganda as compared to other countries. Our findings show that across all countries Uganda inclusive, the largest numbers of business start-ups are in the consumer-oriented sector, with the majority of males and females being involved in this sector as compared to other sectors. In

relation to gender differences in respect to type of business and amount of start-up capital, the findings were quite different in Uganda as compared to the other GEM countries as presented in the findings. More personal start-up capital is invested in trade and business services in Uganda while this is so in Extraction and manufacturing sectors for the case of other GEM countries.

In the light of the above conclusions we make the following policy recommendations. In Uganda, the majority of the entrepreneurs are involved in consumer oriented businesses; there is need for policy makers to improve framework conditions like access to physical infrastructure, financial support, education and training and government programs that will promote other sectors not invested in by the entrepreneurs, so that they subsequently attract entrepreneurs to invest in those sectors as well. Further still, to encourage more females to engage in starting new businesses, they should be sensitized about the viability of business start-ups, through conducting workshops, seminars, media, music dance and drama. Perhaps this could change their attitude towards risk and thereby increase the level of entrepreneurs. Given the high number of females in the Ugandan National Census demographic figures, this will boost not only Ugandan's entrepreneurship but also economic activities.

Our study reveals that more women are involved in consumer oriented businesses, perhaps future studies need to investigate the reasons why other sectors are not well represented and come up with policy recommendations to promote other sectors. By concentrating on consumer oriented businesses implies that the country heavily relies on imported products, this is not a good indication for a country economic development. A more detailed investigation of issues related to gender differences in start-up processes in terms of challenges faced is also important.

REFERENCES

Bayard, K.J., Hellerstein, D.N., & Troske, K. 1999. New evidence on sex segregation and sex differences in wages from matched employee-Employer Data. *National Bureau of Economic Research*, No. 7003.

Bevan, Alan A., & Danbolt, Jo. 2000. Dynamics in the determinants of capital structure in the UK. *Capital Structure Dynamics Working Paper No. 2000-9*.

Brophy, D., 1989. Financing Women-Owned Entrepreneurial Firms. In O. Hagan, C. Rivchun & D. Sexton (Ed.), *Women-owned businesses*. New York: Praeger.

Carrington, W.J., & Troske K. 1998. Sex segregation in U.S. manufacturing. *Industrial and Labor Relations Review*, 51(3): 445-464.

Carter, N., & Rosa, P. 1998. The financing of male- and female owned businesses. *Entrepreneurship & Regional Development*, 10: 225-241

Chittenden, F., Hall, G., & Hutchinson, P., 1996. Small firm growth, access to capital markets and financial structure: Review of issues and an empirical investigation. *Small Business Economics*, 8: 59-67.

Coleman, S. 2000. Access to capital and terms of credit: A comparison of men-and-women-owned small businesses. *Journal of Small Business Management*, 37–52.

DeAngelo, A., & Masulis, R., 1980. Optimal capital structure under corporate and personal Taxation. *Journal of Financial Economics*, 8: 3-29.

Groshen, E.L. 1991. The structure of male/female wage differential: Is it who you are, what you do, or where you work? *Journal of Human Resources*, 26: 457-72.

Harris, M., & Raviv A. 1991. Theory of capital structure. Journal of Finance, 46: 297-355.

Hisrich, R.D., & Brush, C.G. 1987. Women entrepreneurs: A longitudinal study, in: N.C. Churchill, J.A. Hornaday, B.A. Kirchhoff, O.J. Krasner & K.H. Vesper (Eds.), *Frontiers of Entrepreneurship Research*: 187-199.

Holtz-Eakin, D., & Joulfaian, D., & Rosen, H.S. 1994. Sticking it out: Entrepreneurial survival and liquidity constraints. *Journal of Political Economy*, 102(1): 53-75.

Hutchinson, P. 1999. Small enterprise: Finance, ownership and control. *International Journal of Management Reviews*, 1 (3): 343-365.

Jensen, M. & Meckling W. 1976. Theory of the firm: Managerial behavior, Agency costs and ownership Structure. *Journal of Financial Economics*, 3: 305-360.

Johnson, S., & Storey, D. 1993. Male and female entrepreneurs and their businesses: A comparative study. In S. Allen and C. Truman (Ed.), *Women in business: Perspectives on women entrepreneurs*. London: Routledge.

Machaira, R. 1998. *Gender issues affecting growth*. Available at http://www.google.genderissues.html. (Accessed on December 15, 2005).

Macharia, K. 1988. Social networks: Ethnicity and the informal sector in Nairobi. *Working Paper No.* 463. *Nairobi. University of Nairobi - IDS*.

Myers, S.C., & Majluf, N., 1984. Corporate financing and investment decisions when firms have information investors do not have. *Journal of Financial Economics*, 13: 187-221.

Myers, S.C. 1984. The capital structure puzzle. *Journal of Finance*, 34 (3): 575-592.

OECD, 1998. Women entrepreneurs in small and medium Enterprises. OECD Conference Paris.

OECD, 2002. OECD employment outlook: July 2002. Paris: OECD.

Rajan, R.G. & Zingales, L., 1995. What do we know about capital structure? Some evidence from international data. *Journal of Finance*, 50 (5): 1421-1460.

Reilly, K.T., & Tony S.W. 1999a. Does more mean less? The male/female wage gap and the proportion of females at the establishment level. *Canadian Journal of Economics*, 32-4: 906-929.

Reilly, K.T., & Tony S.W. 1999b. The proportion of females in the establishment: discrimination, preferences and technology. *Canadian Public Policy* **Supplement**, 25: S73-94.

Reynolds, P.D. 2000. National panel study of the U.S. business start-ups: Background and methodology. In J. Katz (Ed.), *Advances in entrepreneurship, firm emergence, and growth*, 4. Stamford, CT: JAI Press.

Reynolds, P.D., Hay, M., Camp, M.S., & Autio, E. 2002. Global entrepreneurship monitor: Executive report. Kauffman Center for Entrepreneurial Leadership, Kansas City, MO.

Subrahmanian, R. 2002. Gender and education: A review of issues for social policy 2002.

Thornton, P.H. 1999. The Sociology of entrepreneurship. Annual Review of Sociology, 25: 19-46.

Thurik, A.R. 1999. Entrepreneurship, industrial transformation and growth. In G.D. Libecap (Ed.), *Advances in the study of entrepreneurship, innovation, and economic growth*: 29-65. JAI Press.

Titman, S., & Wessels, R. 1988. The determinants of capital structure choice. *The Journal of Finance*, 43 (1): 1-19.

Uxem, F.W.V., & Bais, J. 1996. Het starten van een bedrijf: Ervaringen van 2000 Starters, EIM, Zoetermeer.

Van der Wijst N., & Thurik R. 1993. Determinants of small firm debt ratios: An analysis of retail panel data. *Small Business Economics*, 5: 55-65.

Verheul, I., & Thurik, R. 2001. Start up capital: Does gender matter? *Small Business Economics*, 16: 329-345

Walter, T., Balunywa, W., Rosa, P., Sserwanga, A., Barabas, S., & Namatovu, R. 2003. *Global Enterprenuership Monitor: GEM Uganda 2003 Executive Report*.

Walter, T., Balunywa, W., Rosa, P., Sserwanga, A., Barabas, S., Namatovu, R. & Kyejjusa, S. 2004. *Global Entrepreneurship Monitor: GEM Uganda 2004 Executive Report*.

Williamson, O.E. 1988. Corporate finance and corporate governance. *Journal of Finance*, 43: 567-591.

Wong, P.K., Ho, Y.P., & Autio, E. 2005. Determinants of angel investing propensity: Evidence from the Global Entrepreneurship Monitor Dataset. Frontiers of entrepreneurship research 2004. Wellesley, M.A: Babson College.

Zoltan, J., Arenius, P., Hay, M. & Minniti, M. 2004. *Global Entrepreneurship Monitor: GEM 2004 Executive Report*.

TOOLS AND TECHNIQUES CONSIDERED IN THE PRODUCT DESIGN PROCESS: A CASE STUDY OF MALAYSIAN SMIs

MOHAMMAD BASIR SAUD MOHD. AZWARDI MD. ISA NURHAIZAL AZAM ARIFF Universiti Utara Malaysia

ABSTRACT

This paper explores and identifies the tools and techniques considered by Malaysian Small and Medium Industries (SMIs) in their product design process and the management of their companies design process. This study found that most Malaysian SMIs are generally do not used these tools and techniques effectively and efficiently in order to comprehend the exact final customer's needs and requirements in designing their products. There are different perceptions and stages of understanding these tools and techniques in their product design process for customer's consumption. Therefore, Malaysian SMIs need to update their contemporary knowledge about tools and techniques that available in the open market in order to fulfilled their final customer needs and requirements. Thus, they will be operating in more effectively and efficiently in the open market.

INTRODUCTION

This main aim of this paper is to explore and identify the tools and techniques considered by the Malaysian SMIs (small and medium industries) in their product design process and the company's management, particularly in the manufacturing sector. The manufacturing sector is the most important players in the country's continued economic development by producing products and services for the local and foreign markets. Thus, SMIs (known more generically in other countries as SMEs, small and medium sized enterprises) played an important role in the supply chain management of most industries and often end producers in their own right. It is believe that well designed products that match customers' needs, requirements and tastes will win the customer's heart and could improve orders (demand) in world open markets. The Malaysian SMIs need to work hard and smartly in order to have competitive advantage and to produce successful products. Nowadays, the Malaysian SMIs have been struggling very hard to survive and to design and develop products that meet customer requirements and needs in the competitive global environment. The Malaysian SMIs need to compete in different aspects of products in one or more areas. Therefore, the quality of management of the product design process is an important characteristic and should be efficient enough to cater for the whole product design processes.

Overall, Malaysian SMIs need be able to make adequate efforts in acquiring new tools and techniques available in the open market in order to compete more effectively in enhancing their product marketability in the open market. The most effective used of major tools and techniques is a major variable when SMIs want to increase their product's quality to enable them to be successfully marketed their quality's products to both local and foreign customers. There is a future for design activities amongst Malaysian SMIs in accordance with the government's emphasis on and intention to create new design that will promote the Malaysian image in the international market, in particular. Thus, Malaysian SMIs have no other alternative but to make a serious effort to manufacture high quality products in order to face intense competition in the open global market.

LITERATURE REVIEW

Most of the research that has been conducted has emphasised the marketing, technical or engineering aspects of industrial designers (Wan Jusoh, 1995; Bajuri, 1988; Ibrahim, 1999). However, little research has been conducted in the area of the product design process or has investigated how to expedite or enhance product design activities in Malaysia, in particular. It is a challenge for the researcher of this study to initiate and explore this subject area in order to expand the boundary of

knowledge concerning product design activities. It is hoped that the findings of this study will facilitate and contribute to the knowledge of interested parties to enhance their company's performance by generating and formulating facilities for SMIs, and crafting procedures, policies, and laws concerning product design activities.

The product design process "contains a conception of the market or customer requirements, a translation of these requirements to specification for drawing, for production and for the preparation of the manufacturing process" (Sharifi & Pawar, 1996). Barton (2000) defined the process of design as "generating a complete description of the product that satisfies a set of requirements and constraints" that is the movement from abstract to concrete ideas and specifications. Therefore, in general, the product design process involves conceptual design, product design, and the production of the products.

During the product design process, SMIs need also aware of the market and customers' needs. Therefore, all these factors must be well integrated and incorporated during the product design process by the company's design function and/or via using appropriate tools and techniques. Many Malaysian manufacturing companies are currently unable to compete effectively and sell their products in the world markets. The failure of Malaysian manufacturing companies in this respect seems to be either due to product costs being too high, or the quality and design of Malaysian products not equating to international standards, and therefore not being competitive enough to penetrate overseas markets. They appear to be, in Porter's (1980, 1990, 2004) terms, "stuck-in-the-middle – neither lowest cost or perceived as differentiated.

Malaysian companies need to face up to these challenges by changing their product designs, learning how to innovate more effectively, and better managing the product design and development process so that customer needs and requirements are more accurately reflected. Malaysian companies should ensure they offer products that are very competitive in terms of design, technical performance, marketing, after-sales service, aesthetics, ergonomics, ease of use and reliability - not to forget the quality of the materials, manufacturing and finishing processes.

The concept of value provides a means for determining customer needs. Coyle (2003) suggested that most customer "value" their product based on the right quoted price, the right quantity/unit of product received, the right place when that particular products are needed (time), and the right condition of product (as specified). Hence, designing for value is conducted to make customers more satisfied with the products as a final user. Here, the value is any benefit (or attribute) that might be perceived by customers, whether tangible or intangible. Value is also determined in terms of price and non-price benefits offered by the company (Walters & Lancaster, 1999).

Quality Management in the Context of Design

Quality obviously affects, and is determined by, the product design process. A starting thread is to recognize that quality of the product or service is a function of two factors: "quality of conformance" and "quality of design" --- what are more commonly referred to by consumers as "build quality" and "design quality" (see Slack et al, 2001 & 2004; Bennett & Forrester, 1993; Bounds *et al*, 1994; Bank, 1992; Dale & Plunkett, 1989; Oakland & Porter, 1995). Thus, TQM approaches seek to improve the competitiveness, effectiveness, and flexibility of the whole organization.

Determining the quality of design is a part of the innovation process, which determines how a product is designed to achieve the desired ends, such as the suitability or conformability purpose or use of the product. In addition, the product design is the process of defining, redefining, and evaluating product features in order to meet customer needs and requirements (Juran, 1992). However, Dale and Plunkett (1989) suggested product design includes a range of other factors such as ensuring the appearance, functions, ease of manufacture, and increasing the value of the products, or providing the features that ensure profit when selling in the open market.

There are three concepts of customer value in relation to the quality design of products: quality of design, quality of performance, and quality of conformance (Juran, 1992; Bounds *et al*, 1994). Quality of design involves ensuring product designs are evolved that conforms to the desired customer needs. Quality of performance is user-based quality, determining whether products manufactured conform to customer needs and requirements when in use. Quality of conformance specifically focuses on the quality performance of the actual operations i.e. manufacturing-based quality (Oakland & Porter, 1995). Womack et al (1990) identified four differences in the design

techniques employed by mass and lean producers of car manufacturers: leadership, teamwork, communication, and simultaneous development. Thus, the designers need a high degree of anticipation, and if designers were accurate in their projections, the time taken for the design process would be shortened.

In addition, using appropriate the tools and techniques which available in the open market will expedite the design process and assist the company to maximize customer value. Even though there are abundant of tools and techniques available, but only three tools will be discussed here – QFD, value analysis and cross-functional team – as these are seen as having the most generic application to Malaysian industry.

Quality Functional Deployment (QFD)

The main aim of QFD is to ensure that customer needs are translated into technical design activities (engineering) and that appropriate actions have been taken throughout every stage of the product development process (Govers, 1996 & 2001; Bergquist & Abeysekera, 1996). QFD enhances the coordination and communication between marketing, production, engineering, and any other personnel in related functions (Schilling & Hill, 1998). Abdul Rahman et al (1999) suggested QFD was a design management tool to enhance the quality aspect of products and services and, subsequently, increase customer satisfaction. Therefore, QFD is a process that can be used as to guide companies to make balanced decisions between what the customer requires and the company can produce given its capacity and capabilities (Govers, 1996). The design process can be classified into four different stages: strategy and concept definition, product design, process design, and manufacturing operations (Govers, 1996). The concept of "House of Quality", HoQ) has been introduced and mapped out a matrix relating customer needs with product attributes (Schilling & Hill 1998; Bergquist & Abeysekera, 1996; Hauser & Clausing, 1988; Harding *et al*, (1999).

Hauser and Clausing (1988) identified three main stages of QFD: identify the customer requirement (what), translating customer needs and requirement into design features (how) and previous experience (why). Bergquist and Abeysekera (1996) modify QFD to be more specific including customer requirement (what are the user needs?); ranking or rating user needs; product characteristics (how can the customer needs be met?); relationship between the different product characteristics; relationship between customer needs and product characteristics; weighting, target values; technical analysis; and customer analysis. However, Harding *et al* (1999) suggested eight elements in the QFD: customer needs (the voice of the customer); engineering characteristics (the design features of the product); relationship matrix; correlation matrix; competitive benchmark; technical importance; technical competitive benchmark; and target value. Further, Abdul-Rahman *et al* (1999) introduced a quality deployment matrix known as the "Quality Chart" used to describe the characteristics of the product's design attributes based on the customers' needs and requirements.

Govers (1996) and King (1989) have identified four main advantages of QFD implementation: identification of precisely what product characteristics are needed; identification of future potential customers; identification of which competing product can be used as a product reference; and how QFD could be used to fit in with the existing and specific product development process of the company.

QFD is not the only improvement method or set of tools that could be used by Malaysian companies to enable them to achieve high quality and customer orientated product designs. However, it does, together with value analysis techniques, provide a route to improve and introduce more competitive product designs for SMIs. Like most manufacturers, Malaysian SMIs need to follow best practice and the latest trends, and so are gradually following their counterparts from different parts of the world in pursuing formal quality assurance methods. In this way they should move toward production of products and services that are more acceptable and, importantly, attractive, in world markets.

Value Analysis

Designing for value is conducted to make customers more satisfied with the products as a final user, whether tangible or intangible. Value is determined in terms of price and non-price benefits offered by the company (Walters & Lancaster, 1999). The process of value analysis is often seen as a useful means of evaluating and improving value. Value analysis is an analytical technique which is

used to examine all the cost components of a product/service in relation to all its functional and quality elements for the purpose of improving design standards, reducing costs, and boosting profitability for the company. Therefore, value analysis is defined as "the elimination, by critical analysis of design, of unnecessary product cost while retaining or improving value to the customer" (Bennett et al, 1988; Oakley, 1984; Forrester, 2002; Pawar et al, 1993).

Value analysis works by changing the product's design and, where appropriate, the method of manufacture or operation. Typically the value analysis team will be based approach whereby participants will pass through five stages: information/familiarization, speculation, evaluation, recommendation, and implementation (Bennett et al, 1988; Oakley, 1984; Forrester, 2000; Pawar et al, 1993).

Cross-functional Team (CFT)

Several issues arise in relation to team working and multi-functional design teams within the Malaysian companies. For instance, who is really involved in the product design process? Are the same functions (departments) involved in the management of the manufacturing/production decision? At what stage of the product design process do they play their roles and what are their functions? Pawar and Sharifi (1997) use the term 'multidisciplinary teams' instead of cross-functional teams. They also suggest other names such as 'Tiger teams', and 'Process action teams'. Usually cross-functional teams are established for a specific task, product development, or a process that needs to be solved. The team members have to work together on certain tasks and develop an understanding of the other's department functions.

Cross-functional teams should include people from all functional backgrounds that provides several advantages by providing a broader knowledge and increasing the cross-fertilization of ideas. To achieve success, the project manager or leader of the team has to hold a top position within the company, be a good problem solver, possess multi-discipline skills or expertise, and be able to use power or be a good influencer of the functions within the company (Brown & Eisenhardt, 1995).

RESEARCH METHODOLOGY

This paper presents the findings gathered from the qualitative analysis through the semi-structured interviews and the survey conducted. The interviews were conducted throughout Malaysia with top managers from SMI's. Amongst the listed questions are those about the value analysis, the cross-functional team, the quality functional deployment, the formal product specification, and the formal project brief. However, this paper will discuss about the QFD, the value analysis, and the cross-functional team.

The researcher chose the companies randomly from amongst the companies listed in the SMIDEC directory for the year 2001. The researcher made an appointment with a total of 61 SMIs companies in three months in Malaysia. Finally, the interviews and responses in English language from staff in 28 SMIs were used in this qualitative analysis.

Assumptions

The information and data obtained from the sample of the survey are assumed to be adequate and to represent the population of Malaysian SMIs. The instrument used in this study is assumed to be the most effective measurement tool for gathering the information and data that are needed. The answers given by the respective respondents during the interviewed were assumed to be the most reliable and a true reflection of their best knowledge about the tools and techniques considered in their respective company and Malaysia in particular.

RESULTS

The Use of "Value Analysis" in the Company's Product Design Process

This section sought to figure out what respondents thought about value analysis and what they meant by value analysis. The top management of some companies could not remember or recall what they have learnt about value analysis while in college. In addition, a few managing directors and managers had not even heard about or used "value analysis" in their company's operation. A few top managements agreed that they used or had heard of value analysis during their company's operation but could hardly explain further about how it had been applied in their own company.

Another senior manager in the food industry tried to clarify that they applied value analysis in their company operation by providing evidence such as certificate in making finished products. The manager of a food company was unsure whether they have used value analysis or not in their operation. However, there is a company who used different terms to clarify the term value analysis.

To conclude the above discussion about value analysis, it seems that most senior managers of Malaysian SMI's are not aware of the importance of the value analysis element in their product design process or their company's operation.

Cross-functional Teams in the Product Design Projects

The researcher received a very good response when he asked about cross-functional teams, and it seems that the interviewees were happy to discuss and willingly elaborate at length on how CFT has been used within their company. A CFT normally consists of representatives from different functions within the company and there are companies that have their own name for CFT. The composition of the CFT depends on the company's nature and the products produced.

There are companies set up a CFT if there is a need for a new product or for a product development (if necessary). The tasks are distributed amongst the team members. The representative of a food company who specializes in herbal medicines, explained further how the CFT works within their company, "Marketing staff and customers will discuss (the product) with the boss. Then, the production and R & D personnel are called in to determine whether the company has the capability to produce the intended products. Then R & D will carry out the research to determine the correct ingredients for the intended products. To discover what are the necessities and the necessary ingredients, we have formed collaboration with the National University of Malaysia (UKM)."

There is an argument that the CFT members are interrelated and need coordination in order to succeed in producing products that will be accepted in the open market. Some companies have an informal team which consisted of three main representatives – sales, marketing and engineers. A small manufacturer usually has only a few members in its company's CFT as stated by one of the managers. On the other hand, a managing director of a furniture company simply stated that they had none CFT in their company. Nevertheless, a manager in another company has their own way of using the CFT within company, that is, just to discuss the weaknesses or problems arising in every shift of production. While a manager of a wood company organizes a meeting once a month discussion between the managing director, general manager, and marketing department. Meanwhile, a manufacturer of plastic bottles described how CFT was used in the company by saying:

"Firstly, we do scanning, then, from my experience and their experience (customers), the factory manager knows whether this bottle can be produced or not with the available machine. Then, we send out for the capping, we just do the final touch up, presentation, just by using free hand from different angles."

Another manager of a plastic company did not mention the CFT members specifically but elaborately explained how the team worked within the company when they get the order from the customers: discuss the goods to be produced; determine the cost of producing, determine whether the products can be produced or not; then price, whether it is viable or not; planning of concept, design, and materials to be used; design the product; straight away do the prototype, and tooling; the product's tooling; finalize and touch up, and get feedback from customers; and production starts from zero. In addition, the final decision making process should be agreed by all members of the team in every stage.

Quality Functional Deployment (QFD) in its Product Design Activities

QFD is an important element in the product design process. This paper will try to investigate what the respondents understand by, and how they make use of, QFD in their company's operation. The survey revealed that most respondents don't really understand or implement QFD in their operation even though during the interview did try to explain the implementation of QFD in their company.

A few respondents gave their own definition or interpretation of QFD such as detect where the defects can exist, more about technical performance and concurrent with design in order to reduce problems and correct before product launch. One respondent emphasized that QFD is basically used

during manufacturing with four distinct stages. The four stages are: incoming production/process quality control (IPQC), during production/process quality control (PQC), outgoing production/process quality control (OPQC), and customer quality control (CQC) that is the product's delivery (based on customers feedback on the product's quality).

A general manager of a food company did express an opinion on how they could solve the complaints or suggestions (which may be made jokingly) made by the customers. However, most companies had never heard about the QFD but tried to explain how they overcame customer complaints, and at the same time check whether these originated from their faults (products) or were the customer's fault (end users). This has been clearly expressed by the general manager of an electronics company as:

"After the product has been fully assembled, then, we get the customer's feedback. Priority is given to one that is urgent and we go to the place where the accident happened.... Then, we modify it to suit the customer's needs."

Companies in the electronics industry use a different name for QFD:

"Some company calls it TQS --- total quality sample. Even though we implement it now, let's say, before product is out (in the market), we did design and value analysis.... Firstly, in the design stage, we look into the problems, functions, etc. Secondly, then we go into the freelance stage and only then submit it to our customers....., only then does the business continue or production start supplying, if not we don't do it."

DISCUSSION

The study identified five tools and techniques in the product design process, namely, value analysis, cross-functional team, quality functional deployment, product specification, and project brief (only three elements been discussed), which gives some indication of the practice by Malaysian SMIs. It was revealed that all used tools and techniques but most were reluctant to give further information about how used these methods in their company's operations (refer to section 5.1, 5.2 and 5.3).

Value analysis is a process of changing the product design and, where appropriate, the method of manufacture or operation by a team, a value analysis team, involving five stages: information/familiarisation, speculation, evaluation, recommendation and implementation (refer to Section 2.3). A total of 29.2% (40 of 137, by using survey) of participating companies used or heard about value analysis but only handful could explain further. However, their explanations did not reflect the actual concept of value analysis (refer to Section 5.1). Most Malaysians SMIs are not aware of the importance of value analysis element in their company's product design process or company's operation. It is important for the Malaysian SMIs to inculcate their staff or those who are responsible for product design with the concept of value analysis in order for them to be effective and efficient in product manufacture.

A total of 38.7% (53 of 137, by using survey) of respondents agreed the importance of a cross-functional team in their company's design process. Their responses are good but without clear evidence (refer to Section 5.2) on how the cross-functional team concept was practised (refer to Section 2.4). However, most company interviews revealed that their team structure involved all the respective departments and individuals, depending on the necessity or project involved (refer to Section 5.2). It is suggested that the Malaysian SMIs need a flow chart or a clear job specification which is easy to follow and use as a guide. The team members should possess a variety of skills, knowledge, and experience from various departments in order to cater for the fast development of product design technologies, especially the methods and techniques used in the production.

Quality functional deployment (QFD) is aimed to ensure that the customers' needs and requirements (voice of customers) are transformed into technical design activities with appropriate actions being taken at every stage of the production process or supply chain management. It is a method of continuous product improvement with the support of an efficient cross-functional team within the company's operation (refer to Section 2.2) Only 21.9% (30 of 137, by using survey) of participating respondents understood the QFD's concept and further explanation was provided by only a few of these respondents. The findings of the study revealed that most respondents do not really understand or have implemented QFD in their company's operation (refer to Section 5.3). Since QFD is an important aspect in every stage of the production process, it is proposed that the Malaysian

SMIs should enhance their knowledge about the uses and the advantages (refer to Section 2.2) of implementing QFD in their operations. QFD will indirectly update their customers about potential future products. This will be achieved through attending seminars, conferences, workshops, or others means of updating themselves about the current information which available in the open market.

There is no doubt that product design activities are an important aspect of producing a company's products but the management of it should be given priority as well. The company's product design activities will be more effective and efficient if the company's management, specifically the personnel directly involved, are well informed about current trends (tools and techniques) in the global market and products availability. In addition, it is vital for a company to have its own research and development department to help its management in terms of designing or redesigning products, and also to facilitate other areas of interest, such as advice on marketing strategies, export opportunities, financial aspects, and methods and techniques in production.

Contributions of the Study

The tools and techniques has been discussed, practiced, and applied widely in the western or developed countries. The findings of this study have extended this concept, the adaptation and adoption of tools and techniques, to other developing countries such as Malaysia. This phenomenal is supported by indicating that Malaysian SMIs have adapted and adopted the concept of tools and techniques that available in the open market in this study. This study has identified the tools and techniques as a platform to enhance a company's performance. This contribution could help and assist future researchers to expand the boundary of knowledge by conducting studies that could help to further verify as well identify others tools and techniques that could be used in company's operations. The findings of this study revealed that the managers could make use of these indicators (tools and techniques) in their future production as a guide to identifying priorities tools and techniques for product design purposes.

The concept of using appropriate tools and techniques and its important could be introduced at the early stage in the education system, in Malaysia in particular, at the secondary school level. The policy makers could utilize the findings when designing the curriculum for subjects like design and technology for various levels of education. This objective could be achieved through encouraging inventions and competitions for new designs by incorporating the appropriate tools and techniques amongst the school children in different categories of product inventions.

As a result of this study, we could also look at how the customers, other interested parties, and policy makers or implementers view the tools and techniques used in designing the products. These studies could provide valuable insight into the appropriateness of tools and techniques used in designing the products and would aid them in designing strategies to promote a company's growth and thus, enable it to stay competitive in the open market.

The survey method was unable to provide details of the actual practices of SMIs used to determine the best available tools and techniques in the product design process. Thus, other qualitative methods such as product observation and imitation, and interviews with regular customers could be used as they may provide a better explanation of the underlying tools and techniques that influence their decision in consuming those products. The customer's perceptions and beliefs about the products were not explored at all. Thus, the researcher recommends a study, which explores the customers' views of the appropriate tools and techniques, should be conducted.

CONCLUSIONS

This study suggests some new findings and results about the management and tools and techniques available in relation to the Malaysian SMIs in their product design process. The progressive development of Malaysian SMIs will enable them to develop world-leading companies. This aim will be achieved through their strong will and effort, and the government's commitment toward the helping them. The researcher believes that the findings of this study will contribute to the policy makers, the governments (include government agencies), the Malaysian SMIs or any interested parties regarding the development of the SMIs, particularly in prioritizing the tools and techniques in their product design process, then, finally venture into the export market (for those companies that have not yet ventured internationally). Finally, all the involved parties will benefit and keep on progressing.

The different top company manager's projected different perceptions about the tools and techniques concepts that had been used in designing and redesigning products of their company. This study is limited to the Malaysian SMIs who responded to the interviews were particularly from the heavily populated area on the West Coast of Malaysia. Therefore, the results of this study may not be generalized to other states, particularly the East Coast of Malaysia and East Malaysia (Borneo Island), which is less densely populated.

REFERENCES

Abdul-Rahman, Hamzah; Kwan, C.L., & Woods, Peter C. 1999. Quality function deployment in construction design: Application in low-cost housing design. *International Journal of Quality & Reliability Management*, 16(6).

Bajuri, M. T. 1988. An examination of potential of industrial designers to contribute towards the process of adaptation of technology transfer from the United Kingdom to Malaysia. PhD Thesis, CNAA, UK.

Bank, J. 1992. *The essence of total quality management*. Prentice Hall, London.

Barton, J.A. 2000. Design decision chains as a basis for design analysis. *Journal of Engineering Design*, 11(3).

Bennett, D. & Forrester, P. L. 1993. *Market-focused production systems: Design and implementation*, Prentice Hal, UK.

Bennett, D, Lewis, C. & Oakley, M. 1988. *Operations Management*. Oxford: Philip Allan.

Bergquist, Karin & Abeysekera, J. 1996. Quality function deployment (QFD) – A means for developing usable products. *International Journal of Industrial Ergonomics*, 18: 269-275.

Bounds, G., Yorks, L., Adams, M., & Ranney, G. 1994. *Beyond total quality management: Toward the emerging paradigm*. London: McGraw-Hill Inc., London.

Coyle, J. J., Bardi, E. J., & Langley Jr., C. J. 2003. *The management of business logistics: A supply chain perspective*. London: South Western Thomson Learning

Dale, B.G. & Plunkett, J.J. 1989. *Managing quality*. London: Philip Allan.

Forrester, P. 2002. *Cases in operations management*. Course materials for full-time DBA and MBA (24) 2002-2003, Birmingham University, UK

Govers, C.P.M 1996. What, and how about quality function deployment. *International Journal of Production Economics*, 46/47: 575-585.

Govers, Cor P.M. 2001. QFD not just a tool but a way of quality management. *International Journal Production Economics*, 69: 151-159.

Harding, J.A., Omar, A.R., & Popplewell, K. 1999. Applications of QFD within a concurrent engineering environment. *International Journal of Agile Management Systems*, 1/2: 88-98.

Hauser, J.A., & Clausing, D. 1988. The house of quality. *Harvard Business Review*, May-Jun: 63-72.

Ibrahim, M. 1999. *The role of the industrial designer in Malaysian Small and Medium Industries*. PhD Thesis, Centre for Design Research, University of Northumbria at Newscastle, UK,

Juran, J.M. 1992. *Juran on quality by design: The new steps for planning quality into goods and services*. The Free Press, New York.

King, B. 1989. *Better design in half the time: Implementing quality function in America*, 3rd. Ed. MA: Goal/QCP.

Oakley, M. 1984. *Managing product design*, London: Weidenfeld and Nicholson.

Oakland, John S. & Porter, Leslie J. 1995. *Total quality management: Text with cases*. UK: Butterworth-Heinemann.

Pawar, Kulwant S.; Forrester, Paul & Glazzard, John. 1993. Value analysis: Integrating product-process design. *Integrated Manufacturing Systems*, 4 (3):14-21.

Pawar, Kulwant S. & Sharifi, Sudi. 1997. Physical or virtual team collocation: Does it matter? *International Journal of Production Economics*, 52: 283-290.

Porter, Michael E. 1980. *Competitive strategy: Techniques for analyzing industries and competitors.* London: The Free Press.

Porter, Michael E. 1990. The competitive advantage of nations. London: Palgrave MacMillan.

Porter, Michael E. 2004. *Competitive advantage: Creating and sustaining superior performance*. London: The Free Press.

Sharifi, Sudi & Pawar, Kulwant S. 1996. Product design as a means of integrating differentiation. *Technovation*, 16(5): 255-264.

Slack, N., Chambers, S., & Johnston, R. 2000. *Operations management*, London: FT Prentice Hall.

Schilling, Melissa A. & Hill, Charles W. L. 1998). Managing the new product development process: Strategic imperatives. *Academy of Management Executive*, 12 (3): 67-81.

Vonderembse, Mark A., & Raghunathan, T.S. 1997. Quality function deployment's impact on product development. *International Journal of Quality Science*, 2(4): 253-271.

Walters, David & Lancaster, Geoff. 1999. Value and information – Concepts and issues for management. *Management Decision*, 37(8).

Wan J., & Wan, J. 1995. *Determinants of success in product development: An exploring investigation of manufacturing companies in Malaysia*. PhD Thesis. The University of Strathclyde, Glasgow, UK.

Womack, James P., Jones, Daniel T., & Roos, Daniel. 1990. *The machine that changed the world*. New York: Rawson Associates.

PERCEPTION OF ELECTRONIC GOVERNMENT UTILIZATION IN STATE OF QATAR

Firend A. Rasheed Maha Al-Emadi *Qatar University*

ABSTRACT

The purpose of this paper is to investigate the perception of the Qatari population concerning their experience in utilizing the electronic government portal in State of Qatar. The focus of the research is to determine factors involved in lack of sufficient usage of the electronic government portal (e-government), lack of efficiency, challenges in improving the services provided, and how e-government portal can best serve citizens of Qatar. This research found five factors are shown to be reliable measurement for characterizing the attitudes towards evaluating Qatar's e-government website. These factors are ease of use, web design, customization, responsiveness, and security. The paper concludes that increasing the level of security for user's payment will increase confidence and facilitate the usage of government services through the web and suggested to include other ministries in the e-government portal to provide other essential services to citizens.

INTRODUCTION

The objective of this research is to investigate the utilization of electronic government (e-government) in state of Qatar, by conducting a survey among various segments of Qatari population, all information collected and analyzed using statistical tools to determine the optimal methods of improving and enhancing the electronic government services in state of Qatar, which has a mission of achieving the highest performance in executing governmental transactions electronically, through streamlined business processes and integrated information technology solutions. Given the efficiency stage of the e-government program in Qatar, the e-government service has not been investigated previously or assessed for its efficiency or its effectiveness. This research is to serve that purpose, and to provide a foundation for measurement of services provided, and to suggest further research on the topic.

The statistical analyses used in this study were the descriptive statistics which is numerically summarizes important characteristics of set of numbers, and the correlation coefficient statistics, which is a measure of the closeness of the relationship or association between independent and dependent variables. These two statistical tools were viewed to be appropriate for this kind of study to highlight if any significant correlation between different variables of the study.

This research concludes that there is a direct relationship between level of education, work sector, age category, and nationality variables and the utilization of e-government portal. However, there is no significant relationship between the gender, martial status and monthly income variables and the utilization of e-government portal. At the end of this research these is a number of suggestions and recommendations for the Qatar's e-government decision makers to improve the quality of e-government services in order to increase its utilization.

LITERATURE REVIEW

Previous research described e-government differently; Bourn (2001) asserts that the concept of e-government combines electronic information based services for citizens (e-administration) with the collaboration of participatory elements (e-democracy) to achieve the objective of balanced e-government. The state or individual local authority institutions grant citizens more opportunities to influence public life by making their views known electronically. At the same time, the Internet allows the public sector to extend its role as a client-oriented service provider. The characteristic feature of 'correct' e-government shall be balanced combination of electronic services and forms of electronic participation.

Heeks (2001) suggested that e-government can develop the strategic connections between public sector organizations, and improve a communication between government levels. This connection and communication improve the co-operation between them through facilitating the implementation of the government strategies, transactions, policies, better use and running of government processes, information, and resources. McClure (2000) recommended that through an

integrated web-portal, it will be possible for citizens and businesses to complete a transaction with government agencies without having to visit several separate ministries and departments in separate physical locations. In addition, e-government strategy is enabling public sector organizations to interact directly and work better with citizens and businesses. This includes digitizing procurement services from and to business in order to improve their service quality, convenience, and cost effectiveness. On the other hand, Sharma (2002) argued that e-government portals require a common and integrated architecture framework that allows different organizations, regions, and towns to share and exchange data independent of formats, devices and underlying architecture. Therefore, government organization must have a clear understanding of architecture frameworks from both the technical and information management levels.

Haldenwang (2004) makes the argument that e-government denotes the strategic, coordinate use of information and communication technologies (ICT) in public administration and political decision-making institutions. The benefits are expected to deliver greater efficiency to concerned institutions, improvements in public services, political participation and transparency. Beyond the immediate benefits of the new technologies, Haldenwang (2004) advised that egovernment should be taken as a tool to promote good governance and to strengthen reform-oriented factors in policies and civil society. Berkley and Gupta (1994) explore that the advantages of egovernment lie in the improved quality of the services provided to citizens' enterprises, and greater efficiency for all participants. The level of satisfaction among the citizens as well as the acceptance of the public sector shall also increase. Berkley and Gupta (1994) also indicates that an international standard for the development and introduction of e-government does not exist. It is, still, possible to identify key principles which an e-government strategy must satisfy. Above all, there is a need for the establishment of a central, responsible authority as well as a need for long-term planning.

According to a study conducted by West (2003) on global e-government of 2,166 national government websites in 198 countries around the world, while most of the government websites offer primarily informational content, only 16% offer services that are fully executable online. West (2003) found that the country with the largest number of online services was Singapore, with an average of 7.8 services across its government agencies. This was followed by US (4.8 services), Turkey (3.2 services), Hong Kong (3.1 services), and Taiwan (2.4 services). It is interesting to note that many of the countries in which e-government is the most developed are those that were considered developing countries only few decades ago.

Layne (2001) describes a four stage model to develop a fully functional e-government. The model is based on technical, organizational and managerial feasibilities. Layne research suggested that e-government is an evolutionary experience, and posits four stages growth model for e-government that consist of; (1) cataloguing, (2) transaction, (3) vertical integration, and (4) horizontal integration. The four stages are arranged in terms of complexity and different levels of integration. Furthermore, James (2003) measures the benefits of e-government in terms of citizen's benefits and he concludes that the creation and use of an e-government capability leads to several benefits that embraces lower cost channels of communication with citizens and businesses, increase resources efficiency, increase in profits and wider economic benefit, advance internal and business procedure, and reduce intricacy.

Seifert (2003) outlines some of the major opportunities to enhance governance, which includes efficiency in term of reducing errors and cost, new services, increased citizens participation, and enhanced national information infrastructure. Moreover, Seifert (2003) presented the challenges to implementing e-governance, which comprises of adequate information delivery, privacy, inconsistencies in computer access, management, and funding requirements. Lau (2003) on the other hand agrees with Seifert (2003) as he asserts some factors that affect the willingness of citizens to use electronic services. These factors are; 1) the availability of the technological tools, 2) the level of access that citizens will have, 3) citizens trust in electronic channels, and 4) their expectation of the types of services that should be delivered and how it should be delivered.

Consumer's perception of e-government issues in Arab countries is consistent in some areas and inconsistent with other development countries. Malawian (2002) shows that technical and customer's issues, such as Internet security, speed of service, customer's trust, awareness, and the knowledge of how to use the service were the most important issues. Malawian (2002) observed that there is not enough attention given to investigating the nature of Arab consumers' perceptions and

feelings towards e-government. Several suggestions to improve using e-government in Arab countries were outlines by Malawian (2002). These includes; developing the basic internet infrastructures, prepare the legal environment to deal with e-government, design an educational and training plans that aims to prepare a qualified technical employees to support e-government, and implementing appropriate public awareness programs for using the e-government services.

RESEARCH METHODOLOGY

This study is based on data collection from a random sample of people in Qatar, however, an exploratory, descriptive and causal research method were also used. In this research, the first stage was exploratory research design method to provide insights and understanding of the research problem and some interviews with the decision maker in Supreme Council for Telecommunication and Information Technology (ICTQatar) e-government department. Then the result of the exploratory research and the interviews were used as input to the second stage, which includes both descriptive and causal research design.

During the second stage a survey was developed that consisted of three parts to test the different hypotheses that were designed in the first stage. In addition the relationship between the different variables that affect using e-government website in Qatar including ease of use, web design, responsiveness, customization and security, were examined in order to help e-government managers to evaluate and determine the right decision and to continually improve. Finally the causal research design was implemented to establish cause and affect relationships. Moreover, the influences of one or more of the independent variables to the other dependent variables were verified.

The data collection method followed in this study consists of secondary data analysis and interview with ICTQatar to understand the e-government point of view regarding using e-government in Qatar. The second method is a survey that was distributed to 180 persons from demographic variables (age, nationality, level of education...etc). The survey was in both Arabic and English language.

However, 10 of the distributed surveys were blanks or incomplete, thus it was not used in the analysis, and 15 cases of the completed questionnaires were found to be unusable because of missing responses. These missing response were ignored, which lead to 155 usable responses. Data collected from the survey was entered into statistical analysis software 'SPSS', which is used to run a variety of statistical analysis for academic use.

ANALYSIS

Descriptive analysis

Finding of statistical analysis discussed below. All tables and analysis attempt to answer the research questions. Descriptive statistic such as minimum, maximum, mean, standard deviation, rang and variance was obtained for all the dependent and independent variables. Another type of descriptive analysis is Crosstabs which is used for showing the frequency and percentage of values that are present (non-missing) and the percentage of missing values for each category as related to the other variables.

Table 1, presents the frequencies of general part variables such as, computer usage, e-government usage, reasons of not using e-government, period of using e-government, and the most services used in e-government portal. A typical user was found to be one who used the computer several times a day, accessed the e-government portal less than once a month, and utilized the e-government portal since less than a year, tended to use Traffic Violations.

Finding from the statistics of general variables show that about 33.5% of people are using the computer several times a day, but in the same time about 32% of those people are accessing the e-government website less than once a month. There were many people who did not use the e-government website for different reasons. However, the most frequent reason was not familiarity with the e-government services, which supports the statistical result that indicates that most of the people know about the e-government since less than a year. The last variable in the general part point out that the traffic violations is the most used services in Qatar's e-government website.

Table 1
Frequency Table of the General Part of the Survey

Computer Usage	Fr	P	Cumula
	equency	ercent	tive %
less than once a month	17	1.0	11.0
Once a month	13	.4	19.4
A few times a month	18	1.6	31.0
A few times a week	23	4.8	45.8
About once a day	32	0.6	66.5
Several times a day	52	3.5	100.0
E-gov Usage			
less than once a month	51	2.9	38.1
Once a month	25	6.1	56.7
A few times a month	28	8.1	77.6
A few times a week	19	2.3	91.8
About once a day	11	7	100.0
Reasons of not using e-gov	•		
e-service is not attractive	2	.3	9.5
Difficult to access	1	.5 0 .6	14.3
No security	3	.9	28.6
Services I need are not provided	2	.3	38.1
Not familiar with it	7	.5 4	71.4
Not interested in it	5	.2	95.2
Other	1	.6	100.0
Period of using e-gov		· -	
Less than a year	56	3	37.8
Between 1-2 years	35	6.1	61.5
Between 2-3 years	24	2.6	77.7
Between 3-4 years	18	5.5	89.9
Between 4-5 years	11	1.6	97.3
More than 5 years	4	.1 2 .6	100.0

Most Services Use			
Visit Visa	15	.7 9	10.1
Driving License	10	6 .5	16.9
Traffic Violations	40	5.8 2	43.9
Electricity & Water	16	0.3	54.7
Resident Permits	16	0.3	65.5
Student Registration	8	.2	70.9
Zakat Fund	15	.7	81.1
Qatari Employment	10	.5	87.8
Health Cards	10	.5	94.6
Red Crescent Funds	6	.9 3	98.6
Others	2	.3	100.0

Table 2 summaries the variables that determine the dimensions of e-government website, demonstrate that 60.8% agreed on that the government website is ease to use and navigate, 15.5% were strongly agreed, 3% disagreed, and 2.4% strongly disagreed and 13.7% are not decided. Regarding the web design, 54% agrees on its efficiency that's means the content information is attractive, well organized and the instruction is ease to follow, 4.5% strongly agreed, 10.3% disagreed, 3.9% strongly disagreed and 22.8 not decided.

Testing the responsiveness variables shows that only 27.4% agreed that the e-government reply and response to their request, 5.5% strongly agreed, 21.9% disagreed, 3.9% strongly disagreed and 36.8% not decided. Examining the customization factor in e-government website, shows that only 36% of people were agreed on that e-government portal provides them with their personal needs and most of the needed services are exists in the website, 4.3% strongly agreed, 26.2% disagreed 3.4% strongly disagreed and 29% not decided. The last factor is the security, only 33.1% agreed about the security of e-government website which includes the e-payments and secured the private information, 9% strongly agreed, 22.6% disagreed, 3.7% strongly disagreed and 27.1% undecided.

Table 2
Frequency Table of the Dimensions of E-government Website

	Fr	P	Cumul	N
	equency	ercent	ative %	ean
Strongly disagree	4	.4	1.4	
Disagree	5	.0	5.4	
Undecided	21	3.7	12.8	9
Agree	94	6 0.8	81.8	
Strongly Agree	24	5.5	100.0	

disagree	Strongly	6	.9	2.7				
disagree	Disagree	16	0.3	14.9				
	Undecided	35	2.8	39.2	3. 5			
	Agree	84	5 4.0	96.6	3			
	Strongly Agree	7	4.0	100.0				
Respor	nsiveness							
	Strongly	6	3	3.4				
disagree	Disagree	34	.9 2	5.4				
	Undecided	57	1.9 3 6.8	25.0	3. 0			
	Agree	43	7.4	85.1	U			
	Strongly Agree	9	5 .5	100.0				
Custon	nization	<u> </u>						
disagree	Strongly	5	.4	4.7				
uisagive	Disagree	41	6.2	16.9				
	Undecided	45	9.0	39.2	3. 1			
	Agree	57	6.6	95.9	-			
	Strongly Agree	7	.3	100.0				
Securit	Security							
disagree	Strongly	6	.7	4.1				
	Disagree	35	2.6	14.9				
	Undecided	42	7.1	42.6	3.			
	Agree	51	3.1	96.6				
	Strongly Agree	14	.0	100.0				

Correlation analysis

Table 3 lists the correlation between key variables. In particular, it shows correlation between the e-government website variables which includes security, ease of use, web design, customization, and responsiveness with the demographic variables such as nationality, age category, gender, and marital status, level of education, work sector and monthly income.

Table 3
Correlation Analysis between Selected Variables

		Α					
		ge		N	L	V	N
	N	Categor	G	arital	evel of	ork	onthly
	ationality	y	ender	Status	Education	Sector	Income
Easy	-	0	0	0	-	0	_
Access	0.151	.072	.130	.016	0.148	.012	0.120
User	-	0	0	0	-	-	-
Friendly	0.151	.031	.151	.016	.170(*)	0.021	0.106
Easy	-	0	0	0	-	-	-
Navigation	.162(*)	.000	.074	.005	.195(*)	0.072	0.064
Infor	_	0	_	0	_	_	_
mation	0.099	.022	.236(**)	.054	.257(**)	0.008	0.079
Attractive					` ,		
Infor mation well	-	-	-	0	-	_	-
organized	0.121	0.042	0.041	.087	.253(**)	0.035	0.052
Infor						_	
mation easy to	-	-	-	-	-	.215(**	-
understand	.215(**)	0.107	0.106	0.016	.329(**)	.213(0.107
Easy		-		_		,	
Contact	0	.260(**	-	.392(**	-	0	-
	.099)	0.095)	0.083	.024	0.119
E-gov	0	-		-			
is prompt in	.006	.244(**	0.102	.321(**	0.153	0.001	0.144
replying	.000)	0.102)	0.133	0.001	0.144
Meet	0	_	0	_	_	0	-
personal needs	.078	0.070	.071	0.031	.257(**)	.080	.228(**
		0.070		0.031	.237()	.000)
Meet	0	- 0.151	0	-	-	- 0.07.4	-
needs	.085	0.151	.115	0.019	.293(**)	0.074	.170(*)
Most	-	-	0	0	-	_	- 247/**
services are	0.009	.168(*)	.028	.143	.241(**)	0.051	.247(**
provided Secur)
e e-payments	-	0	0	0	-	.241(**	-
c c-payments	0.014	.145	.054	.103	0.046	.241(.204(*)
Secur							_
e private	-	0	0	0	-	.260(**	.263(**
information	0.087	.076	.071	.082	0.154))
E-gov		^	0			-	-
truthful	0.072	010	124	0.049	0.120	.225(**	.232(**
	0.072	.010	.134	0.049	0.130))

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Although the responses had been analyzed using frequencies, it is worthwhile to look at correlation coefficient between these variables to investigate their relationships and how they are related to each other. Results indicated that the computer usage, owning computer, and egovernment usage have no relationship with e-government website variable (ease of use, web

^{*.} Correlation is significant at the 0.05 level (2-tailed).

design, customization, responsiveness, and security). However, Pearson's correlation test has shown a negative relationship between work sectors and security variables as r=-.241, -.260, -.225. It is believed that most people who work in the banking sector tends to agree the most that e-government portal is secured in term of e-payments and securing private information in comparison to the service sectors. This is most likely due to the fact that most financial transaction are electronically based and therefore employees with banking experience are more likely to utilize electronic payments, while the service sector includes broad range of services that may not utilize electronic payments, which cause employees in the service sector to be less receptive to electronic payment.

Moreover, Pearson's correlation test has exposed a relationship between level of education and other variables as listed in Table 4 (easy to access, web design, and customization) as r=-.195, -.329, -.241. Such a correlation has confirmed that education level has more impact on electronic government services usage because they pose the knowledge and the ability to use e-government website. On the other hand, the same group tends to show low satisfaction rate towards the efficiency of e-government website regarding the responsiveness and security. This reflects their level of knowledge and understanding of the services provided by e-government. Further analysis shows that people within the age range of 20 to 30 years old use the e-government services the most as r=-.260. This is more likely attributed to the technical knowledge and computing ability, time they spend online, and the belief that it is an effective way of achieving results.

Furthermore, the results of correlation tests have indicated that employed people are more likely to use e-government website. This is probably because they are more likely to have access to the internet at their workplace and/or homes. In addition, statistical results show that there is significance between the nationality and other variables, which illustrate those Qatari nationals, are more prefer to use the e-government website more than non-Qatari. Also, by analyzing the gender variable, statistics show that males feel that the e-government website design is more attractive than the females.

DISCUSSION

This research has identified five factors that are shown to be reliable measurement for characterizing the attitudes towards evaluating Qatar's e-government website. These factors are easy to use, web design, customization, responsiveness, and security. Finding in this research suggests that the majority of the population sample were satisfied with e-government' web design and the ease of use. However, there were variations in response to the needs that the e-government portal provides. There is a lack of usage of e-government portal due to the persuasion that e-government portal is unsecured. Another finding of this research is that there is insufficient service to citizens in term of response to inquiries and replies, which contribute to the lack of usage of e-government portal.

Furthermore, there is no significant relationship between the gender variable and utilization of e-government portal, also there is no significant relationship between the martial status variable and utilization of e-government portal, and there is no significant relationship between the monthly income variable and utilization of e-government portal. On the other hand, there is a relationship between educational level and the utilization of e-government portal. In addition, there is a relationship between age category and the utilization of e-government portal, and there is a relationship between work sector and the utilization of e-government portal. Also, there is a relationship between educational level and the utilization of e-government portal. The findings of this research confirms the hypotheses that electronic government is inefficient in delivery of the needed services to the Qatari population and further improvements are needed based on these findings.

This research suggests that Qatar's e-government authority can attract and increase the utilization of e-government portal by establishing a big marketing campaign that includes all the benefits of e-government portal. In addition, improve the quality of some existing services to be fully accomplished via electronic channels. Furthermore, increasing the security level for user's payment will increase confidence and facilitate the usage of government services through the web. Also try to co-operate with other ministries to provide other necessary services.

This research has lead to some recommendations for future research. First of all, further research is needed to include the provider (Ministry's IT managers and e-government's

designers) point of view. Next, future research can be done by comparison between users and provider's perception to examine the efficiency of e-government portal. Another comparison research can be done between Qatar and other GCC or Arab e-governments.

REFERENCES

Berkley, B. & Gupta, A. 1994. Improving service quality with information technology. *International Journal of Information Management*.

Bourn, J. 2002. Better public services through e-government. London: The National Audit Office.

Heeks, R. 2001. *Understanding E-Government for Development*, Manchester: Institute for Development Policy and Management.

James, G. 2003. *Benefits of e-government*. Australian Government Information Management Office.

Lau, E. 2003. Challenges for e-government development, 5th global forum on reinventing government Mexico City. Available at

http://unpan1.un.org/intradoc/groups/public/documents/un/unpan012241.pdf (Accessed July 12, 2006).

Layen, K., & Lee, J. 2001. Developing fully functional E-government: A four stage model. *Government Information Quarterly*.

Malawian, A. 2002. Key internet characteristic and e-government issues in Arab countries.

Available at http://www.emeraldinsight.com/10.1108/09593840310462998 (Accessed Jan 2007).

McClure, D. 2000. Electronic government: Federal initiatives are evolving rapidly but they face significant challenges. *Accounting and Information Management Division*. Available at: www.gao.gov/new.items/a200179t.pdf.

Mittal, P.A., Kumar, M., Mohania, M.K. 2004. A framework for e-governance solutions, *IBM Journal. Res. & Dev.*, 48(5/6).

Qatar e-Government. 2006. Available at www.e.gov.qa/eGovPortal/inedex.jsp

Seifert, J.W. 2003. A primer on e-government: Sectors, stages, opportunities, and challenges of online governance. Congressional Research Service, Order Code RL31057.

Sharma, S. & Gupta, J. 2002. Transforming to e-government: A framework. Paper presented at the 2^{nd} European Conference on E-government, Public Sector Times.

United Nations. 2004. The Global E-government Readiness Report.

Von Haldenwang, C. 2004. E-Government and Development. *The European Journal of Development Research*, 16(2).

West, D.M. 2003. *Global e-government*, Retrieved July 23, 2006. Available at http://www.insidepolitics.org/egovt04int.html.

E-BIZ:

A STRATEGIC TOOL TO GAIN GLOBAL COMPETITIVE ADVANTAGE FOR GREEN FIELD ENTREPRENEURS

M.V.Shetty Mohd Nor Ismail MMU, Malaysia

INTRODUCTION

In this era of Knowledge Management, when an e-biz like dot.coms reached a market capitalization value of USD 500 million in less than five years that took MNCs over two decades to reach, the world appears to be an open door opportunity for those who are capable of identifying opportunities in the global scenario and delivering maximum value at the minimum time. It has leveled the playing field between a smart e-biz entrepreneur (maybe a Greenfield project) and an MNC putting forth the challenges of who would win. Hence a review of the situation was felt essential.

USA Today reports that Gen Y is making a mark and their imprint is entrepreneurship. It's a trend you certainly could see coming. As large companies became less and less loyal to employees, it's inevitable that workers would become less and less loyal to corporations, eventually eschewing them altogether. Having watched their parents get burned out in boring jobs, today's youth are instead defining their own work-life blend: "People are realizing they don't have to go to work in suits and ties and don't have to talk about budgets every day," says Ben Kaufman, 20, founder of a company that makes iPod accessories. "They can have a job they like. They can create a job for themselves." "It is a fun-loving generation," says Ellen Kossek, a Michigan State University professor in East Lansing who has spent 18 years researching workplace flexibility. "They view work as part of life, but they don't live to work the way we were socialized as boomers. There is a real mismatch between what the young generation wants and what employers are offering."

Of course, they end up discovering, as most entrepreneurs do, that it's not a perfect way to achieve work-life balance, because most entrepreneurs end up working very long hours. But as Richard Branson says, "I don't think of work as work and play as play. It's all living."

Gen Y is the youth segment of today, who constitute nearly 65 % of the present population. Noting the pressure of the parents over office issues the youth of today feel as trifle ones, this segment is favoring a work place of independence, born of freedom. Thus most are favoring entrepreneurship, which of course needs capital that is hard to get at that young age. Are there options to these dynamic youth?

LITERATURE REVIEW

In "Maximizing customer value via mass customized e-consumer services" (Business Horizons- March 2007, Vol 50, 2) Grencei and Richard T. analyzes the basis of improving realization of the strategic potential of the Internet for better business performance and relationship building. In "Consumer attitude toward virtual stores and its correlates" (Journal of Retailing and Consumer Services 2007, Vol 14, 3) Lee, B.C.Y. analyzes the relationships between the attitudes towards virtual stores and its correlates, through a conceptual model verified through empirical data. In "Exploring ecommerce benefits for businesses in developing countries" (Information Society, 2007, Vol 23, 2) Molla, Alemmayehu, Heeks and Rcihards, notes that e-commerce benefits are not limited to improvements in inter and intra organizational communications. In "Revamping on online site as Web sales" (Precision Marketing Vol. 19, 8,) John Lewis reports of his partnership firm in Great Britain revamping its search mechanism by implementing new search technology and thus boost e business, successfully. In "Sotheby to add features to build Online" (wall Street Journal Eastern Edition Vol. 249, 44) Crow and Kelly unveils a plan of redevelopment of Sotheby's website to give greater customer value. In "Strategic Alliances- Incorporating the impact of e-business technological innovations" (Journal of Business and Industrial Marketing -Vol 19,3, 2004) Frank Titan Xie, indicated the favorable aspects of Net on motivation and performance of strategic alliances, crucial for new entrepreneurs. In "Recognizing new opportunities and Innovations- the role of the strategic

orientation and pro-activity in Internet firms" (International Journal of entrepreneurial Behavior and Research- Vol. 8,6, 2002). Jill Kickul and Joanna Walters emphasizes on the challenges aspect of the new market place born of the Internet, needing new approaches and fast sharing of successes and failures, of advantage to the smaller agile player in the newly created level playing field. In "Perceived Risks as Barriers to Internet and e commerce Usage" (Qualitative Market Research- an International Journal- Vol. 5, 4 2002) Yehoshua Liebermann and Shmuel Stashevsky, analyzes the various barriers presently posing as obstacles and attempted to map the perceived risks so that strategy of any enterprise could be suitably devised optimally.

Also literature review on global branding indicated the tremendous opportunity of the internet to leverage and get global brands in place faster. In "Going Global- Global Branding Risks and Rewards of Interbrand" (Oct.2005) the author has indicated the importance of digital branding tools for faster and better global market development. In "Creating a Global Brand"-Tom Blinn (World Self Medication Industry) has indicated that "global brands can and should mean better choices, made available faster, in a simpler manner and in a responsible manner so that everyone wins". This is easier through the market to one strategy, possible through the internet given the versatility of the internet. In "The Strength of Branding and Positioning of Services" Sally Dibb and Lyndon Simkin (International Journal of Service Industry Management Vol. 4,1,1993) have indicated the uniqueness of the service sector in their relative intangibility and the difficulty in matching and positioning with the heterogeneity of the marketplace, which is easily handled by an intelligent use of the internet. In "Global Branding" Geoffrey Genevose has highlighted the struggle to create value which today the Netizens with a sound market commitment do so easily on a one to one basis. The success stories of DELL's direct marketing to customers of their products and Amazon.com beating a 100 year old leader "Barnes and Noble" in a relatively short time through delivery of better value to customers, as reflected in their websites and success stories, indicating that there is no restriction to select individuals but are available to those who have a sensitivity to customer value and capability of the digital technology. In "Branding rights", it has been highlighted that WIPO can now easily register international trademark from any part of the globe through Madrid Protocol, making it easy for digital experts to make it global and yet protect their international rights.

The literature review above indicated that entrepreneurship (with immense opportunities opening up for a global player) is an adventure to the future (sporting) youth, but since they do not have adequate resources, the only option of going global is cyberpreneurship. Going global is crucial to boost image of the firm, obtain extra revenue to the business, earn vital foreign exchange, increase country competitiveness to the extent possible (if there are many such similar entrepreneurs) and leverage one's competence, apart from developing these to international levels to gain a competitive advantage. One also notes the vital role of the NET in speeding up the above process of growth beyond normal levels. Hence one felt that a research study may throw the needed factors for going global as a greenfield project. Due to constraints in funds and time for a market study in detail the researcher adopted an overview methodology, but ha substantiated fairly in simple terms the important issues of differentiation and critical factors for success through a conceived model awaiting test findings from the field.

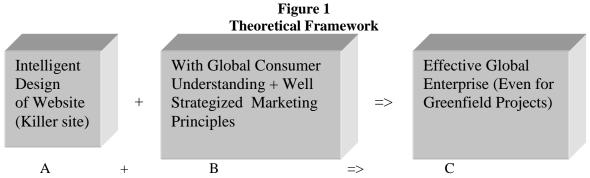
Statement of the Problem

Entrepreneurship is the buzz word today, with everyone wanting to, but it is noted that most of the SME sector is not healthy. Over 80 % of units in all the countries, be it a developed, developing or underdeveloped country have been found to be sick, yet the entrepreneur gave his all for the venture. He wanted to be a millionaire and has thrown his might to reach his goal. However many have not chosen the e business route, which though a new concept has opened up tremendous business opportunities. Most of them want to go global, but it is not cost effective for beginner's to do so. The issues are what is the degree of opportunity and competitive advantage that is gained in the global market by the greenfield entrepreneurs in using e business tools. Is there a possibility? Should they try this possibility? So a modest attempt to identify the issues related to it, the pros and the cons and the killer website needs for making such enterprises successful, should anyone venture into this area is highlighted here

Our major objectives in undertaking the above research and issues were:

• To discover the basis for success of e-business ventures and global enterprises.

- To understand the role of technology, multimedia and marketing in developing a good (killer) web site.
- To enhance the knowledge in business strategies supported by e business initiatives and global marketing issues in an integrated manner.
- To design a website that is a well planned one for the target market that delivers maximum value and has been baked by a system that is progressive enough to make this venture successful.



where A aims at creating a universal, well designed website for the global market with an extensive range of offerings and state-of-the-art technical facilities designed in a user friendly manner. B aims at a good understanding of the global consumer and the marketing process and designing the same in an integrated manner with optimal use of a well strategized operations based on professional marketing principles. C is the outcome desired through the website of an effective global enterprise (even for greenfield entrepreneurs), and ensure early success in the initial phase itself and in a step wise manner to suit the competence and resources ability of the entrepreneur..

REESRACH METHDOLOGY

Overview methodology means that this research was addressed through the following three modes of review:

- a) Overall literature survey, which was confined to important areas like environmental issues and functional issues like marketing, banking, retailing etc. and books related to e-business and global branding or marketing.
- b) Discussions with professors of eminence and professionals, who are expected to be the fore runners of leading Corporate in the related area.
- c) Review of e biz and global marketing research done till date and experiences shared by key personnel in Corporate at convenience, followed by reflective thinking on the various issues felt important by the researcher.

As the research was too broad based, no field research has been undertaken for this study, due to time and cost constraints. It is hoped that this exploratory review would be enhanced with further field studies by researchers, on the various issues raised, from which specific papers may be drawn up before further integrating these into a finer and refined research model for practical implementation. Certain basic issues and definitions were noted here as relevant before any research that is felt crucial to be understood before attempting the applicability of a model recommended at the end of this paper. Hence a preliminary detailing of these simple issues, are mentioned here, which though basic in nature for professionals, may be of interest to cyberpreneurs (novices).

Advantages of Going Global

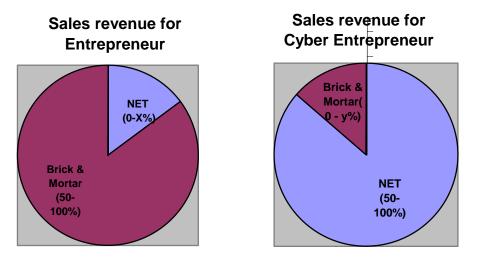
The major advantages are:

- A wider market and better target market.
- Better prices for higher value items.
- Improved Brand name and reputation among peers in the domestic market.
- Networking Possibilities enabling cross selling and strategic alliances
- Foreign Exchange for country.
- Thrill of achievements against stiff competition.

Differences between Entrepreneur vs. Cyberpreneur

There is sufficient confusion of the viability of greenfield entrepreneurs (especially young and inexperienced ones) going global and hence a comparative analysis of the two options of venturing either directly (as conventional entrepreneurs) or through the NET (cyberpreneurs) has been evaluated and is given below, so that one is clear of the steps one could take for gaining success in his desired greenfield global venture. More so as more than 90 % of entrepreneurship and SME's fail in almost all countries the world over, but cyberpreneurship being of low investment and operating cost, many may brave a few failed attempts to be persistent enough to learn from their adversity and go ahead with their visions of being a potential millionaire shortly. Hence a clear distinction between the two categories of ventures for greenfield projects is felt essential so that GEN Y would not be at large when attempting to become a successful entrepreneur.

Figure 2
Major Differences between Entrepreneurs and Cyber Entrepreneurs



1	Decrees in mainly from Drief and Marton with	1	Decrees the seal NET facilities much a setunded
1.	Revenue is mainly from Brick and Mortar with a small part being perhaps from click and mouse.	1.	Revenue through NET facilities maybe networked with brick and mortar arrangements.
2.	Tangible and Directly Visible outlets.	2.	Intangible, but needs IT knowledge and NET use to access and operate site. Visibility has to be created through NET or maybe supported by conventional methods. Transaction mainly on e mode.
3.	Should be conveniently located and layout well designed.	3.	Needs user friendly Website and flexibility and the speed of operations. (The website of the cyber entrepreneur needs to be changed regularly and updated to attract more customers)
4.	Governed by time constraints (10 AM to 10 PM) with varying inflow depending on peak hour.	4.	Should be operating for 24 hours, 7 days in a week, and 365 days in a year. (It is because we don't know when the order will come and we need to regularly reply any enquiry from customers). It may be steady as peak hours of various countries are different.
5.	Could be backed up by the NET or e- commerce or e-business sites, though not essential	5.	Should be networked with tangible suppliers or Brick and mortar outlets in addition to its strong presence in the NET through a website.
6.	Highly personalized approach. Face to face interfaces with customers is generally required.	6.	Highly impersonal approach but market to one is easily possible and relationship building the main objective to deliver continuous value, though in an automated mode. Millions could be catered to individually with the feeling of personal attendance. (Mass customization)
7.	Costly to invest and maybe costly to operate. (Cost more then RM 30000, in Malaysia to start the smallest venture, because one needs to invest in a lot of stock and accessories. Manpower for the outlets is also needed)	7.	Lower cost to invest and marginal cost to operate. (Usually, for Cyber entrepreneur with capital may be below RM 10000 in Malaysia, one should be able to start a small cyber business, as one only need to invest on the basic computer and some software, domain space, which may cost less then RM 5000 per unit. Manpower may be extra or operated only by self or on contract based (on a profit sharing mode).
8.	Inventory arrangement essential. Warehousing transportation etc. needs to be well organized.	8.	Preferred but can be managed with manufacturers' inventory through an appropriate logistics arrangement.
9.	Limited regional or local reach (they only sell within the region /site unless they form chains)	9.	Global reach (even with one enterprise in one outlet, only delivery has to be regional and hence has to be well networked with appropriate logistics firm supported by cybermediaries or franchisees of similar caliber (as the key promoter) in key regions.
10.	Marketing Strategy is conventional and e-commerce or e-business may be there. (The use of website maybe for sale or merely for promoting the products)	10.	Strategies are NET related with online and offline (to create initial awareness) and e-commerce/e-business is crucial for the business and is the heart of its success. (Everything is though internet, tools like chat rooms; cash transaction or e-payments, forum or community etc. is widely used in the websites). A good killer website will ensure the success of the company.

	361		361
11.	Main strength are critical success factors of the business, especially locations, aesthetics, customer service etc. for hotels, competence for professionals, care and cure for medical / health care specialists etc.	11.	Main strengths are connectivity, user friendliness, versatility of web site, flexibility of purchase, wide range of supplies with strengths of tie ups with reputed enterprises. Website design has to be attractive and user friendly along with the facilities offered. Networking with suitable service providers is essential. This is in addition to the functional and professional strengths as the site is expected to build credibility and trust w.r.t customers.
12.	Large space needed w.r.t sales turnover.	12.	Relatively small space w.r.t. sales turnover
13.	Brand name is important (With a distributorship of the products like Nike, Adidas that already well known will cause more people to buy from the shop)	13.	Domain name attracts more footfalls and hence is highly priced and has to be well planned. Brand name of products is essential for easier business growth Branded products could be handled at these sites for increased mileage. Stickiness of the website is important.
14.	All human beings with intent of purchase are customers.	14.	Restricted to NET user or through NET users as purchase is via the NET only. There has to be a fair amount of trust developed for transacting on the NET.
15.	Use of distributors for increased reach. However all distributors of these enterprises are brick and mortar type and heavy investment oriented.	15.	Only cyber franchisee to increase reach or promote the enterprise. Cybermediaries should also be professionals with good IT skills and NET oriented personnel.
16.	Promotion through conventional method hoardings, posters, newspaper/ magazines, maybe promoted through NET advertisements also	16.	Promotion could be through networked cyber sites (like Google, Yahoo, MSN, etc., and may use conventional methods like hoardings, posters, newspaper/ magazines to increase awareness and attract people to the website.
17.	Maybe manual and marginally automated. The store being interiors oriented cannot be improvised except periodically and use of technology is a little irregular and spread out over time based on competitor development in the region.	17.	technology and convergent technology is the main differentiator, though user friendliness and customer focus cannot be lost in these up gradations and innovations of process / technology, based on international developments. Global competition drives the speed of development.
18.	Outlet are normally of a similar manner (aesthetics, format, layout etc.) since it is costly to redesign and upgrade and may lose customer attention with the differences created	18.	the website is low cost and needed to keep customers attracted and ensure repeat visits of the customers and continued patronage to the site and purchase from it.
20.	Offerings (products or services) added on gradually based on customer requests as adjustments in physical outfit may have to be made. Product extensions would have to be introduced in a planned manner to avoid cannibalization. Related products means variations in design and extra space and one need to avoid duplication of space. Products have to be suitable for	19. 21.	Offerings can be added anytime with marginal professional efforts of e-com specialists. Being a volume game, cross selling is easily possible and recommended. Product extension is very easy for the professionals having the right strategy in place. May increase stickiness of the site. Hence networking with related products (even with competitors) may be the order of the day. Products should be suitable for the global market
	the local or regional market only.	۷1.	as well.

Advantages of Cyberpreneurs over entrepreneur

- a) Cyberpreneurs can use their improved knowledge of the NET to go far into the foreign market with a much lesser investment.
- b) Start up costs is much lesser.
- c) Target Market is easier in view of the diversity of access.
- d) Value Addition possibilities for high value items and services are high.
- e) Strategic Alliances and Networking for improved reach and higher quality product is much easier.
- f) Can handle small value clients and operate on low margins benefiting from the low operational costs and later by volumes.
- g) MNC and a smart entrepreneur are facing a level playing field with issues of who will win-"David or Goliath"
- h) Competition is intellectual based and highly creative.

Challenges to Cyberpreneurs

- a) Knowledge level of IT, of internet and foreign Markets need to be much better.
- b) To be nimble and fast for delivery to capture opportunities. Innovative ability is equally important.
- c) Ability to build relationship through the internet is high, but sensitivity to customer needs to be quite high (ability to empathize them) and web-site to be highly user friendly and dynamic.
- d) Technological changes are rapid. One needs to keep abreast of the latest in the international scenario before venturing or deciding on hardware and software or website design.
- e) Consumers are more value conscious and expect much better products (over many variables and after reviewing many more suppliers) offered to them than the value promised. They would also be demanding and upgrading their demands/expectations with more rapidity. Loyalty of this segment is challenging. The customer has too many options to choose from and easily discern the differences using latest IT related management tools.
- f) Connectivity and compatibility issues to be strengthened. Cyber laws are still in their formative stage but have to be noted and adhered to so as to avoid any legal complications.
- g) Marketing efforts have to be both online and offline in a judicious mix.
- h) Customers flow may be erratic. They may come in hordes or none at all.

The key steps to follow to cyber-entrepreurship include:

- a) Identify the offerings you plan to make available. Create the desired value proposition for each of these offerings frequently updated.
- b) Identify the target market and modify the products and perhaps communication to each of these target markets.
- c) Create a killer web site and ensure it is a user friendly web site, well networked in both the countries so that the customers repeatedly come to your site.
- d) Monitor the customer needs and complaints with a 24 x 7 x 365 mode and with high interactivity and response levels.
- e) Create a high value supply chain to cope with demand should they arise in an erratic manner. A good courier company would handle the logistics of the company for ensuring repeat business.
- f) Have a brand and create a brand promise and offer this to the customers in line with their expectations.

- g) Keep introducing promotional activities in the web page like games, information, and offer a customized plan to the customer.
- h) Have a reliable team and ensure the periodic web site is attractive all the time and the needs (queries) / complaints are well attended.
- i) Upgrade the product by suitable cross selling of products well networked and thus ensure stickiness of the web site.
- j) Use the latest technology in the area of hardware software and ICT tools, while using the right marketing mix for improved results.
- k) Continuously build a long term relationship with customer.

In view of the above one needs to be sure of the quality of the website designed to ensure rapid success in his enterprise. Hence the website should be a killer website.

The highlights of a killer website (that spells sure success in the global markets)

Having reviewed briefly the literature and background concepts referred above, we could now analyze possible methods of having a sure win website which is called the killer website and the key components of it. Subsequently a model based on these critical parameters to judge the preparedness of the entrepreneur in his fledgling enterprise may be of relevance, though it is conceptual and needs testing. The model could be tried for various sectors and product categories in close collaboration with experts in IT and the product areas.

The basic principles underlying e-business effectiveness (killer websites) are highlighted below:

- a. Value creation on a dynamic mode taking cognizance of the heterogeneity of the customer and delivering the right value through a predetermined automated mode, that is also cost effective. In e biz, one could fully involve the customer in an interactive mode with minimum time lag so that the customer feels it is his design or offering that is being given to him. In short "Market to One" is possible strongly while handling millions of customers in this mode without really interacting with them, due to the automation effect.
- b. Cost effectiveness of the operations to be minimum in monetary terms, time spent, energy consumed or stress or psychic effort required so that this mode of transaction is preferred to the traditional mode. When the customer recognizes this, he may shift his entire business into this mode after once he is accustomed to the comforts or ease of handling this mode. The time convenience and flexibility of operations through the network arrangement offered in the website would make the customers love this mode of transaction over the traditional mode for they would feel at low cost they could make an effective decision involving more parameters into account.
- c. Convenience of usage needing minimum hardware and software usage or expertise to facilitate the transaction from the stage of conception till payment and receipt of material (either in line in case of services or by courier in case of goods). The convenience could also be in their logistics management of the e-business facilities for the common folks. With the continuous fall in prices and Govt. intervention to have computer kiosks/cafes at regular intervals in villages as well, one would find this much more convenient than the routine mode where one queues up or waits for his turn. Hence a user friendly website would draw customers to their destinations in a well programmed manner that they would enjoy against the traditional boring shopping modes.
- d. Savings in product/offering prices (without sabotaging the quality aspect of the offering) that entice preference to this mode of business. Intermediary costs, offline promotional expenses, staff (salary and administrative) expenses are all reduced systematically to facilitate the maximum saving possible without affecting performance parameters. This is actually possible in view of reduced middle men costs and advertisement expenses, storing costs reduction and operational efficiency, and if passed on to customers as DELL does, one feels that this mode of online purchasing, has all the benefits of purchasing

over the traditional mode, and therefore, due preference would be given to e-business by the newer breed of customers.

- e. **Relationship:** However impersonal this mode of e-business, the loyalties born of enhanced satisfaction and reduced cost, without negative effect on quality or timeliness of delivery has improved relationship with customer which has to be extended to customer type value through a dynamic interactive mode of relationship building process by predetermined automated process. The comforts of convenience and ease of operations may deter many NETIZENS from straying to greener pastures. This is in spite of many pop-ups and other attractive features of competitors that emerge periodically through the NET offered by zealous competitors, out to cut your market share.
- f. Attractiveness: First impression is always the one that results in a longer and lasting relationship with hopes that the customer desires and expectations would be fulfilled by their attractive websites. The promise has to be delivered. However this not only improves the initial inflow of the customer traffic to the site, it also improves the stickiness if crucial links to related sites and important ones are networked suitably. The initial flow is the crucial link that makes the customer scan the offerings, which may result in orders and give you an opportunity for a relationship building process that has to be in built into the system in line with the business strategy. It is the challenge to the designers to ensure dynamic changes in the web site, so that the attractiveness is maintained to fast track customers while retaining the traditional minded customers opposing/uncomfortable with regular changes, and who look for a stable site to settle their e business relationships and electronic mode of transactions. By varied use of games, contests, dynamic interstitials, coupon incentives on a cumulative point basis (or similar frequency/loyalty programs), and many promotional gimmicks routinely introduced may make the site attractive and make her look young always. These should be located in some corner at convenient spaces of the website (all around) so that the general habituated customers do not get confused with the frequent changes, which they do not appreciate or find inconvenient.
- g. **Upgradability of the website:** In this era of changing technologies, without compromising the above principles, one should improve their technology to be State of the Art continuously, discarding the outdated mode with the latest ones. Educating the customers as well into the improved versions clearly indicating the benefits is important. To this effect suitable interfacing at the user end is needed, so that customers should have minimum or negligible inconvenience with this transition. This could also be done by increased options of the use (so that the dynamic new entrants co-exist with the traditional ones). This upgradation could be in hardware, software, multimedia applications or use of convergent technology that has become popular over the previous year. On an average an annual review would be good enough for this state of transition but the same should be done swiftly and deftly, when recognized, so that the customers enjoy the change and is impressed by the competence of the service providers, and their quality of service and concern for customers.
- h. **Networkability:** User friendliness while maintaining the growth is the heart of a dynamic progressive business. With increasing demand of related offerings, one could continuously fulfill this by suitable new offerings added to the website at regular intervals, made possible through the right networking through links and strategic alliances with suitable service providers of a supplementary/complimentary nature, for e.g. tourists would suddenly need hotel bookings in the destinations decided and if airlines offer this addiit0onal feature indirectly through their website, the airlines may be a preferred mode (assuming other parameters including the price is similar). This would also increase the stickiness of the website crucial for improving customer relationship and off-takes. Imagine the feelings of a customer who has gone into a very small website, but through the links provided has got all the things that he needed to buy or has at one site been able to tie-up with many for achievement of their desired objectives. Although in the process he had actually strayed into

many more websites from the initial one, in the process, has actually most of the times operated in a networked zone, it may not matter. Success in this regard would not only increase loyalty, brand value and relationship with the customer, but enhance life time value of the customer, if judiciously created and monitored at a strategic level.

In Malaysia many students have ventured into their own enterprise while studying and many continue to develop this venture in parallel with their new jobs, as they find it exciting and added revenue and are able to get additional revenue that enables one to fall back on whenever the job situation turns murky. Having highlighted the eight governing principles of e –business, let us quickly review the ten major factors/parameters that enables the design of a killer or effective website around a framework. This could be conveniently divided into two major distinguishable segments namely:

- A) Five Technical and Digital/Multimedia and IT related factors/parameters.
- B) Five Marketing or customer oriented (Relationship based) factors/ parameters.

The Technical/Multimedia and IT related factors/parameters include:

- 1) State of the Art Technology: The latest with the best band width, connectivity, storage ability, safety measures (security) etc. be developed with adequate provisions for up gradations or inclusions (should a new development in unrelated area -but crucial for the website's success in a supportive manner takes place) to be at par with the best in the international scene and appropriate for the level of functioning. A thorough review of the options available in the global settings for advancement in a competitive framework be made with the clear perspective of long term standing in the market. One should note that technology plays a supportive role but a very crucial role in effecting competitive advantage.
- 2) Convergence of Technology. Multimedia entails maximum use of all modes of communication, but integration of all the technologies optimally is crucial. Options of use of the MultiMedia tools needed for specific applications are essential for ensuring greater flexibility and user friendliness of the site.
- 3) Modular Approach. For Add On features, or stripping out facilities based on applications be incorporated to ensure budgetary fitments of the consumer i.e. constraints w.r.t time and funds are well addressed. These if necessary could be kept at second level for the more demanding/ probing customers, especially in congested websites, where the main offerings may be side-lined by the confused visitor clogged with too much to bite.
- 4) Content Development and Software Built in for a User friendly, high utility site. This is the soft portion of technology where with the best IT skill and domain expertise, one could improve the value of the website for the customer. Continuous up gradability of content with specific column for specific news / reviews /invites for domain experts to contribute regularly (a free inflow of knowledge for the users) is necessary here Use of the appropriate software(s) or combinations integrated into the use of content, technology, convergent applications, and modular approach attempted above would be he basis of a trouble free (no bugs or computer hang symptoms) effective website.
- 5) Universality of the Website or Networking Strength or Capability can be achieved by appropriate networking and strategic alliances (or acquisitions) with related offerings that would enable greater use of the website to the customer and also improve the stickiness of the website. Suitable placements in search engines strategically selected for easier access and wider reach would be needed. The suitability to be accessed by all potential and aspirational customers, and the ability to make available with ease of use all that one needs for reviewing, ordering and paying, is the basic features of a killer website.

The Marketing or Customer-oriented (Relationship based) factors/ parameters include:

- 1) Value proposition. Creation of the right value proposition, preferably with maximum involvement of the customer, all through the Product Life Cycle, including the design process. The process of customer based innovations enables suitable add-ons and high value customer recommendations flowing in though the created channel without any extra cost. This may attract newer segments of customers and may get increased loyalty of the creative, youthful type of customers who have the thrill of contribution, if suitably recognized or rewarded. To ensure this, facilitate a dynamic interactivity, chat based focus groups (suitably rewarded for their innovative contributions if any (with your own offerings of course) and community based WOM publicity oriented and subgroups for re-development of the product (a free R & D arrangement and suitably tested by users)
- 2) Revenue generation. NET is a mode where customers are normally given free service and revenue is from other sources, who would like to benefit from the relationship you have built with the customer. Hence a well planned "Revenue Model" is to be in place, with a well planned e payment mode to facilitate easy purchase or order placement and thus the use of the customers' e-wallet. The revenue could be from the customer data base where cross selling of product to profiled customers would fetch commissions, advertisement opportunities, subscriptions, network links etc. Pricing strategies of the NET is totally different for the conventional pricing modes. With the operations being automated with a good website the growth is generally exponential and in a short time as well.
- 3) Promotional tools. The right tools based on and related to the value offering are made through incentives of discounts, lowered pricing etc. and strategically located in the website to attract attention and entice customers to order online. This should not overshadow the regular website patronized by loyal habituated customers. These tools are to be dynamically modified in line with the profile of the customer, their loyalty habits and buyer behavior. This could also be used as one more point of the revenue model if planned well.
- 4) Reach or logistics arrangements for e business is a vital element both at distributor or customer end and in supply chain management, both due to distance and costs as well as communication and cultural disparities. It is important that strategic locations of target market be identified, and addressed through the right cybermediaries (professional NET savvy intermediaries), suitably trained into your system, policies and procedures. This would ensure an easier and more effective global presence with local adaptability, crucial for success in the international space.
- 5) Relationship-building capabilities. By suitable image building efforts and enhanced service levels, heightened stickiness of websites, increased loyalty programs, games, contests, attractive features, and also with offline effective measures of communication be developed for specific customers on a "Market to One" basis, one enhances their relationship to consumers. Frequency visitor award or loyalty programs, special access to online databases or portals networked, prospect relationship strategies, imparting knowledge of a specific nature for special applications, well designed chat room with interesting programs, community room as forums for free interchange of ideas and dialogues, intranet for members, extranet for public/ visitors, encouragement of social and spiritual programs on line, and a special bondage created for different category of target markets/potential customers would all enhance relationship considerably and advocates would bring in referrals increasing flow as well..

Proposed Model

Based on our above observation we note that that the degree of effectiveness of the website is dependent on the rating of importance of the parameters (factors) for the website of the product or service as well as the importance of that factor to that industry or product category and also the status of the unit. Now the ratings, degree of importance, etc. are all on a ten point scale. This could be worked out by experts and classified as website being accepted as a killer website or substandard. This model also gives an indication into the parameter to be focused on for

improvement of the quality or effectiveness of the website. However the rating of importance and the rating of the website on the parameter is a subjective judgment that needs expertise or experience in prediction to have the effectiveness a valid one. A sample model is given below with explanatory notes following it. Thus the preparedness of the website for launch gets validated.

Figure 1

No.	Factors / Parameters. Desired in the Website	Weight (of importance) Assigned by an expert (out of 100)	Industrial Cutoff Level for this factor.	Individual's Website Score (of the Corporate)	Remarks
1	A) <u>Technical Features</u> State of the Art Technology / Appropriateness of the Technology.	80	60	70	Fairly State of the Art oriented / technically capable enough
2	Convergence of Technology/ Integration with Software.	50	25	20	Needs better integration & review / upgradation
3	Modular Approach providing for add on / reduction of important features / Flexibility or Versatility.	60	30	31	Acceptable flexibility in modular context & needs review periodically of this-being borderline
4	Content Development and User Friendliness / Navigability	60	65	67	Content is as per expectations but advised regular reviews.
5	Universality of the Website or Networking Strength or Capability	60	40	48	Universal enough for networking.
6.	B) Marketing Related. Value Proposition of the Offering (s)	70	50	45	Customer Value offered is inadequate and needs to be addressed urgently.
7	Revenue Generation Options	80	70	72	Can manage profitability as revenue expected is satisfactory
8	Promotional Tools /Advertising options.	50	40	35	Has not been promoted adequately
9	Reach or Logistics Arrangements	50	25	26	Can deliver satisfactorily
10.	Relationship Building Capabilities.	50	25	35	Good relationship building base & strategy.
Т	Overall Status of the Website.(weighted average preferred or by expert opinion).	100	80	75	Below industrial expectations & has to develop in indicated areas

The issues in use of the model and steps to be followed are given below:

- i) The model has a weightage of each factor (in the website needs) assessed by an expert with respect to the latest in the field as crucial for success in the website.
- ii) The industry needs a particular level of that factor for the success in the expert venture of web site utility.
- iii) The unit has a particular level built in and assessed by the expert or key company executive.
- iv) These are compared based on the noting in iii) above and remarked as adequate / needs improvement with suggestion of type of improvement, urgency and criticality of the improvement.

A detailed review of a specific website would be as follows:

- a) State of the Art Technology is crucial for professional services, animation services etc. and a rating of 80 or 90 would be appropriate, while for a travel agency or a billing unit it is not that important and a rating of 50 or 60 may be adequate.
- b) Convergence of technology may be crucial for services sector like media or designers, where rich media is important and a rating of 80 or 90 may be allotted, while for the share broker or for office correspondence (commerce oriented transactions) it could be rated as 50 or 60 only.
- c) Modular approach in the add on / reduction features is important where services are billed or given in a stage wise manner (partly or wholly) or frequent upgrades may be needed, like the software industry or share brokers firm, and thus a weightage of 70/80 may be allotted, while for a routine communication or commerce site it would be 50/60.
- d) Content development is needed in a routinely information needed situation like magazine, news, tourism or company details and is rated at 90, while in a billing or routine commerce site it may be 40 or 50.
- e) Universality of the website is needed where may convergent linked sites are needed and integration may be necessary like tourism and airlines etc. were flight information, hotel or regulations may be frequently referred to available in different websites, and here they may be rated as 80, while in the routine system or even by professionals or in animation services there may not be much linkage with external sites and rated as 50/60.

Here in giving a status of the unit, one has to quantify levels or status as what is 90 % State of the Art means, that is, it should comprise ofetc. These are to e defined by experts. Cut off is the minimum level for that industry as per the above status assessments. The individual's website score is assessed on the same method as indicated above with respect to the latest in the field and the compliance possibilities of the system to customer use. The difference between individual score and cutoff level if positive means that the same is adequate or in order, but needs monitoring as obsolescence is high and newer areas of applications may demand a higher level of website needs. If negative, it needs immediate and serious modification, least customers may pass it over as inconvenient to use or operate.

Each of the above could be estimated with the needs of the hardware and software or other equipments and the total estimate of a good or satisfactory (fulfilling the minimum cutoff points). Also methods to overcome gaps or shortfalls could be estimated and the budget for all levels of upgradation could be made before deciding on the best one.

Future for Cyberpreneurs

With the rapid growth of ICT technologies and the shift to consumer preferences to the NET and web and with e-malls fetching better revenue than the brick and mortar counterparts, cyberpreneurship would move along way. As predicted by Alvin Toffler in his book: "The Fourth Wave" where he predicted the outbursts of SME sector being the preferred sector for employment. Entrepreneurship or SMEs would be the order of the day and with success appearing in the horizon for this sector due to the NET, the truth of Alvin Toffler's prediction

would see the light of day and Keynesian economy would have to be rewritten more strongly on digital terms.

CONCLUSIONS

From our brief review above we note that:

- a) A potential millionaire can realize his dreams today by creativity and strategic e business initiatives.
- b) Youth and nimbleness (mobility) is an advantage and not a deterrent for success in e business.
- c) You need not be enamored by MNC's, as you can take the bull by the horn or as per Elizabeth Ross Canter's "Make the Elephants Dance" through a wise customer oriented, competitive strategy, creatively designed and innovatively upgraded in a dynamic and user friendly manner.
- d) It is anybody's day tomorrow in e business. As per Management expert C.K. Prahlad in "Competing for the Future" the door is open for anyone with vision, drive and creative instincts to pave a unique path for their customers to follow.

Possibilities of research that open up are infinite, in this new and emerging area of e-business, mostly ranging from case studies of rags to riches (successful cyberpreneurs) to critical success factors of each e business to beat the MNC's in their shrewd business game and also for various sub sectors of offering and niche areas where these websites may not be evaluated (being exclusive). With the outcomes of the research, many modified versions of the above model could be worked out for future entrants to benefit from. This area is knowledge based and in its infancy. The need of multi dimensional skills with high level of creativity and sensitivity of the customer in a dynamic environment is the main challenge to entrepreneurs. However it offers high success probability from rags to riches leaving the doors open for more challenges to the entrepreneurial spirit as it needs very little capital which is the key concern for greenfield projects of young budding creative entrepreneurs.

The problems is the right understanding by most entrepreneurs of cyberpreneurship and its needs, of global marketing, a global perspective of business and the drive due to the above lack of understanding or the challenges. Due to time and funds constraint the field research was made through an overview approach to the research (as explained later) was adopted, and not a field oriented one.

RFERENCES

Blinn, T. 2005. Going global- Global branding risks and rewards of inter-brand.

Crow & Kelly. ND. Revamping on online site as Web sales. *Precision Marketing*, 19(8).

Dibb, S., & Lyndon, S. 1993. The strength of branding and positioning of services. International Journal of Service Industry Management, 4(1).

Grencei & Richard T. 2007. Maximizing customer value via mass customized e-consumer services". *Business Horizons*, 50(2).

Kickul, J., & Walters, J. 2002. Recognizing new opportunities and Innovations- The role of the strategic orientation and pro-activity in internet firms. *International Journal of Entrepreneurial Behavior and Research*, 8(6).

Lee, B.C. 2007. Consumer attitude toward virtual stores and its correlates. *Journal of Retailing and Consumer Services*, 14(3).

Lewis, J. ND. Sotheby to add features to build online. *Wall Street Journal Eastern Edition*, 249 (44).

Molla, A., Heeks., & Richards. 2007. Exploring e-commerce benefits for businesses in developing countries. *Information Society*, 23(2).

Yehoshua, L., & Stashevsky, S. Perceived risks as barriers to internet and e-commerce usage. *Qualitative Market Research- an International Journal*, 5(4).

Xie, F. 2004. Strategic alliances- Incorporating the impact of e-business technological innovations. *Journal of Business and Industrial Marketing*, 19(3).

EXPLORING VIRTUAL REALITY POTENTIAL IN ENHANCING CONSUMERS' SHOPPING EXPERIENCE

Diana Hassouneh

Hebron University, Palestine Email: dianah@hebron.edu

Mousa Alrifaiyeh

Palestine Polytechnic University, Palestine
Email: mousa@ppu.edu

ABSTRACT

Effectively designing electronic stores is essential for the success of online businesses. An effective e-store implies that customers would have a good shopping experience. Most of the online stores use 2D models and VR interfaces to e-commerce sites have recently begun to appear on the internet promising to dramatically enhance the online shopping experience. However, not many studies looked at this relationship. This paper aims at exploring VR potential in enhancing consumers' shopping experience in comparison with the 2D sites on one hand, and between selected VR applications on the other. Also, this paper looks at the effect of having a VR store on consumers' store choice. The results of this study show that VR interfaces, if used smartly, have a huge impact in enhancing consumers' shopping experience. Also, a significant relationship was found between having an enjoyable experience and consumers' store choice.

INTRODUCTION

In the e-commerce environment competition is intense; attracting and retaining customers is not an easy task. To win in the electronic market-space, online stores have to look for ways to differentiate themselves from competitors and provide their customers with a unique and rewarding experience.

E-commerce and online shopping are expected to become one of the fastest growing fields in internet market. For example, the U.S. online retail sale is predicted to reach \$316 billion by 2010 (Okonkwo, 2005). More interestingly, Internet penetration in several countries is growing at an alarmingly high rate and this is not limited to the western countries. E-Commerce is now part of daily living in several Asian countries including South Korea, which has the highest digital penetration in the world. Not to mention that E-retail also influences offline store visits (Okonkwo, 2005). On the other hand, in an interview with Mark Hurst (Rhodes, 1999) he reported that 39% of test users failed in their attempts to buy a product online, and 56% of their search ended in failure. And this means that for companies to succeed online, a company must make the customer experience the cornerstone of its Web strategy.

Never the less, most of the current online stores only provide user with simple, 2D image-based and text-based interfaces or some flash animations to access the products. Such a kind of tedious environment neither provides users with the same shopping experience as they have in stores, nor allows them to customize some personalized products which meet their tasty. Furthermore, it fails to make consumers enjoy fun and evoke an appetite for purchasing something (Pan et al., 2004). VR interfaces to online stores have recently begun to appear on the internet, promising to make the e-shopping experience more natural, attractive, and fun for customers. However, a different view is that of Neilson, he states 2D is better than 3D, and virtual shopping malls are just a gimmick (Pan et al., 2004). Therefore, this paper tries to answer the following questions: 1) How different is the shopping experience in 2D stores from VR stores? 2) Which store attracts more consumers to visit the store in the future, VR or 2D? 3) Which VR applications can enhance consumer's shopping experience?

In this paper, the consumer's shopping experience is evaluated by a number of factors that have been derived from related literature and that can be directly affected by VR

technologies. These factors are: Navigation structure (Product search easiness and Not feeling lost), Shopping enjoyment, Product presentation, and Website performance. An empirical study was conducted to evaluate consumers' shopping experience in both 2D and VR stores, and how their experience affected their decision to shop again in the future. Then chosen VR applications, derived from both literature & practice, have been assessed in terms of enhancing the online shopping experience.

LITERATURE REVIEW

Defining virtual reality and customer experience

According to Heim (1998), Virtual Reality VR has "three I's": Immersion, Interactivity, and Information intensity. Immersion is usually achieved through a head mounted display (HMD) or a CAVE environment. A desktop virtual reality is usually equipped with stereoscopic glasses and maneuvering devices (e.g., data glove, joy stick or space mouse). Currently, VR devices are still not very popular because of their expensive prices. Most of them are used in universities and military departments. However, the immerse feeling also can be produced if an object is expressed with the similar Virtual Reality Modeling Language (VRML) (Pan et al., 2004). Barry Chudakov, principal of the Chudakov Company said about the future of VR: 'There is a strong likelihood that virtual reality will become less virtual and more reality for many. However, I see this as an addiction phenomenon that will likely inspire us to understand unexplored dimensions of being human." (Anderson, 2006).

Many researchers tried to identify what makes a customer experience. For example, Jacques (2005) described the customer experience as the impression created on the customer as the results of contact with a company through any touch point, whether through marketing, branding, customer service, support, in-store experience, usage of a product, service or Web site, etc. The article emphasized that it is important to keep in mind that customers, humans, are emotional, and experience creates emotions. People tend to remember companies much more for how they made them feel than anything else. And unfortunately for companies, people remember, and talk about, bad experiences more than they do good ones.

Fisk (1998) agreed with Jacques definition and added that the exceptional customer experience is one which is great for customers, and great for the business. Firstly, it must deliver superior value to customers, meaning that the experience and its benefits must be clearly differentiated, personalized and relevant. Secondly, it must deliver superior value to the business, meaning that the experience and its delivery must also be profitable, efficient, and generate significant loyalty.

Joining the two definitions of VR & Customer experience, Li et al. (2002) defined the virtual experience as "psychological and emotional states that consumers undergo while interacting with products in a 3-D environment".

E-store design

Designing an appropriate store design is extremely important to win customers and give them a pleasant shopping experience. And this holds true for both real-world stores as well as estores. Many studies began to appear on this subject several years ago studying what makes a good e-store design.

Liang and Lai (2000) believed that the homepage design of an electronic store is much more critical than the layout of a traditional store. Further, they found that the store design does have an effect on consumer purchase decision, as it was sited as the most important one among (Price, Reputation, and Special need). Also, they found that hygiene factors (such as security, & consistent style) are the major concern when consumers decide whether to shop electronically, while motivational factors (such as; search engine, easy to register) play a key role when consumers choose among different electronic stores. Media richness factors (such as; chat room, & customized information) are, in general, less important.

Chittaro and Ranon (2002) used a different approach by looking at the guidelines used in real world stores and called for studying them to see which can be translated in the virtual context. They studied one guideline 'Massification' and found that it can be directly translated. Raymond Burke, E. W. Kelley Chair of Business Administration, Indiana University Bloomington, proposed creating an electronic model of the physical store as customers can use their knowledge to easily transition from the physical store to online shopping. However, Burke pointed out that customers won't have the same level of shopping knowledge for stores they visit less frequently, and so a 3-D shopping interface may not be appropriate (Englert, 1999).

Sawyer & Greely in their article 'Designing for E-Commerce Success' (2000) discussed the design principles and challenges that designers must consider to succeed online. Chief among them are first little experiential information which mean that online stores don't let shoppers see, touch, feel and otherwise experience a product like they can in the real world. And this is a true challenge which can be resolved using VR technologies in the future.

The second practical element the article defined is which products are for sale online and how to list them. Customers like online shopping because the range of available choices can be extremely large, giving shoppers a good chance of finding that perfect item. However, customers also want to use the Web to quickly narrow choices. Product listings should support that process. They noted that the e-store should have the tools to help customers through the buying process and give them the ability to make the most informed decision possible. The article, also stressed that the Speed of the shopping process is extremely important considering anything that slows down online shopping as a problem (Sawyer & Greely, 2000).

Lee and Joshi (2006) proposed a model of consumer satisfaction with online shopping. The model identified three main characteristics of the online shopping environment that can influence customer satisfaction: customer traits; such as expertise in using the computer, channel traits; such as time and cost, and web store traits; such as web performance, enjoyment, and product information.

In 2006 a survey was conducted, by the Blast Radius customer experience panel, to examine the 28 top retail sites in the UK) to evaluate the entire shopping experience. The research found that the top online retailers have the following strengths in common: Unique decision support tools, Use of customer created content, Overall customer involvement is high, Experience is mapped to customer needs, Ongoing innovation, Intuitive interface, Personalization, and Contextual help.

From the literature above and for the purpose of this paper, the factors that have been taken to study the consumers' online shopping experience are: Navigation structure (Product search easiness and Not feeling lost), Shopping enjoyment, Product presentation, and Website performance.

Chosen VR applications

The following are chosen VR applications that are either in use or have been suggested by researchers. The applications are distributed according to their value in enhancing consumers shopping experience; in terms of improving navigation structure, shopping enjoyment, and product presentation.

Navigation structure

Navigation was informally defined by Chittaro & Ranon (2002) as 'the process whereby people determine where they are, where everything else is, and how to get to particular objects or places'. Many ways have been used to indicate to the consumer where the product is in real-world stores, which can be easily transformed to online stores; such as signs and maps.

Chittaro & Ranon (2002) proposed a 3D animated representation of products that move through the store and go to the place where the corresponding type of products is, and they called them "walking products" or WPs. Their experiment resulted in that WPs, from the point view of

users, are extremely useful & funny. Also, they proposed to offer users the possibility of automatically rearranging products in shelves according to different criteria, such as function or price.

Li et al. (2002) proposed a virtual shopping assistant to guide the customers to enter the virtual mall as well as help them in decision making process. Also, they offered the consumer another option instead of navigating through the virtual shopping mall, to perform an intelligent search based on an item (the parameters such as price, color texture, etc.) to save consumers' time.

Shopping enjoyment

Virtual Shopping Mall (VSM), as a prototype system, allows users to choose their own figures from several simple avatars during their navigation. VNet offers something similar, before connecting to the server, a user has to specify his name and select a custom or one of the built-in avatars (Li et al., 2002).

The Agent-aided Collaborative Virtual Environment (CVE) over HLA/RTI was presented by MCRLab, Univ. of Ottawa. It provides users with a very enjoyable experience while shopping online. In the virtual environment, a user, represented by avatars, can join a Virtual World, manipulate and interact with the objects like in the real world (Li et al., 2002).

Chittaro & Ranon (2002) discussed personalizing VR stores and proposed that the user may like to manipulate the store layout, in terms of size & style. Also, with regard to personalization, they proposed to give the user the control to switch background music on and off, and to determine music preferences. Some studies have shown that music, especially classical music, decreases stress and influences people's perception of time (Meehan, 2006). Therefore, using music at stores induce shoppers to stay longer in the shopping area.

Consumers like the idea of having retailers customize marketing activities to their unique needs and preferences. According to Discount Store News (1999) Consumers are favorable toward customized store circulars and advertising (54 percent), product assortments (51 percent) and product suggestions and recommendations (45 percent), with less than 9 percent disapproving.

Product presentation

Li et al. (2002) in their proposed virtual mall customers can inspect products through rotating, zooming and manipulating them one through one by popping up another window. In the electronic store (eluxury) they use multiple 2D Presentation pictures for products from different angles (www.eluxury.com).

Using VR interfaces, products can be shown in 3 dimensions when clicking on them. Also, customers can not only see the product but even touch it using the special gloves that have been mentioned above. All the VR applications discussed above are summarized in Table 1. This experimental study that follows looks at which of these VR applications may enhance the consumers' shopping experience most.

In order to examine whether using VR technologies in online stores, instead of 2D models, enhances consumer's shopping experience, an empirical study was conducted. The study includes three major dimensions. One is to assess the consumer's shopping experience in VR and 2D stores, the second is to analyze consumer choice of electronic stores, and the third is to assess the potential of a chosen number of VR applications in enhancing consumer's shopping experience.

The shopping experience was assessed based on the four factors discussed above: Shopping enjoyment, Product presentation, Website performance, and Navigation structure (Product search easiness and Product search easiness). Consumers' choice was measured by their willingness to visit again in the future. As for the third dimension, it was assessed by looking at

which VR applications can give the best of the following: Navigation structure, enjoyment, and product presentation.

Three hypotheses are outlined:

H1: VR stores give the same shopping experience as 2D stores.

H2: VR stores will attract more consumers to visit again in the future than 2D.

H3: All VR applications enhance consumers' shopping experience.

RESEARCH METHODOLOGY

A total of 60 subjects were involved in the experiment. The subject population was chosen to be very diverse as the audience of e-commerce sites is. Age ranged from 19 to 40, 48% females & 52% males. Occupations of the subjects ranged from students to professors, engineers, secretaries, directors and technical people. All subjects had experience in using WWW; 11% had an excellent experience, 31% had a very good experience, 41% had a good experience, and 17% had a basic experience.

Experimental design

Two electronic stores were chosen for the experiment. They were eluxury (www.eluxury.com) and themallplus (www.themallplus.com). In the experiment, each participant was asked individually to visit the two electronic stores. First eluxury then themallplus store. Users were asked to proceed as if they had really the opportunity to buy 2 products (one from each store) of their choice. All participants were observed to count the time they spend searching for a product in both sites.

After visiting each store, each participant was interviewed to assess his/her shopping experience. Each interview consisted of five questions designed as a 5-point likert-scale question, with 1 being extremely disagree and 5 being extremely agree. The four factors discussed earlier were used in designing the questions. Then each participant was asked whether he/she considers visiting the store again in the future. After interviewing the participant about the two stores, each participant was given the selected VR applications, discussed above, to select from then rank according to which may enhance the shopping experience most in terms of: navigation structure, enjoyment, and product presentation (Refer to Table 1).

Table 1 Chosen VR Application

Navigation Structure	Shopping Enjoyment	Product Presentation
Virtual Assistant	Choosing your figure (Avatar)	3D Presentation when clicking
		on a product
Walking products	Choosing your figure custom	Rotating, zooming, and
		manipulating products
Signs	Meet and interact with other	Multi 2D Presentation for the
	shoppers	product from different angles
Maps	Manipulating store layout	Touching and feeling the
		product
Rearranging products (such as;	Switch background music and	
according to price, brand)	determine it.	

RESULTS

The shopping experience in 2D and VR stores

Participants were asked about their shopping experience in eluxury (2D) and themallplus (VR) in terms of: Navigation structure (Product search easiness and Not feeling lost), Shopping enjoyment, Product presentation, and Website performance.

The navigation structure was assessed by asking participants about product search easiness, and how much lost they felt. The participants found that searching for a particular product to buy from eluxury (2D) was easier from themallplus (VR) store, with a median of 3.9 for eluxury and 2.8 for themallplus. Participants were used to 2D websites and therefore found it familiar and easy. All participants found the product category within a minute in eluxury and decided on the product to buy in about 5 minutes. On the other hand, for themallplus, many participants didn't know where to go, how to look for products, on where to click, what products are available in the store. Therefore, the median for not feeling lost for themallplus was 2.6, while it was 3.9 in the eluxury. However, it was noted that the longer the participant stay in themallplus the easier and much comfortable it becomes. Also, participants who had experience with 3D games found it easier to shop around.

The second factor for analyzing the shopping experience was shopping enjoyment. Interestingly, all participants found themallplus enjoyable with 41% found it extremely enjoyable, with median 4.2. The shopping enjoyment median for eluxury was 3.2 with 21% found it boring. The VR environment is attractive and drives people curiosity. People wonder around, use the elevator, and see other shoppers (virtual). Also, as they wonder shoppers don't know what to expect. For the 2D store, you either enjoy the products available or you don't enjoy at all.

Then participants were asked to evaluate the product presentation in both sites. In eluxury products pictures are very clear and shown in multiple pictures from different angles. Participants found products well presented and the median was 3.8. Themallplus presented their products on shelves and hanged like in real stores, participants said they like this kind of presentation, however; the product pictures were too small and not very clear. Product presentation median for themallplus was 3.1.

The last factor was the site performance. All participants found the 2D store performance extremely good. As for themallplus the median was 3.9. When entering a store in themallplus shelves and products start to download in a couple of seconds which is a little more than the time for the pictures to be shown in eluxury, given that the number of pictures in themallplus is much more. When participants used to enter a store and find nothing they immediately start looking at ways to get out of the store thinking that there is nothing inside, this didn't happen with eluxury, were participants just waited. The reason for this might be that when people shop in a VR environment they unconsciously act like in real stores and expected products to be shown without the need to download, just like in real malls. The findings of the shopping experience of the two stores are shown in Table 2.

Table 2
The shopping Experience in 2D and VR Stores

Shopping Experience Factor	Median for E-luxury	Median for The mall plus
Product Search Easiness	3.9	2.8
Shopping Enjoyment	3.2	4.2
Product Presentation	3.8	3.1
Site Performance	5	3.9
Not Feeling Lost	3.9	2.6

Consumers' store choice

From the discussion above, we can see that the shopping experience for the participants was generally better, in terms of the factors studied, in the 2D store –eluxury- from that of themallplus. In spite of this, interestingly more participants said are going to visit the VR store again than to the 2D store. 55% of participants said are going to visit themallplus store again in the future, 24% said maybe they will and 20% said they are not to visit again. For the eluxury, 48% of participants said are going to visit the store again in the future, 38% said maybe they will and 14% said they are not to visit again.

Looking in more depth at the detailed data of the participants who had a better shopping experience (in terms of the factors studied) in eluxury but chose to visit themallplus, the following revealed. All these participants had an enjoyable (4) or extremely enjoyable experience (5) in themallplus. A statistically significant relationship was found between having an enjoyable experience and consumers' store choice.

VR applications potential in enhancing consumers' shopping experience

Participants were asked to select and then rank selected VR applications that would enhance their shopping experience. First, they were asked about which VR application would make it easier to locate products. Three applications were found useful. 63% chose the virtual assistant, 35% as their first choice, and 38% as their second choice. 51% chose the walking products either as their first choice (38%) or second choice (13%). 49% chose rearranging products either as their first choice (28%) or second choice (21%). 41% of participants didn't think that signs will be useful in locating products. Also, 59% didn't think that maps will be useful as well.

When participants were asked about which of the chosen VR applications make their shopping experience more enjoyable 71% (51% first choice and 20% second choice) said to meet and interact with other shoppers. 39% have put switching background music and determining it as the second enjoyable application. 31% have put choosing their figure custom as their either first choice (24%) or the second (7%), however; 41% didn't think it will be enjoyable. As for choosing their figure, 37% have put it as their first (17%) or second (20%) choice, while 45% didn't think it will be enjoyable. The last one was manipulating the store layout with 28% (11% first choice and 17% second choice) said it would be enjoyable, while 38% didn't think it will enjoy them.

Finally, participants were asked about the most useful product presentation method. Interestingly, 90% said being able to touch and feel the product is the best was for presenting products with 62% have put it as a first choice and 38% as the second. Being able to rotate, zoom, and manipulate products got the second highest percentage of 58% found it as a useful presentation (38% as a first choice and 20% as a second choice). The third useful product presentation (28%) was viewing a 3D Presentation when clicking on a product with 11% of participants put it as a first choice and 17% as a second, while 45% didn't think it would be useful. The last presentation method was having a multi 2D presentation for the product from different angles with only 5% putting it as a first choice and 13% as a second choice, and 45% didn't think it would be useful.

The results above highlight the VR potential in enhancing consumers' shopping experience, especially that the applications that got the highest percentages are only possible in a VR environment (virtual assistant, meeting and interacting with shoppers, touching and feeling products). Therefore, it is important for online businesses to choose the VR applications that have the best potential in enhancing consumers' shopping experience otherwise it might be taking a big risk.

CONCLUSIONS

In summary, the paper has examined the VR potential in enhancing consumers' shopping experience. First the shopping experience was measured by the four factors: Navigation structure (Product search easiness and Not feeling lost), Shopping enjoyment, Product presentation, and Website performance. The VR environment was found more enjoyable than a 2D store. Also, it was found that in a VR environment special concern should be on the navigation structure so that shoppers don't feel lost and find the products they want easily. Consumers in a VR environment were found to act like in real stores and expect products to be in stores as soon as they get in. Therefore, much care should be taken when presenting a product as they enter a store and to have products shown in a clear and attractive way and at the same time keep the loading time at a minimum. Second, having an enjoyable shopping experience has significant impact on consumer choice of electronic stores. In the experiment, participants found the VR environment much more enjoyable than that of the 2D and more of them decided to visit the VR store again in the future in a higher percentage than the 2D. Third, VR applications have different potential for enhancing consumers' shopping experience. The potential of VR applications was on the following order. For enhancing the navigation structure the order of VR applications was: having a virtual assistant, the walking products, rearranging products according to different criteria, signs, and finally maps. As for the potential of VR applications in enhancing the shopping enjoyment, it was found in the following order: meeting and interacting with shoppers, Switching and determining background music, choosing their figure custom, choosing their own figure, and finally manipulating the store layout. For product presentation VR applications were found in the following order: touching and feeling products, manipulating products, viewing a 3D Presentation, and finally having a multi 2D presentation for the product from different angles.

From the results of this study, it becomes clear that VR interfaces do have a huge potential in enhancing consumers' shopping experience. If it was used smartly, making it easy for consumers to locate products, and present the products in an attractive and clear way, there would be no site better than shopping in a VR store. Also, this study highlighted how important it is for online stores to make their sites enjoyable if they want to retain their customers.

REFERENCES

Ahn, T., Ryu, S. & Han, I. 2004. The impact of the online and offline features on the user acceptance of internet shopping mall. *Electronic Commerce Research and Applications*, 3: 405-420.

Anderson, J. Q. & Rainie, L. 2006. *The future of the internet II', pew internet & American life project.* Available at http://www.pewinternet.org/ (Accessed 29 Dec 2006).

Aranoff P. S. & FitzPatrick, R. 2005. *Making the shopping experience more personal*. Available at http://www.netcustomer.com/images/DigitalOutput.pdf (accessed 23 Dec 2006)

Ariely, D. 2000. Controlling the information flow: Effects on consumers' decision making and preferences. *Journal of Consumer Research*, 27(2): 233-248.

Chittaro, L. & Ranon R. 2002. New directions for the design of virtual reality interfaces to e-commerce sites. Proceedings of AVI 2002: *5th International Conference on Advanced Visual Interfaces*, New York: ACM Press.

Discount Store News. 1999. *Enhancing the shopping experience*. Available at http://www.findarticles.com/p/articles/mi_m3092/is_13_38/ai_55191800/pg_2 (Accessed 10 Nov. 2006)

Englert, L. 1999. *Virtual Shopping Adventures*. Available at http://www.indiana.edu/~rcapub/v22n2/sbc.html (accessed 15 Nov 2006).

Fisk P. 1998. How to create an exceptional customer experience by putting yourself in your customers' shoes. Available at http://www.ecustomerserviceworld.com/earticlesstore articles.asp?type=article&id=125 (Accessed 18 Jan 2007)

Friedman, L. 1999. *Discount store news*. Available at http://www.findarticles.com/p/articles/mi m3092 (Accessed 15 Nov 2006).

Finkelstein C. 2006. Virtual reality in business innovative- Applications for virtual reality in business. *The Enterprise Newsletter*, 4.

Fomenko, V. 2006. *Generating virtual reality shops for e-commerce*. Unpublished Master Dissertation, Faculty of Science, Vrije University Brussel, Belgium.

Galletta, D. F., Henry, R., McCoy, S. & Polak, P. 2004. Web site delays: How tolerant are users? *Journal of the Association for Information Systems*, 5(1): 1-28.

Heim, M. 1998. Virtual realism. New York: Oxford University Press.

Häubl, G. & Figueroa, P. 2002. Pablo figueroa interactive 3D presentations and buyer behavior. In Proceeding of *CHI* 2002, *ACM*, Minnesota, USA.

Häubl, G.& Murray, K. 2001. Recommending or persuading? The impact of a shopping agent's algorithm on user behavior. In Proceedings of *EC '2001*.

Hurst, M. 1999. *A deep understanding of the customer experience:* An interview with the **Founder and President of Creative Good**. Available at http://www.webword.com/interviews/hurst.html (Accessed 10 Dec 2006).

Holbrook, M. B. 1997. Three-dimensional stereographic visual displays in marketing and consumer research. *Academy of Marketing Science Review*, 11.

Jacques, D. 2005. Customer experience optimization. *Customer Input Journal*. Available at http://www.customerinput.com/journal/010405.asp, [Accessed 10 Dec 2006].

Lee, K. & Joshi, K. 2006. Development of an integrated model of customer satisfaction with online shopping. *ACM Proceedings of SIGMIS-CPR'06*, California, USA.

Lee, H.G. & Clark, T.H. 1996. Impacts of electronic marketplace on transaction cost and market structure. *International Journal of Electronic Commerce*, 1(1):127-149.

Li, H., Terry, D. & Frank, B. 2002. Characteristics of virtual experience in electronic commerce: A protocol analysis. *Journal of Interactive Marketing*, 15(3): 13-30.

Liang, T. P. & Lai, T. P. 2000. Electronic store design and consumer choice: An empirical study. Proceedings of the *33rd Hawaii International Conference on System Sciences*, 6: 60-42.

Meehan, W. 2006. *Music can affect the way we shop*. Available at http://www.jaxnews.com/lifestyle/2006/jn-comcolumn-1213-wmeehan-6l12q2035.htm (accessed 15 Nov 2006).

Okonkwo, U. 2005. *Can the luxury fashion brand store atmosphere be transferred to the Internet?* Available at http://jobfunctions.bnet.com/ whitepaper.aspx?&compid =10266&docid=140717 (Accessed 05 Jan 2007).

Pan, Z., Chen, T., Zhang, M. & Xu, B. 2004. Virtual presentation and customization of products based on internet. *International Journal of CAD/CAM*, 3(4): 45-59.

Renaissounds Multimedia Production. 2005. *Virtual reality for e-commerce*. Available at http://www.renaissounds.com/ (Accessed 22 Dec 2006).

Sawyer, B. & Greely, D. 2000. *Designing for e-commerce success*. Available at http://www.publish.com/reviewsindex/index.html (accessed 15 Nov 2006).

Szymanski, D. M. & Hise, R. T. 2000. E-satisfaction: An initial examination. *Journal of Retailing*, 76(3):309-322.

The Blast Radius Customer Experience Panel. 2006. *The UK's best online shopping experiences*. Available at http://www.blastradius.com/ukshopping2006.pdf (accessed 02 Jan 2007).

INFORMATION SYSTEMS PERFORMANCE ANALYSIS

Nur Haryati Hashim Ainin Sulaiman

University of Malaya, Malaysia Email: ainins@um.edu.my

ABSTRACT

Information Systems (IS) have been said by many to be one of the critical success factors for the success and sustainability of a business organization. It is stated that the better the IS performance, the better the organization would be particularly in terms of profit. IS performance can be measured in many ways and end user satisfaction has been stated by many as the surrogate measure. Using the end user satisfaction survey, this study analyses IS attributes perceived to be important and whether the current IS performance is up to expectations. A questionnaire survey was distributed to IS end users of a local Information Technology company. Generally, it was discovered that the end-users were satisfied with the company's IS performance. Nevertheless, the end users perceived that the company's IS performance was below the end-users' expectations (based on importance ratings). Further analysis indicated that the users perceived security of data as the most important attribute for IS performance. The gaps between importance and performance varies between each attribute, however the three attributes with highest gap scores were "understanding of systems", "documentation" and "high availability of systems". The Importance Performance Analysis mapping indicates the company has high importance and high performance ratings which mean that their system meets or exceeds the service quality standards. Nevertheless steps must be taken to maintain the existing standards in order to remain satisfactory.

INTRODUCTION

Information technology (IT) and information systems (IS) continue to be hotly debated in the corporate corridors of today's organization. As IT spending matures and has become commoditized to the point that it is as essential as electricity and running water, many organizations continue to wonder if their IT spending is justified (Farbey, Land & Targett, 1992) and whether their IS functions are effective (DeLone & McLean, 1992). IT and IS has evolved drastically, from the heyday of mainframe computing to the environment that has reached the end-users. Previously end-users interact with systems via the system analyst or programmer who translate the user requirements into system input in order to generate the output required for the end-users' analysis and decision-making process. However, end-users are now more directly involved with the systems as they navigate themselves typically via an interactive user interface, thus assuming more responsibility for their own applications. As such, the ability to capture and measure end-user satisfaction serves as a tangible surrogate measure in determining the performance of the IS function, services and application deployed within an organization (Ives, Olson & Baroudi, 1983). Recognizing the importance of measuring IS performance, a study was undertaken. As it is not possible to measure the performance of all organizations in Malaysia, this study was carried out on a well-known local IT company that has been in existence for more than 10 years. In addition, this paper aims to demonstrate the usage of the importance performance analysis to measure the IS performance (end user satisfaction).

Importance-Performance (IP) Analysis

The Importance Performance Analysis (IPA) framework was first introduced by Martilla and James (1977) to assist in understanding customer satisfaction as a function of both expectations concerning the significant attributes and judgments about their performance. Analyzed individually, importance and performance data may not be as meaningful as when both data sets are studied simultaneously (Graf, Hemmasi & Nielsen, 1992). Hence, importance and

performance data are plotted on a two dimensional grid with importance on the y axis and performance on the x axis. The data are then mapped into four quadrants (Martilla & James, 1977) & Bacon 2003). In quadrant 1 importance is high but performance is low. This quadrant is labeled as "Concentrate Here", indicating the existing systems require urgent corrective action and thus should be given top priority. Items in quadrant 2 indicate high Importance and high performance, which indicates the strength of the existing systems and they should be maintained as it is. Low importance and low performance items is placed in the third quadrant which actually indicates that the systems do not pose a threat however they may be considered for discontinuation. This quadrant is labeled "Low Priority". Finally quadrant 4 represents the low Importance but high performance which suggests insignificant strengths and the possibility that the resources invested here are better off diverted elsewhere. The four quadrants matrix helps organizations to identify areas that need to be improved and efforts that need to be taken to minimize mismatches between importance and performance. Many studies have extended the IP Map to include an upward sloping, 45-degree line to highlight regions of differing priorities. It is also known as the isorating or iso-priority line, where importance equals performance. Any attribute below the line must be given priority whereas attribute above the line indicates otherwise (Bacon 2003).

Many researchers have applied IPA (Eskildsen. & Kristensen, 2006). Slack (1994) used it to study operations strategy while Sampson and Showalter (1999) evaluate customer and Ford, Joseph & Joseph (1999) use it for marketing strategy. IPA is also popularly used in many environments such as in health (Skok et al 2001, Dolinsky & Caputo, 1991), banking (Joseph, Allbrigth, Stone, Sekhon & Tinson, 2005; Yeo, 2003), hotel (Weber, 2000) and tourism (Duke and Mont 1996). The IPA has also been applied in the IS/T area. Magal and Levenburg (2005) employed IPA to study the motivations behind e-business strategies among small businesses while Shaw, DeLone and Niederman (2002) used it to analyze end user support. Skok et al (2001) mapped out the IP analysis using the DeLone and McLean IS success model. DeLone and McLean (1992) adopted the end-user satisfaction as a construct. Firstly, it has high face validity since it is hard to deny the success of a system which is favored by the users. Secondly, the development of the Bailey and Pearson instrument (1983) and its derivatives provided a reliable tool for measuring satisfaction which also facilitates comparison among studies. Thirdly, it is relatively more popular compared to the other constructs since the other measures have performed poorly. This is caused by those constructs being empirically weak or empirically hard to obtain, making their use in the field of IS research problematic and prone to many theoretical shortcomings.

RESEARCH METHODOLOGY

Based on the reasons mentioned above, this study adapted the measurement tool developed by Bailey and Pearson (1983) to evaluate end-user satisfaction. The measures used are: system quality, information quality, service quality and system use. System quality typically focuses on the processing system itself, measuring its performance in terms of productivity, throughput and resource utilization. On the other hand, information quality focuses on measures involving the information system output, typically the reports produced. If the users perceive the information generated to be inaccurate, outdated or irrelevant, their dissatisfaction will eventually force them to seek alternatives and avoid using the information system altogether. System use reflects the level of recipient consumption of the information system output. It is hard to deny the success of a system that is used heavily, which explains its popularity as the "MIS measure of choice". Although certain researchers strived to differentiate between voluntary and mandatory use, DeLone and McLean noted that "no systems use is totally mandatory". If the system is proven to perform poorly in all aspects, management can always opt to discontinue the system and seek other alternatives. The inclusion of the service quality dimension recognizes the service element in the information systems function. Pitt, Watson and Kavan (1995) proposed that service quality is an antecedent of use and user satisfaction. Because IS now has an important

service component, IS researchers may be interested in identifying the exact service components that can help deliver user satisfaction.

New and modified items were added to suit the current issues which are pertinent to the IS development and performance evaluation, specific to the organization's IT environment. The newly added factors were included to suit the current issues that are of main concern to the organization IS environment. High-availability directly affects the employees' ability to be productive. Frequent downtimes mean idle time since employees are not able to access the required data or email for their communication needs. The senior management has raised concerns on this issue since it affects business continuity and can potentially compromise its competitive position. Thus, the IS department is exploring measures to provide continuous access to the company's IT systems including clustering technology which provides real-time replication onto a backup system. The second new factor is the implementation of latest technology as part of the office productivity application. Being a leading IT solutions provider, the company needs to keep itself abreast of the recent technologies and solutions available in the market. This is aided by strategic partnerships with various partners who provide thought leadership, access to their latest development and skill transfer to equip the employees with the relevant expertise. Additionally, in order to formulate better solutions for its customers, the company needs to have first-hand experience in using the proposed technologies. To realize this strategy, the company has embarked on a restructuring exercise which sees the formalization of a R&D think tank and deployment unit to facilitate rapid roll-out of the latest technologies for internal use. The third factor included in this study is ubiquitous access to IT applications to enable productivity anytime and anywhere. The main aim is to provide constant connectivity for the employees who are often out of the office, enabling them to stay in touch with email and critical applications hosted within the organization's network. Combined with the application features which are compatible with wireless protocols e.g. 3G and EDGE, email and calendar access can already be made available on selected handheld devices.

Sample

A convenience sampling method was used for data gathering, which is convenient and economical. The targeted respondents were the organization's end users (employees) who had access to its IT facilities and services (email, internet browsing and a host of office automation systems which were developed in-house). They were chosen as they would be able to provide reasonable feedback and judgment pertaining to the subject matter. The survey was converted into an online format to expedite the process, providing easy access to all potential respondents. An email broadcast was sent out to explain the research objectives and a brief instruction on how to complete the survey was also included.

The survey questionnaire was deposited on the organization's Lotus Note database which was accessed by 680 users. The questionnaire comprises of 2 sections which contained an identical set of IS attributes. A total of 20 attributes were selected out of the 39 items proposed by Bailey and Pearson (1983). The rationale for this was essentially to reduce the complexity of the survey questionnaire. Also, the survey questionnaire did not include any negative questions for verification purposes again for the sake of simplification and to reduce the total time taken to provide a complete response. It is foreseeable that including other factors may provide a different insight or improve the internal reliability of the variables studied. However, to perform a vigorous test to qualify the best set of variables would take too much time and could possibly shorten the duration required for data gathering.

In the first section, the respondent is asked to evaluate the degree of importance placed upon each attribute. In the second section, they are required to evaluate the actual performance of the same attributes. A five-point Likert scale was utilized to quantify their responses. All completed questionnaires were automatically deposited into a Lotus Notes database. The security

settings on this database were modified to allow anonymous responses to ensure complete anonymity. Subsequently, 163 questionnaires were returned which is equivalent to a response rate of 24%.

RESULTS AND DISCUSSION

In general, it can be seen that the respondents are satisfied with the IS performance as the mean scores for almost all attributes are above 3 except 'degree of training' (Table 1). The result also illustrated the respondents are very satisfied with the 'relationship with the EDP staff' and 'response/turnaround time'. The detail discussion on user satisfaction is discussed in another paper. In terms of importance, it is interesting to note that the mean score for 'security of data' and 'response/turnaround time' were the top two highest mean scores indicating that the respondents placed greater importance on the quality of the information and system. The Table also illustrates that the respondents perceived that all attributes are performing well below their expectations or level of importance (negative values for gap).

Table 1
IS Attributes Means and Gap Scores

IS Attributes	Performance (X)	Importance (Y)	Gap (P-I)
Understanding of systems	3.27	4.36	-1.09
Documentations	3.06	4.14	-1.08
High availability of systems	3.1	4.16	-1.06
Ubiquitous access to applications	3.05	4.07	-1.02
Degree of training	2.95	3.95	-1.00
Security of data	3.53	4.49	-0.96
Integration of systems	3.09	3.99	-0.90
Top management involvement	3.35	4.19	-0.84
Flexibility of systems	3.28	4.07	-0.79
Implementation of latest technology	3.03	3.81	-0.78
Confidence in the systems	3.44	4.22	-0.78
Attitude of the EDP staff	3.55	4.31	-0.76
Job effects	3.51	4.24	-0.73
Response/turnaround time	3.76	4.46	-0.70
Technical competence of the EDP staff	3.65	4.23	-0.58
Feeling of participation	3.25	3.79	-0.54
Feeling of control	3.27	3.74	-0.47
Time required for new development	3.36	3.8	-0.44
Relevancy	3.54	3.97	-0.43
Relationship with the EDP staff	3.82	4.05	-0.23

The degree of differences however varies, some more than others. Although 'degree of training' was rated lowest in terms of performance, it was not rated lowest in terms of importance hence the gap between performance and importance was only 1. From the gap scores, it is easy to see that the IS department needs to work harder at improving end-users' understanding of the systems, documentation, system availability, ubiquitous access and training provided to the end-users. These five items has the highest gap scores indicating biggest discrepancy between importance and performance. On the other hand, the items with the lowest gap scores (relationship with EDP staff, relevancy, time required to complete new development) suggest that the current performance levels are manageable, even if they are still below end-users'

expectations. These include relationship with the EDP staff, relevancy, time required for new development, feeling of control and feeling of participation.

Mean scores for both importance and performance data were plotted as coordinates on the IP map. The resulting positions on the grid are shown in Figure 1. As mentioned previously, performance and importance scores provide more meaning when they are studied together. It is not enough to know which attribute was rated most important, or which one fared the best or worst. Mapping these scores against the iso-rating line the line shows whether focus and resources are being deployed adequately, insufficiently or too lavishly. All the attributes fall in the second quadrant thus showing that existing systems are efficient. Nevertheless the distribution of the items above the iso-rating indicates importance exceeds performance hence there are opportunities for the company to improve.

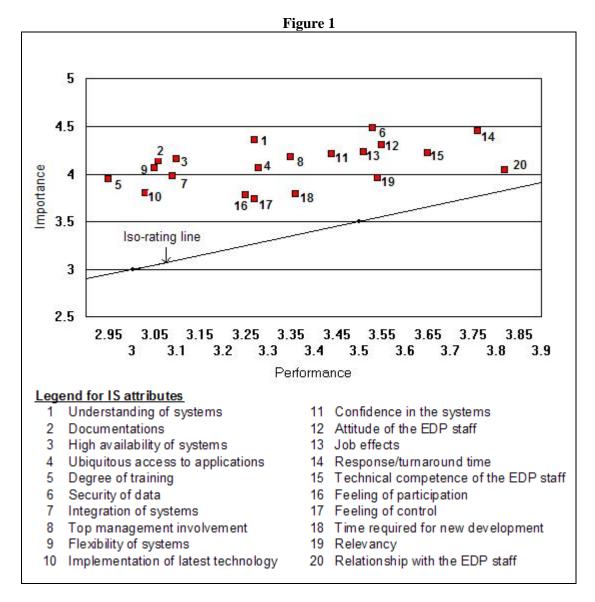
CONCLUSIONS

Organizations are nowadays compelled to analyze its Information Systems relevance (importance) and the actual value (performance) it brings into an organization as it normally involves a huge amount of the company resources. IS departments everywhere should measure the satisfaction level amongst their end-users to evaluate the performance of their IS systems and services. Despite some people branding it nothing more than a popularity contest, end-users' input can reveal insights as to which areas deserve special attention and more resources. Using tested tools such as Bailey and Pearson's instrument helps ensure a highly consistent, reliable and valid outcome which is when deployed over time, can help measure the performance of the IS department to ensure its continual alignment between its operational goals and the underlying business objectives.

As concluded by this study, key IS attributes pertaining to service quality ('relationship with the EDP staff') and system quality ('response/turnaround time') are critical in delivering end-user satisfaction i.e. performance. On the other hand, Data security is deemed to be the most important IS attribute determining IS performance, echoes today's concern about rampant security threats. These threats range from virus and worm attacks which could lead to data loss, identity theft, hacking by unscrupulous hackers and security breaches leading to access by unauthorized individuals. As such, IS department needs to be more proactive in handling these threats and continually demonstrate to the end-users on its ability to secure the system and its information repositories. Confidence in the system is partly related to data security, but more inherently it concerns the quality of the information. The data presented to the user must be reliable, accurate and timely; otherwise it will be meaningless and hinders the end-users from making sound decisions. Additionally, flexible systems allow the end-users to be more creative and where possible, apply some degree of personalization to suit their roles and job functions. Also, systems which can flex with changing business demands, to incorporate more features and accommodate new reporting requirements, help maximize its return on investment and relevance to the business operations.

The IP map (Figure 1) revealed that all twenty IS attributes were performing below the end-users' expectations. The three variables with highest gap scores were "Understanding of systems", "Documentation" and "High availability of systems". Mapping the mean scores for both data sets onto a scatter plot and analyzing the distance of the scores plotted against the isorating line gave much insight to help guide the prioritization of resources and management intervention. For starters, to improve end-users' understanding, the IS department could also strive to improve its documentation and training effort to help the users' become more savvy in using the IT applications provided. This may include the use of computer-based training, applying multimedia and video to conduct online demos and conducting IT "open days" to invite end-users to approach IS personnel with whatever queries they might have regarding the systems

deployed. It is striking to note that the three attributes are significantly related by virtue of reasoning, although further statistical analysis may be required to support this notion.



Similarly, the items with the lowest gap scores are also somewhat related. Based on the gap analysis, the IS department has already fostered good relationships with the end-users, encouraging high user involvement in the development of new applications and IT solutions. This leads to a higher feeling of control and participation amongst the end-users and with that they are assured that the solutions developed are highly relevant to their tasks objectives. The IS department would be wise to maintain their healthy relationship with the end-users while they pursue the enhancement of the other IS attributes identified with the highest gap scores, as mentioned previously.

The limitation of this study is the use of a convenient sample rather than a random systematic sampling, since convenient method may have introduced sampling bias. Additionally, end-user responses on the perceived importance may suffer from their desire to rank everything as "Very Important" to suggest a highly concerned outlook on the overall state of the factors presented.

REFERENCES

- Bacon, D.R. 2003. A comparison of approaches to importance performance analysis. *International Journal of Market Research*, 45(1): 55-71.
- Bailey, J. E. & Pearson, S.W. 1983. Development of a tool for measuring and analyzing computer user satisfaction. *Management Science*, 29(5): 530-545.
- DeLone, W.H. & McLean, E.R 1992. Information systems success: The quest for the dependent variable. *Information Systems Research*, 3(1): 60-95.
- Dolinsky, A.L. & Caputo, R.K. 1991. Adding a competitive dimension to importance performance analysis: An application to traditional health care systems. *Health Marketing Quarterly*, 8(3/4): 61-79.
- Duke, C.R & Mont A.S. 1996. Rediscovery performance importance analysis of products. *Journal of Product and Brand Management*, 5(2): 143-54.
- Eskildsen, J.K. & Kristensen, K. 2006. Enhancing importance performance analysis. *International Journal of Productivity and Performance Management*, 55(1): 40-60.
- Farbey B, Land F & Targett D. 1992. Evaluating investments in IT. *Journal of Information Technology*, 7: 109-122.
- Graf, L.A., Hemmasi, M. & Nielsen, W. 1992. Importance satisfaction analysis: A diagnostic tool for organizational change. *Leadership and Organization Development Journal*, 13(6): 8-12.
- Ives, B, Olson, M & Baroudi, J.J. 1983. The measurement of user information satisfaction. *Communication of the ACM*, 26(10): 785-793.
- Joseph, M. Allbrigth, D., Stone, G., Sekhon, Y. & Tinson, J. 2005. Importance-performance Analysis of UK and US Bank Customer Perceptions of Service Delivery Technologies. *International Journal of Financial Services Management*, 1(1): 66 88.
- Magal, S & Levenburg N.M.. 2005. Using importance performance analysis to evaluate e-business strategies among small businesses. Paper presented at the 38th Hawaii International Conference on System Sciences, Hilton Waikoloa Village Island of Hawaii, January 3-6.
- Martila J.A. & James, J.C.1977. Importance-performance Analysis. *Journal of Marketing*, 2(1): 77-79
- Pitt, L.F., Watson R.T & Kavan, C.B.1995. Service quality: A measure of information systems effectiveness. *MIS Quarterly*, 19(2): 173–185.
- Sampson, S.E. & Showalter, M.J. 1999. The performance importance response function: Observation and implications. *The Services Industries Journal*, 19(3): 1-25.
- Shaw, N.C., DeLone, William H., & Niederman, F. 2002. Sources of dissatisfaction in end-user support: An empirical study. *Data Base for Advances in Information Systems*, 33(2): 41–56.
- Skok, W., Kophamel, A. & Richardson, I. 2001. Diagnosing information systems success: Importance-performance maps in the health club industry. *Information & Management*, 38: 409-419.
- Slack, N. 1994. The importance-performance matrix as a determinant of improvement priority. *International Journal of Operations & Production Management*, 14(5): 59-76.
- Weber, K. 2000. Meeting planners' perceptions of hotel-chain practices and benefits: An importance-performance analysis. *Cornall Hotel and Restaurant Administration Quarterly*, 41(4): 32-38.
- Yeo, A.Y.C. 2003. Examining a Singapore bank's competitive superiority using importance-performance analysis. *Journal of American Academy of Business*, 3(1/2): 155-161.

THE EFFECTS OF SELF-CONGRUITY ON BRAND PERSONALITY AMONG ETHNIC GROUPS IN MALAYSIA: AN EXPLORATORY RESEARCH

Namasivayam Karuppiah Md. Zabid Abdul Rashid Email: namsiva@gmail.com

ABSTRACT

The purpose of this study is to explore the effect of culture within ethnic groups and its three components: values, attitudes and behaviors, which determine the preference for brand personality. The researcher will explore similarities and differences in the individually held values within ethnic groups and brand personality preferences for purchase decisions. While a large body of literature has explored similarities and differences in cross-cultural values and buyer attitudes and behaviors in Asian versus Western countries, few studies have explored these constructs within ethnic subgroups within a culture, allowing the researcher to fill a significant gap in the research literature. The researcher will explore brand personality attitudes or the reasons why respondents bought their favorite brands. This research intends to use brand personality scales (Aaker, 1995) and self congruity theory (Sirgy, 1985) to find the relationships between attitude, values and behaviour within ethnic cultures. The study will contribute to the body of knowledge concerning cross-cultural similarities and differences in value structures and brand personality preference consumer behaviour between ethnic cultures.

INTRODUCTION

Self was a concept defined as the *total set of beliefs about and attitudes toward the self* (Rosenberg 1970). The most important component of self-concept is the individual's personality traits. Consumers were thought to prefer brands, products or suppliers with images that are congruent with their own self-images (Landon, 1974; Sirgy, 1980; Quester et al., 2000).

Consumers are not homogeneous they belong to different cultures and sub-cultures which includes ethnic groups. Ethnicity implies many dimensions including "a sense of common customs, language, religion, values, morality and etiquette" (Webster, 1994). At an individual level, the process of self-identification or ethnic identity is part of one's self concept which is based on his or her knowledge of membership in a social group(s) together with emotional significance and value that is attached to that membership (Tajfel, 1981).

On the other hand, Brands provide symbolic brand benefits to consumers (Park et al.1986; Keller 1993, 1998; Helgeson et al., 2004). These symbolic benefits refer to the signal effect of using a brand, which is what the brand says about the consumer to the consumer and to others (Aaker, 2001). The signal effect of a brand can be based on the image of a generalized or typical user of the brand and/or the personality of the brand itself (Helgeson et al., 2004). The focus of this paper will be based on self-congruity between brand image or brand benefits, commonly called Brand Personality within ethnic groups.

No known studies have explored what types of individually held self-congruity values activate which brand personality component within ethnic groups, allowing the researcher to fill a significant gap in the research literature.

LITERATURE REVIEW

Self-congruity "links the psychological construct of the marketplace" (Grubb & Grathwohl, 1967, p. 22). The 'self-evident' truths in consumer behaviour was "that people purchase a product or brand only if these things are consistent with, enhance, or in some way fit well with the conception they have of themselves" (p.38). The concept of self-congruity involves

a self-evaluation of the person as a consumer as opposed to a self-evaluation of general life situations (Eriksen, 1996).

There are two components attached to Self-congruity (Quester et al., 2000). These are product image and self-image. Sirgy (1985) and Aaker (1997) states that products and services can be conceptualized as having personality images, just as people do. This personality images attached to products are called 'brand personality'. Self-image (also known as self-concept) was described as "consumers' personalities that can be inferred form the brands they use, their attitudes towards different brands and the meanings brands have for them (De Chernatony & McDonald, 1997). The perception consumers have of themselves influences the brand purchase decisions in ownership or usage of a particular brands with a particular brand image (brand personality) appears to be consistent with their own self-image (Quester, 2000).

Brand personality is defined as "the set of human characteristic associated with a brand...that serves a symbolic or self-expressive function" (Aaker, 1997, p. 348). Symbolic benefits refer to the signal effect of using a brand, which is what the brand says about the consumer to the consumer and to others. People describe the brand of a product as their friend or a problem solver, "because consumers often imbue brands with human personality traits...as if they were celebrities The signal effect of a brand can be based on the image of a generalized or typical user of the brand and/or the personality of the brand itself (Helgeson et al., 2004). De Chernatony and McDonald (1997) relates brand personality preference as "just as people take care in choosing friends who have similar personality to themselves, so brands, which are symbolic of particular images, are chosen with the same concern" (p. 145). Brands also serve as expressive devices; people prefer brands whose image is closest to their own (Quester, 2000). Thus brand personality becomes the driving force for a consumer towards the preference of a brand or historical figures and as they relate to one's own self" (Aaker, 1997: 348).

In consumer behaviour, research culture-based effects have been explored by identifying the influence of culture on the individual or groups of individuals (Helgeson et al., 2004). Research has also shown that individuals influence culture through the creation of institutions, symbols and bond of identity that carry and validate particular cultural meaning systems (Hofstede, 1983). Therefore consumption symbols such as commercial brands (e.g. Mercedes Benz) can serve as carriers of culture. That is the meaning embedded in brands can serve to represent and institutionalize the values and beliefs of a culture (Helgeson et al., 2004).

Consumer behaviour and consumption of goods are tightly connected to lifestyles and culture. For example, symbolic associations linked to certain objects or colors may vary considerably across countries and cultures (Usunier, 1996). Further, ethnic culture within a country is becoming very important. Ethnicity implies many dimensions including "a sense of common customs, language, religion, values, morality and etiquette". In simplicity, 'ethnicity' can be viewed as a characteristic of racial group membership on the basis of some commonly shared features (Jamal, 2003).

In a number of countries such as US, Canada, Australia as well as in Europe, immigration patterns of recent decades have lead to the creation of large ethnic subcultures (Jamal, 2003; Verbeke et. al., 2005). Similarly, Malaysia had a multi-ethnic and multi-cultural population dated back to half a century. Studies have shown that individuals attachment to cultural values is contingent on their level of trust, belief in self-efficacy and pressure form their peers (Fontaine et. al., 2005). Friendship between individuals of different ethnic groups creates a better understanding between ethnic groups. This is evident in the Malaysian context where people of diverse racial and ethnic composition work in harmony and unity brought about by a few unifying factors (Asma, 2001). Ethnic subcultures are becoming very significant in marketing (Jamal, 2003; Penaloza Gilly, 1999). They are growing in size and have an increased purchasing power accompanied by heightened political and cultural awareness and ethnic pride (Penaloza Gilly, 1999; Jamal, 2003). It is extremely important for marketers to respond to the consumer differences with differentiation and segmentation strategies (Sheth et. al., 1999).

This research attempts to find the effect of ethnic subculture in Malaysia on individuals' self-concept and their corresponding consumer behaviour in terms of preference towards certain brand personalities.

Rationale

For some marketers, mass marketing is a thing of the past and marketers are paying attention to the needs of consumer differences, particularly to ethnic sub-cultural groups (Sheth et. al., 1999). In USA, many of the marketers (e.g. major retailers, grocers, banks and other financial service companies) have already responded by adopting their marketing mix strategies to target ethnic minority consumers (Jamal, 2003). In UK, during the last couple of decades a variety of ethnic retail enterprises have emerged within the small and medium enterprises business sector (Ram, 1994). The cultural diversity of the marketplace dictates most of the individual market transactions that take place between marketers and consumers who come from different ethnic background (Jamal, 2003).

There are growing number of marketing enterprises that are owned and operated by people of different ethnic backgrounds with ambition of identifying and serving the needs of consumers of different ethnic backgrounds (Jamal, 1996, 2003). Consumers of different ethnic background at the same time also have the opportunity to interact with one another and to shop around and make their consumption choices as per their interactions and experiences with marketers of different ethnic backgrounds (Penaloza & Gilly, 1999).

A significant characteristic feature of multicultural marketplace is the positioning of the marketers and consumers of different ethnic backgrounds into multiple and traversing cultural spheres (Penaloza & Gilly, 1999). This is evident in the social dissolution, extreme individuation of taste and consumption patterns (Firat & Venkatesh, 1993; Jamal 2003). Marketers are increasingly confronted with issues that are related to the way consumers continuously identify and re-identify themselves and the way marketers identify the market. This paper seeks to find the significance of ethnic group consumer behaviour in Malaysia towards self-congruity and preference towards distinct brand personality.

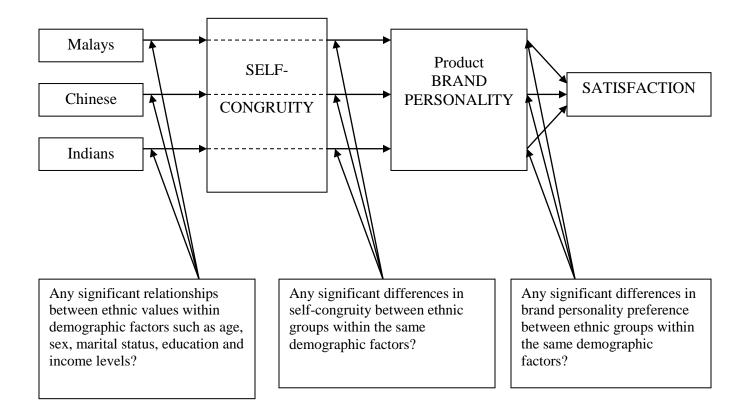
Problem Statement

Multi-ethnic and multi-cultural population in Malaysia has existed for more than a half century, unlike the ethnic migration to USA, Canada, Australia, Europe and UK. There is a strong possibility that acculturation could have changed the distinct ethnic cultures over the period. This paper intends to find the effect of ethnic subcultures in Malaysia on individuals' self-concept and its corresponding consumer behaviour on brand personality preference.

Research Question

This paper attempts to find out the differences between individual values within the three major ethnic groups (within appropriate demographic factors such as age, sex, marital status, education levels, and income levels). Are their self-concepts significantly different? Is there a significant relationship between ethnic background and the development of self-concept and their preference behaviour to brand personalities? See Figure 1.

Figure 1
Conceptual Framework on the Effects of Ethnic Culture on Self-concept and the Corresponding Effect on Brand Personality Preference.



Purpose and Objective

Asma (2001) describes the multi-cultural, multi-racial groups' lives in harmony with some unifying factors. This suggests that the ethnic subgroups do maintain its distinctiveness. Malaysian population consists of 60% Malays, over 30% Chinese and 8% Indians. All the ethnic groups maintain their own culture, lifestyle and celebrate festive seasons unique to their culture. Ethnic groups do have a distinct seasonal spending during their festive seasons. Most of the consumer goods are purchased generally by all the subgroups. However, there are a number of consumer items bought and used only by certain cultural groups in large quantities such as, 'belachan' (a food seasoning) mainly by Malays, pickles and spices mainly by Indians, soya bean products mainly by Chinese.

The purpose of this research is to find whether there is a significant difference between the consumer preferences towards various brands of a common product such as automobiles among the different ethnic groups. This will be a significant tool to be used by marketers to formulate marketing strategies to target the ethnic groups during their respective festive seasons. This will not only benefit marketers but also full fill the consumer needs of the ethnic groups as well. There aren't many marketers out there to respond to such needs of ethnic groups.

Self-Concept

Self has been conceived by early social psychologists as a unitary structure representing the core of personality (Allport, 1955). In other words, one's self concept contains the values, roles, goals and memories of one's self. These are defined as "relatively distinctive and enduring

personality characteristics" (Epstein, 1977; Aaker 1995). Personality traits tend to be inferred based on an individual's behaviour. Based on this behaviour, attributions about one's personality are made. Research has shown that one's core self concept is more predictive of future behaviour (Markus and Nurius, 1986). Grubb and Grathwohl formally proposed that "the consuming behaviour of an individual will be directed toward furthering and enhancing of his self concept through the consumption of goods as symbols". (Sirgy, 1980, p.350).

Research in personality psychology has shown that certain traits are cognitively associated and can be comprised into five global personality schemas namely the "Big Five" factors (Norman 1963) or domains. There are five factors which have consistently been found in personality research (Norman, 1963; Tupes & Christal, 1957; Digman, 1990; Azoulay et al., 2003). These five personality domains are briefly discussed as follows.

- a) Agreeableness associated with characteristics such as altruism, nurturance, caring and emotional support (and hostility, indifference, self-centeredness at the other). Individuals who tend to score high (vs. low) on Agreeableness tend to be more trusted, modest and compliant.
- b) Extroversion traits such as being sociable, affectionate and talkative. Individuals score high on Extroversion tend to be talkative, sociable, dominant, warm and highly emotional.
- c) Conscientiousness traits such as being careful, reliable and organized. Individuals who are Conscientious tend to be highly prudent and high achievers.
- d) Openness traits such as being original, creative and imaginative. It is also described as intellect (Hogen, 1986; Digman, 1990) and sensitivity to art and beauty (McCrae, 1990). Individuals who have these traits tend to enjoy aesthetic impressions, have wide interest and demonstrate high degrees of intellectual capacity.
- e) Neuroticism traits such as being worrying, high strung and insecure. Individuals on Neuroticism tend to have low self-esteem (Costa et al., 1991).

These five personality domains have proven to be robust across different sub-samples of subjects (Digman and Inouye, 1986; Paunonen et al., 1992), across various stimuli (Church and Vurke, 1994) and over time (Digman, 1990). There is a similarity between the Aaker's brand personality scales and the psychological five factors model (see Figure 2).

Figure 2
Aakers's Brand Personality Scale and The Psychological Five Factor Model.

Authors	Dimensions	Facets (**) or items (***)
Aaker	Sincerity	(**) Down-to-earth, honest, wholesome, cheerful
	Excitement	Daring, spirited, imaginative, up-to-date
	Competence	Reliable, intelligent, successful
	Sophistication	Upper-class, charming
	Ruggedness	Outdoorsy, tough
mini-markers Co Ex	Openness (or intellect)	(***) Creative, imaginative, intellectual, philosophical, deep, complex, uncreative, unintellectual
	Conscientiousness	Efficient, organised, systematic, practical, disorganised, inefficient, sloppy, careless
	Extraversion	Bold, extraverted, talkative, bashful, quiet, shy, withdrawn, energetic
	Agreeableness	Kind, sympathetic, warm, cooperative, cold, unsympathetic, harsh, rude
	Neuroticism	Unenvious, relaxed, fretful, envious, jealous, moody, touchy,
	(or Emotional Stability)	temperamental

Table I Aaker's brand personality scale and the psychological five factors model

Source: Azoulay & Kapferer. 2003.

Swann (1987) explains that there are three strategies by which individuals express one self: [1] Choosing interaction partners and social settings, [2] adopting interaction strategies that evoke self-confirmatory responses and [3] displaying identity cues. Brief details on the strategies are reviewed here.

[1] Choice in Interaction Partners and Social Settings: Researchers for years have examined interaction partners and social settings as a tool to express individual self. People prefer others who see them as they see themselves (Swann & Brown 1990). These authors found that students whose college roommates' appraisals of their personality traits were incongruent with their own perceptions of those traits were more likely to plan to change roommates. Moreover, this was true regardless of the valence of the personality traits contained in their self-concept. Even favorable perceptions of the self by others may be avoided if they are perceived to be inaccurate.

Pervin (1967) found that people gravitate toward and stay in situations that are compatible with their self-concept. Students are happiest if their college has qualities that are congruent with their view of self. Students tend to dropout otherwise.

- [2] Interaction Strategies that Evoke Self-Confirmatory Responses: Individuals who see themselves as dominant may bring others to treat them in an authoritative and commanding manner, while their counterparts may create just the opposite reactions. Swann (1983) confirmed two groups of individuals: one dominant and the other non-dominant to play a role of leader in a set of games. The dominant-self seems to be the forceful dominant type and the other resisted the dominant role.
- [3] Displaying Identity Cues: Swann (1987: 1040) indicated that individuals express themselves through displaying identity cues "If people are to succeed in laying claim to a particular identity, it is critical they look the part". To have effective identity cues three criteria must be met: (a) The cues must be visible, (b) individuals must have control of the cues, and (c) the cues must characteristically evoke desired response from others. ".....clothes, cosmetics and cars meet all three of these criteria quite well. The clothes one wears for example, can be used to tell others whether one is liberal or conservative, wealthy or destitute, easygoing or meticulous, fleshy or sedate, prudish or promiscuous" (Swann, 1983: 37).

Relationship between Self and Brand Personality

Brand personality is defined as "the set of human characteristic associated with a brand...that serves a symbolic or self-expressive function" (Aaker, 1997: 348). Symbolic benefits refer to the signal effect of using a brand, which is what the brand says about the consumer to the consumer and to others. People describe the brand of a product as their friend or a problem solver, "because consumers often imbue brands with human personality traits...as if they were celebrities The signal effect of a brand can be based on the image of a generalized or typical user of the brand and/or the personality of the brand itself (Helgeson et al., 2004). Thus brand personality becomes the driving force for a consumer towards the preference of a brand as they relate to one's own self" (Aaker, 1997: 348).

People use their values as "a criteria for evaluating the importance of product attributes or brand personality" (Vinson, Scott & Lamont, 1977).

Brands as Self-Expressive Devices

Research in consumer behaviour suggested that brands based on their association with particular personality traits are an additional vehicle which individuals use for such self-expression (Biel, 1993; Plummer, 1985). Rio et al, (2001) elaborate this as 'personal identification function' of brand and related this to the fact that consumers can identify themselves with some brands and develop feelings of affinity towards them. In the literature on

brand influence, a basic theory refers to the congruence between the consumer's behaviour, his self-image and the product image. This theory is based on the idea that individuals can enrich their self-image through the images of the brands they buy and use (Hogg et al., 2000).

The focus on developing and distinguishing brand has been driven by the proliferation of brands in most product categories in the last twenty years (Aaker, 1995). Therefore, marketers are compelled to differentiate their brands in order to provide additional value to the consumer and to distinguish their brand from competition (Aaker, 1991; Keller, 1993). In addition to product attributes, marketers have attempted to create points of differentiation in non-product related domains, such as user imagery, usage situations and brand personality (Aaker, 1995). Therefore brands are increasingly using diverse personalities as possible identity cues for the purpose of self-expression (Swann, 1987; Biel, 1993).

Brand has the ability to perform a social identification function to the consumer. Brand acts as a communication instrument allowing the consumer to manifest the desire to be integrated or on the contrary, to be dissociated from the groups of individuals that make up his closest social environment (Rio et al., 2001). Consumers interested in this function will positively value those brands that enjoy a good reputation among the groups with which they belong to or aspire to form part of (Long & Shiffman, 2000).

Brand also fulfils another function: status function to satisfy individual 'self' (Rio et al., 2001). This status function expresses the feelings of admiration and prestige that the consumer may experience upon using the brand (Solomon, 1999). Therefore, the status could even impede the individual's identification with certain social groups. This is in line with Maslow's (1970) theory of a hierarchy of needs, the status and social identification functions are respectively related to the needs of ego and social.

Although human and brand personality traits might share a similar conceptualization (Epstein, 1977), they differ in terms of how they are formed. Perceptions of human personality traits are inferred based on an individual's behaviour, physical characteristics, attitudes and beliefs, and demographic characteristics (Park, 1986). In contrast, perceptions of brand personality traits can be formed and influenced by any direct or indirect contact that the consumer has with the brand (Plummer, 1985). In this way, the personality traits of the people associated with the brand are transferred directly to the brand (McCracken, 1989). In addition, however, personality traits come to be associated with a brand in an indirect way through product related attributes, product category associations, brand name, symbol or logo, advertising style, price and distribution channel (Aaker, 1997).

Brand Personality Theory

Researchers have found that the study of the interaction between the personality of humans and brands is difficult. For example, Kassarjian (1971) pointed out "....consumer behaviour researchers must develop their own definitions and design their own instruments to measure personality variables..." (p. 415). Many consumer behaviour researchers (Malhotra 1988; Triandis, 1995) similarly share this view. Therefore, a conceptual understanding of the nature and structure of the brand personality construct is necessary. Hence, research in personality and psychology which examines individual perceptions of the personality traits associated with humans is drawn up to show that individuals conceptualize human personality in terms of five domains or factors, termed as the 'Big Five' (Norman 1963; Tupes & Chrystal 1957). This structure of brand personality will then be compared to the original 'Big Five' factors of human personality (Norman 1963). This will be discussed in detail with the work of other researchers later in this literature review.

Osgood et al. (1957) advocated the use of semantic differential scales to measure personality in psychology. However, open-ended techniques tended to lack a theoretical basis, thereby limiting the interpretation of the findings. Aaker (1995) used the original 'Big Five' factors of the human personality to develop, test and validate a brand personality measurement

scale (BPS) that has proven its test-retest reliability and validity over a large grouping of studies (Aaker, Benet-Martinez & Garolera, 2001). This instrument uses Likert scales for measurement rather than semantic differential scales (Osgood et al., 1957), because of the inherent weaknesses in the open-ended survey techniques (Roth, 1995).

Brand personality is an important means of differentiation and development of long-term brand equity (Beil, 1993; Keller, 1993). For example, 'Marlboro' as described as rugged, and outdoorsy whereas 'Channel' is considered to be sophisticated and glamorous. Consumers, using these brands can display certain characteristics about themselves to others, and their own selves, and thus obtain social recognition and maintain and develop their identities (Belk, 1988; Supphellen, 2003). Such benefits are often termed added values in the brand management literature because they are not physical attributes of the product, but are meanings added to the brand through various marketing activities including advertising (Supphellen, 2003). Although Western brand personalities have been shown to play an important role in Western home markets, little is known about the impact of Western brand images in foreign cultures. We do not know whether brand personalities created in Western markets are equally valued in Eastern European or Asian cultures (Aaker, 2001; Supphellen, 2003).

The Aaker brand personality scale has proven very useful to advertisers in Western markets. However, less is known about the validity of the scale in other parts of the world. Although human personality scales tend to be robust across cultures (Paunonen et al., 1992), the same is not necessarily true for brand personalities (Supphellen, 2003). Aaker (2001) recommended researchers to test her brand personality instrument cross-culturally (or within cultural groups) in order to fill this research gap.

Culture and Ethnic Values

Hofstede (1980) defined culture as the "programming of the mind that differentiates one group from another group." This definition focuses on the differences between groups, not between races (Fontaine & Richardson, 2005). For example, in Malaysia at least there are two different cultures within the category known as "Malaysian Chinese" (Ong Fon Sim, 1993; Fontaine & Richardson, 2005). Therefore cultural diversity exists within ethnic groups in Malaysia. Asma et al. (2001) observes that "Malaysia has often been described as a minefield of cultural sensitivities due to its diverse racial and ethnic composition. Yet, Malaysian work in apparent harmony and unity brought about by a few unifying factors."

Ethnicity can be viewed as a characteristic of racial group membership based on some commonly shared features. In this sense, ethnic identity is viewed as a complex psychological process that involves perceptions, cognition, and affect and knowledge structures about how a person thinks and feels about himself and others in the society (Jamal 2003).

A number of scholars observed that it is significant to understand the ethnic minority subcultures and the associated cultural dimension to marketing (Jamal, 2005; Penaloza & Gilly, 1999). Ethnic minority subcultures are growing in size and have an increased purchasing power accompanied by heightened political and cultural awareness and ethnic pride (Penaloza & Gilly, 1999). Many in the USA especially the major retailers, grocers, banks and other financial service companies have already responded by adopting their marketing mix strategies to target ethnic minority consumers (Jamal, 2003). A characteristic feature of a multicultural marketplace is the positioning of the marketers and consumers of different ethnic backgrounds into multiple and traversing cultural spheres (Penaloza & Gilly, 1999). Marketers are increasingly confronted with issues that are related to the way consumers continuously identify and re-identify themselves and the way marketers identify the market (Jamal 2003).

DISCUSSION

Landon (1974) tested congruity hypothesis by comparing self-concept scores with purchase intentions. He found that the hypothesized self-image to be significantly correlated with purchase intentions. Some individuals show a dominant influence of self-image correlation over all products used while others show a dominant influence of ideal self-image. Sirgy's (1980) studies indicate that congruence between product image (brand personality) and self-concept facilitates positive behaviour and attitudes towards products, which holds true regardless of whether the comparison is based on actual or ideal self-concept. Eriksen's (1996) study also confirms that a relationship exists between self-image and product image (brand personality) and intention to purchase. Therefore, self-congruity and not self-concept may have a greater influence on consumers' preference, purchase intention, ownership and loyalty to specific products and possibly brands (Quester et al., 2000).

Acculturation also plays a significant role in the changes in ethnic consumption patterns (Berry, 1980). Berry defines acculturation as the 'phenomena which result when groups of individuals having different cultures come into continuous first hand contact, with subsequent changes in the original culture patterns of either or both groups'. Hence, changes in purchase patterns do and can happen among any ethnic groups that have the contact and interactions within themselves (Jamal 2003).

Jamal (2003), also confirms that ethnicity is influenced by personal experiences and interactions with others and by the images provided by the mass media. Ethnicity is re-affirmed by consuming the symbolic meaning of products as portrayed in their images and by using, the consumption process as materials with which multiple and co-existing identities can be constructed and maintained. However, individuals switch products that represented images (reflecting their inner selves) (Firat and Schultz, 1997). Jamal (2003) found in his research that individuals not only felt a stable sense of identity but also a fluid sense of identity whereby they could play with different images of themselves.

Managerial Implications

Cross-cultural studies often assume cultural differences exist at an ethnic-group level, rather than directly measure and demonstrate these differences (Laroche et al, 2002). Kwok et al (2005) confirmed this assumption in their research on Anglo-Australians and Chinese-Australians. Clearly, differences in cultural values do not necessarily give rise to differences in preferences and choices but ethnic values do.

However, people see themselves belonging to more than one ethnic group and the strength of identification with a particular group may differ between its members (Kwok et al., 2005). Although some nations such as Malaysia and Belgium have diverse cultural groups within their borders, it has been pointed out that there must be some common foundations upon which there is general agreement, or else the survival of the nation would be in doubt (Asma et al., 2001; Yeniyurt et al., 2003; Verbeke, 2005). In these 'cleft' cultures, ideas can exist where individuals are able to maintain their own unique cultural identities while adopting values that are supportive of the larger cultural group (Yeniyurt et al., 2003).

In addition, Yeniyurt et al., (2003) also found that economic, educational and urbanization structures of a particular country have different effects on the role of cultural dimensions on the penetration of products. This indicates that the individual preferences towards products or brands may change with the level of economic, education and urbanization developments.

CONCLUSIONS

Marketers were successful in choosing diversity in their strategy to cater for different mode of consumption among ethnic groups. By doing so, marketers were able to facilitate openness/tolerance (Van Raaij, 1993) or different ways of being and living among individuals. However, Firat and Venkatesh (1993) have an opposing view that contemporary consumers experienced disjointed, disconnected moments and experiences in life and their sense of self when marketing did not represent image that corresponded to their ethnic values.

Oswald, (1999) found contradictions between consumers' self-concepts and self-images that they communicate through their consumer behaviors. Consumers are likely to conform neither individually not as a group to any one specific segment or a category. Therefore treating consumer as a homogeneous market segment becomes questionable (Firat and Schultz, 1997; Firat and Venkatesh, 1993; Oswald, 1999; Van Raaij, 1993). Marketers need to focus on several self-images that a consumer is likely to subscribe to within his/her sphere (Jamal, 2003). Further research is required in this area to prove the relationship between self-congruity-ethnic values-brand personalities. This will be very useful body of knowledge to understand consumer perception and behaviour.

REFERENCES

Aaker, D. A. 2001. The value relevance of brand attitude in high technology markets. *Journal of Marketing Research*, 38(4): 485-494.

Aaker, D.A. 1991. Managing brand equity, New York, The Free Press.

Aaker, J. L. 1995. *Brand personality: Conceptualization, measurement and underlying psychological mechanisms*. Dissertation, Graduate School of Business at Stanford University.

Aaker, J. L. 1997. Dimensions of brand personality. *Journal of Marketing Research*, 34(3): 47-357.

Aaker, J.L, Martinez, V. B & Garolera, J. 2001. Consumption symbols as carriers of culture: A study of Japanese and Spanish brand personality constructs. *Journal of Personality and Social Psychology*, 81(3): 492.

Allport, G. 1955. *Becoming*. New Haven, CT: Yale University Press.

Asma, A. & Lrong, L. 2001. Cultural dimensions of Anglos, Australians and Malaysians. *Malaysian Management Review*, 36(2): 1-17.

Azoulay, A. & Kapferer, J.N., 2003, Do brand personality scales really measure brand personality? *Brand Management*, 11 (2): 143-155.

Belk, R.W. 1988. Possessions and the extended self, *Journal of Consumer Research*, 2 (September): 139-168.

Berry, W.J. 1980. Acculturation as varieties of adaptation. In Padilla, A.M. (Ed.), *Acculturation: Theory, models and some new findings:* 9-46, Westview Press, Boulder, CO.

Biel, A. 1993. Converting image into equity, In Aaker, D.A & Biel, A (Eds.), *Brand equity and advertising*, New Jersey: Lawrence Erlbaum Associates.

Coasta, P.T., & Dey, D.A. 1991. Facets scales for agreeableness and conscientiousness: A revision of the BEO personality inventory. *Personality and Individual Differences*, 12: 887-898.

De Chernatony, L, & McDonald, M. 1997. *Creating powerful brands*. Oxford: Butterworth-Heinemann.

Digman, J.M. 1990. Personality structure: Emergence of the five-factor model. *Annual Review of Psychology*, 41: 417-440.

Digman, J.M., & Inouye, J. 1986. Further Specification of the five robust factors of personality. *Journal of Personality and Social Psychology*, 50: 116-123.

Epstein, S. 1977. Traits are alive and well, In D. Magnusson & N.S. Endler, (Eds.) *Personality at the crossroads*, Hillsdale, New Jersey: Lawrence Erlbaum Associates.

Eriksen, M.K. 1996. Using self-congruity and ideal congruity to predict purchase intention: A European perspective. *Journal of Euromarketing*, 6(1): 41-56.

Firat, A.F. & Schultz, C.J. 1997. From segmentation to fragmentation: markets and marketing strategy in the postmodern era. *European Journal of Marketing*, 31(3/4): 183-207.

Firat, A.F. & Venkatesh, A. 1993. Postmodernity: The age of marketing. *International Journal of Research in Marketing*, 10: 227-49.

Fontaine, R & Richardson, S. 2005. Cultural values in Malaysia: Chinese, Malays and Indians compared. *Cross Cultural Management*, 12(4): 63-77

Grubb, E.L. & Grathwohl, H.L. 1967. Consumer self-concept, symbolism and market behaviour: A theoretical approach. *Journal of Marketing*. 31(4): pp. 22-7.

Helgeson, J.G, & Supphellen, M. 2004. A conceptual and measurement comparison of self-congruity and brand personality: The impact of socially desirable responding. *Asia Pacific Journal of Marketing and Logistics*, 46(2): 205-233.

Hofstede, G. 1980. *Culture's consequences: International differences in work-related value*. Beverely Hills, CA: Sage.

Hofstede, G. 1983. The Cultural relativity of organizational practices and theories. *Journal of International Business Studies*, 14(2): 75-89.

Hogg, M.K., Cox, A.J. & Keeing, K. 2000. The impact of self-monitoring on image congruence and product/brand evaluation. *European Journal of Marketing*, 34 (5/6): 641-666.

Jamal, A. 2003. Marketing in a multicultural world: The interplay of marketing, ethnicity and consumption. *European Journal of Marketing*, 37(11/12): 1599-1620.

Kassarjian, H. 1971. Personality and consumer behaviour: A review. *Journal of Marketing Research*, 8 (Nov): 409-418.

Keller, K.L. 1993. Conceptualizing, measuring and managing customer-based brand equity. *Journal of Marketing*, 57: 1-22.

Kwok, S & Uncles, M. 2005. Sales promotion effectiveness: The impact of consumer differences at an ethnic-group level. *Journal of Product and Brand Management*, 14/3: 170–186.

Landon, E.L. 1974. Self concept, ideal self concept and consumer purchase intentions. *Journal of Consumer Research*, 1 (September): 44-51.

Laroche, M., Pons, F. & Turnel, A. 2002. A cross-cultural comparison of direct mail receptivity. *Journal of International Consumer Marketing*, 14(4): 5-24.

Long, M.M. & Schiffman, L.G. 2000. Consumption values and relationships: Segmenting the market for frequency programs. *Journal of Consumer Marketing*, 17 (3): 214-232.

Malhotra, N.K. 1988. Self-concept and product choice: An integrated perspective. *Journal of Economic Psychology*, 9: 1-28.

Markus, H., & Nurius, P., 1986. Possible selves. American Psychologist, 41: 954-969.

Maslow, A.H. 1970. *Motivation and personality*. NY: Harper and Row.

McCracken, G, 1989. Who is the celebrity endorser? Cultural foundations of the endorsement process. *Journal of Consumer Research*, December: 310-321.

McCrae, R.R. 1990. Trait and trait names: How well is openness represented in natural languages? *European Journal of Personality*, 4: 119-129.

Norman, W.T. 1963. Toward an adequate taxonomy of personality attribute: Replicated factor structure in peer nomination personality ratings. *Journal of Abnormal and Social Psychology*, 66: 574-583.

Ong, F. S.1993. Chinese ethnicity: Its relationship to some selected aspect of consumer behaviour. *Malaysian Management Review*, 28(2): 29-43.

Osgood, C. E., George, J. S, & Percy, H. T. 1957. *The measurement of meaning*. Chicago, Ill: University of Illinois.

Oswald, R.L. 1999. Culture swapping: consumption and the ethnogenesis of middle-class Haitian immigrants. *Journal of Consumer Research*, 25 (March): 303-18.

Park, B. 1986. A method for studying the development of impressions of real people. *Journal of Personality and Social Psychology*, 52: 907-917.

Park, C.W., Jawarksi, B.J., & MacInnis, D.J. 1986. Strategic Brand Concept-Image Management, *Journal of Marketing*, 50 (October): 135-145.

Paunonen, S.V., Jackson, D.N., Trezebinski, J., & Forsterling, F. 1992. Personality structure across cultures: A multi-method evaluation. *Journal of Personality and Social Psychology*, 63 (3): 447-456.

Penaloza, L. & Gilly, M.C. 1999. Marketer acculturation: The changer and the changed. *Journal of Marketing*, 63: 84-104.

Pervin, L.A. 1967. A twenty-college study of student: X college interaction using TAPE: Rational, reliability and validity. *Journal of Educational Psychology*, 58: 290-302.

Plummer, J, 1985. How personality makes a difference. *Journal of Advertising Research*, 24(December/January): 27-31.

Quester, P.G, Karunaratna, A., & Li, K.G. 2000. <u>Self-congruity and product evaluation: A cross-cultural study</u>. *Journal of Consumer Marketing*, 17(6): 525-535.

Ram, M, (1994). Unraveling social networks in ethnic minority firms. *International Small Business Journal*, 13(3): 42-53.

Rio, A.B, Vazquez, R., & Iglesias, V., 2001. The effects of brand associations on consumer response. *Journal of Consumer Marketing*, 18 (5): 410-425.

Rosenberg, M. 1970. Conceiving the self. New York: Basic Books.

Roth, M. S. 1995. Effects of global market conditions on brand image customization and brand performance. *Journal of Advertising*, 24(4).

Sheth, J.N, Mittal, B, & Newmann, B.I, 1999. *Customer behaviour: Consumer behaviour and beyond*. Pralndon, FL: Harcourt Brace and Company.

Sirgy, M.J. 1980. The self-concept in relation to product preference and purchase intention. *Developments in Marketing Science*, 3: 350-354.

Sirgy, M.J. 1985. Using self-Congruity and ideal congruity to predict purchase motivation. *Journal of Business Research*, 13: 350-354.

Solomon, M.R. 1999. The value of status and the status of value. In Holbrook, M.B. (Ed.), *Consumer value: A framework for analysis and research*, *London:* Routledge.

Supphellen, M. & Gronhaug, K. 2003. Building foreign brand personalities in Russia: The moderating effect of consumer ethnocentrism. *International Journal of Advertising*, 22: 203-226.

Swann, W., 1983. Self-verification: Bringing social reality into harmony with the self. In *Social Psychological Perspectives on the Self:* 33-66. Hillsdale, NJ: Earlbaum.

Swann, W. 1987. Identity negotiation: Where two roads meet. *Journal of Personality and Social Psychology*, 53: 1038-1051.

Swann, W., & Brown, D.J. 1990. From self to health: Self-verification and identity disruption. In Sarason.B, Sarason, I., & Pierce, G (Eds.), *Social support: An interactional view:* 150-172, New York: Wiley.

Tajfel, H. 1981. *Human groups and social categories: Studies in social psychology*. Cambridge University Press, Cambridge.

Triandis, H. C. 1995. *Individualism and collectivism*. Boulder, CO: Westview Press.

Tupes, E.C & Chrystal, R.E. 1957. Recurrent personality factors based on trait ratings. *USAF ASD Technical Report* No. 61-97, Lackland Air Force Base, TX: U.S. Air Force.

Usunier, J.C. 1996. *Marketing across cultures*. London: Prentice-Hall.

Van Raaij, W.F. 1993. Postmodern consumption. *Journal of Economic Psychology*, 14(3): 541-63

Verbeke, W & Lopez, G.P. 2005. Ethnic food attitudes and behaviour among Belgians and Hispanics living in Belgium. *British Food Journal*, 107(11): 823-840.

Vinson, D. E., Scott, J. E., & Lamont, L. M. 1977. The role of personal values in marketing and consumer behaviour. *Journal of Marketing*, 41: 44-50.

Webster, C. 1994. Effects of ethnic identification on marital roles in the purchase decision process. *Journal of Consumer Research*, 21 (September): 319-31.

Yeniyurt, S & Townsend, J.D. 2003. Does culture explain acceptance of new products in a country? An empirical investigation. *International Marketing Review*, 20(4): 377-396.

FASHION BRANDING: AN EMPIRICAL INVESTIGATION OF CONSUMER CHOICE CRITERIA IN QATAR

Ahmad Jamal
E-mail jamala@cardiff.ac.uk
M. Mirella Yani-de-Soriano
Cardiff Business School, UK
Adel Harhoush
University of Qatar, Qatar

ABSTRACT

This paper identifies consumer market segments existing among female consumers of fashion brands (clothing) by using attribute importance judgments and some personality traits, life style patterns and attitudes towards advertising. Data was collected using a questionnaire among respondents in Doha, Qatar. Results indicate that subjective attributes are more important for people buying fashion clothing brands than the objective attributes. However, the significance of specific attributes during product evaluation could vary according to one's susceptibility of interpersonal influence, attention to social comparison information, fashion consciousness, innovativeness and attitudes towards advertising. The paper discusses implications for brand managers.

INTRODUCTION

The aim of this paper attempts to explore the effect of personality traits, lifestyle patterns and attitudes towards advertising on consumer evaluation of product attributes. In particular, the paper raises a number of research questions in the branded clothing market. For instance, "what is the effect of consumer personality traits (e.g., susceptibility to interpersonal influences, attention to social comparison information), lifestyle patterns (e.g., fashion consciousness, innovativeness) and attitudes towards advertising on their evaluation of product attributes?" In other words, "do all consumers attach same importance to product attributes or do different consumers (say with different levels of interpersonal influence or attitudes towards advertising) use product attributes differently in their product evaluations?" This study uses empirical data to identify consumer market segments sharing similar patterns in a non-western context.

LITERATURE REVIEW

Decisions about product characteristics or attributes are important elements of marketing strategy, since, by changing the product attributes, marketers can make their products more attractive to consumers (Peter & Olson, 1996; Stephen & Simonson, 1997). In this context, marketers are often interested in identifying the product attributes that are considered as most important by consumers during their evaluation and purchase of products. By doing so, they can identify different target audiences with different attribute importance structures (Chao, 1989). They can then position their brands on the basis of attributes that are relevant, meaningful and valuable to each of the target audiences. Consumer researchers are also interested in exploring attribute importance judgments because consumers are expected to make their choices on the basis of their evaluation of, and knowledge about, the product attributes (Geistfeld, et al, 1977; Peter & Olson, 1996; Wahlers, 1982). In certain cases, consumers can compare alternatives across various product attributes and choose the one they most prefer. In other situations, consumers may evaluate each option separately and then pick the one that suits those best (Stephen & Simonson, 1997). The evaluative criteria can include objective attributes such as price, brand name, country of origin or subjective attributes such as quality, comfort and design (see, for example, Grapentine, 1995; Myers & Shocker, 1981). Furthermore, product attributes are also a starting point for the 'means-end chain' (see, for example, Gutman, 1982), which is an important consumer behaviour model. The notion of means-end chain suggests that consumers see most product attributes as a means to some end – that end could be a consequence and/or a more abstract value (Claeys & Swinnen, 1995; Gutman, 1982; Peter & Olson 1996). In other words, exploring the importance of product attributes make sense because these attributes serve some fundamental needs and/or values (Sheth et el. 1999).

A review of the literature suggests that the evaluative criteria can include objective attributes such as price, brand name, country of origin or subjective attributes, such as quality, comfort and design (see, for example, Grapentine, 1995; Myers & Shocker, 1981). In particular, previous research suggests that brand name is a significant product attribute in product evaluations as consumers are more likely to be familiar with the brand name than with all other product attributes (see for example, Bettman & Park, 1980; Dodds, et al., 1991; Peterson & Jolibert, 1976). Similarly, country of origin is another important product attribute during brand evaluation (see, for example, Ahmed & d'Astous, 1996; Bilkey & Nes, 1982; Johansson, et al. 1985; Ulgado & Lee, 1993). Previous research suggests that consumers utilize both objective as well as subjective attributes during product evaluations (Lee & Lou, 1996; Monroe & Dodds, 1988; Peter & Olson, 1996; Rao & Monroe, 1989; Richardson et al., 1994; Schellinck, 1983). However, it is often argued that objective are more general in nature (Lee & Lou, 1996; Richardson et al., 1994), and that consumers are more aware of them and therefore rely more heavily on them while evaluating products as compared to the subjective attributes (see for example Bettman & Park, 1980; Dodds et al., 1991; Han & Terpstra, 1988; Lee & Lou, 1996).

However, in the case of branded clothing, which is a publicly consumed necessity, consumers' brand choices are likely to be influenced by their reference groups (Bearden & Etzel, 1989). Some earlier studies have suggested that the effect of product attributes in product evaluations can be moderated by factors like consumer individual differences (Bettman & Park, 1980; Oliver, 1980). However, to the best of our knowledge, no recent study has specifically looked into the effect of individual differences such as consumers' susceptibility to interpersonal influences (Bearden et el. 1989), attention to social comparison information (Bearden & Rose, 1990), fashion consciousness (Wells & Tigert, 1971), innovativeness (Sheth et al, 1999) and attitudes towards advertising (Donthu & Garcia, 1999). Researchers have long argued that some consumers have personalities that make them readily susceptible to influence by others (Bearden et al. 1989; Bearden & Rose, 1990; Calder & Burnkrant, 1977).

In the context of branded clothing, one could argue that consumers with high susceptibility to interpersonal influences are likely to reinforce and enhance their self image by purchasing and using products that they think others will approve of. Similarly, attention to social comparison information, which is also a personality characteristic, is expected to be related to one's proneness to normative influence (Hoyer & MacInnis, 2000). In other words, such consumers are expected to care about what other people think about them and look for clues as to the nature of those likely reactions (Bearden & Rose, 1990). Consumers with such personality traits pay a significant amount of attention to what others are doing and use this information to guide their own behaviour. In the context of branded clothing, reliable sources of social comparison information could include the behavioral clues, such as the kinds of clothing worn by others and explicit pronouncement of the relative appropriateness of the use of particular types or brands of clothing (Bearden & Rose, 1990; Jolson, et al, 1981; Levy, 1959). Similarly, consumers are thought to adopt given behaviour patterns representative of their lifestyles, and as a consequence are likely to purchase different types of products (Gonzalez & Bello, 2002, Gutman & Mills, 1982; Kucukemirogly, 1999; Lesser & Hughes, 1986). Two of the important lifestyle patterns relevant to this study include a consumer's tendency to be fashion conscious and his or her tendency to be enthusiastic and to seek variety and excitement in product choices (Sheth et al, 1999). However, there appears to be an absence of research examining the link between importance judgements of product attributes and consumer individual differences in terms of their personality traits, lifestyle patterns and their attitudes towards advertising. In other words, individuals exhibiting certain personality traits and lifestyle patterns may also prefer certain attributes to be present in the brands they choose to buy. If this is correct, then preferences for certain brand attributes might be explained by differences in consumer personality traits, their lifestyles and their attitudes. The current paper aims to fill these gaps in the literature.

Context and Significance of the Research

The study was conducted in Doha, Qatar, a country with a high standard of living, which enjoys many social services and all the amenities of any modern nation. Qatar's national income primarily derives from oil and natural gas exports. Qataris' wealth and standard of living compare well with those of Western European nations; Qatar has the highest GDP per capita in the developing world, with no income tax (Wikipedia). The Arabian Gulf is at the very heart of the Middle East and North Africa region, a powerful economy consisting of a combined population of 1.4 billion people and a staggering combined Gross Domestic Product of \$1.9 trillion. For marketers it is vital to be aware of and sensitive to the cultural, religious and social norms that underpin the regions preferences (Furey, 2007). However, despite its tremendous potential, there is a substantial lack of consumer behaviour research in this region and the Middle East, in general.

This is important for marketers since there can be significant differences between consumers in the Middle East and consumers in the West, where most of the consumer research is conducted. For example, even in the same region, research shows that there is a difference in the behavior of consumers of the oil producing countries and the non-oil producing countries as far as their decisions to purchase imported products in the Middle East (Metwally, 1993). This research also shows that the major factors concerning the attitudes of Middle Eastern consumers towards imported products include: product quality, price, suitability to local conditions, international advertising, past experience, taste, fashion and style (Metwally, 1993). Furthermore, in a crosscultural research, Pons et al. (2006) found that Middle Eastern consumers perceived a lower level of density and were more appreciative of a crowded retail setting than their North American counterparts, mainly due to cultural, historical and geographical differences, particularly, these groups are opposite to each other on the individualism/collectivism continuum (Hofstede, 1983) and Middle Eastern consumers are historically used to shopping in the crowded souqs or Arab markets.

According Jamal et al. (2006), Qatar has attracted considerable international interest and investments in recent years leading to significant changes in the retail landscape of the country (see also, Raven & Welsh 2004). International retail chains have entered the market and a large number of modern shopping malls with modern recreational facilities (e.g., restaurants, cafes, themed children play areas) compete with the traditional *souqs* or Arab markets. From a managerial perspective, an understanding of consumer choice criteria in this market would provide an essential understanding of the way Qatari shoppers can be effectively segmented and targeted. Also, there is a high level of cultural, social, and economic homogeneity across the Gulf countries in the region leading to a common sense of heritage, cultural unity and consumer (Baker & Abou-Ismail 1993; Bhuian 1997; Bhuian & Kim, 1999). Therefore, a study of consumer choice criteria among Qatari consumers is expected to provide some useful insights the consumer choice criteria across the GCC states which represent attractive international markets for global brands (Bhuian & Kim, 1999; Jamal et al., 2006)

Since specific work on Qatari consumers is very rare, Jamal et al. (2006) recently made a significant contribution by identifying six broad categories of shoppers in Qatar including escapist shoppers, socializing shoppers, game shoppers, independent perfectionist shoppers and apathetic shoppers and budget conscious shoppers. Interestingly, the category of escapist shoppers (those valuing gratification and hedonism while shopping) composed of a significant majority of females. Escapist shoppers as per Jamal et al., (2006) were those who viewed

shopping as an escape mechanism to get their minds off their problems and as a way for relieving stress and alleviating negative mood. Since these female shoppers attached significant importance to the hedonic dimension of shopping, they were more likely to pay more attention to retail and brand attributes than their male counterparts (Jamal et al., 2006).

The present study focuses on the female market for fashion branding since Arab women are an attractive target group for several reasons: They have enormous buying power within the home; they are heavy media consumers and; they are increasingly influential in Arab households (e.g., the female 20- to 30year-old age group is larger than the male in many key target markets). These characteristics make females an important group for a broad range of advertisers, particularly for the range of products that includes cosmetics, beauty and health, fashion, and sports/aerobics equipment (Carter, 1997). Traditionally, women are heavy media consumers. Adult (aged 18-49) women outnumber adult men by some 8.3 million in the U.S. TV universe according to data from Nielsen Media Research (Greppi, 2003). In the UK, women make 80% of all consumer goods decisions. Similarly, the female economy makes up more than half of the US GDP. According to brand consultant, Tom Peters, internationally, women contribute more than 40% of the developed world's GDP (Cunningham & Roberts, 2006).

The rise of the female consumer phenomenon requires a change in marketing thinking. Marketers must keep feminine preferences in mind not only for traditional women's products, but for items ranging from digital cameras to cars which have been aggressively aimed at men in the past. However, marketers should be careful in directly appealing to women, because this would alienate them. According to Bridget Brennan, founder of consultancy Female Factor Communication, "many marketers fear that direct appeals to women will alienate men, but the opposite is true, products with a feminine veneer are apt to turn off not just men but women who suspect these are watered-down versions of the real deal." Brennan adds that "women value comfortable retail environments, easy-to-use products and superior service" (Meyers, 2006).

However, despite the huge opportunity that women present, recent research shows that marketers are failing to appeal to them. One in two women does not think companies understand women in the real world, according to Yougov. Fifty percent of women say that firms are trying to sell to them things by making them feel bad about themselves; and 68% of women say that they can't identify with women used in advertising at all (Cunningham & Roberts, 2006). These claims are consistent with recent research which found cross-cultural differences in the ideal self-image related to a possible advertising presenter on the dimensions of health and beauty of European women. The study found that two-thirds of women had firm and diverse ideas about the ideal eye and hair color for beauty, and about half had a firm idea about eye and hair color for health, which suggests that advertisers need to understand these cross-cultural variations before developing standardized advertising communicating such appeals (Bjerke & Polegato, 2006). The main reason why marketers are failing to appeal to women is because men and women are profoundly and permanently different, despite previous well-intentioned presumptions (Cunningham & Roberts, 2006).

Therefore, since there is a lack of accurate knowledge of the behavior of women as consumers, the present study aims to fill this gap in the literature by improving our understanding of the shopping motivations and attitudes of Arab women. The findings have important implications both for theory and practice of marketing. The results will shed light not only on the criteria women follow in their evaluation and choice of branded fashion clothing items, but also on how these criteria reflect their individuality. This knowledge is particularly relevant for the development of more successful marketing strategies targeting female consumers in the future. The paper is part of a work in progress project investigating the consumption activities of women in various countries including Qatar and the UK. In this paper, we focus only on brand choice criteria utilized by female shoppers in Qatar.

RESEARCH METHODOLOGY

A sample of 500 respondents was drawn from undergraduate students, all majoring in business economics at a local university in Doha, Qatar. Inclusion in the sample required that the respondents be females and do regularly purchase branded clothes for their personal or family use. To increase the response rate, the students were encouraged to take additional copies of the questionnaire back home and distribute them among family and friends. The procedure resulted in 331 completed questionnaires with a response rate of 66%. However 23 questionnaires were incomplete resulting in 308 (62%) usable questionnaires. Out of the 308 usable questionnaires, all of them identified themselves as females, regular buyers of branded clothing items. Overall, the sample is primarily aged 20-39 (80%); 62% single and 36% married; educated (69% holding college degrees), mainly students (64%), and mainly Qatari nationals (80%).

A questionnaire in English was drafted containing Likert-scaled items scoring from 1 (not important at all) to 7 (very important) to measure the attribute importance judgements used by respondents while buying a piece of branded clothing. After an extensive review of the literature, the following attributes were studied: fashion, price, brand name, price reduction, durability of material used, variety of choice, fitting, appearance/look of clothing, workmanship, comfort of wearing, availability of preferred design, color, country of origin of brand, information provided with each piece, warranty, advice given by friends, advice by family members and advice given by sales staff (Dodds, et al., 1991; Myers & Shocker, 1981; Grapentine, 1995; Gutman, 1982; Ulgado & Lee, 1993; reference to first author's prior published work). Statements used to measure susceptibility to interpersonal influences, attention to social comparison information, fashion consciousness, innovativeness, and attitudes towards advertising were drawn from prior research (Bearden et el. 1989; Bearden & Rose, 1990; Donthu & Garcia, 1999; Wells & Tigert, 1971; Sheth et al, 1999). Measures were also included in the questionnaire to capture the brand usage patterns and demographic profile of the respondents. An Arabic version of the questionnaire was then drafted with the help of two bilingual experts fluent in both English and Arabic. Consequently, the questionnaire was first translated into Arabic and then back translated into English to ensure translation equivalence (Hui & Triandis, 1985; Lysonski & Durvasula, 1996; Soriano & Foxall, 2002). Minor changes were made in the wording to clarify the semantics in the Arabic version. A total of 15 pilot tests were then conducted with consumers who were seen as similar to the population for the study. Pre-testing was also carried out with two leading academic members of staff at a leading local university. The purpose of the pre-testing was to refine the questionnaire and to assess the validity and applicability of measures; corresponding amendments were made to the questionnaire after the pilot tests.

RESULTS

The mean ranking of attribute importance scores revealed that, in general, the subjective criteria items such as appearance/look of clothing, fitting, comfort of wearing, workmanship and color were rated much higher in importance by the respondents than the objective criteria items such as brand name, country of origin and price. This meant that while purchasing a high involvement product such as branded clothing, respondents generally considered subjective attributes to be more important than the objective attributes. The items used to measure susceptibility to interpersonal influences, attention to social comparison information, fashion consciousness, innovativeness, and attitudes towards advertising were all subjected to exploratory factor analysis with principal axis factoring and varimax rotation with scree test criterion and eigen values used to confirm the number of factors to extract (Hair et al., 1998). The main purpose of the exploratory factor analysis was to confirm whether items loaded correctly to the corresponding factors as identified by prior research. A final five-factor model was estimated, in which none of the items exhibited low factor loadings (<0.40) or high cross-loadings (>0.40). Cronbach's alpha coefficients were then computed to assess the scale reliabilities of the factors

identified; all five of them easily passed the minimum level recommended by Nunnally (1978) of 0.70.

A number of hypotheses were generated and tested in this study. For instance, one of the hypotheses stated that: 'for people purchasing fashion branded clothing, the subjective evaluative criteria are more important than the objective evaluative criteria'. In order to test this hypothesis, both subjective and objective evaluative criteria were calculated as the sum of items constituting each of the evaluative criteria. The hypothesis was then tested utilizing a student 't' test. The results showed that the average means of subjective evaluative criteria were significantly higher (p<0.001) than those of objective evaluative criteria. Thus, the hypothesis was accepted. This means that while purchasing a fashion branded clothing item, respondents generally considered subjective attributes to be more important than the objective attributes.

In order to establish the impact of consumer individual differences on attributes importance judgments, the following procedure was adopted. Since 3 items, each ranging from 1 to 7, loaded on factor one (interpersonal influence), therefore, this factor had a minimum value of 3 and a maximum value of 21. The factor appeared to be symmetrically distributed about the middle point of 12 as defined by the median. Therefore, respondents displaying a level below 12 were categorized as those with lower levels of interpersonal influence whereas respondents displaying a level above 12 were considered as those with higher levels of interpersonal influence. Same procedure was repeated for social comparison, fashion consciousness, innovativeness and attitudes towards advertising. Using these definitions of high and low levels for each of the 5 factors, Mann-Whitney U tests were applied to the product attributes used in the study. The results are shown in Table 1(a) and 1(b). The Mann-Whitney U test is applicable in situations where the data is of a nonparametric nature as is the case with the use of rating scales for this research. The Mann-Whitney U test also makes no assumption of the distribution of the data as is the case with the student t test; in this situation Mann-Whitney U test is preferred and will give more robust results. Refer to Tables 1a and 1b at end of the paper.

DISCUSSION

Our findings indicate that the respondents who were highly susceptible to influence by others paid much more attention to advice given by friends, family members and by sales staff. They also paid a much higher attention to price, price reductions and to fashion in comparison with those who were not highly susceptible to influence by others. However, the respondents with higher levels of attention to social comparison information appeared to pay much more importance to not only advice from friends and family members, but also to a range of other product attributes such as comfort of wearing, variety of choice, availability of preferred design, fashion, price, durability, fitting and workmanship. On the other hand, the respondents with higher levels of fashion consciousness appeared to pay much more importance to brand name, fashion, availability of preferred design, appearance and country of origin of brand as compared to those with lower levels of fashion consciousness. Similarly, respondents with higher levels of innovativeness also appeared to pay much more importance to brand name, fashion, country of origin, and price reductions as compared to those with lower levels of innovativeness. Furthermore, the difference between respondents displaying higher and lower levels of positive attitudes towards advertising in terms of the importance of many of the product attributes was also highly significant. In other words, those with positive advertising attitudes paid much more attention to brand name, fashion, advice given by friends, family members and sales staff, price, warranty and country of origin. Table 1 (a) and Table 1(b) also reveal that brand name is an important product attribute for those with higher levels of fashion consciousness, innovativeness and those with positive attitudes towards advertising. On the other hand, external social factors such as advice give by friends, family members and sales staff were some important product attributes for those with higher levels of interpersonal influence, social comparison information and those with positive attitudes towards advertising.

These findings also confirm the notion that consumers do utilize both subjective as well as objective evaluative criteria while evaluating products and services (Lee & Lou, 1996; Monroe & Dodds, 1988; Peter & Olson, 1996; Rao & Monroe, 1989; Richardson, et al., 1994; Schellinck, 1983) The findings, however, do not support the notion that consumers generally rely more heavily on the objective evaluative criteria, in comparison with the subjective evaluative criteria, during evaluation and purchase of products (Bettman & Park 1980; Dodds et al., 1991; Han & Terpstra, 1988; Lee & Lou, 1996).

Furthermore, appearance, fitting and comfort of wearing appeared to be the most important product attributes. Our findings also demonstrate that within fashion clothing market, not everyone is going to attach the same level of importance to attributes during product evaluation. For instance, more fashion conscious, innovative consumers and those having positive attributes towards advertising are likely to consider brand name as a really important product attribute. This may be due to the fact that consumers in certain circumstances utilize brand name as heuristics to make their choices (Chaiken, 1980). Alternatively, they might be seeking high quality brands to enhance their self images and conform to their social norms. On the other hand, those with high levels of susceptibility to influence by others and attention to social comparison information are likely to consider external advice (friends, family and sales staff) as crucial product attributes.

The implications of the findings reported here are that, if the brand managers of fashion clothing are targeting a wider audience, they need to make sure that they not only communicate high quality brand images but also make high investments to ensure that the role of reference group members such as family and friends is properly embedded in their marketing efforts. Hence, development of a strong brand image without incorporating appropriate role models in marketing communications programs may lead to dissatisfaction with the brand. Alternatively, the brand managers can follow a segmentation strategy by promoting their brands on the basis of the characteristics that are most highly salient to specific target audiences. They can position their brands to different segments of the market on the basis of consumer differences highlighted in this study. This is due to the fact the study has demonstrated that several consumer individual characteristics give rise to differences in the utilization of evaluative criteria. This is in line with the conventional marketing wisdom, which dictates that one can differentiate new products and improved products from existing alternatives by targeting different segments of the market.

The aim of this paper was to explore the effects of personality traits, lifestyle patterns and attitudes towards advertising on consumer evaluation of product attributes. However, as with every research project, the findings reported and conclusions drawn here are characterized by some limitations that restrict the extent to which they can be reliably generalized. For example, we focused on certain specific personality traits such as susceptibility to interpersonal influences and attention to social comparison information whereas other research might wish to consider the effects of some other important personality traits. Similarly, there can be a potential overlap between a person's susceptibility to interpersonal influences and attention to social comparison information as both reflect a person tendency to be influenced by social group. Also, the constructs used in this study were at one point in time reflecting a static rather than dynamic perspective. Furthermore, the data analysis was limited to few leadings brands within the cosmetics market which means that the findings may be restricted to the patrons of these brands. Furthermore, our sample is drawn from female shoppers whereas future research might wish to include both male and females to investigate the gender effects on consumer evaluation of attributes associated with fashion brands.

REFERENCES

Ahmad, S., & d'Astous, A. 1996. Country-of-origin and brand effects: A multi-dimensional and multi-attribute study. *Journal of International Consumer Marketing*, 9 (2): 93-115.

Baker, M., & Abou-Ismail, F. 1993. Organizational buying behavior in the gulf. *International Marketing Review*, 10(1): 42-60.

Bearden, W.O., Netemeyer, R.G., & Teel, J.E. 1989. Measurement of Consumer Susceptibility to Interpersonal Influence. *Journal of Consumer Research*, March: 473-481.

Bearden, W.O., & Rose, R.L. 1990. Attention to Social Comparison Information: An Individual Difference Factor Affecting Conformity. *Journal of Consumer Research*, March: 461-471.

Bettman, J.R., & Park W.C. 1980. Effects of Prior Knowledge and Experience and Phase of the Choice Process on Consumer Decision Processes: a Protocol Analysis. *Journal of Consumer Research*, 7 (December): 234-248.

Bhuian, S.N. 1997. Marketing cues and perceived quality: perceptions of Saudi consumers toward products of the US, Japan, Germany, Italy, UK and France. *Journal of Quality Management*, 2(2): 217-234.

Bhuian, S.N., & Kim D. 1999. Customer attitude toward marketing mix elements pertaining to foreign products in an emerging international market. *International Journal of Commerce and Management*, 9(3/4): 116-137.

Bjerke, R., & Polegato, R. 2006. How well do advertising images of health and beauty travel across cultures? A self-concept perspective. *Psychology and Marketing*, 23(10): 885-884.

Bilkey, W.J., & Ness, W. 1982. Country of origin effects on product evaluations. *Journal of International Business Studies*, 13 (Spring/Summer): 89-99.

Calder, B.J., & Burnkrant, R.E. 1977. Interpersonal influences on consumer behaviour: An Attribution Theory approach. *Journal of Consumer Research*, June: 29-38.

Carter, M. 1997. The buying power of Arab women. Campaign, June 6: 33

Chaiken, S. 1980. Heuristics versus systematic information processing and the use of source versus message cues in persuasion. *Journal of Personality and Social Psychology*, 39 (November): 752-766.

Chao, P. 1989a. Export and reverse investment: Strategic implications for newly industrialized countries. *Journal of International Business Studies*, Spring: 75-91.

Claeys, C., & Swinnen, A. 1995. Consumers' means-end chains for "Think" and "Feel" products. *International Journal of Research in Marketing*, 2: 193-208.

Cunningham, J., & Roberts, P. 2006. Female consumerism: What women want. *Brand Strategy*, *London*: Dec 18, 2006: pp. 40.

Dodds, W.B., Monroe, K.B., & Dhruv, G. 1991. Effects of price, brand, and store information on buyers' product evaluations. *Journal of Marketing Research*, 28(3) (August): 307-319.

Donthu, N., & Garcia, A. 1999. The Internet shopper. *Journal of Advertising Research*, (May/Jun) 39(3): 52-59.

Furey, T. 2007. Franchising in the Middle East, Dubai and beyond. *Franchising World*, (January) 39(1): 86-90.

Geistfield, L.V., Sproles, G.B., & Badenhop, S.B. 1977. The concept and measurement of a hierarchy of product characteristics. In H.K. Hunt (Ed.) *Advances in Consumer Research*, *9*: 302-307. Ann Arbor, Michigan: Association for Consumer Research.

Gonzalez, A.A., & Bello, L. 2002. The construct of lifestyle in market segmentation: The behaviour of tourist consumers. *European Journal of Marketing*, 36(1/2): 51-86.

Grapentine, T. 1995. Dimensions of an attribute. *Marketing Research*, Summer 7(3): 18-27.

Greppi, M. 2003. Women and TV: A love story. *TelevisionWeek*, (Nov) 22(45): 21.

Gutman, J. 1982. A means-end chain model based on consumer categorization processes. *Journal of Marketing*, 46 (Spring): 60-72.

Gutman, J., & Mills, M.K. 1982. Fashion lifestyle, self-concept, shopping orientation and store patronage: an integrative analysis. *Journal of Retailing*, 58(2): 64-86.

Han, C.M., & Terpstra, V. 1988. Country-of-origin effects for uni-national and bi-national products. *Journal of International Business Studies*, Summer: 235-255.

Hofstede, G. 1983. National cultures in four dimensions. *International Studies of Management and Organizations*, Spring-Summer: 46-74.

Hoyer, W.D, & MacInnis, D.J. 2000. Consumer behavior, 2nd ed., NY: Houghton Mifflin.

Hui, C.H., & Triandis, H.C. 1985. Measurement in cross cultural psychology: A review and comparison of strategies. *Journal of Cross Cultural Psychology*, 16 (June): 131-152.

Jamal, A., Davies, F., Chudry, F., & Al-Mari, M. 2006. Profiling consumers: A study of Qatari consumers' shopping motivations. *Journal of Retailing and Consumer Services*, 13 (1): 67-80.

Johansson, J.K., Douglas, S.P., & Nonaka, I. 1985. Assessing the Impact of Country of Origin on Product Evaluations: A New Methodological Perspective. *Journal of Marketing Research*, 22 (November): 388-396.

Jolson, M.A., Anderson, R.E. and Leber, N.J. 1981. Profiles of signature goods consumers and avoiders. *Journal of Retailing*, 57(4): 19-39.

Kucukemirogly, O. 1999. Market segmentation by using consumer lifestyle dimensions and ethnocentrism: An empirical study. *European Journal of Marketing*, 33(5/6): 470-489.

Lee, M., & Lou, Y. 1996. Consumer reliance on intrinsic and extrinsic cues in product evaluations: A conjoint approach. *Journal of Applied Business Research*, 12(1): 21-29.

Lesser, J.A., & Hughes, M.A. 1986. The generalizability of psychographic market segments across geographic locations. *Journal of Marketing* (January).

Levy, S.J. 1959. Symbols for sale. *Harvard Business Review*, 37 (July-August): 117-124.

Lysonski, S., & Durvasula, S. 1996. Consumer decision making styles: A multi-country investigation. *European Journal of Marketing*, 30(2): 10-21.

Metwally, M.M. 1993. Attitudes of Middle Eastern consumers towards imported products: Survey results. *Journal of International Marketing and Marketing Research*, (June) 18(2): 81-94.

Meyers, T. 2006. She-moms. *Advertising Age*, 77(44), Midwest region edition, Oct 30, 2006, pp. S1.

Monroe, K.B., & Dodds, W.B. 1988. A research program for establishing the validity of the price-quality relationship. *Journal of the Academy of Marketing Science*, 16 (Spring): 151-68.

Myers, J.H., & Shocker, A.D. 1981. The nature of product related attributes. *Research in Marketing*, 5: 211-236.

Nunnally, J.C. 1978. *Psychometric theory*. NY: McGraw-Hill.

Oliver, R. 1980. A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. Journal of Marketing Research, 17 (Nov): 460-469.

Peter, J.P., & and Olson, J.C. 1996. Consumer Behavior and Marketing Strategy, Illinois: Irwin.

Peterson, R.A. & Jolibert, A. 1976. A Cross National Investigation of Price and Brand as Determinants of Perceived Product Quality. Journal of Applied Psychology, 61 (4): 533-536.

Pons, F., Laroche, M., & Mourali, M. 2006. Consumer Reactions to Crowded Retail Settings: Cross-cultural Differences between North America and the Middle East. Psychology and Marketing, 23(7): 555.

Rao, A.R., & Monroe, K.B. 1989. The Effect of Price, Brand Name, and Store Name on Buyers' Perceptions of Product Quality: An Integrative Review. Journal of Marketing Research, 26 (August): 351-57.

Raven, P., & Welsh, D. H. B. 2004. An exploratory study of retail service quality: a focus on Kuwait and Lebanon. The Journal of Services Marketing, 18(2/3): 198.

Richardson, P.S., Dick, A.S., & Jain, A.K. 1994. Extrinsic and Intrinsic Cue Effects on Perceptions of Store Brand Quality. Journal of Marketing, 58 (October): 28-36.

Schellinck, D.A. 1983. Cue Choice as a Function of Time Pressure and Perceived Risk. In Bagozzi, R.P. & Tybout, A.M. (Eds) Advances in Consumer Research, 10: 470-75. Ann Arbor, Michigan: Association for Consumer Research.

Sheth, J.N., Banwari, M., & Newman, B.I. 1999. Customer Behaviour: Consumer Behaviour and Beyond, Dryden Press.

Soriano, M.Y., & Foxall, G.R. 2002. A Spanish Translation of Mehrabian and Russell's Emotionality Scales for Environmental Consumer Psychology. Journal of Consumer Behaviour, September, 2 (1): 23-36.

Stephen M.N., & Simonson, I. 1997. Attribute-Task Compatibility as a Determinant of Consumer Preference Reversals. Journal of Marketing Research, May, 34(2): 205-218.

Ulgado, F.M., & Lee, M. 1993. Consumer Evaluation of Bi-National Products in the Global Market. Journal of International Marketing, 19(3): 5-22.

Wahlers, R.G. 1982. Number of Choice Alternatives and Number of Product Characteristics as Determinants of the Consumer's Choice of an Evaluation Process Strategy. In Advances in Consumer Research, 9: 544-549.

Wells, W.D., & Tigert, D.T. 1971. Activities, Interests, and Opinions. Journal of Advertising Research, 11 (August): 35-56.

Wikipedia. 2007. Qatar. Available at: http://en.wikipedia.org/wiki/qatar (accessed 25 January, 2007).

Table 1 (a) Mean Scores: Branded Clothing Attribute Importance

	High		Low			High		Low		-	High	1	Low		
	Intern	ersona	l Interp	ersona	1	Socia	1	Soci	al		Fash	ion		scious	
	Influe		Influe				arison	n Comparison			Conscious				
	n		n		Mann-	n		n		Mann-	N		n		Mann-
					Whitney					Whitney					Whitney
					U					U					U
Fashion	203	5.82	105	5.34	-2.603**	166	5.89	142	5.39	-2.539*	198	6.24	110	4.62	-8.816***
Price	203	5.67	105	4.70	-4.106***	166	5.58	142	5.05	-2.007*	198	5.43	110	5.16	-1.937
Brand name	203	5.51	105	5.08	-1.665	166	5.56	142	5.13	-1.925	198	5.73	110	4.71	-5.725***
Durability of material	203	5.91	105	5.83	-0.352	166	5.75	142	6.04	-2.127*	198	5.92	110	5.81	-0.866
used															
Variety of choice	203	5.67	105	5.42	-1.142	166	5.37	142	5.82	-2.772**	198	5.61	110	5.53	-0.833
Fitting	203	6.58	105	6.69	-1.412	166	6.52	142	6.73	-2.216*	198	6.61	110	6.63	-0.465
Appearance/look of clothing	203	6.72	105	6.62	-0.320	166	6.64	142	6.74	-0.813	198	6.77	110	6.53	-2.402*
Workmanship	203	6.21	105	6.17	-1.026	166	6.16	142	6.24	-2.039*	198	6.27	110	6.05	-1.669
Comfort of wearing	203	6.40	105	6.59	-2.255*	166	6.25	142	6.73	-3.911***	198	6.49	110	6.43	-0.311
Availability preferred	203	6.09	105	6.16	-1.505	166	5.96	142	6.29	-3.096**	198	6.26	110	5.85	-2.683**
design															
Color	203	6.06	105	6.13	-1.473	166	6.00	142	6.18	-1.931	198	6.19	110	5.89	-1.914
Country of origin (brand)	203	4.61	105	4.19	-1.587	166	4.58	142	4.33	-0.776	198	4.64	110	4.14	-2.219*
Information provided	203	4.33	105	3.98	-1.379	166	4.10	142	4.34	-0.974	198	4.27	110	4.10	-0.739
Warranty	203	4.80	105	4.38	-1.664	166	4.63	142	4.68	-0.265	198	4.78	110	4.43	-1.713
Advice given by friends	203	4.63	105	3.46	-4.696***	166	4.61	142	3.78	-3.436**	198	4.29	110	4.12	-0.802
Advice by family members	203	5.04	105	4.06	-4.046***	166	5.04	142	4.32	-3.111**	198	4.70	110	4.72	-0.259

Advice given by sales staff	203	4.12	105	3.32	-3.133**	166	4.02	142 3.65	-1.553	198 3.91	110 3.74	-0.682
Price reductions	203	5.94	105	5.15	-2.889**	166	5.72	142 5.61	-0.247	198 5.59	110 5.82	-0.648

Note: Mann-Whitney U results are shown above, * indicates statistically significant at the 10% level, two-tailed test, ** indicates statistically significant at the 1% level, two tailed test

Table 1(b)
Mean Scores: Branded Clothing Attribute Importance

	High		Low			High	_	Low		
	Inno	Innovative		Innovative		Ad Attitude		Ad Attitude		
	N		n		Mann-	n		N		Mann-
					Whitney					Whitney
					U					U
Fashion	169	6.08	139	5.15	- 4.834***	146	6.10	162	5.27	- 4.750***
Price	169	5.46	139	5.19	-1.306	146	5.58	162	5.12	-1.951*
Brand name	169	5.65	139	5.02	-3.469**	146	5.80	162	4.97	- 4.538***
Durability of material used	169	5.89	139	5.86	-0.118	146	5.90	162	5.86	-0.235
Variety of choice	169	5.67	139	5.47	-0.885	146	5.68	162	5.49	686
Fitting	169	6.62	139	6.61	-0.501	146	6.59	162	6.64	-1.215
Appearance/look of clothing	169	6.69	139	6.68	-0.569	146	6.68	162	6.69	-0.544
Workmanship	169	6.28	139	6.09	-0.902	146	6.27	162	6.12	-0.681
Comfort of wearing	169	6.38	139	6.58	-1.108	146	6.42	162	6.51	-0.834

Availability preferred design	169	6.21	139	5.99	-1.544	146	6.21	162	6.03	-1.500
Color	169	6.15	139	6.01	-0.899	146	6.22	162	5.96	-1.559
Country of origin (brand)	169	4.80	139	4.06	-2.963**	146	4.76	162	4.20	-2.525*
Information provided	169	4.32	139	4.08	-1.008	146	4.42	162	4.02	-1.706
Warranty	169	4.69	139	4.62	-0.525	146	4.94	162	4.40	-2.407*
Advice given by friends	169	4.38	139	4.04	-1.374	146	4.64	162	3.86	-3.453**
Advice by family members	169	4.74	139	4.67	-0.364	146	5.09	162	4.36	-3.472**
Advice given by sales staff	169	3.89	139	3.79	-0.389	146	4.21	162	3.52	-2.841**
Price reductions	169	5.41	139	5.99	-2.185*	146	5.76	162	5.59	-0.620

Note: Mann-Whitney U results are shown above, * indicates statistically significant at the 10% level, two-tailed test, ** indicates statistically significant at the 5% level, two-tailed test, *** indicates statistically significant at the 1% level, two tailed test

BRAND-BUILDING: THE CASE OF THE WINE INDUSTRY IN CYPRUS Demetris Vrontis

School of Business Administration, Intercollege, <u>Cyprus</u>
Email: vrontis.d@intercollege.ac.cy

ABSTRACT

This research aims to examine the importance of branding in the Cyprus wine industry. Further, it seeks to identify the wine-consumer perceptions and expectations as well as the main problems found in the industry. The paper reports on the findings of the first in its kind research study carried out in Cyprus in the wine sector. The findings that emerged set the foundation for helping the various stakeholders in the sector to contribute towards building strong brands to help them sustain the fierce competition from foreign brands. Empirical data was collected by using secondary and primary data sources. Primary data sources included semi-structured interviews, focus groups and questionnaires with the key stakeholders in the industry. Overall, this research examined consumers' perceptions about Cyprus wine and identified the problems and major challenges evident in the industry. On the basis of this knowledge, the researchers put forward some propositions towards building strong local brands. Based on the research findings, this paper recommends to practitioners new ways for development and market penetration, and enables them to build their brand and improve their marketing practices in an increasingly competitive environment.

INTRODUCTION

A brand is a singular idea or concept that a product owns inside the mind of the prospect. It usually comes in the form of a name, term, sign, symbol or design, or a combination of them and is intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of competitors (Keller, 2003). It is widely accepted that the successful seller must surround his generic product with a cluster of value satisfaction. The seller must provide a total proposition; the content of which exceeds what comes out of the production line. Branding is particularly important as "people choose the brands in the same way they choose friends" (Vrontis, 1998:81).

Branding is crucial in any industry, company or product. According to David Higgins, Brown Forman Beverages Worldwide Wine Group President, "in the wine business people do not understand the need to build brands. That will become more and more of a problem among mid size wineries" (Westling, 2001). The success of a brand is the work of everyone in the organization. Building the brand is very important in the wine market where the consumer can be overwhelmed by too many choices. By having a strong brand a company can enjoy cost effective marketing campaigns, greater trade leverage, higher margins, ease of extending lines, stands out of competition and defense against price competition. These benefits come as a result of the brand becoming recognizable and established in the minds of the consumers and thus triggering recognition of the brand name and/or mark in a purchasing situation. Strong brands lead to strong companies, consumer loyalty and to an overall strong industry.

The European Union producers, predominantly, France, Italy and Spain, account for 62% of world wine production, while the U.S. wine production, is only 6%, Australia 2% and Chile 1%. Although production has dropped from its peak in recent years, consumption has declined by 20% since 1990. The world surplus still averages over 5 billion liters per year and is growing as a percentage of total production. Consumption has fallen sharply in most major wine producing countries in the last three decades. Of the total wine production, only 18% is exported. The EU countries lead with France and Italy almost equal, accounting for 50% of world exports. The US has grown to 3% and Chile and Australia are equal with a 2% share each. Due to mergers, acquisitions, joint ventures and strategic investments, the world's top wine companies now control labels in countries all over the globe. As a result, consumers see (and drink) more and more wines from the US, France, Australia, South Africa, Chile, Italy, Canada and many other countries (internet 1).

In Cyprus, no research has been carried out in order to shed light onto the importance of branding and its benefits to the wine industry. Through this research we seek to identify the wine-consumer perceptions and expectations as well as the main problems found in the Cyprus wine industry. The

findings could then aid practitioners in the Cyprus wine industry in providing them valuable considerations and guidelines.

The Cyprus Wine Industry – a Historical Overview

There is historical evidence that wine was first produced between the years 5000-4000 B.C. in the eastern Mediterranean area, as far as Persia. The first countries to have produced wine appear to have been Mesopotamia, Persia, Phoenicia, Greece, Cyprus and Egypt. The history of Cyprus and the history of wine have been inextricably linked since the beginning of creation, and indeed, Cyprus is today considered to be one of the first countries in which viticulture and wine production were practiced (Johnson, 2001). Cyprus was so renowned for its wines that according to the poet and dramatist, Euripides, the ancients when talking about wine would refer to it as the 'Cypriot Nama' (Domine, 2001).

Aristidou (1990) argues that Cyprus first acquired fame for the excellence of its wines. Modern excavations carried out on the island have established that during the Hellenic (Classical) Age, there existed a wealthy and remarkable society whose prosperity seems to have originated from and depended on viticulture, wine production and wine trading. The significant role of wine in Cyprus over the Roman period is clearly evident in numerous wall-mosaics, pots and sculptures, which were brought to light by archaeological excavations in Cyprus. Mosaics at the House of Dionysus in Pafos attest to the colourful history of the Cyprus vine. Dionysus, the pleasure-loving god who taught Icarius how to plant vines in exchange for the hospitality he had shown him, is seated on a chair holding grapes. An inscription that reads 'the first wine drinkers' in Greek accompanies a mosaic depiction of two shepherds quite drunk on Icarius wine. Many renowned wines of the world are made from vines brought to Europe from Cyprus after the Crusades - champagne, for example, may have originated from a choice cutting taken from Mount Olympos, in Cyprus (Internet 2).

The role of Cyprus as a wine producing country was further enhanced during the period of the Lusignans (1149-1489) and Venetians (1489-1571). During the Middle Ages, a sweet wine called Commandaria, gained international fame. According to the historian Ludolf von Suchen, who visited the island between 1336 and 1341, Commandaria's trade by the Crusader conquerors of the island became the source of their wealth and prosperity (Kythreotou, 2003). However, the progress and development of Cyprus in the field of viticulture and wine-producing ended in the latter half of the 16th century with the Turkish Ottoman occupation of the island. During virtually this entire 300 year period of the island's occupation, the art of wine producing would receive scant attention.

Today, the wine industry is making significant efforts to develop processes and procedures in grape cultivation and wine production. Cyprus wine is seeking to become more competitive both in terms of quality and price. In line with an international phenomenon that is occurring in the increasing homogenization of goods and services, branding has progressively become more important to the wine industry as a means of differentiation and competitive advantage.

LITERATURE REVIEW

Branding in the Wine Industry

A brand is a combination of elements that uniquely identifies a product produced by one particular manufacturer and thereby distinguishes it from competitors' products. Branding usually includes a particular name, logo, and symbol and or design that the customer then associates with a particular manufacturer. Kotler (2000) also stipulates that a brand is essentially a seller's promise to consistently deliver a specific set of features, benefits, and services to buyers. Further, Pringle and Gordon (2001), depicts that a brand represents promises about what a product/service or a company can deliver. In addition, Chernatony and McDonald (1992) postulate that a successful brand is an identifiable product, service, person or place, augmented in such a way that the buyer or user perceives relevant unique added values that match their needs most closely.

The wine industry is extremely fragmented and has a myriad of brands, which creates a problem in brand recognition and complicates the sales process (Andrew, 2002). Consolidation of the industry has helped to improve margins and increase the sales of the leading wine companies, but it has also increased the number of brands that have to be managed. It is considerably more difficult for a sales team to push 20 different brands (each consisting of multiple varietals) into the distribution network than ten or five (Wine Business Monthly, 2002). This is becoming even more challenging as companies and sales teams attempt to avoid cannibalization among the different brands that they produce and distribute.

Branding is crucial in any industry, company or product. Wineries and the wine industry in general should appreciate and recognize that branding is of paramount importance, as strong brands will continue to enjoy robust growth. For the first time in 2000, Marketing's Annual UK Biggest Brand Report included three wine brands among its top 20 growers (Marsh, 2001). It is therefore no surprise that marketing budgets in the category of brand building are increasing drastically. France, Italy and Spain are only a few of the countries that have managed to develop strong brands. Countries with a developing wine industry like Greece, Chile and Argentina are focusing their attention on developing and sustaining recognizable and meaningful brands.

In Cyprus, no research has been carried out in order to identify the importance of branding and the benefits it can offer to the wine industry. The section that follows sheds light onto the key developments in the international wine industry and provides the foundation for the discussion of the nature of the Cyprus wine industry.

This study aims to identifying the main problems as well as customer perceptions and preferences in the Cyprus wine industry. Specifically, the objectives of this research are:

- 1. To identify the main problems that the Cyprus wine industry faces
- 2. To explore consumer behaviour, perceptions and preferences in relation to Cyprus wine
- 3. To identify the implications for the branding of local wines in Cyprus

RESEARCH METHDOLOGY

The research methodology consisted of both primary and secondary data. Primary data included the use of qualitative and quantitative approaches. Secondary data was collected by reviewing the existing branding literature as discussed in books, academic and trade journals, information databases, professional magazines, government publications and specialized internet sides. Information gathered from secondary sources was treated as exploratory and explanatory and was used for the design of interviews.

Primary research has focused on three different methods. These are face to face semi-structured interviews with wine producers as well as consumers' questionnaires and focus groups. In addition, in order to gain industry knowledge, four exploratory interviews with wine experts were carried out at the onset of this study. These preliminary interviews also provided the basis in designing the questions for the interviews, focus group discussions and questionnaires.

First, the researchers carried out fifteen in depth semi-structured interviews with the owners of Cyprus Wineries. These semi-structured interviews were non-standardised. The researchers focused on a list of themes and questions. However there was some variation in terms of the order and the questions were asked depending on the flow of the discussion. Taking notes and tape-recoding were used in order to keep a record of the information collected. Second, with regards to the telephone consumer survey, exploratory interviews helped the initial design of the questionnaire which was then pilot tested with forty participants before used to collect data. In the actual research, the researchers carried out 600 telephone interviews to wine consumers in Cyprus. The analysis was mainly quantitative and it was undertaken by the use S.P.S.S. statistical package. Specifically it utilized frequencies and cross-tabulations statistical tests. Even though the analysis undertaken was mainly quantitative, some qualitative analysis also took place. On the one hand, quantitative methods dealt with identifying what, why and where something is happening, while qualitative methods provide further information and understanding on the why and the how.

There are limitations associated with this research method (survey questionnaire). Telephone interviews do not really reveal the depth and volume of information that would generate knowledge and understanding regarding people's motivations, preferences and behaviour. Instead, the information generated tends to reveal relationships and associations between variables and mainly provide information of what is happening rather than why it happens. To overcome this limitation, it was necessary to combine this quantitative method with a qualitative one. For this reason focus group discussions took place in all major cities of Cyprus.

Finally, in relation to the focus groups, four focus groups were held in Nicosia, Larnaca, Limassol, and Paphos. The first focus group was held with ten participants and the remaining three with seven participants. All the participants belonged to the 18-60 age range. The focus groups included individuals who were occasional users of wine and other alcoholic drinks; employed and unemployed; university and college students; and all had a good knowledge of wine. The researchers acted as moderators and observers and used an interview guide in all the group interviews. The focus group discussions led to the collection of in-depth qualitative data regarding consumers' attitudes towards wine consumption, life styles, and purchase decision making.

The research sample was drawn by using non-probability (purposive) and probability (stratified) sampling. Specifically, researching wine producers and consumer focus groups were based on purposive sampling. Purposive or judgmental sampling enabled the researchers to use their own judgment to select cases that will best enable them to answer their research questions and meet their objectives. Further, sampling for consumer telephone questionnaires was based on stratified random sampling. Stratified random sampling is a modification of random sampling in which the researchers divided the population into three relevant and significant strata based on a number of attributes. For this research, the division was based on age, sex and geographical location to allow the provision of a representative sample and ensure that each of the strata is represented proportionally within the sample.

RESULTS AND DISCUSSION

In the last two decades a number of changes have affected the Cypriot wines. The demand for basic Cyprus table wine from the former Eastern Bloc countries has decreased and so did the demand for Cyprus sherry from countries such as the UK. International competition in the wine world has never been so fierce. Quality has risen on all fronts, and more wine producing countries have been exporting to foreign markets. These developments led to the restructuring of the wine industry in Cyprus and led to considerable quality improvements on the final product. On the production side, there have been a number of positive steps taken such as: (1) improved vineyard management, with selective grubbing up and replanting, (2) building of wineries closer to the vineyards to ensure picked bunches of grapes are processed as soon as possible, (3) new winemaking talent including foreign winemakers and (4) improved production processes. Thirty-five to forty boutique wineries have also sprung up on the island in the last fifteen years and have been responsible for some of the renewed interest in Cypriot wines. These wineries are financed privately and owned by wine enthusiasts. In relation to sales, a greater emphasis has been placed on the promotion of Cypriot wines in foreign markets. However, there is no collective effort, as individual wineries are promoting their own brands in foreign markets.

This section addresses the first research objective and discusses the findings that emerged from the personal interviews held with the wine producers. It seeks to identify the key challenges and problems that characterise the local wineries. The data analysis sheds light onto the fact that the wine producers, and distributors (for example restaurants and supermarkets), lack the necessary knowledge, know how, and often the technology in relation to wine producing, handling, and storing. This has serious negative implications for the product and service quality as well as customer satisfaction.

This research identified that the Cypriot wine producers prefer to work individually. This is mainly due to the high competition that characterizes the sector, which hinders teamwork and cooperation leading to the creation of a negative work environment that affects negatively the ability of the sector to face the increasing competition from the foreign brands. The study also revealed that the vineyards are not owned by the wine producers. As a result, wine producers purchase grapes from

various grape producers, with variations in the quality, maturity, and flavor of the grapes used. Subsequently, the wine producers have no or limited control over the quality and consistency of the wine produced. Also the majority of the wine produced in Cyprus is based on the local grape varieties: Mavro (for red wine) and Xynisteri (for white wine). Unfortunately, these grape varieties are poor in aroma, which subsequently affects the flavor of the wine produced and sold. The quality of the wine is also affected by the fact that grape picking takes place in high temperatures (35-40 Celsius) in summer.

There is also evidence to support that there is increasing competition in the sector from foreign brands such as Greece, France, Chile and New Zealand. Local wine producers share the belief that Cypriots favor foreign brands that are offering good value for money. Since the local winery owners rarely develop formal business or marketing plans they fail to take into consideration their competitors, an approach which can have detrimental consequences for their market share and position.

In summary, the industry appears to be facing a wide array of problems and challenges that unfortunately have not been addressed. Failure to take immediate and decisive action can have long term detrimental consequences for the whole industry and for individual wineries.

This section discusses the findings that emerged from the group interviews held with the wine consumers. Generally, the Cypriot consumers drink wine when socialising and in special occasions (to celebrate). The interviewees claimed that even though beer and vodka are the most preferred alcoholic drinks, the number of Cypriots who drink wine is increasing. Wine is perceived to be a drink which should be enjoyed with friends and family members since it is viewed as having the following qualities: 'romantic', 'special', and 'aristocratic'. The consumers' preference towards the consumption of red or white wine is determined primarily by the type of food (for example Cypriots prefer to drink white wine with fish and red with meat dishes) and the season (for example there is a preference for the consumption of white wine in the summer months and red in winter). It appears that the packaging and advertising can have a strong impact on wine preferences and consumption patterns. Specifically, when the consumers were asked which information sources they use to evaluate various alternatives in the selection process, they claimed that they rely on advertisements which can have either a positive or a negative impact on their attitudes towards wine brands. An interesting finding was that the promotional material regarding local wines is insufficient. This lack of knowledge though can have serious implications for the demand of the local wine. Further, Cypriot consumers often use the packaging of a product (bottling and labelling) as an indicator to make their purchase choices.

When the participants were asked to identify the factors which influence their purchase choices they identified advertising, price, packaging and word of mouth to be the most important ones. There was some degree of uncertainty regarding the relationship between the price and quality. Consumers do not generally believe that a wine with a high price will necessarily be the best; whilst those consumers who have a good wine knowledge claimed that they are not influenced by the price. An interesting finding was that the mass production of local wine by the big wineries in order to decrease prices and increase the demand has had a negative impact on the image of local wine. Finally, the consumers believe that the restaurant owners and waiters should be trained so as to have a good knowledge and understanding of the local wine in order to be in a position to offer better advice to consumers.

It is equally important to understand and examine he data collected from the analysis in relation to the consumer telephone interviews. From a total of 600 hundred telephone interviewees the majority of them (73.1%) claimed that they consume alcoholic drinks. When they were asked whether they drink wine, 97.5% answered positively. This is perhaps due to the fact that wine can be consumed in different occasions such as: in family gatherings (22.1%), with friends (24.4%), in restaurants (19%), at a club (2%), during festivities (24.2%), and at home (8.2%). Wine drinking is a part of the local culture and is favored over other alcoholic drinks when people spend time with friends.

It was extremely interesting to identify that the majority of wine drinkers in Cyprus prefer to consume local wines (87.2%) whilst only 12.8% prefer imported wines. In addition, in order to identify whether customers tend to be loyal to specific brands, the interviewees were asked whether they usually buy the same brand, and 55.6% gave a positive answer. Future research can focus on identifying the factors that motivate customers to remain loyal to a certain brand.

The majority of wine drinkers prefer red wine (60.3%) whereas, 36.8% prefer white, and the remaining 2.9% prefer to drink rose \square . Women appear to be more favorable towards white wine (45.3%) whereas men tend to prefer red. The preference for the rose \square wine was very similar between the two genders: 3.0% for men and 2.9% for women. The white wine is preferred by individuals that belonged to the 20-30 age group, the red wine was favored by individuals that were over sixty years old, and the rose \square by those that belonged to the 31-45 age group.

An important part of this research study was the identification of those factors that influence the customers' wine purchase choice. The table that follows below presents the factors that appear to be most influential. Specifically, the flavor of the wine appears to be the most influential factor (26.1%) followed by the wine aroma (19.8%), the wine color (17%), the brand name (13.6%), and the price (12.8%). Men tend to emphasize more the wine flavor (69.9%), the wine aroma (53.3%), and the color of the wine (52.1%) when they select wine. Women have exhibited a similar attitude, specifically: women tend to be influenced more by the flavor of the wine (67.7%), the aroma (51.2%), and the color of the wine (37.1%).

It was also important to identify customers' perceptions towards the quality of the local wines. The majority of wine drinkers (94.2%) believe that the quality of the local wine is good, and only 0.3% of the wine drinkers believe that the quality is poor. The majority of the interviewees (69.9%) also believe that the local wines offer good value for money. 69.8% of the interviewees believe that that the prices of the local wines are reasonable in comparison to those of foreign wine. When asked about the bottling and labeling of local wines, the majority of interviewees (91%) believe that these are good, 8.9% believe that these are average and only 0.2% feel that these are bad. Finally, the interviewees were asked which factors they perceive as important for the promotion of the local wines. The majority of the interviewees (39.1%) share the view that the name of the geographic area is the most important factor. 29.7% believe that the reputation of the winery is an important factor and 23.7% feel that the reputation of the Cypriot wines is a factor which should be emphasized.

This research identified that the majority of the participants (96%) feel that wine tasting is the most influential promotional tool used by wine makers. The rational is that it gives consumers the opportunity to experience the wine's flavour, aroma, and colour. This experience has the potential to create strong preferences towards wine brands and hence, influence consumer behaviour (purchase choice).

Word of mouth communication (85%) and wine exhibitions (81%) are equally important in shaping customers' perceptions. Word of mouth communication provides information which is usually believable by consumers since it comes from trusted information sources such as friends and family members. Wine exhibitions give the opportunity to consumers to taste wine, interact with wine producers and compare the key characteristics of different wine brands such as: aroma, flavour, and prices. Personal experience and information from 'trusted' sources can create strong brand preferences and hence, lead to brand loyalty. The country of origin (80%) and the brand name (78%) can shape customer's perceptions and hence, influence consumer behaviour. Some countries such as France have a strong reputation for wine producing. This strong reputation and distinct brand image lead to a competitive advantage since consumers are more likely to perceive wines from these countries more favourably. Positive feelings and attitudes influence consumer behaviour. At the same time, customers are likely to share their positive experiences and perceptions with their friends and encourage them to purchase a specific brand, and hence, increase sales and the number of customers. The data analysis shows that 78% of respondents consider the brand reputation to be an influential factor for customer loyalty. A strong brand reputation can instil confidence in that the product can deliver the promised benefits such as high quality and hence, lead to customer satisfaction.

The shape of the bottle and labelling (54%) help differentiate a brand from competitive brands and are often part of the promotional efforts undertaken by the corporation. For example, the bottle is often featured in the advertisements and also advertisements may use the colours featured in the label to achieve visual continuity and brand recognition. The study revealed that only some respondents believe that sales promotion (45%), retail displays (43%) and advertising (25%) influences their purchase decisions. The promotion mix appears not to be as effective in shaping people's perceptions, preferences,

and behaviour as expected. The reason is that respondents revealed that they are not influenced by these promotional tools, which are controlled by wine producers and hence, are used to manipulate them into purchasing specific brands.

CONCLUSIONS

This research identified that the wine industry in Cyprus is growing and becoming increasingly more competitive and the customer more demanding, wine companies that wish to survive and thrive need to develop their branding, marketing and operational techniques. However, despite the local wine industry's steady growth there are several problems that threaten its viability: lack of technology; ineffective storing and handling; lack of professionalism; foreign competition; wine cellars and customers; poor image of Cyprus wines in foreign countries; and ineffective promotion. Brand building can be effective if issues which differentiate Cyprus, as a wine producing country, are promoted to consumers as competitive advantages. Firstly, the history, mythology and culture of Cyprus as a wine producing country, should be emphasized in order to attract the attention and receive the acceptance of wine consumers. Furthermore, Cypriot indigenous varieties can also differentiate Cyprus on the wine map and may be used as a point of differentiation which makes Cyprus unique, if compared with New World wine-producing countries. Moreover, it is highly recommended that international acceptance, success and the recognition of Commandaria may be used as a first step towards success. In addition, it is recommended that different kinds of wine should be produced for different target market audiences. Finally, as customers are always looking for something different and unique, a well planned marketing mix, including a well designed integrated marketing communications approach, can highlight these selling propositions that are distinctive and aid practitioners towards this direction.

Branding is important, however, effectiveness is depended upon considering the possible developments with regards to quality. Wine quality can be improved only if wine makers in Cyprus develop their know-how, acquire external expertise, and work collectively. Further, stakeholders' lack of education needs to be turned around in order to develop their knowledge in handling, storing, serving, drinking and enjoying wine. It is recommended that for more immediate results the wine makers should concentrate primarily on consistently producing better quality wine. They should always strive to offer value for money. Wine quality may also be improved if wine makers in Cyprus were to develop their know-how, acquire external expertise, and work collectively with each other. The Cyprus wine industry has high potential to expand and develop. Developments in terms of quality, together with appropriate marketing techniques and branding strategies, could increase market volume, value and share. Problems arising from low quality non-branded house wine are devastating and dilute the image of the industry. Branding in the wine industry should be developed by focusing on the history of Cyprus in relation to wine.

It is recommended that different wines should be produced and branded for different target market groups. For example, fresh, easy to drink, young, and cheap wine may be produced for young people and more distinct, mature and premium wine for older people, who are willing to pay more. The cooperation between wine producers is of paramount importance. This could be in the form of establishing new associations or in the form of achieving economies of scale by sharing expertise and costs associated with the employment of a full time oenologist and sommelier. Further, it was identified that currently, as has already been stated, vineyards in Cyprus are not privately owned. To overcome any problems that may arise from this, it is highly recommended that wine makers fully control the quality of the grapes being produced by grape producers.

In exploring consumer perceptions regarding the price and quality of local wines in comparison with the price and quality of foreign brands, customers believe that Cyprus wine offers good value for money. The packaging (bottling and labeling) of the locally produced wine is also perceived to be good. Consumers tend to share the view that emphasis should be placed on the name of area in which wine is produced for promotion purposes. Furthermore, this research revealed the most important factors that influence the customers' wine purchase choice which should be taken into consideration by wine

practitioners. Specifically, these factors in order of importance are: the flavor of the wine, the wine aroma, the wine color, the brand name and the price.

In relation to promotion, wine practitioners should place attention on wine tasking events and wine exhibitions. These, provided that the quality of wine is good, will have additional benefits through word of mouth. It is evident that practitioners should invest in brand building and brand reputation as customers tend to be loyal to brands they have tasted in the past and enjoyed drinking. Other promotional tools such as sales promotion, retail displays and advertising are of less importance and no major investment should occur.

Overall, this research identified that wine practitioners should consider a number of factors in order to allow branding, quality and marketing techniques to be further developed. These are in terms of: concentrating on native grapes which offer optimum results, restricting cultivation and developing quality, identifying the right price level that will offer value for money and customer satisfaction, updating the current wine making technology and viticulture, using better marketing and promotional techniques, development of know how, increasing professionalism, collective cooperation, focusing attention on vineyards, obtain professional advice, employ professional oenologists and sommeliers, there is a need for cooperation among the key actors in the industry, focus on quality rather than quantity.

Finally, this research indicated that branding is of paramount importance for practitioners in the Cyprus wine industry. A strong brand name carries high credibility, loyalty, name awareness, perceived quality and a strong brand association.

REFERENCES

Andrew, A. 2002. Globalization of the Wine Industry, Wine Business Monthly, Vol. 9, No. 4, April 01.

Aristidou, G.A. 1990. Cyprus wine. Nicosia: Cyprus.

Domine, A. 2001. Wine. Cologne: Konemann Verlagsgesellschaft mbH.

Johnson, H., & Jancis, R. 2001. The world atlas of wine, Mitchell Beazley, London.

Keller, K.L. 1998. *Strategic brand management: building, measuring, and managing brand equity*. NJ: Prentice Hall.

Kotler, P. 2000. *Marketing management*. NJ: Prentice Hall, The Millennium Edition, Upper Saddle River.

Kythreotou, F. 2003. *The book of Cyprus wine*. Nicosia: Intercollege Press.

Marsh, H. 2001. Wine Branding Gains Respect, April 26, Haymarket Publishing, 23.

Saunders, M., Lewis, P., & Thornhill, A. 2003. *Research methods for business students*, 3rd Ed. London: Prentice Hall.

Westling, B. 2001. Building brand equity in the wine industry. *Tincknell and Tincknell*, November.

Wine Business Monthly, April 01, 2002. Vol IX No 4

Internet 1: http://www.wine-pages.com/guests/contrib/nncyprus.htm

Internet 2:

 $\frac{\text{http://web1.infotrac.galegroup.com/itw/infomark/71/282/56942183w1/purl=rc1_EAIM_0_A65578653\&dyn=4!xrn_2_0_A65578653?sw_aep=intercol}$

COLLABORATED MARKETING – TOWARDS A MULTIDIMENSIONAL MODEL OF MOTIVATION IN OPEN SOURCE ORIENTED MARKETING PROJECTS

Klaus-Peter Wiedmann Sascha Langner Nadine Hennig

ABSTRACT

With the ongoing trend to consumer empowerment, the Open Source (OS) Movement spreads its wings. Once started as counterparts to proprietary software development, OS Networks exist today in a variety of fields: as organizations of creative, as educational networks or as collaborative marketing communities. A better understanding and management of OS Networks in general and OS Marketing communities in particular, implies the in-depth analysis of their conditions and drivers. Based upon relevant motivational theories and recent research, this paper provides a conceptual framework, which elaborates the influence of key motivational dimensions and need-based drivers, leading to a multi-dimensional model of OS Marketing Motivation.

INTRODUCTION

Networks have gained growing interest in marketing management referring to an intraorganizational (e.g., co-branding strategies), an inter-organizational (e.g., integrated product management) or a customer interaction level (e.g., customer clubs). As an unusual form of consumer-sided social organization, Open Source Networks (OSN) have drawn special attention from both, academics and practitioners. Originating from counterparts to proprietary software development (e.g., Windows vs. Linux), these communities exist today as collaborative networks in a variety of application areas, e.g. as organizations of creative generating texts, videos, images or audio sources (e.g., creativecommons.org, flickr.com or jamendo.com), as educational networks (e.g., MIT OpenCourseWare) or as collaborative marketing communities (e.g., Mozilla's spreadfirefox.com, P&Gs Vocalpoint or Converse's conversegallery.com).

Thus, with special reference to Open Source Software (OSS) community motivation, this paper aims at providing a conceptual framework for the theoretical identification of key motivational dimensions and need-based reasons to answer the following research questions: Why do consumers take part in an marketing-oriented OSN, on which OSN characteristics is individual participation based upon, and what are underlying drivers that firms can address to induce people to participate in business processes voluntarily?

This paper is structured into three main sections: First, considering different theories of motivation (need and expectancy), a multi-dimensional conceptualization of individual OSN motivation is developed. Second, based on previous research on OSS motivation, motivational determinants and their specific role in OSM participation are introduced and analyzed. Third, the model and its propositions are discussed with reference to future research steps and managerial implications to efficiently integrate consumers in development and management of marketing processes.

CONSTRUCT DEFINITION AND LITERATURE REVIEW

Open Source Networks

In the last years, OSNs have gained a lot of attention from academics and practitioners. Spontaneously founded, all of these networks recruit their members on a voluntary base, and most of all disburden themselves of strict copyright standards by establishing flexible rights for a flexible use of intellectual property. Collaborative OSN such as Linux, Apache or Typo3 communities have shown that a large and complex system of software code can be built, maintained, developed, and extended by a worldwide network of developers who work in a highly parallel, relatively unstructured way although most of the community members are not even employed or paid by a central institution (e.g., Lerner & Tirole 2002, Weber 2004, Watson 2005, Feller & Fitzgerald 2002, Raymond 2001). Today many OSN exist as intra-organizational networks (MNEs) on a global level (e.g., the community of the web browser

Firefox) as well as inter-organizational networks between e.g. two or more OS projects (e.g., the partnership between the OS Marketing community spreadfirefox.com and the developer community of the web browser Firefox at mozilla.org). OSNs have become so promising that many companies, e.g. IBM or Red Hat, even base their business models on OS projects like the Linux kernel (Watson 2005).

Despite the growing popularity of the OS idea, it has to be stated that not all OSN get as much attention and involvement of stakeholders as they need to have to keep the development processes running and the outputs error-free and up to date. Therefore, an important bottle-neck in any shape of OSN is to convince enough attractive stakeholders to participate.

Open Source Software As An Example for a Classic OSN

The core idea of Open Source development like Open Source Software (OSS) (as a typical form of an OSN) is, that the source code of a given proprietary object (e.g. a computer program) is publicly available (via the internet) under an open source license to study, change, and improve its design (Open Source Initiative 2006, Perens 1999, Stallman 2002). Every consumer with sufficient skills can join an OSS project any time – e.g., by simply downloading the source code, integrating a reasonable extension or correct errors (Watson 2005, Hertel et al. 2003). In OSS communities, software developers usually contribute their work "for free", as a hobby or during their work hours (even though OSS development is not part of their usual field of work). However some firms recently started sponsoring OSS projects (like IBM who spent over a billion dollars on Linux-related research and development in the last 5 years), and pay programmers so they can work on specific OSS projects full-time (Watson 2005). Nevertheless, most of the programmers still prefer to work independently without being paid by a large company. Thus, to accomplish the needed tasks, OSS projects (even sponsored ones) have to offer software developers other reasons than money to participate.

Defining Open Source Marketing

The concept of Open Source Marketing (OSM) combines the ideas, ideals and success factors of the Open Source Movement and Open Source Networks with the classic aims, strategies and activities of marketing management. By actively integrating the consumers into the planning and implementation processes of marketing, the ongoing trend to consumer empowerment shall be incorporated, reactance toward marketing and advertising shall be soothed/extenuated/moderated/reduced and, according to a mutual Win-Win situation, the creative human resources of the consumers shall be used more efficiently (Cherkoff 2005, Christ 2004).

OSM encompasses a normative, a strategic, and an operative level. The normative level is of special importance as Open Source Marketing constitutes a fundamental change of attitude in handling products and services and their marketing: fewer restrictions in favor of free idea exchange and lower planning safety in favor of an improved customer orientation (Brøndmo 2004). In view of its strategic component, OSM refers to the cooperative and collaborative planning and specification of marketing aims, strategies, and activities in an OSN. Referring to its operative level, OSM addresses the collaborative organized, creative arranging and realization of marketing activities by flexible use of copyright standards (cf. CreativeCommons.org 2006).

In general, OSM includes:

- Access to marketing materials, which are no longer restrictively protected on copyright, but available to consumers under a flexible user's license.
- Permission and support of derivatives or further developments of advertisements, texts, logos etc.
- Free access to commercials or banners as well as storyboards, basic animations, text or sound files on the company's website.
- Possibility to discuss and criticize all relevant elements of corporate marketing management in forums, chats and blogs.

Consequently, OSM means primarily "letting off". The target group is not only allowed, but induced to improve the corporate marketing concept with additions, further developments, parodies or criticism.

Even though a lot of empirical efforts on elaborating OSS programmers' motivation have been made (e.g., Lakhani & Wolf 2005, Hertel et al. 2003 or Lerner & Tirole 2002), there is still a lack of a more broadened view on OSN motivation in general and OSM participation motives in particular. Thus, projects like the OSN organized at spreadfirefox.com show that people have the willingness to engage in OSM, the reasons for them to take part can only be assumed so far.

Open Source Marketing Motivational Dimensions

Ample of research has been made to elaborate and identify consumer motivational drivers. Theories differ on the particular needs that a person is attempting to fulfill and from where the energy is derived from, but almost all have in common that motivation requires a desire to act and having a mutual objective (Ramlall 2004). In this motivational theory effort, we therefore focus on the two well established approaches of (1) *need-based* and (2) *expectancy-based motivation* to explain individual participation in OSN.

- (1) Need-based motivation Need theories attempt to identify internal factors that energize behavior. Needs as defined previously are physiological or psychological deficiencies that arouse behavior. These needs can be strong or weak and are influenced by environmental factors (Blackwell et al. 2001, Solomon et al. 2002).
- (2) Expectancy-based motivation "Expectancy theory holds that people are motivated to behave in ways that produce desired combinations of expected outcomes" (Kreitner & Kinicki 1999, p.227). An individual will therefore act in a certain way based on the expectation that the act will be followed by a given outcome and on the attractiveness of that outcome to the individual (Vroom 1964).

Thus, participating in an OSN requires one ore more unfulfilled needs as well as the individual expectancy that the need-based deficiencies could be removed by the specific OSN. Together, these two theories (need and expectancy) are assumed to explain an individual's willingness to actively participate in an OSN.

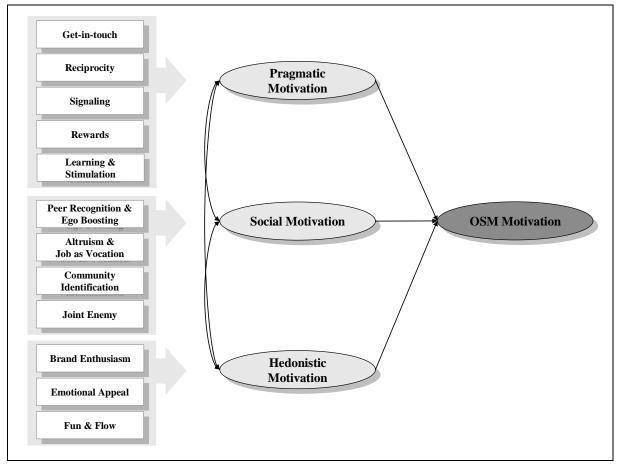
Against this background, Figure 1 shows our proposed conceptual model to investigate specific OSN motivations and motivational drivers. To analyze OSM Motivation, our conceptual model integrates the three dimensions of a pragmatic, a social and a hedonistic motivation.

Pragmatic Motivation: A pragmatic motivation integrates all need and expectancy based motivations that are related to a direct benefit for the consumers' participation in an OSN like e.g. receiving appealing compensations (rewards), enhancing one's individual job perspectives (signaling), meeting respectable personalities (get-in-touch) or receiving help in other projects (reciprocity).

Social Motivation: The social dimension integrates all motivational factors that are related to interpersonal relationships in the community like identification processes, peer recognition, altruism or a joint enemy (e.g. a competing brand or a dominating company like Microsoft in the software market).

Hedonistic Motivation: The hedonistic motivation finally includes specific and non-specific emotional drivers for participating in an OSN like emotional appeal and brand enthusiasm (is there an emotional brand/consumer fit and has the brand the power to activate?) and fun and flow experiences during the community work.

Figure 1
The Conceptual Model of Consumers' Motivation in OSM



Conceptualization and Propositions: Determinants of A Customer's Motivation In OSM With regard to the three main dimensions of a pragmatic, a social, and a hedonistic motivation and related key drivers, Figure 2 shows a hypothetical taxonomy of consumers' motivation in OSM.

Pragmatic Motivation Dimensions

Get-in-touch: Celebrities, stars and experts influence consumers' behaviour ever since. They help grab attention, create awareness, and communicate effectively with consumers who admire them or aspire to be like them (Blackwell et al. 2001, Solomon et al. 2002). As OSNs in general and OSM projects in particular often attract leading executives and famous specialists, interested consumers can specifically target persons they wish to meet or work with (Weber 2004, Cherkoff 2005, Raymond 2001). Getting in touch with these celebrities is therefore a main driver for OSN motivation. Consequently,

P₁: The chance of cooperating with a leading company executive or a famous expert in a collaborative project may affect an individual's motivation to participate in an OSN.

Figure 2
Hypothetical Taxonomy of Consumers' Motivation in OSM

Motivation	Motivation Dimensions	References
	Get-in-touch	Cherkoff (2005), Weber (2004), Raymond (2001), Solomon et al. (2002), Blackwell et al. (2001)
	Signaling	Lakhani & Wolf (2005), Hertel et al. (2003), Lerner & Tirole (2002), Lerner & Tirole (2001)
Pragmatic	Rewards	Lakhani & Wolf (2005), Hertel et al. (2003), Lerner & Tirole (2002), Hars & Ou (2002), von Hippel (2001),
	Reciprocity	Holmström (1997), Simon et al. (1998), Frey (1997), Bonaccorsi & Rossi (2003), Franke & Shah (2003), Morrison et al. (2000), Riggs & von Hippel (1994), von Hippel (1988),
	Learning & Stimulation	Lakhani & von Hippel (2003), Lakhani et al. (2002), Lerner & Tirole (2002)
	Peer Recognition & Ego Boosting	Lakhani & Wolf (2005), Weber (2004), Krogh et al. (2003), Dalle & David (2003), Hertel et al. (2003), Bonaccorsi & Rossi (2003), Lerner & Tirole (2002), Moody (2001), Wayner (2000), Raymond (1999)
Social	Altruism & Job as Vocation	Weber (2004), Bergquiest & Ljungberg (2001), Raymond (2001)
	Community Identification	Lakhani & Wolf (2005), Weber (2004), Raymond (2001), Simon et al. (1998), Klandermans (1997), Kelly & Breinlinger (1995), Levy (1994)
	Joint Enemy	Weber (2004), Lerner & Tirole (2002), Raymond (2001)
	Brand Enthusiasm	Roberts (2005)
Hedonistic	Emotional Appeal	Lakhani & Wolf (2005), Weber (2004), Hertel et al. (2003), Lerner & Tirole (2002), McVoy (1993)
	Solomon et al. (2002), Weber (2005), H Tirole (2002), Lerner & Ti Tirole (2002), Lerner & Ti Tirole (2002), Lerner & Ti Tirole (2002), Hars & Our Holmström (1997), Simon Bonaccorsi & Rossi (2003) Morrison et al. (2000), Rig Hippel (1988), Learning & Stimulation Peer Recognition & Ego Lakhani & Wolf (2005), W (2003), Dalle & David (2008) Bonaccorsi & Rossi (2003) Moody (2001), Wayner (2004), Bergquiest (2004), Bergquiest (2001) Community Lakhani & Wolf (2005), W (2001) Community Lakhani & Wolf (2005), W (2001) Community Lakhani & Wolf (2005), W (2001) Joint Enemy Weber (2004), Lerner & T (2004), Lerner & T (2004) Brand Enthusiasm Roberts (2005) Emotional Appeal Lakhani & Wolf (2005), W (2003), Voiskounsky & Sr (2003), Voiskounsky & Sr (2003), Voiskounsky & Sr	Lakhani & Wolf (2005), Nakamura & Csikszentmihalyi (2003), Voiskounsky & Smyskiva (2003), Torvalds & Diamond (2002), Himanen (2001), Csikszentmihalyi (1975)

Signaling: Related to mainly OSN specific esteem-needs like individual reputation development or the social motivation dimensions of peer recognition and ego-boosting (Hertel et al. 2003) is the factor of signaling. Within a large and decentralized OSN, individual reputation can be regarded as a necessary cognitive component of concrete feedback (Lakhani & Wolf 2005, Lerner & Tirole 2002, Lerner & Tirole 2001). Hence, the concept of signaling is of particular importance: Many community members regard their participation in an OS project as a demonstrative act to show the quality of their work. Reputation within a well-informed and self-critical community network becomes an efficient proxy measure for that quality. Integrating social or norm-oriented motives, signaling includes expected reactions of relevant others such as family members, colleagues, actual or potential employers or friends. The more positive the expected reactions of relevant others are, weighted by the perceived importance of these others; the

higher is supposed to be the motivation for taking part and contributing to an OSN (Klandermans 1997). Consequently,

P₂: The possibility to signal one's skills to relevant others may affect an individual's motivation to take part in an OSN.

Rewards: The third pragmatic motivation dimension includes predominantly *reward-oriented* benefits. Motivations of this dimension originate from expected costs and benefits such as investment of time and money, making new friends, or risking one's health (Simon et al. 1998). The higher and the more likely the expected gains are perceived, the higher is the motivation to participate in a network like an OSN. The opposite holds for expected losses.

Economists have contributed the most to our understanding of how reward-oriented motivations drive human behavior: "The economic model of human behavior is based on incentives applied from outside the person considered: people change their actions because they are induced to do so by an external intervention. Economic theory thus takes [reward-oriented] motivation to be relevant for behavior" (Frey 1997, p. 13). Lerner and Tirole (2002) as well as Lakhani and Wolf (2005) also posit a rational consideration of costs and benefits in explaining why e.g. programmers choose to participate in an OSN. As long as the benefits exceed the costs, an individual is expected to contribute. The authors propose that the net benefit of participation consists of (1) immediate and (2) delayed payoffs:

- (1) Immediate payoffs for OSN participation can include being paid to participate and/or having an individual need for the object provided by the OSN like a specific OS software or marketing tactic (von Hippel 2001). Although the OS movement is often portrayed as an entirely volunteer enterprise, the possibility of paid participation (as mentioned before) should not be ignored as an obvious reward-driven motivation to participate (Lakhani & Wolf 2005, Hars & Ou 2002, Hertel et al. 2003). Firms benefiting from OSNs (like IBM or P&G) may hire freelancers to participate in OSN because they are either specialists in a specific field of work speeding developments up or have a high reputation in the community influencing other OSN members to focus on special tasks. In either case, firms make a rational decision to hire programmers to contribute to OSNs.
- (2) *Delayed benefits* to participation include mainly career advancement through e.g. signaling or *individual reputation development* (Holmström 1999) and/or improving skills (*learning and stimulation*). On the one hand, participants can recommend themselves to potential employers e.g. in case of an OSS project their superior (programming) skills and talents by contributing (code) to projects where their performance is monitored by any interested observer. On the other hand, firms searching for a particular skill in the labor market can easily find qualified employees by examining (code) contributions in OSNs. Consequently,

P₃: The character and expected value of reward-oriented benefits in terms of immediate and/or delayed benefits may affect an individual's willingness to participate in an OSN.

Reciprocity: As mentioned above, another immediate benefit relates to the direct use of the object or the ideas provided by the OSN. Research on the sources of innovation has shown that users in general and lead users in particular have strong incentives to create solutions to their particular needs in diverse fields, e.g. industrial products (von Hippel, 1988), scientific instruments (Riggs & von Hippel, 1994), library information systems (Morrison et al., 2000), or sports equipment (Franke & Shah, 2003). Furthermore OSN members often hope to get help and support in the future given that their previous contributions to the community or specific members of it have created a tacit reciprocity agreement (Bonaccorsi & Rossi, 2003). Thus user need to solve a particular problem and/or the possibility of future help in other projects, may also drive participation in OSNs. Consequently,

P₄: The incentive to create solutions to their particular needs and/or the possibility to create a tacit reciprocity agreement by helping the community may affect an individual's willingness to participate in an OSN.

Learning and stimulation: Closely related to a reciprocal motivation is a sense of *learning and stimulation* in task accomplishment (Lakhani & von Hippel 2003, Lakhani et al. 2002, Lerner & Triole 2002). Even though an OSN dedicated to the development of e.g. an operating system for a computer may not be considered extremely creative or stimulating by outside observers, it may be rated as a highly creative and challenging problem-solving process and good learning opportunity by some individuals engaged in the project – the same holds for other creative processes like e.g. developing a mission statement or a complete marketing campaign during an OSM project. Consequently,

P₅: The possibility to learn and to improve one's skills in challenging projects may affect an individual's willingness to participate in an OSN.

Social Motivation Dimensions

Peer recognition and ego boosting: Peer recognition and individual ego-boosting are main motivating forces in OSN. The challenge of e.g. programming in the OS environment is a source of satisfaction. This is a consistent finding across most surveys (Lakhani & Wolf 2005, Hertel et al. 2003, Lerner & Tirole 2002, Weber 2004, Bonaccorsi & Rossi 2003). Therefore, ego as a main motivator is not only tolerated but openly accepted in many online communities.

In addition, participants improve their programming skills through the active peer review that is prevalent in OSNs (Weber, 2004; Moody, 2001; Raymond, 1999; Wayner, 2000). In general, contributions to the community (like software code in an OSS project) have to pass an intense peer review before and after submissions become part of the solution (e.g. the official software). Credit files and public e-mail archives ensure that e.g. bad working styles or the disrespect to conventions and logic are communicated back to the original author, same holds for excellent work. Peers in every OSN, members, and interested outsiders, who discover mistakes, often suggest specific changes to improve the outcome of the project (von Krogh et al., 2003; Dalle & David, 2003). This interactive process improves both, the quality of the work and the overall skills of the individual participants. Consequently,

P₆: The possibility to demonstrate one's skills to others (peers) as a source of satisfaction may affect an individual's willingness to participate in an OSN.

P₇: The possibility to work and to improve one's skills under a comprehensive peer review may affect an individual's willingness to participate in an OSN.

Altruism and Job as Vocation: The integration of aesthetic needs in their OSN work is part of an OSN member's experience of their job as vocation (Weber 2004, Bergquiest & Ljungberg 2001, Raymond 2001). It is a practical benefit to get something to work/develop a special solution or idea for your own use. Sharing this solution or idea with other people in the world via internet can even bring additional satisfaction as e.g. a specific software code or a new marketing technique can help hundreds of other OSN members get their companies running - particularly if the cost of sharing is near zero. Consequently, P₈: The possibility of working in a beloved domain and therewith altruistically helping others finding a

P₈: The possibility of working in a beloved domain and therewith altruistically helping others finding a solution for a given problem will affect an individual's willingness to participate in an OSN.

Community Identification: The closer an individual identifies with an OSN or an active subgroup, the higher is the likelihood for taking part personally – a strong element of a shared *identity and belief system* within the community (Weber 2004, Lakhani & Wolf 2005, Raymond 2001, Levy 1994). For instance, OSS programmers, who do not just appreciate, but actually live the idea of "free" software, only participate in an OSS project, when they find like-minded people. Individuals, who feel and define themselves as members of an OSN and behave according to the norms and standards of this group, do not simply weigh costs and benefits when they decide whether they want to be involved in a group, they also look for an identity fit with the OSN. In this context it has to be stated, that the identification with more specific subgroups is a better predictor of the willingness to contribute to the social movement than identification with the movement as a whole (Simon et al. 1998, Klandermans 1997). For example, identification as a feminist was a better predictor for the willingness to participate in woman-related

movement than identification as a woman (Kelly & Breinlinger, 1995). Similar processes can be assumed for OSNs. Consequently,

P₉: A shared identity and belief system within the OSN community or an active sub group is a key predictor for an individual's community participation and identification and may affect an individual's willingness to participate.

Joint Enemy: To many network members, community participation and identification is part of an ongoing battle with a *joint enemy* (Weber 2004, Lerner & Tirole 2002). In OSS networks, e.g. Microsoft is such an often scold villain. However, this single company only acts as a proxy for many companies developing proprietary products or services. The underlying motivation here is simple to understand: it combines concerns about business practices, (technical) aesthetics, freedom, and independence. Consequently,

 P_{10} : The existence of and possibility to ally oneself against a joint enemy may affect an individual's willingness to participate in an OSN.

Hedonistic Motivation Dimensions

Brand Enthusiasm: For OSN members it is not only relevant what they do but rather for whom they do it. In this domain falls the strong motivational effect of brand enthusiasm. Some brands (like Firefox or Apple) have the emotional power to activate their customers in a way that they voluntarily engage in business related communities like Internet forums, Chats (e.g. IRCs) or even brand-focused fan clubs (Roberts 2005). Consequently, P₁₁: Brand enthusiasm as a strong emotional motive force may affect an individual's willingness to participate in an OSN.

Emotional Appeal: "Aesthetics" describes the way a lot of OSN members think about their work. OSS developers for example do not consider writing software codes as a mere engineering problem but as an aesthetic challenge. To them, engaging in an OS project is an act of self-expression; quality and beauty both matter as there are always several ways to solve an (engineering) problem. The motivational need for aesthetical self-expression is a consisting finding across a variety of OSN related studies (Lakhani & Wolf 2005, Lerner & Tirole 2002, Weber 2004, McVoy 1993, Hertel et al. 2003). Consequently,

 P_{12} : The possibility of and motivational need for aesthetical self-expression may affect an individual's willingness to participate in an OSN.

Fun and Flow: Closely related to emotional appeal and job as vocation is the dimension of fun and enjoyment. One of the first psychologists to study this motivational driver was Csikszentmihalyi (1975), who emphasized that some activities are pursued for the sake of the enjoyment derived from doing them. He proposed a state of "flow", in which enjoyment is maximized, characterized by intense and focused concentration; a merging of action and awareness; confidence in one's ability; and the enjoyment of the activity itself regardless of the outcome (Nakamura & Csikszentmihalyi 2003, Voiskounsky & Smyskiva 2003, Lakhani & Wolf 2005, Weber 2004, Diamond & Torvalds 2002).

Flow states occur when a person's skill matches the challenge of a given task. In this optimal zone of activity, flow is maximized. If a task is beyond the skills of an individual, it will provoke anxiety, and if a task is below the person's skill level, it will induce boredom. Therefore, enjoyable activities are found to provide feelings of "creative discovery, a challenge overcome and a difficulty resolved" (Csikszentmihalyi 1975, Lakhani & Wolf 2005). Existing research referring to the participation in OSN in general and programming in particular (Lakhani & Wolf 2005, Voiskounsky & Smyslova 2003, Himanen 2001, Torvalds & Diamond 2001) confirm a state of flow achieved by people engaged in specific community tasks. Thus, OSN participants may be seeking flow states by selecting OS projects that match their skill levels with the given task difficulty, a choice/challenge that may not be available in their regular jobs. Consequently,

 P_{13} : The enjoyment of a challenging activity and the possibility to reach a state of flow while working in and/or for the community may affect an individual's willingness to participate in an OSN.

DISCUSSION AND IMPLICATIONS

Having more robust measures of motivational drivers is of course a key for managerial practice integrating OS ideas in traditional network management. In view of our propositions concerning the impact of a social and hedonistic motivation on the willingness to take part in an OSM project, managers might discover the power and relevancy of a relationship based collaborative marketing community supporting traditional marketing campaigns and in view of a pragmatic motivation the possibilities to identify and target new employees with high capabilities. Overall, taking the interplay between OSN motivation and OSM participation into account our framework already might lead to the opportunity of a better understanding of the conditions and drivers of an OSN in order to innovate and to come to a broadened view of network organization and development in general. This will of course enlarge the efficiency and possibilities of companies operating in the private and non-profit sectors to evaluate the value of existing OS projects and OSNs in the future.

Future Research Steps

Focusing on the link between motivation and participation in an OSN, this paper has examined the theoretical dependencies of motivational sources (needs), general drivers (expectancy-dimensions) and individual motives for taking part in an OSN in general and an OSM project in particular.

Of course, our model is only a first step and should be further developed in different ways. First, the different hypotheses sketched above will have to be elaborated in more detail. Second, in the next step of developing hypotheses, we should as well emphasize the interplay between the different variables. This will have to lead to a proper causal modeling of effects between the dimensions of OSN motivation and OSM participation. In this context we will also have to add the conceptualization of different forms of OSNs' and consumer characteristics (typologies) and their explanation in view of their impacts on motivations. As important the generation of such an extended model might be, we believe that first of all, we should try to empirically find out the relevancy of different variables measuring motive intensity and rank to portray need and goal-oriented motivation in a more aggregated sense. Against this background we might concentrate a more advanced causal modeling on important variables. Such a procedure seems to be important insofar as the amount of variables and relationships between them is so high that one would run the risk "getting lost in complexity".

Preparing the empirical test of our model the dimensions of the analyzed motivational dimensions and factors need to be operationalized. In some cases we already can fall back on already existing and somewhat tested measures, in other cases we will have to start from scratch. Especially in view of the different dimensions of OSNs' characteristics it might be worth starting with exploratory interviews with well-experienced OS community network members, which are likely to yield further items. Further steps of the empirical work have, of course, to meet the state of the art of the use of sophisticated multivariate methods. For example, it might be useful to compare different approaches of formative and reflexive construct development and testing (Diamantopoulos & Winklhofer, 2001, Jarvis et al. 2003), and, due to the fact that we cannot assume linear relationships between the different variables, we should also draw on nonlinear causal modeling (cf. also using neural networks).

Despite the limitations and necessary steps in future research, the primary contribution of our framework lies in developing and explaining a model of motivation explanation and genesis in OSM projects.

REFERENCES

Bergquiest, M./Ljungberg, J. (2001): The power of gifts: organizing social relationships in Open Source communities. European Journal of Information Systems, 11 (4), 305-320.

Berkman, H. W./ Lindquist, J. D./Sirgy, J. M. (1997): Consumer behavior, Chicago: NTC Publishing Group.

Blackwell, R. D./Miniard, P. W./Engel, J. F. (2001): Consumer behavior (9 ed.), Fort Worth et. al. 2001.

Bonarccorsi, J./Rossi, C. (2003): Why Open Source software can succeed. Research Policy, 32 (7), 1242-1258.

Brøndmo, H.-P.: (2004): Open-Source Marketing. http://www.clickz.com/experts/brand/sense/article.php/3397411

Cherkoff, J. (2005): End of the Love Affair. The love affair between big brands and mass media is over. But where do marketers go next? The Open Source Movement has the answers.... http://www.collaboratemarketing.com/open_source_marketing/

Christ, P. (2004): Can Open Development Work for Marketing Activities? http://www.knowthis.com/articles/marketing/collaboration.htm/

Csikszentmihalyi M. (1975): Beyond boredom and anxiety: The experience of play in work and games, San Francisco: Jossev-Bass.

Dalle, J.M./David, P.A. (2003): The Allocation of Software Development Resources in 'Open Source' Production Mode. *MIT Working Paper*, http://opensource.mit.edu/papers/dalledavid.pdf

Deci, E. L./Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*, New York, NY: Plenum Press.

Diamantopoulos, A./Winklhofer, H. M. (2001): Index construction with formative indicators: An alternative to scale development, *Journal of Marketing Research*, 38 (2), 269-277.

Feller, J./Fitzgerald, B. (2002): *Understanding open source software development*. London: Addison-Wesley.

Franke, N./Shah, S. (2003): How communities support innovative activities: an exploration of assistance and sharing among end-users, Research Policy, 32 (1):157-178.

Frey, B. (1997): Not just for the money: an economic theory of personal motivation. Brookfield. VT: Edward Elgar Publishing Company.

Ghosh, R. A./Glott, R./Krieger, B./Robles, G. (2002): Survey of developers.

http://floss.infonomics.nl/report/FLOSS_Final4.pdf.

Hars, A./Ou, S. (2002): Working for free? Motivations for participating in Open -Source projects, International Journal of Electronic Commerce, 6 (3):25-39.

Hertel, G./Niedner, S./Herrmann, S. (2003): Motivation of software developers in Open Source projects: an Internet-based survey of contributors to the Linux kernel, Research Policy, 32, 1159-1177.

Himanen, P. (2001): The hacker ethic and the spirit of the information age, New York: Random House.

Holmström, B. (1999): Managerial incentive problems: A dynamic perspective, Review of Economic Studies, 66 (169-182).

Jarvis, C. B./MacKenzie, S. B./Podsakoff, P. M (2003): A critical review of construct indicators and measurement model misspecification, Journal of Consumer Research, 30 (2), 199-218.

Kelly, C./Breinlinger, S. (1995): Identity and injustice: Exploring women's participation in collective action, Journal of Community and Applied Social Psychology, 5, 41-57.

Klandersmans, B. (1997): The social psychology of protest, Oxford: Basil Blackwell.

Kretiner, R./Kinicki, A. (1998): Organizational Behavior (4 ed.), Boston: Irwin McGraw-Hill.

Lakhani, K. R./Wolf, B./Bates, J./DiBona, C. (2002): Hacker survey. http://www.osdn.com/bcg/.

Lerner, J./Tirole, J. (2002): The simple economics of open source. Journal of Industrial Economics, L: 197-234.

Levy, S. (1994): Hackers. Heroes of the computer revolution, New York: Penguin Books.

Maslow, A. (1943): A theory of human motivation, Psychological Review, 50, 370-396.

Maslow, A. (1954): Motivation and personality, New York: Harper.

Mitchell, T. R. (1982): Motivation: New directions for theory, research, and practice, Academy of Management Review, 7, 80-88.

Moody, G. (2001): Rebel Code: Inside Linux and the Open Source revolution. New York: Perseus Press.

Morrison, P. D/Roberts, J. H./Von Hippel, E. (2000): Determinants of user innovation and innovation sharing in a local market, Management Science 46 (12):1513-1527.

Nakamura, J/Csikszentmihalyi, M. (2003): The construction of meaning through vital engagement, in Flourishing: positive psychology and the life well-lived, edited by C. L. Keyes and J. Haidt, Washington, DC: American Psychological Association.

Omoto, A. M./Snyder, M. (1995): Sustained helping without obligation: Motivation, longevity of service, and perceived attitude change among AIDS volunteers, Journal of Personality and Social Psychology, 68, 671-686.

Perens, B. (1999): The open source definition, in DiBona C./Ockman S./Stone M. (Eds.), Sources: Voices from the Open Source revolution: 171-196. Sebastopol, CA: O'Reilly.

Ramlall, S. (2004): A review of employee motivation theories and their implications for employee retention within organizations, The Journal of American Academy of Business, Cambridge, MA: 52-63.

Raymond, E. S. (2001): The cathedral and the bazaar: Musings on Linux and open source by an accidental revolutionary, Sebastopol, CA: O'Reilly.

Riggs, W./Von Hippel, E. (1994): Incentives to innovate and the sources of innovation: The case of scientific instruments. Research Policy 23 (4):459-469.

Robbins, S. (1993): Organizational Behavior (6 ed.), Englewood Cliffs: Prentice-Hall.

Simon, B./Loewy, M./Stürmer, S./Weber, U./Freytag, P./Habig, C./Kampmeier, C./Spahlinger, P. (1998): Collective identification and social movement participation, Journal of Personality and Social Psychology, 74, 646-658.

Roberts, K (2005): Lovemarks: The Future Beyond Brands, New York: PowerHouse books.

Stallman, R. (2002): Free software, free society, Boston, MA: GNU.

Solomon, M./Bamossy, G./Askegaard, S. (2002): Consumer behaviour: A European perspective, Edinburgh, England: Pearson Education.

Steers, R./Porter, L. (1983): Motivation and work behavior (3 ed.), New York: McGraw-Hill Book Company.

Stephens, D. C. (Eds.) (2000): The Maslow Business Reader, New York: Wiley.

Torvalds, L. & Diamond, D. (2001): Just for fun: the story of an accidental revolutionary. New York, NY: HarperCollins.

Voiskounsky, A./Smyclova, O. (2003): Flow-based model of computer hackers' motivation, CyberPsychology & Behavior, 2 (6), 171-180.

Von Krogh, G./Spaeth, S./Lakhani, K. R. (2002): Community, joining, and specialization in open source software innovation: A Case Study, Research Policy, 32. 1217-1241.

Von Hippel, E. (1988): The Sources of Innovation, New York, NY: Oxford University Press.

Vroom, V. H. (1964): Work and motivation. New York: Wiley.

Wayner, P. (2000): Free for all: How Linux and the free software movement undercuts the high-tech titans, New York: HarperBusiness.

Weber, S. (2004): The success of open source, Cambridge, MA: Harvard University Press.

INTEGRATING MARKETING ACTIVITIES: CASE STUDY IN MALAYSIA

Rabaah Tudin

University Malaysia Sarawak, Sarawak, Malaysia E-mail: trabaah@feb.unimas.my

ABSTRACT

Globally, issues on the integration of marketing activities have gained massive attention. The aim of this research is to understand the integration of marketing activities conducted by Bumiputra companies in Malaysia. Data were gathered through in-depth interviews and 63 interviews were usable. The findings suggest that Bumiputra companies practiced both transactional and relational marketing activities on a daily basis.

INTRODUCTION

Marketing issues have been extremely widely discussed in the literatures of Western countries such as the United Kingdom (UK) and the United States of America (USA), and the contribution of marketing disciplines to business activities has been widely recognized. The ideas formed in marketing definition are implemented through the concepts of marketing. The marketing concept found in textbooks or Western marketing circles is that marketing is a process whereby 'an organization or individual achieves its goals by providing products or services that satisfy its target consumers better than their competitors through the integration of marketing activities' (Wentz, 1979; Murphy & Enis, 1985; Zikmund & D'Amico, 1999; Pride & Ferrell, 1989; Evans & Berman, 1994; Schoell & Guiltinan, 1995; Kotler & Armstrong, 1999; Perreault & McCarthy, 1999). According to Gummesson (1994), in theory (at least) both the marketing mix theory and relationship marketing (RM) are based on the marketing concept that puts customers and their needs as the center. In agreement with Gummesson, Gronroos (1989), Sin, et al. (2002) and Petrof (1997) claimed that RM is embedded in marketing theory.

The practice of marketing activities might differ between companies located in the West and East. Robins (1996) claimed that Western businesses engaging in trade in Northeast and Southeast Asia for the first time do not always recognize the major impact that the industrial development policies of non-Western governments have on their domestic markets and local marketing practice. Empirical evidence is needed to confirm this finding, as Robins' sources of data are secondary, for example, magazines and financial and economic reviews. Arising from Robins' literature, primary research is needed to understand the extent of marketing activities conducted by companies in Malaysia. Specifically, the objectives of this project are to determine whether Bumiputra businesses adopt relational model, if so, is the relationship model adopted by Bumiputra companies seen as a perceived aid to achieving marketing objectives and to examine the integration of marketing activities practised by Bumiputra companies.

LITERATURE REVIEW

Although many issues are discussed under the marketing concept, special attention is given to discussion on the integration of marketing activities. In order to know what the customer needs or wants and then to satisfy those needs or wants, many marketing activities have to be integrated. All the integrated marketing activities have to be managed efficiently so that the products or services are offered to the target customers at optimum value. Kotler (1972) claimed that there is a distinction between marketing and marketing management. The author believed that marketing is a descriptive science involving the study of how transactions are created, stimulated, facilitated and valued (also called the generic concept of marketing [Kotler, 1972]). Meanwhile, marketing management is a normative science involving the efficient creation and offering of values to stimulate desired transactions.

All the marketing activities can be categorized as either direct marketing or indirect marketing. Direct marketing involves things that consumers can easily see and distinguish from one company to another. Examples of direct marketing are the packaging of products, advertising, personal selling,

building or renting a prestigious space for the showroom and giving price discounts. Indirect marketing, in contrast, entails activities which cannot be seen by the consumer or customers who are directly involved in the interaction without realizing. Indirect marketing works slowly and imperceptibly in the mind and perception of the consumer. Examples of indirect marketing are word of mouth, creating rapport, creating networking especially with industrial customers, interacting with customers personally, interaction with intermediaries, institutional bodies and other companies within the business network. Direct marketing is implemented through the marketing mix while indirect marketing is implemented through "relationship marketing".

The marketing Mix

Several marketing thinkers have discussed and proposed the important elements that should characterize the marketing mix. In the early 1960s, Borden listed 12 activities in what he called the 'marketing mix', namely product planning, pricing, branding, channels of distribution, personal selling, advertising, promotions, packaging, display, servicing, physical handling and fact finding and analysis (Borden, 1991). Perreault & McCarthy (1999) later re-categorized these activities (excluding fact finding and analysis) as the 4Ps namely product, price, place and promotion.

Not completely satisfied with the 4Ps concept, Wentz & Eyrich (1970) included another element, marketing research, but it seems that Borden's fact finding and analysis and the marketing research category proposed by Wentz & Eyrich are similar. The purpose of doing marketing research is exactly to gather information and subsequently to analyze the data.

About twenty years after the existence of McCarthy's 4Ps, Booms & Bitner (1981) added another 3Ps to McCarthy's 4Ps to cater for service firms, making the total 7Ps. These 3Ps are Participants, Physical Evidence and Process of Service Assembly. These 7Ps were agreed by Cowell, but he changed the word 'participants' to 'people' listing People, Physical Evidence and Process of Service Assembly as the 3 extra Ps (Cowell, 1984). The physical evidence element however, is similar to McCarthy's element of 'place'. Examples of physical evidence given by Booms & Bitner (1981) are furnishings, color, layout and noise level. These activities would be more appropriately developed under the heading of 'place', since this applies not only to product marketing but also to services marketing. For instance, a doctor opening up a clinic would need a place and that place must meet the standard hygiene levels, have proper furniture, a low noise level and fit the mood of the visiting patients. The new concepts emanating from this article are the elements of participant and process. 'Participant' recognizes the vital contribution of the organization's employees and the element of process is to check the overall system operating in the organization.

In 1992, Rafiq & Ahmed (1995) conducted an exploratory survey on using the 7Ps as a generic marketing mix. The respondents were delegates of the UK's Marketing Education Group (MEG) Conference held in Salford in 1992 and the European Marketing Academy (EMAC) Conference held in Aarhaus, Denmark in May 1992 (Rafiq & Ahmed, 1995). A postal survey was used to gather information and 46 usable questionnaires were received from the UK respondents while 59 responded from the non-UK delegates. The respondents held the positions of professors, associate professors, assistant professors and research students. The results suggest a high degree of dissatisfaction among the respondents with the 4Ps framework and a high degree of acceptance for the 7Ps framework as a generic marketing mix (Rafiq & Ahmed, 1995). Rafiq & Ahmed (1995) claimed that these results support their contention that Booms and Bitner's 7Ps framework should replace McCarthy's 4Ps framework as the generic marketing mix.

Many of the marketing activities discussed by the Western marketing thinkers had traditionally centered on direct marketing. However, in 1986 Kotler highlighted the importance of indirect marketing. Kotler (1986) claimed that companies which wanted to enter a new market either domestically or internationally, for example, a new state or a new country, might want to use *megamarketing*. Kotler defined megamarketing as the strategically coordinated application of economic, psychological, political and public relations skills to gain the cooperation of a number of parties in order to enter and /or operate in a given market. In order to carry out megamarketing, Kotler (1986) believed that executives must add

power (including political power) and public relations to McCarthy's 4Ps. Power and public relations are intangible areas and customers must experience these activities by reading or listening to the media, otherwise they might not know that the companies are carrying out these activities.

In Singapore, the article by Low & Tan (1995) provided some insights into a typical construction firm's marketing strategy based on a better understanding and comparison of Sun Tzu's *The Art of War* and basic marketing concept. *The Art of War* was used to analyze the effectiveness of the P factors proposed by the Western world (Low & Tan, 1995). In terms of the marketing mix, *The Art of War* seems to incorporate 9 of the P factors, namely, product, place, promotion, price, power, public relations, personnel, physical facilities and process management. However, Low & Tan's research was based on secondary sources. Research using empirical evidence is needed to support the secondary research study in understanding the true nature of the marketing mix variables that are needed in Eastern countries such as Singapore or Malaysia.

The integration of marketing activities has received increased attention from marketing thinkers mainly because the core of marketing is the marketing mix (the 4Ps) (Gronroos, 1989). Borden's 12-element marketing mix was re-categorized into 4Ps and later discussed in terms of 9Ps by Low & Tan (1995). The direct marketing elements in the marketing mix are also extended to include indirect forms of marketing, such as power and politics. From the discussion above, it seems currently that marketing activities are categorized under product, price, promotion, place, market research, participants, process, power and public relations (9 elements).

Relational Marketing

Gronroos (1996) claimed that the relationship philosophy relies on co-operation and a relationship of trust with customers, other stakeholders and network partners. Besides the importance of the traditional elements of the marketing mix, relational marketing demonstrates that so much else may be of importance to marketing, such as to establish and develop long-term customer relations, than the means of competition represented by the traditional marketing mix (Gronroos, 1989). There are indications that the basic values of the manipulative marketing mix theory have not changed, except that RM is often comprehended as a firmer grip on the customer (Gummesson, 1994).

Many marketing authors have conducted research to provide empirical evidence concerning relationship-marketing activities. These authors include those researching in the Western environment and the Eastern environment. In relation to market sectors, the empirical studies on manufacturing, services and consumer-packaged goods were conducted in New Zealand, Denmark, USA, China and Ireland.

In New Zealand and Denmark, Lindgreen (2001) researched on manufacturing sector. Lindgreen investigated three case studies – a Danish food catering company, a Danish dairy company and some New Zealand exporters of wine (10 wineries). Findings showed that the Danish food catering company had moved from transaction marketing to RM (Lindgreen, 2001). While, the Danish dairy company suggested that a pluralistic approach to marketing was being practiced. In this Danish dairy company, transaction marketing was implemented in some instances and RM was implemented in other instances – the approach depended on the particular business partners (Lindgreen, 2001). On the other hand, the exporters of wine in New Zealand suggested that the approach to marketing could be any one of four different approaches: transaction marketing, relationship marketing, a hostage situation and a free rider situation. In transaction marketing is when the seller was proposing a generic offer and the buyer sought to satisfy a generic need; RM is when the seller was developing a unique offer proposition for buyer who sought to satisfy a specific need; hostage situation is when the buyer seeks to satisfy a special need but the seller is proposing a generic offer; and in the free rider situation the buyer seeks to satisfy a generic need but the seller wants to develop a close relationship (Lindgreen, 2001).

The empirical studies on services sector in this section are based on research conducted by Voss & Voss, Hausman and Sin, et al. Voss & Voss (1997) conducted research on PlayMakers Repertory Company (PRC), a non-profit professional theatre located in Chapel Hill, North Carolina (USA). A total of 477 usable surveys from 11 performances were obtained from a set of respondents ranging from single-

ticket buyers to long-time subscribers. PRC used database marketing, word-of-mouth and other relational forms of motivation (Voss & Voss, 1997). Voss & Voss (1997) claimed that service firms which could establish relationships based on shared values as well as governance structures (such as subscriptions) might be more successful in satisfying and retaining their best customers. Contrary to Voss & Voss, Hausman (2001) conducted research on a hospital, a profitable organization in the USA. A total of 92 usable mail questionnaires were gathered from respondents responsible for purchasing medical and surgical supplies for their hospitals (Hausman, 2001). The results of empirical tests suggested that relationship strength varies significantly within the healthcare supply chain and that these differences impact upon the hospital's ability to achieve positive joint outcomes (Hausman, 2001). Hausman (2001) claimed that the key to success lies in a combination of trust, commitment and relational orientation on either side. In Hong Kong (China) Sin, et al. (2002) conducted research on service firms and obtained 279 usable questionnaires. His analysis showed that 77.5% of the firms employed 100 or fewer employees, 9.7% employed between 101 and 500 and 10.4% employed above 500. His results suggest that the relationship marketing orientation (RMO) has a positive impact on sales growth, customer retention, return on investment (ROI), market share and overall performance (Sin, et al., 2002). His findings are that bonding is the only variable, among the 6 components (trust, bonding, communication, shared value, empathy and reciprocity) of the RMO, which has a positive and significant association with sales growth, customer retention, ROI and overall performance (Sin, et al., 2002).

Issues in consumer packaged goods sector were derived from Quinn's personal experience. Quinn (1996) introduced a "boomerang" principle of bringing the customer back by concentrating on three key tasks, namely, to get every member of the team working to meet customer needs; to create a bigger, better marketing department than any of the competitors; and to reward customer loyalty. Quinn (1996: 11) claimed that in the future even more than in the past, *the customer must be king*. Quinn emphasized on getting as close to the customers as possible and satisfying them. His experience of how to "create a bigger and better marketing department than the competitors" was a consequence of learning from customers and satisfying them. Competitiveness or the level of competition was acted upon after the information was generated and responded to. The third way to compete in the market and retain customers was to reward customer loyalty (Quinn, 1996). Selling consumer goods by frequently communicating with the customers suggested that the Superquinn supermarket adopted both transactional and relational marketing.

Relationship Marketing is a practice by all firms however, the level of activities differs in relation to the market served. High level of relationship marketing seems to be practiced by business-to-business sectors and services sectors. Despite Quinn experiences with his customers, O'Malley & Tynan (2000) claimed that RM in consumer markets was more rhetoric than reality.

RESEARCH METHODOLGY

The study will be using primary data that were collected through qualitative method, namely, a face-to-face in-depth interview. The gathering of final data was conducted between January to March 2003. The survey population of this research consists of the private limited Bumiputra business organizations registered in Malaysia between 1972 and 1996. Bumiputra refers to all the natives such as the Malays, Melanaus, Ibans, Kedayans, Muruts, and many more (excluding Chinese and Indians). The companies investigated in this project are those registered with the Companies Commission of Malaysia. As of December 1996, there were 417,941 companies registered in Malaysia, of which 411,673 were private limited companies (CCM, 1996). A sampling unit is one strategic business unit (SBU). Senior managers or owners were interviewed in the organization investigated. Probability sampling was used to conduct this study. All the sampling units were chosen randomly until saturation point was reached (Lincoln & Guba, 1985). The total number of interviewed Bumiputra companies was 79, but information from only 63 companies was usable.

In-depth Interview was semi-structured and the questions were divided into 3 main parts, namely: the company's background, marketing mix and other related marketing activities. The company's background includes industry background, business main activity, the number of employees hired and

year of company's registration or operation. Marketing mix activities include product development, pricing strategy, suitability of the location and promotional activities. Marketing activities that were not covered under the marketing mix were placed under other related marketing practices. Other relevant questions asked were the company's target market group, reaction towards competitors and marketing research activities.

The duration of the interview was about 1 to 2 hours and the interview session was conducted at any time between 9 am to 6 pm. The information from the interviews was split up into many complete questions, with one idea per question. The responses were then allocated to the questions asked. After being checked, the content of the interview information was then analyzed. The information was coded consistently for the entire 63 interview responses, using a numerical index. The data were interpreted and then their contents were analyzed.

RESULTS

In terms of the number of employees, 92.9% of the companies in this project were small (150 staff or fewer) while the sizes of the companies researched by Sin, et al. (2002) were 77.5% small. Many marketing researchers investigated on specific industry such as the manufacturing sector (Lindgreen, 2001), construction sector (Low & Tan, 1995), services sector (Voss & Voss, 1997; Hausman, 2001) or fast moving consumer products (Quinn, 1996). On contrary, Bumiputra companies under investigation worked in different sectors namely: services sector (41.3%), consumer durables (17.5%), repeat industrial goods (14.3%), fast moving consumer products (12.7%) and other (14.3%) market sectors (Table 1). Markets categorized under 'other' included the construction and real estate markets.

Table 1 Market Sector

	Frequenc	Total %
	у	
Consumer Durables	11	17.5
Fast Moving Consumer	8	12.7
Products		
Repeat Industrial Goods	9	14.3
Services	26	41.3
Others	9	14.3
Total	63	100.0

The Relational Marketing

Objective 1: To determine whether Bumiputra businesses adopt relational marketing, if so, is the relational marketing adopted by Bumiputra companies seen as a perceived aid to achieving marketing objectives. Yes, Bumiputra businesses adopt relational marketing and relationship marketing is widely practiced in Malaysia. Among others, relational marketing is synonymously known as 'networking' or 'cable' in Malaysia. Relational marketing is known by many names such as relationship marketing in the west, networking in Malaysia or *guanxi* (Ambler, 1995; Luo, 1997) in China. All the Bumiputra companies investigated practiced networking or relationship marketing (Table 2). This finding contradicts those of O'Malley & Tynan (2000), who claim that relationship marketing in consumer markets is more rhetoric than reality: for Bumiputra companies, relationship marketing in consumer markets is a reality. In addition, Kotler's (1986) idea of power and politics in *megamarketing* is included in the networking process. In this project, networking was important both to those selling products and providing services and networks were mostly targeted at government officials or government bodies.

Table 2
Transactional & Relational Marketing Activities

Activities	Total
Enterprise	63
Promotion – 4 & above activities	41
Promotion – 3 & below activities	22
Total	63
Price (market)	21
Place (Strategic)	50
Product	25
Services	27
Product & Services	11
Total	63
Relationship Marketing	63

Networking is an unrecorded activity but is claimed to be the most effective marketing activity practiced by Bumiputra companies. A majority of respondents strongly believed that networking is the best marketing activity to achieve their companies' goal. In terms of marketing effectiveness, a majority of the companies (39.7%, 25/63) quoted networking as the main marketing activity and said that it had a higher level of effectiveness as a promotional activity than personal selling (20.6%, 13/63) and "tender, contract and quotation" (20.6%, 13/63) (see Table 3). Many companies which did not choose networking as their most effective marketing activity but chose personal selling instead (20.6%, 13/63) chose networking (23.8%, 15/63) as their second most effective marketing activity. This suggests that networking or relationship marketing plays a vital part in Bumiputra's business success.

For many Bumiputra companies, the role of networking, especially through 'personal connection' or third parties, was crucial to the success of business transactions. As with Luo's finding (1997), in many cases within the networking system, relationships between individuals are valued more than relationships between organizations. The networking system is very fragile. It works best if the relationship between the parties (such as a company's owner and an influential person) and the networks is good. However, if the relationship turns sour, then networking systems can collapse. The collapse of such systems can affect the success of the business in cases where a project was first acquired through such networking. Based on the present researcher's experience of life in Malaysia, it is not unusual for favors or money to change hands to bring about the desired outcome between the parties involved in networking activities.

Table 3 Effective Marketing Activities

Main Activity1			Main Activity2		
Activity	Frequency	Total	Activity	Frequency	Total
		%			%
Networking*	25	39.7	Networking*	15	23.8
					1
Personal Selling	13	20.6	Personal Selling	4	6.3
Tender/contract/	6	9.5	Tender/contract/	13	20.6
quotation			Quotation		
Word-of-mouth	5	7.9	Road show	4	6.3
Location/counter	7	11.1	Good service	3	4.8
Company's name	2	3.2	Company's name	3	4.8
Expert in our services	1	1.6	Others	2	3.2
Low price	1	1.6	Employing agents	2	3.2
Direct selling	1	1.6	Location/Counter	1	1.6
Advertise in newspaper	2	3.2	Ad. in newspaper	1	1.6
			Making proposals	3	4.8
			Word-of-mouth	3	4.8
			Promotion	2	3.2
			Face-to-face comm.	1	1.6
			Reducing rate	1	1.6
			Publicity	1	1.6
			Exhibitions	1	1.6
			Low price	1	1.6
			Sub-Total	61	96.8
			Missing: Not applicable	2	3.2
Total	63	100.0	Total	63	100.
					0

The information above does not overlap. For instance, a company chose personal selling as its main activity and road shows as its second most important activity.

Integration of the Marketing Activities

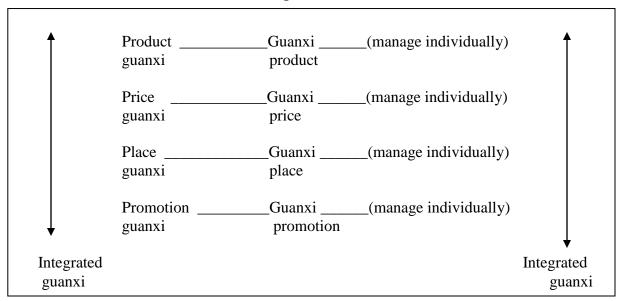
Objective 2: To examine the integration of marketing activities practiced by Bumiputra companies. It seems that all Bumiputra companies practiced both transactional and relational marketing activities (table 1) on a daily basis. The findings suggest that adoption and implementation of product, price, place and promotion are limited. Moreover, the level of adoption is different from that commonly practiced in the USA or the UK. Table 1 shows that all 63 interviewed companies practiced promotions activities. Forty-one companies exercised a minimum of 4 promotional activities while 22 companies exercised a maximum of 3 promotional activities. Twenty-one companies consider market price into their pricing consideration and 50 companies claimed that their locations were strategic. Slightly more Bumiputra companies involved in services (27) than product (25) or a combination of both (11). Additionally, Bumiputra companies also adopt and put greater emphasis on the relational model, unlike marketing activities in the USA and the UK.

The results of this research lead to a different definition of the marketing concept for Bumiputra companies, which read: "an organization or individual achieves its goals by providing products or services that satisfy its target consumers through the integration of both transactional and relational marketing activities."

Networking, Guanxi and Relationships Marketing within the 4Ps and Vice Versa

Bumiputra companies recognize the marketing mix, namely, product, price, place and promotion (4Ps). For many Bumiputra businesses, it is important that each of the Ps is properly managed. In managing each P, they also involve networking/guanxi/relationship marketing. For ease of discussion, networks practiced by Bumiputra companies are called guanxi and the lower level of guanxi is denoted by guanxi while the higher level of guanxi is denoted by Guanxi (Figure 1). Meanwhile, Ps denotes a higher level of the 4Ps while the lower level of the 4Ps is denoted by Ps.

Figure 1
Relationships of 4Ps and Guanxi



The Four Ps and guanxi: Examples of guanxi in the 4Ps exercised in the Bumiputra companies (Figure 1) are shown below:

Product – The respondents find out directly from customers which benefits the customers seek from their product and are willing to modify their products or services according to the request of the customers.

Price – The interviewed companies were located in the city center. Their product prices were labeled, but several of the Bumiputra businesses were flexible with their prices. Flexibility here was limited to certain conditions. These conditions included whether the buyers were willing to spend time on negotiating price and were, or knew, family members or friends. It was normal for the owner to give a discount if family members and friends approached them. At the same time, it was not normal for Bumiputra owners/managers to reduce their price if non-acquaintances asked for a reduction. However, if these non-acquainted customers approached politely and negotiated appropriately, there was a good chance that the price of the products could be reduced. The discounted amount was not fixed; it depended on the timing and the process of the negotiation

Place – Under special circumstances, a few companies were willing to deliver products to their loyal customers without charging for delivery.

Promotion – Word-of-mouth was popularly used as an indirect marketing activity. In addition to the use of word-of-mouth through friends and families to sell products or services, satisfied customers also used it.

Depending on circumstances, the guanxi might or might not be present at all the time or on all the Ps. The core of the activities was the four Ps and the guanxi was to complement and act as augmented

services to the four Ps (Refer to Figure 1). Once all the Ps were managed separately, the four Ps were then integrated. During the integration of all the Ps, guanxi was also in evidence especially between the employees within an organization and also between the company and its customers. The activities of transaction marketing (4Ps) and relationship marketing (guanxi) were packaged together to present a unified offering of the products to the customers. In consumer-packaged goods (e.g., in supermarkets), the four Ps overshadowed the practice of guanxi.

Guanxi and 4Ps

Depending on the depth of the interaction or whether the market is protected, guanxi can turn into Guanxi. Examples of Guanxi in the four Ps of Bumiputra companies are as follows (Figure 1):

Product: One good example was the vendorship program. The government acted as the coordinator between a purchaser company and a (Bumiputra) supplier company. The government arranged for and encouraged the purchaser company (called the Anchor company) to take its supplies from the (Bumiputra) supplier company: this transaction is called the vendor development program. Another example of Guanxi was the government's giving business contracts to Bumiputra companies because of their 'Bumiputra' status. After the relationship was established, especially business-to-business transactions, once in a while, even if the products supplied are below standard quality, the consumer would accept delivery because the Guanxi between the companies was more important than the lower quality of the products in question.

Price: When Bumiputra companies supply their products or services to government bodies or private agencies, they have to submit closed bids or negotiate contracts based on a negotiated price. For instance, in a negotiated contract, a construction company may come up with a project proposal and submit it to the government. If the project is approved, the two parties will negotiate on the price.

Place – An example was Bumiputra companies' renting their business premises because they were cheap and some of these cheap premises were specially built by government agencies to cater for Bumiputra businesses. Another example was the credit given by a few Bumiputra companies to their product's distributors, especially during economic downturns, to maintain relationships and the continuity of the business channel.

Promotion: this occurs, for example, when a Bumiputra company approaches an influential person (having guanxi with this person) in one company to recommend the business to another company engaged in related business. The practice of using recommendations from a third party to pursue marketing objectives is quite common among Bumiputra businesses.

In the above examples, Guanxi was supplemented by the four Ps. However, the role of the four Ps in the above interactions was low. Once Guanxi was individually managed, the whole Guanxi and four Ps were integrated. In contrast to the earlier use of guanxi, in many Bumiputra companies, Guanxi overshadows the four Ps. This is consistent with Gronroos's (1994) claim that in relationship marketing, interactive marketing (Guanxi) becomes the dominating part of the marketing function, with the marketing mix playing a much smaller role and merely supporting interactive marketing activities. For Bumiputra companies, the impact of Guanxi on customers is considered the most vital part of the total marketing function, as Gronroos's (1989) claims.

CONCLUSION

The findings show that Bumiputra businesses adopt relational marketing and these activities were seen as a perceived aid to achieving their marketing objectives. These Bumiputra businesses integrate both the relational (guanxi) and transactional marketing (4ps) to form their overall marketing activities. Guanxi works closely with the 4Ps and sometimes guanxi is valued more and above the 4Ps. The existence of the 4ps alone can create the possibility of the company's survival however; the success of the business highly depends on the guanxi made. The findings of this study show that guanxi and 4ps' will interchange to take the leading role, depending on the circumstances of the business transaction. If guanxi take the leading role, the 4ps will support and vice versa. The result of this study is consistent

with Lindgreen's (2001) research on a Danish dairy company suggesting that a pluralistic approach to marketing was being practiced, in which transaction marketing was implemented in some instances and relationship marketing was implemented in others; the approach depended on the particular business partner. The result of this study also agrees with Styles & Ambler (2003), who claimed that transaction and relational approaches to marketing co-exist and operate to reinforce one another.

There are some major elements identified which have directly or indirectly hindered the research process and limited the applicability of the research:

- 1. Limited Sample Size The results of this study may not be representative of the market. Due to the time and cost involved, only a limited number of people were interviewed.
- 2. Not Industry Specific This study is not sector or industry specific. Industries could not be determined before the research was conducted, since the list provided by the CCM shows the private limited Bumiputra companies registered between 1972 and 1996, but gives only the name of the company and the state (coded) in which they are located. This information cost RM100.00, the only option offered by CCM that the researcher could afford. Another option (which was beyond the researcher's means) was information on companies' directors, total assets, name of industry, contact addresses and so forth, priced at RM10.00 per company. Despite the high cost, this does not guarantee that the company was still in existence physically or was active at the time of data collection.

REFERENCES

Ambler, T. 1995. Reflections in China: Re-orienting images of marketing. *Marketing Management*. 4 (1): 22-30.

Booms, B.H., & Bitner, M.J. 1981. Marketing strategies and organization structures for service firms. In J.H. Donnelly & W.H. George (Ed), *Marketing of services*. Chicago: American Marketing Association.

Borden, N.H. 1991. The concept of the marketing mix. In B.M. Enis & K.K. Cox (Ed), *Marketing classics*. Boston: Allyn And Bacon.

Companies Commission of Malaysia. 1996. Companies Registration System.

Cowell, D. 1984. The Marketing Of Services. Oxford: Butterworth-Heinemann.

Evans, J.R., & Berman, B. 1994. *Marketing*. London: Maxwell Macmillan Canada.

Gronroos, C. 1989. Defining marketing: A market-oriented approach. *European Journal of Marketing*. 23 (1): 52-60.

Gronroos, C. 1994. From marketing mix to relationship marketing: Towards a paradigm shift in marketing. *Management Decision*. 32 (2): 4-20.

Gronroos, C. 1996. Relationship marketing: Strategic and tactical implications. *Management Decision*. 34 (3): 5-14.

Gruen, T.W. 1997. Relationship Marketing: The Route to marketing Efficiency and Effectiveness. *Business Horizons*, 40 (6): 32-38.

Gummesson, E. 1994. Making relationship marketing operational. *International Journal of Service Industry Management*, 5 (5): 5-20.

Hausman, A. 2001. Variations in relationship strength and its impact on performance and satisfaction in business relationships. *Journal of Business & Industrial Marketing*, 16 (7): 600-616.

Kotler, P., & Armstrong, G. 1999. *Principles of Marketing* 8th Ed. NJ: Prentice-Hall International, Inc.

Kotler, P. 1972. A Generic concept of Marketing. Journal of Marketing, 36 (April): 46-54.

Kotler, P. 1986. Megamarketing. *Harvard Business Review*. March-April, 117-125.

Lincoln, Y.S., & Guba, E.G. 1985. *Naturalistic Inquiry*. Newbury Park: Sage Publications.

Lindgreen, A. 2001. A framework for studying relationship marketing dyads. *Qualitative Market Research: An International Journal*, 4(2): 75-87.

Low, S.P., & Tan, M.C.S. 1995. A convergence of Western marketing mix concepts and oriental strategic thinking. *Marketing Intelligence & Planning*, 13(2): 36-46.

Luo, Y. 1997. *Guanxi*: Principles, Philosophies, and Implications. *Human Systems Management*, 16(1): 43-51.

Murphy, P.E., & Enis, B.M. 1985. *Marketing*. London: Scott, Foresman & Company

O'Malley, L., & Tynan, C. 2000. Relationship marketing in consumer markets: Rhetoric or reality? *European Journal of Marketing*, 34(7): 797-815.

Perreault, W.D. Jr., & McCarthy, E.J. 1999. *Basic marketing: A global-managerial approach*. Boston: Irwin McGraw-Hill.

Petrof, J.V. 1997. Relationship marketing: The wheel reinvented? Business Horizons, 40(6): 26-31.

Pride, W.M., & Ferrell, O.C. 1989. *Marketing: Concepts and Strategies* 6th Ed. Boston: Houghton Mifflin Company.

Quinn, F. 1996. Becoming a customer-driven organization: Three key questions. *Managing Service Quality*, 6(6): 6-12.

Rafiq, M., & Ahmed, P.K. 1995. Using the 7Ps as a generic marketing mix: An exploratory survey of UK and European marketing academics. *Marketing Intelligence & Planning*, 13 (9): 4-15.

Robins, F. 1996. Marketing in a "managed" economy. *Marketing Intelligence & Planning*, 14(3): 45-56. Schoell, W.F. & Guiltinan, J.P. 1995. *Marketing: Contemporary Concepts and Practices*. NJ: Prentice Hall, Inc.

Sin, L.Y.M., Tse, A.C.B., Yau, O.H.M., Lee, J.S.Y., & Chow, R. 2002. The effect of relationship marketing orientation on business performance in a service-oriented economy, *Journal of Services Marketing*, 16(7): 656-676.

Styles, C., & Ambler, T. 2003. The coexistence of transaction and relational marketing: Insights form the Chinese business context. *Industrial Marketing Management*, 32(8): 633-642.

Wentz, W.B. & Eyrich, G.I. 1970. *Marketing: Theory and Application*. NY: Harcourt, Brace & World, Inc.

Wentz, W.B. 1979. *Marketing*. St. Paul: West Publishing Company.

Zikmund, W.G., & D'Amico, M. 1999. *Marketing* 6th Ed. Cincinnati: South-Western College Publishing.

HYBRID FINANCE IN THE DOUBLE TAX TREATIES

Martin Six

Vienna University of Economics and Business Administration, Austria Email: martin.six@wu-wien.ac.at

ABSTRACT

The compartmentalisation of company finance into equity and debt does not truly capture the enormous diversity of financial instruments available. A wide variety of hybrid instruments incorporate elements of both equity and debt. From a fiscal point of view the classification of such hybrid instruments as equity or debt is crucial for two reasons. First of all, the issuer can treat interest on the latter as tax-deductible in most cases, and secondly, for the investor the classification determines whether the payments received from the respective instrument is treated as a dividend or as interest. One important question in this context is how hybrid instruments are treated in the tax treaty between the source state and the residence state. It is the aim of this paper, to show how the yield on hybrid financial instruments can or must be qualified as either dividend or interest in the double tax treaties, irrespective of the treatment in contracting states.

INTRODUCTION

The compartmentalisation of company finance into equity and debt does not truly capture the enormous diversity of financial instruments available. A wide variety of instruments incorporate elements of both equity and debt. Usually, these financial instruments cannot be clearly attributed to either equity or debt and are, therefore, referred to as hybrid-instruments or mezzanine finance. The spectrum of hybrid instruments ranges from corporate shares with features typical of loans (such as certain preference shares) to loans with features usually associated with equity investments (such as participation in profit and loss). Such equity-type loans would include *inter alia* jouissance rights, silent partnerships, participation bonds, convertible bonds, warrant bonds, profit participation loans and preference shares.

The classification of such instruments as equity or debt may or may not be of particular interest from an investor's point of view, as hybrid instruments may be issued for a variety of non-tax reasons. From a fiscal point of view, however, the classification as equity or debt is crucial for two reasons. First of all, the issuer can treat interest on the latter as tax-deductible in most cases, and secondly, for the investor the classification determines whether the payments received from the respective instrument is treated as a dividend or as interest (Eberhartinger, 2005:122; Helminen, 2004:56; Wittendorff & Banner-Voigt, 2000:3).

This classification for tax purposes is the source of important opportunities and risks in the area of international tax management, especially in international groups, where hybrid instruments can be used efficiently as flexible, tailor-made forms of finance. In certain cases, the qualification of a hybrid instrument as debt in the source state and as equity in the state of residence of the parent company can lead to double non-taxation of the profits, since the payment would then be deductible as interest in the source state and might be exempt as a dividend in the state of residence of the parent company. The opposite case, where the hybrid instrument is treated as equity in the source state and as debt in the state of residence of the parent company, might lead to double taxation, when the payment is subject to withholding tax in the source state and to income tax in the state of residence of the parent company.

It is these cases of qualification conflicts between the source state and the residence state that spark the interest of policy makers and tax consultants alike. One important question in this context is how hybrid instruments are treated in the tax treaty between the source state and the residence state. Following the opinion of Lang (1993:202; 1998:513, 1999:67) that each tax treaty has to be interpreted autonomously, that is to say independent from the national tax law of the contracting states as long as no direct reference to the national law of one of the contracting states is made, the treatment of hybrid instruments as either dividend or interest in a tax treaty must primarily follow from the tax treaty itself.

It is the aim of this paper, to show how the yield on hybrid financial instruments can or must be qualified as either dividend or interest in the double tax treaties, irrespective of the treatment in contracting states. I look at this in the context of the OECD Model Tax Convention on Income and on Capital (OECD-MC), which I chose as an example, because the majority of the Tax Treaties currently in force are based upon this Model Convention (Cf. the Commentary on the OECD-MC [OECD-Com], Introduction, recital 13, and Vogel, 2000:106). The paper analyses the treatment of hybrid instruments in the relevant distributive rules in the OECD-MC. The analysis will show that the yield on hybrid instruments in the majority of cases either qualifies as dividend or interest in terms of the OECD-MC. The focus therefore rests on Art 10 (Dividends) and Art 11 (Interest) of the OECD-MC.

Hybrid Finance in Art 10: Dividends

Article 10 (3) OECD-MA defines the term dividends as:

- income from shares, "jouissance" shares or "jouissance" rights, mining shares, founders' shares or other rights not being debt-claims, participating in profits,
- As well as income from other corporate rights, which is subjected to the same taxation treatment as income from shares by the laws of the State of which the company making the distribution is a resident.

Art 10 (3) OECD-MC in the last sentence explicitly refers to the national law of the source state and thereby makes this law part of the treaty between the two contracting states. The German doctrine (e.g. Lang, 1991:86) interprets this last sentence as a dynamic reference, which means that the treaty does not refer to the law in force when the treaty was concluded, but to the applicable law from time to time.

On principle it is debatable if this reference encompasses the whole definition of dividends or if it only captures *income from other corporate rights* as in the second part of the definition. From the wording of Art 10 (3) the reference clearly does not capture the income enumerated in the first part of the definition. The terms *income from shares*, "*jouissance*" *shares or "jouissance" rights, mining shares*, *founders' shares or other rights not being debt-claims, participating in profits* therefore have to be interpreted independent from the national law of the source state (Lang, 1991:90; Wassermeyer, 2004:996; Vogel, 1991:873).

Consequently only *income from other corporate rights* is affected by the reference to the national law of the source state, which according to *Lang* (e.g. 1991:90) and *Vogel* (1991:574) only relates to the *taxation treatment as income from shares* but not to the meaning of the term corporate rights as used in the treaty. Accordingly this term has to be interpreted independent from the national law of the source state as well. This means that the source state classification of a certain hybrid instrument is relevant only if, from the perspective of an autonomous interpretation, it is qualified as a corporate right (cf. Helminen, 1999:83).

Additionally the use of the term *other corporate rights* instead of simply *corporate rights* indicates that all the items of income enumerated in the Art 10 (3) OECD-MC have to be corporate rights, in order for them to qualify under the definition in Art 10 (2) OECD-MC (Helminen 1999:83,194,271; Vogel 1991:574: Giuliani 2002:14). Accordingly the yield of hybrid instrument, regardless if subsumed under the first or the second part of the definition, will only qualify as dividend according to Art 10 (3) OECD-MC, if the underlying hybrid instrument constitutes a corporate right in terms of the convention (Helminen, 1999:272; Vogel, 1991:577; Wassermeyer, 2004:1002).

Relevant criterion for the qualification as a corporate right in terms of the OECD-MC as well as for the delimitation from debt-claims with a right to participate in the profits of the issuer is the right to benefit from a possible increment in the value of the company's assets as remuneration for sharing the risk run by the enterprise (Giuliani, 2002:14; Lang, 1991:125; Vogel, 1991:574). In other words an investment only then qualifies as equity and therefore as dividend-generating, if the investor must accept

the possible risk of the loss of the investment in a way comparable to the risk assumed by a shareholder (Helminen, 1999:274; Vogel, 1991:574).

A profit-participating right undisputedly is an essential characteristic for equity classification, but it alone clearly does not change the nature of debt to equity. According to the prevailing doctrine, the holder of a corporate right in addition to a profit-participating right must at least be entitled to participate in the liquidation proceeds of the company. This second criterion is fulfilled, if the holder participates in the hidden reserves of the issuing company, which means that the repayment has to be subordinated to the claims of other creditors (Helminen, 1999:271; Lang, 1991:124; Vogel, 1991:573).

The wording of Art 10 OECD-MC however does not explicitly list these criteria let alone go into detail on how these two criteria have to be formulated in order for a specific hybrid instrument to qualify as equity. The wide scope of possible characteristics of hybrid instruments (e.g. conversion rights, fixed repayment by a definite date, fixed minimum interest rates) consequently makes it difficult to decide, whether the two criteria mentioned above are fulfilled. Whether or not the extent of the profit participation and the extent of the participation in the liquidation proceeds combined impart enough participation in the entrepreneurial risk to allow for qualification of the financial instrument as a corporate right therefore must be evaluated in each individual case in light of all the characteristics of the financial instrument in question (Helminen, 1999:272).

The extent of the control rights connected with a certain financial instrument however should have no influence on the character of equity or debt, because limitations in the control rights of a shareholder do not directly increase or decrease the risk component. As long as a the owner of a hybrid instrument participates in both the current profits and the liquidation proceeds, restrictions in the control right compared to those of a shareholder or the lack of such rights do not change the character of equity to debt (Helminen, 1999:271).

Hybrid Finance in Art 11: Interest

Art 11 (3) of the OECD-MC provides the definition of the term interest. It reads as follows:

The term "interest" as used in this Article means income from debt-claims of every kind, whether or not secured by mortgage and whether or not carrying a right to participate in the debtor's profits, and in particular, income from government securities and income from bonds or debentures, including premiums and prizes attaching to such securities, bonds or debentures. Penalty charges for late payment shall not be regarded as interest for the purpose of this Article.

Art 11 (3) OECD-MC contains no reference to the national law of one of the two contracting states and therefore has to be recognized as a final and all-embracing definition of the term interest as used in Art 11 OECD-MC, which has to be interpreted independent from the national law of either of the two contracting states (Vogel, 1991:656; Wassermeyer, 2004:1080).

According to Art 11, para 21 of the OECD Commentary to the OECD-MC (OECD-com) this is justified because

- the definition covers practically all the kinds of income which are regarded as interest in the various domestic laws;
- the formula employed offers greater security from the legal point of view and ensures that conventions would be unaffected by future changes in any country's domestic laws;
- in the Model Convention references to domestic laws should as far as possible be avoided.

Central component of the definition is the term *income from debt-claims of every kind* which in itself is not defined in the OECD-MC or in the OECD-com, but merely complemented by an exemplary enumeration of certain kinds of debt claims (government securities and income from bonds or debentures), whereas this enumeration clearly does not influence the universal character of the term itself.

Even if Art 11 (3) OECD-MC contains no restrictions to the term, the leading doctrine correctly assumes that interest in this context generally encompasses remunerations for making capital available (Vogel, 1991:655 et seq). In context with Hybrid Finance the problem is, that on one hand dividends in terms of Art 10 constitute remunerations for making capital available as well and on the other hand debt claims which carry a right to participate in the debtor's profits are explicitly encompassed by the definition of interest in Art 11 (3). Therefore the question arises, how Art 10 (3) and Art 11 (3) OECD-MC are related (cf. Helminen 1999:270).

In this context the OECD-com in Art 11 recital 19 implicitly acknowledges that any kind of income can only fall under one of the distributive rules in the OECD-MC (cf. e.g. Lang, 2002:202) by clarifying that the term "interest" as used in Article 11 does not include items of income which are dealt with under Article 10.

From the discussion of the scope of Article 10 follows, that the income from financial instruments which impart enough participation in the entrepreneurial risk to allow for a qualification as a corporate right, qualifies as dividend under Art 10 OECD-MC. Such yields *vice versa* cannot fall under Art 11 OECD-MC even if they would qualify as interest in terms of Art 11 (3) OECD-MC, because, according to the prevailing doctrine, the terms *income from corporate rights* and *income from debt claims* in context of the tax treaties are mutually exclusive (cf at length Lang, 1991:120 et seq; Helminen, 1991:271 et seq.; Wassermeyer, 2004:1085 et seq.).

Hybrid instruments with a profit-participating right as well as a right to participate in the liquidation proceeds of the issuing company from a tax treaty perspective therefore do not yield *income from debt claims* in terms of Art 11 (3) OECD-MC, but rather *income from corporate rights* in terms of Art 10 (3) OECD-MC. The yield in these cases therefore qualifies as dividend in terms of Art 10 OECD-MC. On the other hand the yield of hybrid financial instruments which impart a participation in the entrepreneurial risk solely through a profit-participating right, e.g. if the payment of interest on a debt claim depends on profits being made, does not qualify as dividend but rather as interest in terms of Art 11 (3) OECD-MC (Vogel, 1991:657; Lang, 1991:133).

CONCLUSIONS

The relevant distributive rules for the treatment of income from hybrid financial instruments in the OECD-MC are the Articles 10 (Dividends) and 11 (Interest). The essential criterion for the delimitation between these two distributive rules is the existence of a corporate right. The yield of hybrid instruments which are qualified as corporate rights in terms of Art 10 OECD-MC is classified as Dividend in terms of Art 10 whereas in all other cases the yield consequently classifies as Interest in terms of Art 11 OECD-MC.

In order for an investment to qualify as a corporate right in terms of the OECD-MC, the investor must accept the possible risk of the loss of the investment in a way comparable to the risk assumed by a regular shareholder. According to the prevailing German doctrine this is the case, if the investment at least incorporates a participation in the profits as well as a participation in the liquidation proceeds of the issuing company. Only if these two criteria are fulfilled, the risk of the loss of the investment assumed by the investor is in a way comparable to the risk assumed by a regular shareholder.

The OECD-MC itself however does not explicitly list these criteria let alone go into detail on how these two criteria have to be formulated in order for a specific financial instrument to qualify as equity. In the case of hybrid instruments the wide scope of possible characteristics as regards the participation in the entrepreneurial risk makes for a difficult decision, whether the two criteria mentioned above are actually fulfilled in the individual case.

This in turn will inevitably lead to situations, where the two contracting states do not agree on whether the characteristics for qualifying a specific hybrid instrument as a corporate right and thus as dividend-generating are present. In these cases it is possible that the tax payer will end up in a situation where one state applies Art 10 while the other applies Art 11, which depending on the relevant tax treaty

might result in double taxation or double non-taxation of the income received, leaving the mutual agreement procedure as a last resort to solve the issue.

One way for the contracting states to preclude against these problems would be to extend the reference to the classification in the source state in the Dividend-Article to cover the entire definition of the term dividend in the tax treaty, since then the delimitation between dividend and interest would lie solely with the source state and consequently no qualification conflict will arise. One example for such a solution is the tax treaty between Germany and Austria, where the definition of the term dividends in the OECD-MC has been adapted as follows:

The term "dividends" as used in this Article means income from shares, "jouissance" shares or "jouissance" rights, mining shares, founders' shares or other income which is subjected to the same taxation treatment as income from shares by the laws of the State of which the company making the distribution is a resident. The term "dividends" includes also income derived by a silent partner ("stiller Gesellschafter") from the partner's participation as such, income from participating profit sharing loans ("partiarisches Darlehen") or profit sharing bonds ("Gewinnobligationen") and similar remuneration provided it is not deductible in determining the taxable income of the borrower under the laws of the Contracting State in which it arises, as well as distributions on share certificates in an investment trust.

REFERENCES

Duncan, J. A. 2000. General Report. In IFA (Ed.), *Cahiers de droit fiscal international*, Volume LXXXVa, Tax Treatment of hybrid financial instruments in cross-border transactions: 24-34. The Hague: Kluwer.

Eberhartinger, E. 2005. Besteuerung und steuerliche Gestaltung von hybrider Finanzierungsinstrumente. In Bischof, M. & Eberhartinger, E. (Eds.), *Hybride Finanzierungsinstrumente*: 119-141. Vienna: Linde. Giuliani, F. M. 2002. Article 10(3) of the OECD model and borderline cases of corporate distributions, *IBFD Bulletin*. 11-14.

Helminen, M. 1999. The dividend concept in international tax law. London: Kluwer.

Helminen, M. 2004. *Classification of cross-border payments on hybrid instruments*, IBFD Bulletin. 56-61.

Lang, M. 1991. Hybride Finanzierungen im Internationalen Steuerrecht. Vienna:Orac.

Lang, M. 1993. Country Chapter Austria. In IFA, Cahiers de droit fiscal international, Volume

LXXVIIIa, Interpretation of double taxation conventions: 197-219. Deventer: Kluwer.

Lang, M. 1998. Off-track interpretation of double taxation treaties as exemplified by the taxation of lecturers, *Steuer und Wirtschaft International*. 508-513

Lang, M. 1999. The significance of national tax law in interpreting and applying double taxation treaties, *Steuer und Wirtschaft International*. 61-69.

Lang, M. 2002. Einführung in das Recht der Doppelbesteuerungsabkommen Vienne: Linde.

Vogel, K. 1991. Klaus Vogel on Double Taxation Conventions. Deventer: Kluwer.

Vogel, K. 2000. Problems of the Interpretation of Tax Treaties. *Steuer und Wirtschaft International*. 103-112.

Wassermeyer, F. 2004. Commentary on art 10 MA. In Wassermeyer, F. & Lang, M. & Schuch, J. (Eds.), *Doppelbesteuerung – OECD Musterabkommen, DBA Österreich-Deutschland – Kommentar*: 961-1035. Munich: C.H.Beck.

Wassermeyer, F. 2004. Commentary on art 11 MA. In Wassermeyer, F. & Lang, M. & Schuch, J. (Eds.), *Doppelbesteuerung – OECD Musterabkommen, DBA Österreich-Deutschland – Kommentar*: 1059-1123. Munich: C.H.Beck.

Wittendorff, J. & Banner-Voigt, E. 2000. *Taxation of hybrid instruments*, *IBFD derivatives and financial instruments*, 3-7.

INTERNATIONAL ESTATE (TAX) PLANNING: RISKS AND POSSIBILITIES IN A GLOBALIZED WORLD

Michael Petritz

Vienna University of Economics and Business Administration, Vienna, Austria Email: Michael.petritz@wu-wien.ac.at

ABSTRACT

The modern world is growing more and more together, capital and people move increasingly rapid. A growing number of people work, at least for some time, in foreign countries or even move their permanently. Therefore, families have developed cross-border ties and/ or posses fortune in other countries. When it comes to inheritances, gifts or estates in order to provide and support descendents bad surprises often occur. Unforeseen difficulties are caused by the fact that private as well as tax laws vary considerably and often have to be applied simultaneously. The outcome then might consist in unintentional legal portions, invalid wills or an excessive tax burden which hardly leaves any fortune for the beneficiary. However, the involvement of different states can also open up possibilities which are often not to accomplishable under rigid home state legislation. Therefore, by timely thoughts and taking adequate planning measures, of which some are addressed in the underlying paper, negative consequences can be avoided and possibilities exceeding home state conditions open up.

INTRODUCTION

The modern world is growing more and more together, capital and people move increasingly rapidly. A growing number of people work, at least for some time of their lives, in a foreign country or move their permanently. Therefore, cross-border family ties have developed or assets in foreign countries are possessed. When it comes to provisions for family members (in the lifetime) for their descendents or to inheritances often bad surprises occur. Due to the involvement of legal systems of two (or even more) states processing of gifts / estates turn out to be more complex, different and more time-consuming than expected. Wills set up under one jurisdiction might be interpreted in deviating ways, legislation concerning legal portions often vary, and two states feel in the position to tax the transferred fortune. Therefore, often the assets which are designated to be transferred to a specific person do not, or not in whole substance, reach the heir / beneficiary. Remedy can often be provided by well timed planning, which is called "estate planning". A good and comprehensive definition is given by Mancer (1995: 5):

"Estate Planning is the use of various lawful facilities to gain, to hold and then to pass assets over to other people at an appropriate time so that everyone involved, and particularly the donor, gets appropriate satisfaction from the plan; and contributions to the public revenue are perhaps minimized."

This definition shows the different legal aspects estate planning involves: besides private lax problems also taxation of the measures to be planned has to be taken into consideration. While the next chapter shortly summarizes private law problems, chapter three focuses on the taxation point of view.

Private Law Problems arising in International Inheritance, Gift and Estate Situations

Private laws of different jurisdictions tend to rule most questions concerning inheritances, gifts and estates in deviating ways. First of all, it has to be identified which legislation is to be applied. This question is normally dealt with by "international private law". However, "international private law" is part of the legislation of the respective countries and therefore, might lead to conflicts.

Example 1:

Mr X, citizen of state A, has been living in state A for the last 15 years of his life. Most of the estate assets are located in state B. However, his son and decedent, Mr Y, is citizen of state B and also lives there. While the "international private law" of state A says that the

private law of state B has to be applied, state B's "international private law" supposes state A's "international private law" to be applicable.

However, also the opposite situation might occur in which both countries believe their private law to be the one to be used. This situation then can pose unpleasant consequences since it requires conditions of two states to be fulfilled and triggers legal consequences in two states. Problems can arise in this aspect for example by the following:

- Form requirements of valid last wills (Do they have to be concluded in writing, orally or in presence of witnesses?).
- Legal portions (Is there a mandatory regulation of legal portions?)
- Consideration of the relatedness of involved person (e.g. is marriage to more then one partner legal? how are adoptions treated?, etc).
- Transfer of assets (e.g. can shares in companies be transferred to beneficiaries? If yes, in which way?)
- Liability questions (who is liable for liabilities of the descendent?)

Taxation of Inheritance, Gifts and Estates

Recently, in more and more states the discussion has started whether or not the transfer of assets in the course of inheritances, gifts and estates should be taxed. In Germany and Austria this discussion has been inflamed by recent decisions of the High Constitutional Courts. While in Austria the current political opinion is towards abolishment, Germany will likely prevent from abolishing this tax and is likely to adjust it. Sweden, Portugal, Russia, Hong Kong, Slovakia and India have just recently said "farewell" to such taxation, in the USA estate taxation will phase out in 2009 but without follow-up legislation will be reintroduced in 2010. Italy, on the contrary, has moved back towards its 2001 abolished tax.

However, as inquiries of the author whose results are shown in the following table have proved, hardly any country really leaves the transfer of assets in course of an inheritance, gift and estate permanently untaxed:

Figure 1
Global Inheritance, Gift & Estate taxation



While the green-marked countries do not tax such transfers in any (at least for the author) identifiable ways, the orange countries apply a (virtual) capital gains taxation (explained in chapter 3.2) which can be postponed under certain requirements and the red states still apply inheritance and gift taxation (for the countries left white no data could be located).

The table, therefore, shows that most of the countries still impose tax on such transfers, they might just have shifted traditional inheritance, gift and estate taxes to taxes on income. This is also valid for most of the above mentioned countries which are supposed to have "abolished" such taxes.

Unharmonized Tax Systems - Different Criteria to Trigger Tax

As already mentioned, problems in international estate planning can also arise from taxes imposed by the different states involved. These difficulties are due to the fact that tax systems are not harmonized around the globe, not even in their basic structure, as e.g. corporate income tax systems, as the report of the International Fiscal Association (IFA) has shown.

Thus, states use different criteria in order to determine whether or not inheritance/ gift or estate tax liability arise. If those criteria are fulfilled, most states impose tax on the income from a world-wide point of view, should mean that they feel entitled to tax the whole income even if assets and fortune are physically situated in the other country.

Such criteria which can trigger tax are the following:

- Domicile / Residence of the decedent / donor.
- Domicile / Residence of the heir / beneficiary.
- Residence of the decedent / donor or the heir / beneficiary.
- "Enlarged" unlimited tax liability (deemed residence even if decedent / heir has left the country a specified period of time ago).
- Citizenship of either the descendent / donor or the heir / beneficiary.
- (Ordinary) Place of Abode.
- Physical presence of specific assets (e.g. land).

In a number of states (Austria, Germany, USA, Japan) tax rates can be considerably high and amount to more than 50 per cent. The following example shows therefore an easy-comprehensive example to provide an overview of the consequences:

Example 2:

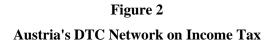
Decedent X, citizen of state A, moved three years before his death to state B where he had a domicile until his very end. His heir Y, citizen of state C, had his domicile in state D. The estate of Mr X mainly consisted of land situated in state E.

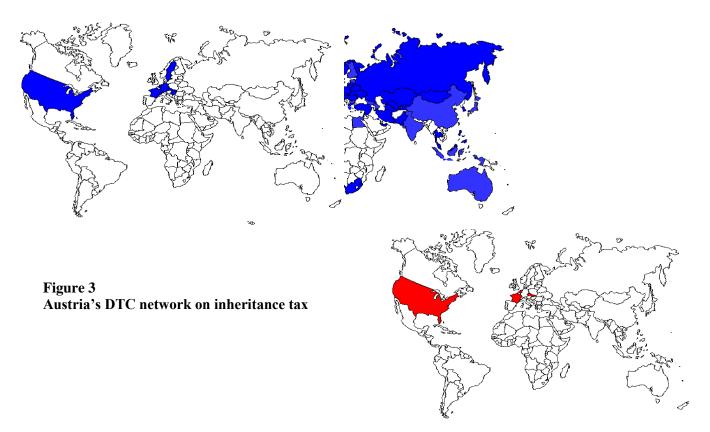
In a constellation as the one just described it might happen that five state feel entitled to impose tax and that the overall tax burden easily (e.g. 5 times 30 per cent tax rate equals an overall tax burden of 150 per cent of the value of the estate) outweighs the benefits of the inheritance, leaving the heir with no fortune but even with supplemental liabilities behind.

The Lack of a Worldwide Double Taxation Treaty Network

In income and corporate income taxation the problem of (juridical) double taxation is greatly solved by means of double taxation conventions (DTC). States with considerable trade and investment relations have developed a network of such bilateral treaties in the absence of a comprehensive multinational convention. In 2002 the then fifteen member states of the European Union had concluded more than one thousand DTC on income and corporate income taxation. However, the network in the world of inheritance taxation is much slimmer, and comprised for the then EU-15 only around 100 DTC, thus amounted to only a tenth. Even worse was and still is the situation in gift tax DTCs: the EU-15's network in this part only comprised 26 DTCs, or approximately 2.5 per cent as many as for income and corporation income taxation.

As an example, the following figures show the situation for Austria:





The achievement of the goal of a comprehensive DTC network only between the nowadays 27 states counting EU would require more then 300 DTCs, a number which is far from being reached, even more if it is considered that between 2002 and 2006 no additional DTC in this respect was concluded and the new EU Member States' network is either very modest or not existing at all.

While relations between countries which have concluded DTCs ultimately result in singular taxation, this goal can sometimes to be solved by unilateral measures, if any. Other countries only accept to take into account the foreign taxes as deductions from the taxable base what is, in fact, a much less effective mechanism in order to achieve relief from double taxation, as the following example will show:

Example 3:

The value of the estate is 1,000, whereof 500 result from country A and the other 500 from country B. Both countries apply a 25 per cent tax rate. Country A is the residence state which taxes the world wide inheritance, country B only taxes the in its territory situated assets. There is no DTC between A and B.

	A credits B's tax	A allows deduction of B's tax
Tax paid in B	125	125
Preliminary Tax Base in A Deduction	1,000	1,000 - 125
Final Tax Base in A	1,000	875
Tax due in A	250	219
Tax Credit	- 125	
Overall tax burden	125	219

Different Taxation Systems and Kinds of Taxes Involved

In a global context, three different systems of taxation of inheritances, gifts and estates are identifiable:

- Estate taxation
- Inheritance taxation
- Taxation of a virtual capital gain

While estate taxation is common in the Anglo-American world, inheritance taxation is the system used mostly in continental Europe and Japan. The main difference between the two consist in the fact that an estate based method focuses on the estate (which is deemed to be a juridical person on its own) as the taxpayer while the inheritance taxation model obliges the heir as a natural person to pay the tax. In an international context, the fact that different taxpayers are obliged to pay the taxes often prevent from double taxation relief (since in principal only the taxes paid by one and the same taxpayer in two jurisdictions on the same event permit relief).

The third system, taxation of a virtual capital gain, is the incorporation of inheritance, gift and estate taxation in the income tax code. People are not obliged to pay inheritance, gift or estate tax but simply income tax. While this system allows to get relief in relation with other countries by the more extensive income DTC network it should not be forgotten that under such systems, as e.g. used by Australia and Canada, relief for foreign inheritance, gift and estate taxes are mostly not available.

Example 4:

While Austria taxes the assets in case of an inheritance with up to 60 per cent inheritance tax, Canada would impose (deferred) capital gains tax. Due to the different type of tax involved, a tax credit is hardly probable.

Timing Mismatches

Another hurdle to struggle with results in the fact that national legislations often tax at different points of time. While for example state A imposes tax in year X1, state B does not do so before year X5. DTCs, however, only allow consideration of the taxes paid in the respective states in one and the same year. Trans-period relief mechanisms are therefore not provided by DTCs and thus lead to excessive taxation consequences. Only relief in such a situation can be provided by unilateral measures which often require a substantial effort with local tax authorities.

(Estate) Tax Planning

The negative impact of excessive taxation of inheritance in cross-border situations has been explained above. These consequences can, however, be minimized or even be completely avoided by timely planning considerations. The chapter is headlined "(Estate) Tax Planning". However, the title

should not mislead and refer to planning measures only connected with "estate taxes" but rather implies all taxation measures connected with any kind of taxes occurring in connection with estates, inheritances and gifts. The title has been selected since the term "estate tax planning" has become the technical term which is used by scholars as well as by practitioners.

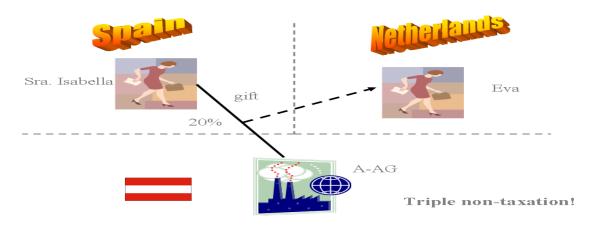
"Asymetric" Criteria To Trigger Tax

In the same way as diverging tax triggering criteria can lead to multiple taxation it is also possible to use them for tax planning. If one plans domicile, residence, abode etc carefully, one can avoid taxes completely:

Example 5:

In the example which is also visualized by the figure below, the decedent, Sra Isabella, resident and national of Spain makes a gift consisting of shares in the Austrian based A-AG corporation to Eva who is national and resident of the Netherlands.

Figure 5
Triple Non Taxation by Asymmetric Tax Triggering Criteria



Since Spain only taxes if the beneficiary is resident in Spain, the Netherlands only if the donor is resident in the Netherlands and Austria only if either the donor or the beneficiary is resident in Austria, the outcome of the situation described is triple non-taxation.

Such situations will become more and more interesting in the futures since some states have or will abolish inheritance, gift or estate taxation and therefore make the situations to set-up much easier to accomplish. One hurdle left in this respect is exit taxes which, however, are not dealt with in this paper due to the scope and the complexity of this topic.

Conflicts of Qualification

Terminology is not consistent in the field of qualification conflicts. The term is to a large extent not known in the Anglo-American world and has its roots in continental Europe. However, the problems which it addresses are not unknown in international tax law. The Commentary to the OECD Model Convention speaks of "conflicts of classification" and "conflicts of allocation" in respect with the DTCs. However, these problems are only one side of the medal and since the DTC network in respect of inheritance, gift and estate taxation is very modest (cf chapter 3.3) therefore do not seem to be adapt to capture all possible situations which might occur one has to look for more adept definitions. Due to the relatedness to private law it is not surprising that the same problems have also arisen in this field. In contrast to tax law, however, in the field of private law there are definitions to be found which seem also adequate to be used for taxation purposes. Under "qualification" is understood:

"The subsumption of facts effected and pre-cast by the legal system of one country or of terms and definitions of such a system under the rules and legislations of the legal system of another state."

This definition has to be extended also to the subsumption under a cross-national legal system, e.g. DTCs.

A "conflict of qualification", thus consists in:

"Interpretation problems caused by diverging interpretation of the terms contained in a rule by persons of different legal systems"

Such problems typically arise in taxation by the wording of DTC provisions (e.g. concerning the meaning of "fiscal domicile" in Art 4 OECD MC on Estates and Inheritances and on Gifts). However, the problems caused if transnational rules are lacking, are even more complex.

Qualification conflicts are often used for international income and corporate income tax planning. As the following two examples will show, they are also adapted to be used for inheritance, gift and estate tax planning. This is even more true since not even academically accepted tax planning prevention mechanisms (cf chapter 5) exist.

Transparency Conflict

Such a qualification conflict can be first construed by the different treatment of partnerships in international tax law. While one part of the countries treats partnerships as "transparent" (which means that each partner is deemed to be co-owner of the respective enterprise), the other treats partnerships as "intransparent" (which means that the partnership is treated as a company and each partner is deemed to possess shares in this "company").

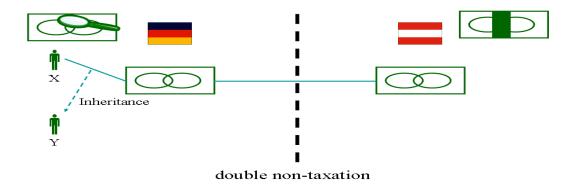
Such a constellation can in "real life" situations e.g. look like the following.

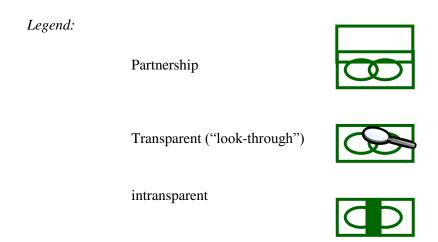
Example 6:

Both, descendent (X) and heir (Y) are residents of Germany. Mr X possessed shares in a German partnership which also possessed shares in an Austrian partnership ("double-level partnership"). The main assets, however, are situated in the Austrian partnership. Germany and Austria have concluded a DTC concerning inheritance taxation. However, while Germany treats the partnership as transparent and therefore would assign the taxing rights to Austria, Austria, however, treats the partnership as non-transparent. Consequently, both states do not tax.

Figure 6

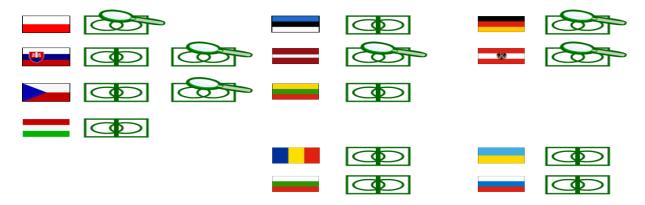
Double Non Taxation as a Result of Transparency Conflict





As already mentioned, this conflict cannot only be construed between Austria and Germany but also between numerous other states. The following list gives an overview of the treatment of shares in partnerships:

Figure 7
Treatment of Partnerships



"Gewillkürtes" Betriebsvermögen

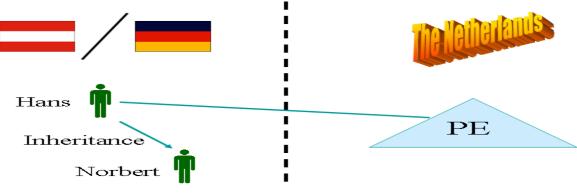
Another qualification conflict arises due to the concept of "gewillkürtes Betriebsvermögen" which is only recognized in Austria and Germany but unknown in all other countries. The main idea behind the concept of "gewillkürtem Betriebsvermögen" is that taxpayers may elect to contribute assets in their enterprise which would normally not present business assets.

Example 7:

Hans, the descendent, is resident and national of either Austria or Germany and possess a permanent establishment (PE) which is part of his business in the Netherlands and whose business assets also comprise "gewillkürtes Betriebsvermögen". The heir, Norbert, is also resident and national of either Austria or Germany. Since Austria and Germany therefore belief that the Netherlands have the right to tax business property which is situated therein, the Netherlands do not recognize the "gewillkürtes Betriebsvermögen" and therefore do not impose tax on these assets. The outcome is again, double non-taxation.

Figure 8

Double Non-Taxation by "Gewillkürtes Betriebsvermögen"



Double non-taxation

Limitations of Planning Activities by Tax Authorities' Prevention Measures

Tax planning is, as long it is not excessive and abusive, legitimate and definitely not outside of the possibilities provided by the legal framework. Double or multiple non-taxation is therefore an outcome which is also accepted by tax authorities. However, recent tendencies of tax authorities are in the direction of preventing double non-taxation in the future by:

- Implementing provisions in DTCs defining the law of which state has to be applied
- The use of the credit instead of the exemption method for treaty but also unilateral provisions
- Implementing the context interpretation method for DTCs by using the terms, expressions and the Commentary of the OECD MC on income and corporate income taxation
- New interpretation of the article on the methods for elimination of double taxation
- Introduction of subject-to-tax provision
- Increasing use of bilateral exchange of information.

However, most of the mentioned measures either deal with DTC-issues which are, as shown in chapter 3.3, not as common as in the area of income and corporate income taxation, need existing DTCs to be renegotiated, or are not in line with existing jurisdiction (at least not for the past). Thus, there might be more obstacles to consider in the future but they are not reality yet.

CONCLUSIONS

Succession in an international context poses a variety of problems for the involved persons. However, the international aspect also provides for possibilities and chances which are not to be achieved under national (home state) legislation. The aspects to be considered concern private law issues as well as taxation issues. Not to fall into the pitfalls requires timely planning. As the paper has shown, excessive tax consequences can be prevented, double non-taxation can be achieved. Even though there are ideas from tax authorities to combat double non-taxation in the future, the current leading opinion is that they are not yet to be taken into account, at least not as long as there is no fraud involved. Modern estate planning is therefore a must in a more and more globalized for people with cross-border relations!

REFERENCES

Aigner, H. J. 2002. Qualifikationskonflikte beim Übergang von Anteilen an Personengesellschaften im ErbSt-Musterbkommen. In Aigner et al (Eds.), *Erbschaftssteuern und Doppelbesteuerungsabtkommen*, Linde Verlag, Vienna, Austria: 245 et seq

Berthold, H. 1992. *Qualifikationskonflikte im Internationalen Steuerrecht, S+W Steuer- und Wirtschaftsverlag GmbH*, Hamburg, Germany.

Davis, D.M., Beneke, C., & Jooste, R.D. 1998. *Estate planning*, Durban: LexisNexis, Butterworths.

Dorazil, W., Taucher, O. 2006. *ErbStG loose-leaf* (latest update: April 2006), *Manzsche Verlags- und Universitätsbuchhandlung*. 2001. Vienna, Austria.

Ferid, M., Firsching, K., Dörner, H., & Hausmann, R. 2006. *Internationales Erbrecht, loose-leaf* (latest update: December 2006), Verlag C.H.Beck Munich, Germany.

Flick, H., Plitz, D. J. 1999. *Der internationale Erbfall*, Verlag C.H.Beck Bonn/Frankfurt, Germany.

Fraberger, F. 1997. *Der steueroptimale Tod*. Verlag Orac., Vienna, Austria.

Fraberger, F. 2001. *Nationale und internationale Unternehmensnachfolge*, Linde Verlag, Vienna, Austria.

IFA. 1985. Cahiers de Droit fiscal international XXXIX. Kluwer Law International,

Deventer, The Netherlands.

Loukota, H. 2002. Die Zukunft der Erbschaftsteuerabkommen. In Aigner et al (Eds) *Erbschaftssteuern und Doppelbesteuerungsabtkommen*, Linde Verlag, Vienna, Austria, 245 et seq.

Mancer. 1994. Guide to New Zealand Estate Planning and Tax. Wellington, New Zealand.

Piltz, D. J. 1999. Internationale Erbfälle. In Birk (Ed.), *Steuern auf Erbschaft und Vermögen*, DStJG 22, Cologne, 275 et seq.

Schilcher, M. 2004. Subject-To-Tax-Klauseln in der österreichischen Abkommenspraxis,

Linde Verlag, Vienna, Austria.

Schuch, J. 2002. Die Zeit im Recht der Doppelbesteuerungsabkommen, Linde Verlag, Vienna, Austria.

Sonneveldt, F., Bom, H. M., Zuiderwijk, J. C.L. 2001. Global Estate Planning, *Kluwer Law International*, The Hague, Netherlands.

Toifl. 2007. Doppelnichtbesteuerung im Erbschaftssteuerrecht, taxlex, 62 et seq.

ABBREVIATIONS USED

Art	Article
Arts	Articles
BFH	Bundesfinanzhof (German Federal Fiscal Court)
BAO	Bundesabgabenordnung
	(Austrian General Fiscal Code)
BMF	Bundesministerium für Finanzen
	(Ministry of Finance)
BStB1	Bundessteuerblatt (Federal Tax Gazette)
CDFI	Cahiers de droit fiscal international
Cf	confer
DTC	double taxation convention
EAS	Express Antwort Service
	(express reply services provided by Austrian Ministry of
	Finance)
ECJ	European Court of Justice
Ed	Editor
Eds	Editors
e.g.	example given
et al	and others

et seq and following EU European Union

IBFD International Bureau of Fiscal Documentation

IFA International Fiscal Association

IStR Internationales Steuerrecht (periodical, Germany)

m.no. marginal number

OECD Organization for Economic Cooperation and

Development

OECD MC OECD Model Convention

para paragraph

PE permanent establishment

Sec Section subpar subparagraph taxlex periodical (Austria)

TAX CONSEQUENCES OF HYBRID FINANCE IN THIN CAPITALIZATION SITUATIONS: AN ANALYSIS OF THE SUBSTANTIVE SCOPE OF NATIONAL THIN CAPITALIZATION RULES WITH SPECIAL EMPHASIS ON HYBRID FINANCIAL INSTRUMENTS

Margret Klostermann

Vienna University of Economics and Business Administration, Austria Email: margret.klostermann@wu-wien.ac.at

ABSTRACT

The choice of corporate finance is an important source of tax planning opportunities for multinational companies. Investing companies have to be aware of inconsistent tax classification of equity and debt between countries in particular. Additionally, thin capitalization rules have to be taken into account. In response to changing corporate needs the present paper focuses on the tax consequences of hybrid financial instruments. Only some literature exists on cross-border hybrid finance. Especially the linkage between the two areas — hybrid finance and thin capitalization — both on a national and international level had to be dealt with academically. The paper analyses the substantive scope of thin capitalization regimes in general and in detail. The main finding is that the tax consequences of hybrid instruments reverse when used in thin capitalization situations and that traditional tax policy has to be reconsidered.

Introduction

Roughly spoken a company may be financed by equity or by loans. As a rule, the choice of the means of financing is up to the shareholders. Apart from economic and legal circumstances, tax motives may lead to the decision of a company's shareholder to use loan capital rather than equity (Lüthi, 1991: 446; Knobbe-Keuk, 1992: 405). Indeed, the tax treatment of a company and its shareholders differs significantly according to whether the raised capital is equity or loan capital: whereas the return on an equity investment (dividend distribution) forms part of the company's taxable profit, the return on a loan investment (interest payment) is generally regarded as deductible expense in computing the taxable profit (OECD, 1987: 9; McDaniel, McMahon & Simmons, 1999: 497). Financing structures with a small proportion of equity are therefore generally more advantageous as they reduce a company's tax burden not only in a national but possibly also in an international context. However, from a legal or economic point of view, e.g. in connection with 'Basel II', equity-strong financing may be required. In this regard, the use of hybrid financial instruments is the source of interesting tax planning techniques (Herzig, 2000: 483; Eberhartinger & Six, 2006: 5). Hybrid financial instruments can be designed in a way that they provide capital that is economically similar to equity but taxed as debt (McDaniel, McMahon & Simmons, 1999: 497). Through the use of hybrid instruments inconsistencies in national tax systems can be exploited and double non-taxation may arise.

In recent years, the free choice of financing by shareholders is increasingly restricted (Lüthi, 1991: 446). More and more countries tend to introduce so-called thin capitalization rules to restrict excessive (shareholder-) debt financing of companies (Endres, 2006: 257 et seq.). Tax authorities want to detect disproportionate use of loan investments and prevent a potential loss of tax income with regard to cross-border financing structures (e.g., Van Raad, 1986: 178; Lüthi, 1991: 447; Gouthière, 2005: 367). Thin capitalization rules are of special interest when companies use hybrid financial instruments to finance their activities in a tax-minimizing way. Hybrid financial instruments may come under the substantive scope of national thin capitalization rules and may be included in the computation of a safe haven. For this very reason a qualification of hybrid instruments either as equity or as debt is essential. Thin capitalization rules, however, may stipulate special classification criteria. In addition to a possible inclusion of hybrid instruments in the calculation of the safe haven the tax consequences of the thin capitalization rule may also be applied to debt-alike hybrid instruments. Therefore, in thin capitalization situations the favourable tax treatment of debt-alike hybrid financial instruments may be lost and other group financing structures may be influenced negatively. Equity-alike hybrid instruments may become more advantageous.

National problems of hybrid finance have already been discussed scholarly (e.g. Eberhartinger, 1996). International aspects of hybrid instruments have also been dealt with in tax literature (Lang, 1991; OECD, 1987; OECD, 1996; OECD, 2000). However, not much literature exists on cross-border hybrid finance. A comprehensive, updated analysis as well as categorisation of existing thin capitalization rules or similar provisions covering managerial, legal and fiscal aspects does not exist at all. Especially the linkage between both areas – hybrid finance and thin capitalization – both on a national and an international level has to be dealt with academically (Watrin & Lühn, 2004). Recent ECJ-Cases prove the importance of this special aspect of business finance.

The focus of this paper rests on the taxation of cross-border finance of multinational companies. The taxation of partnerships will not be part of the analysis. The use of abnormal or excessive rates of interest will not be dealt with in this paper either. It is the aim of this paper to address the above-mentioned issues and call attention to the fact that well-known tax planning techniques (Merks, 2006) possibly have to be reconsidered in corporate tax planning. The theoretical analysis will be completed by the country-specific regulations of six countries. The countries chosen are Austria on the one hand, being the home country of this research project, and its most important capital import and capital export countries. An illustrative example will help to demonstrate the tax effects of corporate cross-border finance.

LITERATURE REVIEW

TAX ASPECTS OF CORPORATE FINANCE

It is important to point out that tax motives may not be the main or only reason leading to the financing decision of multinational enterprises (OECD, 1987: 9 et seq.; Endres, 2006: 256). Legal and economic conditions also must be taken into account (Hosson & Michielse, 1989: 476; OECD, 1996: 90). However, tax is cost and cost means profit reduction. Tax minimization therefore directly corresponds to the managerial aim of profit maximization. Shareholders have to structure their financing activities in order to minimize the tax burden (Endres, 2006: 258).

Basically there are two methods of finance: equity and debt. Shareholders of a company are generally free in the choice of finance (OECD, 1987: 9; Bittker & Eustice, 2000: 4-4; Gouthière, 2005: 367). Because of various reasons shareholders tend to use debt financing rather than equity financing (Piltz, 1996: 92). In fact, equity is risk capital. An equity investment leads not only to a change in holdings and voting rights but also to an increase in responsible capital. While an equity investment offers entrepreneurial independence and additional creditworthiness, the formal requirements of an equity investment are enormous. The advantages of a debt investment are e.g. a lower risk assumption, a return on investment independent of the result of the company, possible exploitation of the leverage effect etc. (Piltz, 1996: 92; Endres, 2006: 256). For a clear distinction between equity and debt contributions see Table 1.

Due to changing corporate needs the simple differentiation between debt and equity does not mirror the diversity of finance any more (e.g., Leitinger, 2005; Hudetz, 2005; Müller-Känel, 2004). Many financial instruments show elements of both categories or can be converted from one type to the other (Duncan, 2000: 23; Kahn/Lehman, 2001: 502 et seq.; Bittker & Eustice, 2000: 4-21). These financial instruments are called 'hybrid financial instruments' or 'mezzanine finance'. Hybrid financial instrument are financial instruments that have economic characteristics that are inconsistent, in whole or in part, with the classification implied by their legal form (Duncan, 2000; see table 2).

Table 1 Classification Criteria of Equity and Debt

Classification criterion	Equity	Debt	
Legal position	(co-)ownership rights	creditor rights	
Entrepreneurial influence	normally full information, control and voting rights	normally no information, control and voting rights	
Substantial holding Profit participation	sharing in profits and losses; participation in hidden reserves and liquidation proceeds	normally fixed return independent of profits and losses	
Liability	at least amounting to the share	no liability	
Collateral	no collateral	(preferential) collateral	
Order in case of insolvency	subordinated	preferential	
Term of capital commitment	no fixed repayment provision	fixed repayment provision	
Compensation			
Right to compensation	residual right	nominal right	
Type of compensation	dividend payment	interest payment	
Tax classification	non deductible profit distribution	deductible interest expense	

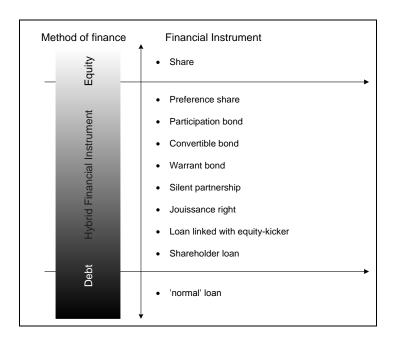
Table 4
Classification Criteria of Hybrid Financial Instruments

Classification criterion	Hybrid Financial Instruments
Legal position	inconsistent; possibly conversion right
Entrepreneurial influence	normally few information, control and voting rights
Substantial holding	
Profit participation	(interest) return dependent on profit and losses
Liability	up to the amount that is converted into equity
Collateral	no collateral; subordination clause
Order in case of insolvency	preferential compared to shareholders; subordinated compared to creditors
Term of capital commitment	normally long-term
Compensation	
Right to compensation	via equity-kicker
Type of compensation	inconsistent
Tax classification	normally deductible expense

Hybrid financial instruments can be tailored to meet the needs of every investor. The spectrum of hybrid financial instruments ranges from corporate shares with features typically associated with loans

and loan contracts with conditions typical of equity investments. The more debt characteristics are included in an instrument, the more likely a classification as debt for tax purposes is and vice versa (Helminen, 2004: 57). However, countries weigh characteristics differently and are so unanimous about classification. In general, debt-equity hybrids include e.g. preference shares, silent partnerships, jouissance rights, participation bonds, convertible bonds, warrant bonds and profit participation loans (Table 3).

Table 5
Spectrum of Hybrid Financial Instruments



A basic problem in connection with business finance is the fact that the terms 'equity' and 'debt' are not defined uniformly in national as well as international corporate, accounting and tax law and they do not imply the same legal consequences. As a matter of fact the classification of hybrid instruments is even more complicated. Hybrid instruments cannot be clearly attributed to either equity or debt. Only few of these instruments are regulated by law. For tax purposes, however, a clear attribution of financial instruments to either equity or debt is crucial. Due to the lack of tax neutrality in finance (Kofler & Payerer, 2004: 54; Seibold, 2002: 164) not only the inflow but also the return on investment is treated differently for tax purposes (Kahn & Lehman, 2001: 41 et seq.). The return on equity investments is in principle subject to double taxation (Posin & Tobin, 2005: 86; Rose & Chommie, 1994: 522): once at the level of the profit generating company and once at the level of the shareholder in case of distribution. Dividends are part of a company's taxable profit, which means that they do not reduce the company's taxable base. At the level of the shareholder dividends are subject to capital gains tax. The return on loan investments on the contrary is generally taxed only once at the level of the shareholder. At the level of the lending company interest is a tax-deductible expense leading to a reduction in the corporate taxable base. Additionally, refinancing costs are tax deductible at the level of the shareholder. In conclusion, debt financing is generally more favourable than the contribution of equity capital (Kahn & Lehman, 2001: 45).

Tax classification criteria of hybrid instruments are not necessarily congruent with economical or legal criteria and depend on a country's legislation, jurisdiction and administrative practice (OECD, 1987: 14). Different criteria, e.g. the performance-dependency of payments, the bearing of risk etc., must be interpreted and carefully weighted in order to do a final classification. The differences in classification are

an important source of corporate tax planning opportunities and risks (Helminen, 2004: 56). In cross-border situations, hybrid instruments may be treated as debt in the source state and as equity in the country of residence of the shareholder and vice versa. The return on the investment would be deductible in the source state and exempt from tax in the state of residence of the shareholder. In the opposite case, the return on the hybrid instrument would be treated as a non deductible profit distribution in the source state and as a taxable interest payment in the country of residence of the shareholder (Herzig, 2000: 485). Disregarding anti-avoidance rules, e.g. 'subject-to-tax-clauses' (Schilcher, 2004: 34 et seq.), double non-taxation or double taxation may be the result.

THIN CAPITALIZATION RULES

The concept of thin capitalization rules: The term 'thin capitalization' simply refers to a company's capital structure which is characterised by a high proportion of (shareholder-) debt to equity. expressions like 'hidden equity capitalisation' or 'shareholder debt financing' are often used synonymously (OECD, 1987: 11).

It is a fact that the conditions for, definitions of and exceptions from thin capitalization rules vary from country to country. The aim of every set of regulations on thin capitalization, however, is the same: the avoidance of excessive debt financing, especially through shareholders, and of the corresponding loss of tax revenue in the source country (e.g., Knobbe-Keuk, 1992: 408; Grotherr, 1995: 52; Thömmes, 2004: 126; Endres, 2006: 258). In cross border situations the main portion of the tax revenue from interest payments is realised in the country of residence of the lender. The main portion of the tax revenue from dividend payments on the contrary is realised in the source country. Therefore tax administrations began to introduce thin capitalization rules. The preliminary question of thin capitalization rules is, whether or not the payment concerned derives from a loan or equity contribution (OECD, 1987: 13). In the beginning thin capitalization rules consequently have been applied to cross-border situations only. Due to developments in European Law, however, several countries broadened the scope of their thin capitalization rules and included domestic situations also (e.g., Obser, 2005: 7).

Legal basis of thin capitalization rules: Measures taken against thin capitalization of companies are either based on general tax rules or regulated by specific law. Those countries which penalize thin capitalization with general tax rules rely on principles such as the substance over form principle, the general arm's length principle or the abuse of law concept (Piltz, 1996: 102 et seq.). Normally these principles are derived from a country's jurisdiction or administrative practice and used only in extreme cases (e.g. Austria; see table 4).

 ${\bf Table~6} \\ {\bf Legal~Basis~of~Thin~Capitalization~Rules~of~Different~Countries}$

У	Type of Thin 0			
Country	Specific law	General Rule Administration Practice	Introduction	
Austria	-	Art 8 (2) CTA	-	
Germany	Art 8a CTA	Art 8 (3) 2 nd sentence CTA	1994	
Czech Republic	Art 25 (1)(w) ITA	-	2005 ^a	
Hungary	Art 8 (1)(j) und (5) CDTA	-	1992	
Netherlands	Art 10 d Wet Vpb	-	2004	
United Kingdom	Schedule 28 AA ICTA 1988 [s. 209 ICTA 1988]	-	2004 ^a	

a new rule

Countries with particular rules on thin capitalization specify a certain unobjectionable debt to equity ratio (fixed-ratio-approach, see e.g. McDaniel, McMahon & Simmons, 1999: 514 et seq.) or reclassify interests paid to non-residents in general. Sometimes countries grant exceptions to the basic rule for certain types of activities and groups of companies. In some countries thin capitalization rules are applied only to particular industries, shareholders, managing directors or holding companies (Piltz, 1996: 101 et seq.). Mostly countries pursue a fixed-ratio-approach and additionally refer to the arm's length principle when applying their thin capitalization rule (Table 5) (see e.g. Kessler & Obser, 2004).

Table 7
Country-specific Thin Capitalization Approaches

Country	Fixed Debt/Equity Ratio	General Anti Abuse Approach	Arm's Length Test	Threshold/Tax Exemption
Austria	-	Х	Х	-
Germany	1,5:1	-	x ^a	250.000 € / -
Czech Republic	4:1 / 6:1	-	-	-
Hungary	3:1	-	-	-
Netherlands	3:1/ group ratio test	-	-	- / 500.000 € ^b
United Kingdom	-		Х	- -

no arm's length test for profit-

- ^a dependent return
- b not in connection with group ratio test

Tax consequences of thin capitalization rules: the tax consequences at the level of the subsidiary in the source country can be divided into three categories (Piltz, 1996: 119 et seq.):

- 1. reclassification of debt as equity,
- 2. non-deductibility of interest,
- 3. reclassification of interest as (hidden) profit distribution.

As a result, all thin capitalization rules lead to the non-deductibility of the payment on 'bad' debt at the level of the subsidiary. Thus an increase in the taxable base of the subsidiary has to be expected.

- 4. reclassification of debt as equity,
- 5. non-deductibility of interest,
- 6. reclassification of interest as (hidden) profit distribution.

As a result, all thin capitalization rules lead to the non-deductibility of the payment on 'bad' debt at the level of the subsidiary. Thus an increase in the taxable base of the subsidiary has to be expected.

The country of residence of the parent company generally has two options in treating the return on investment: tax it as interest or tax it as profit distribution. If the country of residence does not agree with the tax treatment in the source country and taxes the return on the debt investment as regular interest, double taxation will be the result. If the country of residence, on the other hand, accepts the characterisation of the source country and makes a corresponding adjustment of the tax burden at the level of the parent company – normally by granting an exemption from tax -, single taxation can be achieved. The country of residence, yet, will lose part of its tax revenue (see Table 6).

Table 8

Tax Consequences of Thin Capitalization Rules (see Zielke, 2006)

>	Tax Consequence		Corresponding Adjustment in					
l rtr	(permanent)	(permanent) Country		Country of	Residence			
Country	Reclassification in Dividends	(permanent) Non- Deductibility	AUT	GER	CZ	ΩН	٦	λη
Austria	х			no	yes	yes	yes	-
Germany	Х		no		no	no	yes	yes
Czech Republic	х		no	yes		no	no	yes
Hungary		х	no	no	no		yes	no
Nehterlands		Х	no	no	no	yes		yes
United Kingdom		X	no	no	no	yes	yes	

Substantive scope of thin capitalization rules:

Preliminary remarks: Countries with special thin capitalization regulations generally follow the concept of a fixed debt to equity ratio. Within certain limits the return on the debt financing remains deductible; the taxpayer rests in a 'safe haven'. The unobjectionable debt-equity ratio varies from country to country. For the application of thin capitalization rules either the level of debt of the lending company in total or against individual shareholders or certain groups of shareholders is relevant. Some countries also grant a certain threshold. If the debt financing does not attain a minimum amount, the thin capitalization rule is not applicable. Groups of companies or certain industries may be subject to different treatment in this context. As the taxpayer normally has to bear the burden of proof, the definition of the respective variables has to be examined in detail. Firstly, the question has to be answered, what the relevant equity capital is. Secondly, the relevant loan capital has to be defined. Finally, it must be determined if hybrid instruments are also included in the substantive scope of thin capitalization rules.

As a rule, the more equity components and the less debt components a company's capital structure has, the more favourable the debt-equity ratio and consequently the effects of a thin capitalization will be. With reference to the discussion in chapter II this seams quite contradictory. The conclusion of the previous discussion was that from a tax perspective debt financing is generally more advantageous than equity financing. In thin capitalization situations, however, it is exactly the opposite way round. If a company uses debt financing structures beyond the safe haven, the result in the source country will definitely be the denial of the interest deduction. This is exactly what tax administrations want: tax the return on investments originally classified as debt as profit distributions in order to assure single taxation in the source country. The problem arises when crossing the borderline. If the resident country is willing to treat the payment as dividends also, the overall tax burden will be identical with the tax burden of straight equity finance. If the country of residence, on the contrary, is not willing to follow the classification of the source country the same economic substance will be taxed twice. For this reason, the use of pure equity financing is more favourable, especially more certain in its consequences. The very same is true for the use of hybrid financial instruments in thin capitalization situations.

Equity Definition

The meaning of equity in thin capitalization rules is largely consistent with the meaning of equity in commercial balance sheets. The authorized share capital, the surplus capital retained, retained earnings from previous years and untaxed reserves are typical equity components (Piltz, 1996: 110) and therefore generally considered in the calculation of the debt-equity ratio. The amount of equity is e.g. calculated at the previous year-end, the actual year-end or in a given year.

Debt Definition

Every set of regulations on thin capitalization clearly stipulates what is to be considered as debt. Depending on the country's regime the following types of loan capital will or will not be included in the determination of the level of debt (see Piltz, 1996: 106 et seq.):

- 1. Ordinary loans: ordinary loans with arm's length interest rates and fixed repayment obligations are generally classified as debt.
- 2. Non-interest-bearing loans: as long as no interest payment is made, a country's tax revenue cannot be lost and therefore an inclusion of non-interest-bearing loans in the computation of the level of debt does not make a sense.
- 3. Short-term-loans: the treatment of short-term-loans is quite inconsistent.
- 4. Back-to-back loans: as a rule, this form of loan financing comes under the scope of all thin capitalization rules.
- 5. Third party loans: if a third party has the right to take recourse on the shareholder based on a surety, guarantee, statement of support etc. the loan will generally increase the level of debt. Some countries, however, differentiate.

The relevant amount of debt is either the amount of debt at year-end, an average annual amount of debt, the highest amount of debt in a given year, a choice between the highest and the average amount of debt or some other figure.

Hybrid Financial Instruments

Thin capitalization rules typically control shareholder loans and high-debt equity ratios respectively. Nevertheless hybrid instruments may also fall under the substantive scope of thin capitalization rules. De Hosson & Michielse (1989: 477) see a possible manifestation of thin capitalisation in hybrid financial instruments when shareholders provide capital that 'is essentially equity capital in prima facie clothing as a loan' (see also Lüthi, 1991: 446). Even if hybrid instruments do not come under the substantive scope of thin capitalization rules they may be included in the computation of the safe haven. Due to the personal scope of certain thin capitalization rules, not only hybrid finance through shareholders but also through third parties must be taken into account. Table 7 gives an overview of the substantial scope of thin capitalization rules of selected countries (Gassner, 1996; Watrin & Lühn, 2004; Smit & Smith, 2005; Végh & Szűcs, 2005; Nias & Purcell, 2005; Trezziová & Fekar, 2005).

Table 9
Substantive Scope of Thin Capitalization Rules in different Countries

>	Substantive Scope of Thin Capitalization Rules						
Country	'Normal' Loan	Short-Term Loan	Interest-Free Loan	Back to Back Loan	Third Party Loan with Recourse ^a	Hybrid Financial Instrument	
Austria	-	-	1	-	1	-	
Germany	х	-	Х	х	х	х	
Czech Republic	х	-	1	-	-	-	
Hungary	х	-	1	-	-	-	
Netherlands ^b	x/x	-/x	-/x	-/x	-/x	-/x ^c	
United Kingdom	х	-	-	х	х	_d	

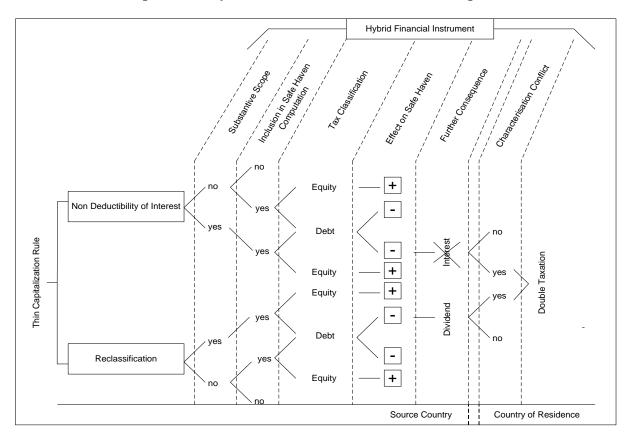
^a e.g. certificate of bond, letter of comfort

b two different methods of calculation dependent on the test chosen:

- a) safe haven test: net debt-calculation according to tax balance sheet items; only 'money loans' are included
- b) group ratio test: no net debt-calculation; all liabilities of the commercial balance sheet have to be included
- ^c Art 10 (1)(d) ITA specific rule for 'hybrid loans': neither equity nor debt; interest non-deductible when equity-hybrid
- ^d International Arbitrage Rules

In any case, the classification of hybrid instruments for thin capitalization purposes as either debt or equity is decisive. In most cases the classification criteria are consistent with the general classification criteria in tax law, provided that they exist. Sometimes, however, traditional tax classification rules are insufficient. Debt-alike hybrid instruments do typically have a negative impact on the taxation of companies in thin capitalization situations. If a debt-alike hybrid instrument e.g. is not included in the substantive scope but nevertheless in the calculation of the safe haven, the taxation of 'regular' (shareholder) loan capital may be influenced negatively. If a debt-alike hybrid instrument is included in the safe haven calculation and in the substantive scope, such hybrid instruments do not only have negative influence on the level of debt but also lose their own tax attractiveness. Equity-alike hybrid instruments, on the contrary, always have a positive effect on the taxation of thinly capitalized companies. The following table (table 8) shows possible constellations of hybrid instruments in thin capitalization situations.

Table 10
Possible Consequences of Hybrid Financial Instruments in Thin Capitalization Situations



Comparison of Tax Burden - An Illustrative Example

The following two Tables (Table 9 and 10) shall illustrate the tax consequences of cross-border group-finance discussed in chapter III. The source country or the country of residence of the subsidiary is

Germany. The country of residence of the parent company is Austria. Whereas Germany pursues a strict thin capitalization regime (e.g., Obser, 2005), according to Austrian Corporate Tax Act a company is supposed to be thinly capitalized only in extreme cases (Gassner, 1996). The following assumptions have been made:

- 1. Only corporations are included;
- 2. The parent company has a holding of 100 % of the subsidiary;
- 3. The rate of interest is at arm's length;
- 4. In case of loan financing the EBIT is used up by interest payments;
- 5. Only income taxes are considered and
- 6. Refinancing costs at the level of the parent company are not taken into account.

Table 11

Tax Consequences of Cross-Border Shareholder Loans in Comparison

Source Country: Germany							
Country of Residence: Austria							
		•	Shareholder Loar	1			
Method of Finance	Equity	GER: Interest ^a AUT: Interest	GER: Art 8a ^c AUT: Dividends	GER: Art 8a ^c AUT: Interest			
Level of Subsidiary in GER							
EBIT	500,00	500,00	500,00	500,00			
Interest on Loan		-500,00	-500,00	-500,00			
+ Reclassified Interest			500,00	500,00			
EBT	500,00	0,00	500,00	500,00			
German Trade Tax (16,67 %) ^b	-83,33	-41,67	-83,34	-83,34			
Corporate Income Tax (25 %)	-104,17	10,42	-104,17	-104,17			
Solidarity Surcharge (5,5 %)	-5,73	0,57	-5,73	-5,73			
Distributable Profit	306,77	-30,68	306,77	306,77			
Level of Parent Company in GER							
Capital Income (Art 49 (1) 5a German ITA)	306,77	0,00	306,77	306,77			
No Withholding Tax on Dividends (Art 43b German ITA)	0.00		0,00	0,00			
No Withholding Tax on Interest	0,00		0,00	0,00			
(Art 43 (1) 7 German ITA)		0,00					
Level of Parent Company in AUT							
Participation Exemption	306,77		306,77				
Interest Income		500,00		500,00			
Corporate Income Tax (25 %)		-125,00		-125,00			
Net Profit	306,77	344,32	306,77	181,77			
Total Tax Burden	193,23	155,68	193,23	318,23			
	38.65%	31.14%	38.65%	63.65%			

- ^a Interest payment > 250.000 €, > safe haven but positive arm's length test
- ^b Half of the interest on long-term debt has to be added for trade tax purposes
- ^c Interest payment > 250.000 €; > safe haven, negative arm's length test

Source Country: Germany			
Country of Residence: Austria			
	Sharohe	older Loan + Hybrid Inst	rumont
	GER: HI = Equity	GER: HI = Debt	GER: HI = Debt
Method of Finance	→ no Art 8a	→ Art 8a	→ Art 8a
metrod of Findrice	AUT: Interest/Dividend ^a	AUT: Interest/Interest ^c	AUT: Dividend/Dividend
Level of Subsidiary in GER			
EBIT	500,00	500,00	500,00
Interest on Loan	-250,00	-250,00	-250,00
Interest on Hybrid Instrument		-250,00	-250,00
+ Reclassified Interest (on Shareholder Loan)		250,00	250,00
+ Reclassified Interest (on Hybrid Instrument)		250,00	250,00
EBT	250,00	500,00	500,00
German Trade Tax (16,67 %) ^b	-62,50	-83,34	-83,34
Corporate Income Tax (25 %)	-46,87	-104,17	-104,17
Solidarity Surcharge (5,5 %)	-2,58	-5,73	-5,73
Distributable Profit	138,05	306,77	306,77
Level of Parent Company in GER			
Capital Income (Art 49 (1) 5a German ITA)	138,05	306,77	306,77
No Withholding Tax on Dividends			
(Art 43b German ITA)	0,00	0,00	0,00
No Withholding Tax on Interest (Art 43 (1) 7 German ITA)	0,00		
Level of Parent Company in AUT	0,00		
Participation Exemption	138,05		306,77
Interest Income (Loan and Hybrid Instrument)	250,00	500,00	· ·
Corporate Income Tax (25 %)	-62,50	-125,00	
Net profit	325,55	181,77	306,77
Total tax burden	174,45	318,23	
. C.u. tax baraon	34.89%	63.65%	<i>'</i>

Table 9 clearly shows that a shareholder loan (31.14 %) is more favourable than an equity investment as long as the safe haven of 251.000 € is not exceeded or the arm's length test was positive. If the unobjectionable debt to equity ratio is exceeded, however, the minimum tax burden amounts to 38.65 % and equals the tax burden of a regular equity contribution. A tax burden of 63.65 % has to be expected if the country of residence, namely Austria, is not willing to make a corresponding adjustment. Economic double taxation is the result. In order to avoid the worst case tax burden, the parent company may substitute half of the shareholder loan by a hybrid financial instrument. Depending on the classification of the hybrid instrument as either equity or debt the safe haven of Art 8a German CTA will be exceeded or not.

Through the use of an equity-alike hybrid instrument in connection with a (lower) shareholder loan the tax burden can be reduced to 34.89 % (see table 10). Compared to the tax burden of a pure loan financing (table 9) this structure is a bit less favourable; the risk of a reclassification according to the thin capitalization rule, however, is eliminated. Compared to the tax burden of pure equity finance (table 9) the substitution by an equity-alike hybrid instrument is more favourable not only with regard to the tax burden but also with regard to the legal requirements. The use of debt-alike hybrid instruments, on the other hand, leads to a tax burden of 38.65 % provided Austria makes a corresponding adjustment. If the country of residence of the parent company refuses to make a corresponding adjustment, as in most cases, again double taxation is the result.

Table 12

Tax Consequences of Hybrid Instruments in Thin Capitalization Situations

HI Hybrid Instrument

- ^a Austria classifies the return on the shareholder loan as interest and the return on the hybrid instrument as dividend
- ^b Half of the interest on long-term debt has to be added for trade tax purposes
- ^c Austria classifies the return on the shareholder loan as interest and the return on the hybrid instrument as interest (no corresponding adjustment)
- d Austria classifies the return on the shareholder loan as dividend and the return on the hybrid instrument as dividend (corresponding adjustment)

CONCLUSIONS

Hybrid financial instruments clearly offer tax planning opportunities, in particular in a cross-border setting. Hybrid instruments may be tailored in a way that they provide capital that is economically similar to equity but taxed as debt. With regard to the variation in the extent to which such instruments are used and the inconsistency in tax classification between countries the overall corporate tax burden can be minimized. However, the use of hybrid financial instruments can be risky. In connection with thin capitalization the favourable tax consequences of debt-alike hybrid financial instruments may reverse:

- The deductibility of payments on excessive 'debt' at the level of the subsidiary is lost,
- Double taxation may arise when the residence country is not willing to make a corresponding adjustment;
- Other group financing structures may be influenced negatively.

Therefore the use of equity-alike hybrid instruments becomes more advantageous. The main question, which classic method of finance – debt or equity - hybrid instruments are assigned to in thin capitalization rules has to be answered for each country separately. These findings are, however, not valid for countries:

- which do not sanction thin capitalization at all
- which do sanction thin capitalization only in very extreme cases and
- whose thin capitalization rules do not include hybrid financial instruments at all.

In planning business with companies situated in these countries the traditional tax policy will be effective. The present paper is of particular importance to the field of tax management as it calls attention to find alternatives in cross-border company finance. Leasing contracts, factoring, real capital investments or (non-revolving) short-term loan financing are only a few examples (e.g. Obser, 2005: 159 et seq.).

REFERENCES

Bittker, B.I., & Eustice, J.S. 2000. *Federal Income Taxation of Corporations and Shareholders*, 7th Edition, Valhalla: Warren, Gorham & Lamont.

De Hosson, F. C., & Michielse, G. M. M. 1989. Treaty aspects of the 'thin capitalisation' issue – A review of the OECD Report. *Intertax*: 476-484.

Eberhartinger, E., & Six, M. 2006. National Tax Policy, the Directives and Hybrid Finance. Options for tax policy in the context of the treatment of Hybrid Financial Instruments in the Parent-Subsidiary Directive and the Interest and Royalties Directive. Discussion Paper No. 16, Vienna University of Economics and Business Administration, Austria.

Endres, D. 2006. Zur steueroptimalen Vergabe von Eigen- und Fremdkapital im Ausland. *Praxis Internationale Steuerberatung*: 255-258.

Duncan, J.A. 2000. General Report. In IFA (Ed.), Cahiers de droit fiscal international Volume LXXXVa, *Tax treatment of hybrid financial instruments*: 21-34. The Hague: Kluwer Law International.

Gassner, W. 1996. Austria. In IFA (Ed.), Cahiers de droit fiscal international Volume LXXXIb, *International aspects of thin capitalization*: 315-339. The Hague: Kluwer Law International.

Gouthière, B. 2005. A Comparative Study of the Thin Capitalization Rules in the Member States of the European Union and Certain Other States. *European Taxation*: 367-369.

Grotherr, S. 1995. Ausländische Unterkapitalisierungsregelungen. In D.J. Piltz & H. Schaumburg (Eds.), *Unternehmensfinanzierung im Internationalen Steuerrecht*: 49-87. Köln: Dr. Otto Schmidt.

Helminen, M. 2004. Classification of Cross-Border Payments on Hybrid Instruments. *Bulletin*: 56-61.

Herzig, N. 2000. Thema I: Hybride Finanzierungsinstrumente im nationalen und internationalen Steuerrecht. *Internationales Steuerrecht*: 482-485.

Hudetz, T. 2005. Voraussichtliche Auswirkungen von Basel II auf Bonitätsbeurteilung durch österreichische Kreditinstitute bei hybriden Finanzierungen – als eigene Bankforderung oder als externer Kapitalisierungsteil. In M. Bischof & E. Eberhartinger (Eds.), *Hybride Finanzierungsinstrumente*: 141-182. Wien: Linde Verlag.

Kahn, A., & Lehman, J.S. 2001. Corporate Income Taxation 5th Edition. St. Paul: West Publishing Co.

Kessler, W., & Obser, R. 2004. Überblick zur Gesellschafter-Fremdfinanzierung in den Mitgliedstaaten der Europäischen Union. *Internationales Steuerrecht*: 187-191.

Kofler, H., & Payerer, A. 2004. Steuern und Außenfinanzierung. In R. Bertl et al (Eds.), *Handbuch der österreichischen Steuerlehre Bd IV*: 53-86. Wien: Lexis Nexis Verlag.

Knobbe-Keuk, B. 1992. Developments in Thin Capitalization and Some Legal Obstacles to Legislation. *European Taxation*: 405-408.

Leitinger, R. 2005. Mezzaninkapital als alternatives Finanzierungsinstrument. In M. Bischof & E. Eberhartinger (Eds.), *Hybride Finanzierungsinstrumente*: 33-54. Wien: Linde Verlag.

Lüthi, D. 1991. Thin capitalisation of companies in international tax law. *Intertax*: 446-453.

McDaniel, P.R., & McMahon, M.J.jr, & Simmons, D.L. 1999. *Federal Income Taxation of Business Organizations*. New York: Foundation Press.

Merks, P. 2006. Categorizing Corporate Cross-Border Tax Planning Techniques. *Tax Notes International*: 55-69.

Müller-Känel, O. 2004. Mezzanine Finance - Neue Perspektiven in der Unternehmensfinanzierung. Bern/Wien: Haupt.

Nias, P. M. W., & Purcell, N. 2005. United Kingdom. European Taxation: 435-441.

Obser, R. 2005. Gesellschafter-Fremdfinanzierung im europäischen Konzern. In IDW (Ed.), Wissenschaftliche Schriften zur Wirtschaftsprüfung. Düsseldorf: IDW Verlag GmbH.

OECD 1987. Thin Capitalisation. In OECD (Ed.), *Issues in International Taxation No 2*: 7-36. Paris: OECD Publications.

Piltz, D. J. 1996. General Report. In IFA (Ed.), Cahiers de droit fiscal international Volume LXXXIb, *International aspects of thin capitalization*: 83-140. The Hague: Kluwer Law International.

Posh, D. Q., & Tobin, D. T. 2005. *Principles of Federal Income Taxation* 7th Edition. St.Paul: Thomson/West.

Rose, M.D., & Chommie, J.C. 1994. *Federal Income Taxation* 3rd Edition, St.Paul: West Publishing Co. Schilcher, M. 2004. Subject-to-tax-Klauseln in der österreichischen Abkommenspraxis. In M.

Lang (Ed.), Schriftenreihe zum Internationalen Steuerrecht Bd 33, Wien: Linde Verlag.

Seibold, S. 2002. Steuerliche Betriebswirtschaftslehre in nationaler und transnationaler Sicht. Bielefeld: Erich Schmidt.

Smit, P., & Smith, E. 2005. Netherlands. *European Taxation*: 417-423.

Thömmes, O., & Stricof, R., & Nakhai K. 2004. Thin Capitalization Rules and Non-Discrimination Principles. *Intertax*: 126-137.

Trezziová, D., & Fekar, P. 2005. Czech Republic. *European Taxation*: 378-381.

Van Raad, K. 1986. *Nondiscrimination in International Tax Law*. Deventer/Antwerpen/London/Frankfurt/Boston/New York: Kluwer Law and Taxation Publishers.

Végh, P. G., & Szűcs, B. 2005. Hungary. European Taxation: 398-402.

Watrin, Ch., & Lühn, M. 2004. Mezzanine-Finanzierungen im Rahmen des § 8a KStG n. F. Steuern und Bilanzen: 724-731.

Zielke, R. 2006. Gesellschafter-Fremdfinanzierung und Doppelbesteuerung in der Europäischen Union. Österreichisches Recht der Wirtschaft: 600-610.

GROWTH, NON-DEBT TAX SHIELDS, AGENCY CONFLICT AND CORPORATE DEBT: A STUDY OF THE MALAYSIAN CORPORATE SECTOR

L.Sarada L.V.L.N.Sarma Lellapalli V.Ramana Multimedia University, Malaysia E-mail: l.sarma@mmu.edu.my

ABSTRACT

Companies use debt capital (borrowed funds) for several reasons. Ever since Modigliani and Miller (MM) identified the advantage of tax-deductibility of interest charges in debt capital, the field has grown in several directions. The influence of non-debt tax shields on usage of debt is one area as explored by De Angelo and Masulis (1988). Companies' borrowing is expected to have an inverse relationship with the extent of their use of "non-debt tax-shield" generating avenues. The Free Cash Flow Hypothesis of Michael C. Jensen (1986) assigns a different role to debt capital: debt is expected to act as a weapon to 'discipline' managers and prevent extravagant spending of corporate earnings for personal aggrandizement. Growth opportunities and the associated asymmetric information problems is another situation for profitable deployment of debt. Sample is drawn from the "Industrial Products" segment of the Malaysian corporate sector, and multiple regression analysis is used to report findings.

INTRODUCTION

The tax-deductibility of interest advantage of debt leading to an additional value to a levered company over an unlevered company equivalent to the tax rate (T_C) multiplied by the quantity of Debt (D) is very ably brought out by Modigliani and Miller (MM, 1963 and 1958); it is, more or less, universally accepted. This field witnessed rapid advancements incorporating into this capital structure discussion issues related to agency conflict and costs (Michael C. Jensen, 1986), asymmetric information (Stewart C. Myers, 1984), (Myers & Majluf, 1984), non-debt tax shields (De Angelo & Masulis, 1988) and other aspects. This paper addresses the following aspects related to debt levels and hence restricts discussion to non-debt tax shields and debt, growth opportunities and debt and free cash flows and debt. Needless to mention that there are many other aspects influencing the choice of debt giving rise to conflicting hypotheses and some times mutually off-setting influences. No wonder, Myers has very aptly described the area as capital structure puzzle.

Non-Debt Tax Shields and Debt

Presence of tax –shield generating avenues like depreciation, lease payments, capital expenditure related tax commissions and such others offer a set of opportunities considered to be formidable substitutes to debt generated tax shields through interest paid on debt. This aspect was the focus of analyses by De Angelo and Masulis (1988). To quote them: "In our model, these realistic tax codes features imply a unique interior optimum leverage decision for each firm"; this led them to conclude that "the existence of non-debt tax shields (NDTS) is adequate to overturn the capital structure irrelevancy theorem". Companies do indulge in a trade-off between debt and non-debt tax shields. Hence non-debt tax shields and debt levels are expected to have a negative relation.

Growth Opportunities and Debt

Asymmetric information between managers and investors at the capital market leads to underpriced equity. This, in turn, leads to a situation of under investment as managers, under such a situation, prefer to reject projects with Positive Net Present Value if the latter do not offset the gap

between the intrinsic and market value of equity. For significant works on asymmetric information see Akerlof (1970) and Stiglitz (1994). Myers (1984 & 2001) argues that growth opportunities enable managers to overcome aversion to equity issues and lean more towards equity capital than Debt. It is, therefore, expected that debt and growth opportunities (GRO) exhibit negative relation.

Free Cash Flow (Fcf) and Debt

Managers entrusted with the responsibility and commensurate authority to discharge the same may strengthen their position and become powerful. Such entrenched managers often squander away corporate profit for personal aggrandizement; this tendency assumes alarming proportions in the presence of sizeable Free Cash Flows. Committing such free cash flows to cash out flows would prevent managers from indulging in wasteful spending for personal benefit. A ready candidate found to be effective enough in curbing wasteful expenditure is debt with its mandatory annual cash outflow obligations in the form of interest and some principal payments annually (Michael Jensen 1986); thus Free Cash Flow and Debt levels are assumed to be positively related. This is the agency theory explanation. Another explanation to the opposite effect would be explained at the time of the discussion of empirical results.

The purpose of the present paper is to identify the influences of factors discussed above on debt capital in the selected companies from the corporate sector in Malaysia. The hypotheses mentioned below are verified towards this primary objective.

HYPOTHESES

Following hypotheses are included:

- 1. Firm's debt is inversely related to the non-debt tax shields availed by it.
- 2. Firm's debt is inversely related to its growth opportunities.
- 3. Firm's debt is positively related to its Free Cash Flow.

The following variables are also included among the list of influencers of debt magnitudes as they are often mentioned in earlier studies:

- a) Size (SIZE): Large companies can afford to have higher levels of debt in their capital compared to small companies. This is so because perceptions of large companies' financial soundness by investors are more positive vis-à-vis small companies.
- b) Financial Slack (FISLA): Pecking order theory postulates that company's preparedness to combat asymmetric information and the associated under- investment problem could be checked through maintenance of near-liquid short term investments i.e. maintenance of slack, and unutilized debt capacity (Myers & Majluf, 1984). But such slack increases the adverse selection costs and makes equity more costly. Therefore, companies with more of financial slack tend to use more debt.
- c) Agency Problem (AGEP): Agency theory in the area of 'shareholder-manager' conflict hypothesizes that 'entrenched' managers avoid debt to be free from the commandments of creditors. A concentrated and strong share holder group can control the agency problem. Proportion of shares held by 'Block Shareholders' in total outstanding shares is, for example, an index of shareholder power over managers and is expected to reflect the intensity of agency conflict. When shareholders are strong, companies tend to have more debt since such shareholders can impose debt to ensure 'disciplined' managers (Zweibel 1996).
- d) Profitability (PROF): Need based approach to debt argues that highly profitable companies have less need for debt as retained earnings are available in greater measure. But approaches based on asymmetric information compulsions assign a signaling role to debt (Ross, 1977). Profitability and Debt, thus, might exhibit positive relation too.
- e) Degree of Safety with Debt (DSD): Higher is the safety cover available for companies ensuring capacity to meet cash out flow obligations on debt, higher would be the levels of debt in those companies. A simple interest coverage ratio can convey this ability.

f) Deviation of Debt from Target Ratio (DETRA): Companies which experienced in the previous year debt levels higher than the targeted debt levels, adjust them in the current year. Mean Reversion Theory and Trade-off Theory imply this behavior.

The Model

All the factors mentioned above have a bearing on the Long Term Debt (LTD) that a company employs at any point of time. This relationship is brought out through the following equation:

LTD =
$$a_0 + a_1$$
 NDTS + a_2 GRO + a_3 FCF + a_4 SIZE + a_5 FISLA + a_6 AGEP + a_7 PROF + a_8 DSD + a_9 DETRA + μ (1)

where the dependent variable is Long Term Debt (LTD), the explanatory / predictor variables are as explained above and μ is the error/random disturbance term.

RESEARCH METHODOLOGY

Statistical Method employed is confirmatory Regression Model since the inclusion of independent variables is based on *a priori* reasoning and the variables tested and suggested in earlier studies. This method is appropriate for verification and validation purposes.

The sample for this study consists of 31 companies drawn from the 'Industrial Products' segment (of the Malaysian Corporate Sector) listed on the Main Board of Bursa Malaysia. The study is designed as a continuous cross sectional analysis for the years 2004 and 2005.

Statistical package used is SPSS-14 to carry out the multiple regression analysis and the selected associated econometric tests. The data required are collected from financial statements of sample companies from the website of Bursa Malaysia (www..klse..com.my) and DATASTREAM.

RESULTS

Results of the Multiple Regression Analysis for the cross section years 2004 and 2005 are reported in Table-1 and Table-2, respectively. Empirical results of the main three hypotheses of this study are summarized below.

- Non-debt tax shields and debt: The coefficients for NDTS turned out to be significantly
 positive in both the years viz., 2004 and 2005. Companies exploit fully both sources and,
 therefore, exhibit positive relationship between NDTS and Debt. The present study's results,
 contrary to the results of many earlier studies, indicate that debt and non-debt sources of tax
 shields are not mutually exclusive.
- 2. Growth and debt: Price/Earnings ratio is credited with the virtue of possessing information on future growth prospects of companies. Companies' aversion to equity issue will be overcome in the presence of growth opportunities since these opportunities will eliminate or significantly reduce the costs of equity issue due to asymmetric information; growth opportunities thus facilitate equity which implies negative correlation between growth opportunities and debt. In both the years (2004 & 2005) the growth coefficient turned out, as expected, to be significantly negative.
- 3. Free cash flow and debt: Agency theory's implications appear to be less relevant than consideration of financial sources. Higher levels of Free Cash Flows make companies rely more on equity- internal equity, especially or facilitate retirement of

debt; should that be so, an inverse relation between Free Cash Flow and Debt is in order (it is revealed by the significantly negative coefficients in both 2004 and 2005).

A negative coefficient for Free Cash Flow is consistent with the Franchise value hypothesis too (Berger 2002).

TABLE 1
Dependent Variable: LTD/TA (Year 2004)

Independent	Regression Coefficient	Standard Error	't' value	Sig
Variable				(Significance level)
Constant	0.002	0.109	0.021	0.984
NDTS	0.432	0.194	2.221	0.037
GRO	-0.001	0.000	-2.980	0.007
FCF	-0.610	0.267	-2.289	0.033
SIZE	1.389E-07	0.000	3.196	0.004
FISLA	-0.110	0.087	-1.263	0.221
AGEP	0.002	0.001	1.786	0.088
PROF	1.035	0.261	0.351	0.729
DSD	0.118	0.077	1.545	0.137
DETRA	0.015	0.080	0.185	0.855
			$R^2: 0.616$	
			Adj. $R^2: 0.452$	

TABLE - 2 Dependent Variable: LTD/TA (Year 2005

	Dependent Variable: L1D/1A (Year 2005)						
Independent	Regression Coefficient	Standard Error	't' value	Sig			
Variable				(Significance level)			
C = 11 = 11 = 11 = 11	0.076	0.064	1 202	0.242			
Constant	0.076	0.064	1.203	0.242			
NDTS	1.936	0.230	8.414	0.000			
GRO	-0.001	0.000	-2.726	0.013			
FCF	-0.322	0.065	-4.975	0.000			
SIZE	-3.586E-06	0.000	-1.053	0.304			
FISLA	0.069	0.013	5.236	0.000			
AGEP	-4.029E-05	0.001	-0.049	0.962			
PROF	0.287	0.180	1.595	0.126			
DSD	0.046	0.078	0.591	0.561			
DETRA	0.285	0.103	2.767	0.012			
		$R^2:0.881$					
	Adj. $R^2:0.831$						

Debt, on the other hand, has potential to convey information about FCF (Sarada et.al.2006). This is one more aspect to this area are not investigated here. Discussion on other variables included to make the model adequately identified is not taken up here. It is necessary, of course, to mention that payout ratio also influences debt (Sarma &Kok, 2003).

The coefficients of determination (R²) are high in the two years studied⁴. The following additional tests ensured reliability and efficiency of the regression estimates.

 $^{^4}$ Minimum R^2 that can be captured at a sample size as that of this study, with a power of 0.80 for about 10 independent variables is approximately 0.50. (See Hair et.al. Table 4-7, P.195). In both the years analysed in this study, the R^2 observed is greater than 0.50.

Normality Test

Normality of the error terms of the variate is tested through visual observations of the normal probability plots of the residuals; this observation led to the deletion of outliers (Hair et. al., 2006). This has reduced, incidentally, the number of sample companies to 31 from the originally chosen 40. Moreover, Kolmogorov-Smirnov tests and Shapiro-Wilks tests are also carried out. The statistic and the significance level for years 2005 and 2004 are given below:

<u> </u>	K	Colmog	orov-				
	Smirnov Test			Sha	apiro-Wilks	Γest	
		Ye	ear: 2005				
Unstandardized	Statistic	df	Sig	Unstandardized	Statistic	Df	Sig
Residual	0.906	31	0.200	Residual	0.979	31	0.778
		Y	ear: 2004				
Unstandardized	Statistic	df	Sig	Unstandardized	Statistic	Df	Sig
Residual	0.100	31	0.200	Residual	0.975	31	0.672

The modified Kolomogrov -Smirnov (K-S) statistic and Shapiro -Wilks (S-W) statistic test the extent of deviation from the normal distribution.

Significance levels of the normality tests are given below:

Year: 2	2005	
'Kolmogorov- Smirnov' Test Statistic	0.200 > 0.05	
'Shapiro-Wilks' Test Statistic	0.778 > 0.05	
V	2004	
Year:	200 4	
'Kolmogorov- Smirnov' Test Statistic	0.200 > 0.05	
L		

These Statistics confirm that the residuals are normally distributed.

Multi-collinearity

One of the assumptions of regression analysis is that the independent variables are strictly independent of each other. In the extreme case of collinearity the correlation matrix approaches singularity leading to the blown up standard errors of regression coefficients and turning the latter insignificant.

Diagnosing Multicollenearity²: A direct measure of multicollinearity is 'tolerance' which is estimated using the following formula: $1 - R^{2*}$,

where R^{2*} is the coefficient of determination of regression of independent variable -1 on the remaining (N-1) independent variables. Higher the R^{2*} , lower will be Tolerance of Independent variable -1 and higher would be its collinearity with others and vice versa. 'Tolerance' is estimated for each of the independent variables. A second measure of multicollinearity is the Variance Inflation Factor (VIF). VIF

_

² Hair et.al. (2006), PP.226-258.

is the inverse of Tolerance. Different threshold values for Tolerance and VIF are recommended. A 'Tolerance' standard of, for example, 0.19 (and a VIF of 5.3) imply a correlation of 0.90 and above. A tolerance threshold of 0.25 to 0.30 and a VIF less than 5.0 are usually considered significant and acceptable.

The Tolerance and VIF estimates for independent variables of Regression Equations used in 2004 and 2005 are given below (Table-3 and Table-4). The results show that multicollinearity is within limits and is not 'harmful'.

Power is the capacity of the model to cull out the statistical significance of the phenomenon the model is intended to identify when it is present in the population. "Power is", therefore," the probability of correctly rejecting the null hypothesis when it should be rejected". Effect size is one of the influencers of power (power is determined by effect size, alpha and sample size). 'Effect Size' conveys the magnitude of the effect of interest in the population. 80% to power and 0.14 to effect size (the later is reported as 'square of partial eta' in SPSS-14) are threshold values researchers usually assign in empirical investigations. Table 5 and Table 6 below report 'Effect Size' and 'Power' for the independent variables of the Equation fitted for Year- 2004 and Year- 2005, respectively. The results are more robust for the year 2005 relative to 2004.

TABLE - 3
Multi-collinearity
'Tolerance' and VIF Measures (Year 2004)

1 of cranec	and vii Micasures (I car 2007	· ·
Independent Variable	TOLERANCE	VIF
NDTS	0.315	3.174
GRO	0.811	1.233
FCF	0.298	3.355
SIZE	0.807	1.240
FISLA	0.830	1.204
AGEP	0.806	1.240
PROF	0.675	1.481
DSD	0.791	1.265
DETRA	0.601	1.665

TABLE 4
Multicollinearity
'Tolerance' and VIF Measures (Year 2005)

-	olerance and vii micasures (real 200	,,,,
Independent Variable	TOLERANCE	VIF
NDTS	0.746	1.340
GRO	0.775	1.290
FCF	0.686	1.459
SIZE	0.846	1.182
FISLA	0.760	1.315
AGEP	0.642	1.557
PROF	0.784	1.276
DSD	0.697	1.434
DETRA	0.923	1.083

³ Hair et.al. (2006), PP.10-13.

TABLE 5
Effect Size and Power (Year 2004)

EFFECT SIZE (Partial Eta Squared)	POWER		
0.000	0.050		
0.190	0.563		
0.297	0.811		
0.200	0.588		
0.327	0.862		
0.071	0.226		
0.132	0.399		
0.006	0.086		
0.102	0.314		
0.002	0.054		
	EFFECT SIZE (Partial Eta Squared) 0.000 0.190 0.297 0.200 0.327 0.071 0.132 0.006 0.102		

TABLE 6
Effect Size and Power (Year 2005)

Independent Variable	EFFECT SIZE (Partial Eta Squared)	POWER
Constant	0.065	0.210
NDTS	0.771	1.000
GRO	0.261	0.739
FCF	0.541	0.997
SIZE	0.050	0.171
FISLA	0.566	0.999
AGEP	0.000	0.050
PROF	0.108	0.331
DSD	0.016	0.087
DETRA	0.267	0.751

DISCUSSION

Non-Debt tax shields and Debt-generated tax shields are found to be complementary, rather than competitive, in that companies tap both sources to reach wealth maximization. This is a significant finding of this study. The sign and size of the Free Cash Flow variable endorse its conventional role as source of finance rather than the role related to agency theory indicated in Free Cash Flow Hypothesis. This evidence is also consistent with the "Franchise value Hypothesis" which states that companies enjoying higher market values (through Free Cash Flows, for example, as is the case with the companies of the present study's sample) would like to protect that value from bankruptcy costs associated with Debt and therefore prefer equity to debt.

Growth potential is found to possess information on future prospects and, therefore, has very high potential to reduce the adverse selection costs of equity. This has resulted in its significantly negative relation with debt capital. Empirical results of this study have offered significant results on the above three hypotheses testing of which is the primary objective of the study. This could be achieved in spite of a small sample; this is, of course, because of selection of variables based on strong *a priori* reasoning. This has thrown up some more independent variables playing the role of 'moderators' as is the case with FISLA, DETRA etc., Identification of their independent and individual contributions to Debt, with an enlarged sample is slated for a separate study.

REFERENCES

Akerlof, G.A. 1970. The market for lemons: Quality uncertainty and the market mechanism. *Quarterly Journal of Economics*, 84 (3): 488-500.

Berger, Allen N. 2002. Capital structure and firm performance- A new approach to testing Agency Theory and an application to the banking industry. *Paper presented at the JFI / FRBNY / NYU, Symposium, Corporate Governance in the Banking & Financial Services Industry, New York*.

DeAngelo, Harry, & Masulis, Ronald W. 1988. Optimal Capital Structure under Corporate and Personal Taxation. *Journal of Financial Economics*, 8 (1): 3-30.

Hair, Joseph F., Black, Willima C., Babin, Barry K., Anderson, Rolph E. & Ronald L. 2006. *Multivariate data analysis*. New Jersey: Pearson Prentice-hall

Jensen, Michael C. 1986. Agency cost of free cash flow, corporate finance and take overs. *American Economic Review*, 76 (2): 323-329.

Modigliani, Franco. & Miller, Merton H. 1958. Cost of capital, corporation finance and the theory of investment. *The American Economic Review*: 48 (3): 261-297.

Modigliani, Franco, & Miller, Merton H. 1963. Corporate income taxes and cost of capital: A correction. *The American Economic Review*, 53 (3): 433-443.

Myers, Stewart C. 1984. The capital structure puzzle. *Journal of Finance*, 39 (3): 575-592.

Myers, Stewart C. & Majluf, Nicholas. 1984. Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2): 187-221.

Myers, Stewart C. 2001. Capital structure. *Journal of Economic Perspectives*, 15 (2): 81-102.

Ross, Stephen A. 1977. The determination of financial structure: The incentive signaling approach. *Bell Journal of Economics*, 8 (1): 23-40.

Sarma, L.V.L.N., & Kok, L. K. 2003. Financial policies and asymmetric information: A study of signaling significance of dividends in Malaysia. *Proceedings of the Malaysian Finance Association Fifth Annual Symposium*: 375-393.

Sarma, L.V.L.N., Sarada, L., & Mohd. Ismail Ahmad. 2006. Asymmetric information and signaling devices for corporate earnings' prospects. *The ICFAI Journal of Accounting Research*, V(3): 24-33.

Stiglitz, J.E. 1974. On the irrelevance of corporate financial policy. *American Economic Review*, 64 (6): 851-866.

Zwiebel, J. 1996. Dynamic capital structure under managerial entrenchment. *American Economic Review*, 86(5): 1197-1215.

THE PROPER TAXATION OF PUBLIC-PRIVATE PARTNERSHIPS (PPP): AN ANALYSIS OF THE TREATMENT IN TAX STRUCTURES OF EUROPEAN COUNTRIES

Gerald Posautz

Vienna University of Economics and Business Administration, Austria Email: gerald.posautz@wu-wien.ac.at

ABSTRCAT

PPP are defined as tailored long-term cooperation between the public sector and private sector enterprises. First developed in the U.S.A. these partnerships have been used by governments across Europe to improve quality and efficiency of services and to counteract public debt. The main aspect of a PPP is the public authorities' shift from offering services to demanding fulfilment of public sector duties by private enterprises. Independent of the specific PPP-model the private and the public partner are both subject to various taxes and charges during the life cycle of the partnership. The paper focuses on two different approaches for the tax treatment of PPP in Europe: a) The integration in the existent tax structure, and b) A special treatment, e.g. via tax exemptions. Results indicate negative consequences for both approaches - a potential cost increase for public authorities in the first case and a distortion of competition in the second case.

Introduction

A Public-Private Partnership represents a promising and highly developed form of cooperation between private enterprises and the public sector. Governments around the world are considering or already have considered the implementation of PPP to achieve a better provision of services compared to the traditional way. The fundamental idea is insofar simple and convincing as private sector enterprises substitute or support the public sector in the provision of services that can be better managed by the private sector and do not absolutely have to be provided by a public sector entity (e.g. sovereign duties). Notionally this approach can lead to advantages for the public sector, for private sector enterprises and for the public.

In practice the institutionalization of PPP raises various problems in different domains of law, economy or administration, questioning the often exaggerated advantages. Apart from the U.S.A. and as a consequence of the long-term character of a PPP European countries lack experience values. The evaluation and quantification whether a certain service should be provided via a PPP is difficult even if highly complex average return methods have been introduced.

This paper focuses on the implications of taxes and charges within public-private partnerships. Concentrating on the situation in Europe the aim is to point out that the existing tax structures might be inadequate and therefore the treatment may result in microeconomic and macroeconomic disadvantages (e.g. the distortion of competition). Although this paper is work in progress the basic message should come through and stimulate further research. In practice the public and the private sector are aware of these problems and drooling over reasonable solutions.

LITERATURE REVIEW

PPP: Reflecting the Changing Role of the Public Sector

There has been a long tradition with various forms of cooperation between public authorities and private sector enterprises (e.g. Torres & Pina, 2001: 603). The range is dependent on the historic period and the country (e.g. Newman & Verpraet, 1999: 487) and varies between the extremes service provision by public authorities (fully public) and total privatization (fully private) (e.g. De Luca, 2000: 15). Regarding successful catchwords like outsourcing, sale and lease back or privatization it comes clear that a PPP may be a practical variation of public-private cooperation but definitely not a new phenomenon. The ulterior motive for a PPP is similar to a basic goal of cooperation as a whole – to achieve a surplus by combining different strengths and competences. In terms of public-private cooperation better output (e.g. lower costs, higher quality, higher efficiency, etc.) can result from input representing the special skills of the private sector and of the public sector.

Nevertheless certain aspects highlight PPP from other forms of cooperation. PPP in general represent long term cooperation (with contracts up to 30 years) designed for solving complex problems and to provide services tailored to the specific needs. Special attention is paid to the appropriate apportionment of the risks as well as of the duties and responsibilities between the partners. A particular kind of risk is shifted to the partner who is best able to manage it (e.g. Broadbent & Laughlin, 2004: 57) and getting an adequate remuneration in return. Consequential very public-oriented arguments for a PPP (e.g. easier project funding and the decrease of the public sector borrowing) do not cover all advantages of a PPP. This also shows the very fact that it is extremely difficult for private sector sources to offer funding at a cheaper rate than the government (e.g. Terry, 1996: 10).

Almost fifty years ago PPP were first used in the U.S.A. in urban renewal partnerships. Compared to nowadays comprehension of PPP the relationship between the public and the private sector was different. Public authorities tried to stimulate investments of private sector enterprises by granting subsidies for building and investing in certain project areas (Reuschke, 2001: 10). Over decades the intensity and complexity of PPP-suitable projects has emerged from the U.S.A. over a large part of the world. Nowadays PPP is a catchword in Europe and an attractive way of constructing/refurbishing infrastructure or providing services in a new manner.

Typical projects include the construction (and maintenance) of hospitals, airports, prisons, schools, highways, etc. First adopted in the UK (named Private Finance Initiative (PFI) instead of PPP) the governments of many European countries have considered and already tried the shift from offering a service to delivering it in cooperation with private partners or even to demanding the fulfilment by a private sector enterprise.

DIFFERENT TYPES OF PPP-MODELS: As PPP represent large scale individual projects it is difficult to define prototypes of ppp even though this is indispensable for scientific research. There are diverse approaches of classification, reflecting for example the kind of responsibilities and duties that are transferred to the private partner or the legal relationship between the private and the public partner. In the anglophone countries the classification is predominated by the tasks which are transferred to the private partner. Regarding the construction (and maintenance) of a large scale infrastructure facility these duties vary from building (b), operating (o), financing (f), owning (o), developing (d), transferring (t), leasing (l), refurbishing (r), etc. A widely used model representing the life cycle approach of PPP is for example BFOT (build, finance, operate, transfer). In doing so the private partner (e.g. A consortium of private sector enterprises) builds and finances for example a hospital at the early stage of the life cycle. During the operating phase the private partner takes over responsibility for the cleaning, the maintenance, security patrols etc. While the public partner is focusing on the intended usage, for example the provision of medical treatment in a hospital. Finally the ownership and the risk of exploitation of the infrastructure facility is transferred (back) to the public sector. Over the life cycle the private partner is rewarded for the provided services whereas in most cases the amount is dependent on quantitative terms (e.g. capacity utilization) or ex ante defined values.

Another approach to classify PPP which is widely used in Continental Europe and especially in German-speaking countries is based on the legal relationship between the private partner, the public partner and the end-user. The above described BFOT-model is in German referred to as "Betreibermodell" and representing a distinct shift of the public sector from offer to demand. From the end-user' perspective the involvement of the private partner has probably marginal consequences because there is (still) interaction with the public partner regarding the main services (e.g. medical treatment) and potential fees.

Continuing the classification in German-speaking countries the "Konzessionsmodell" implicates different legal relationships as the service is directly provided to the end-user by the private partner. Interaction between the public and the private partner focuses on supervision rights of the public partner, for example concerning the pricing, and on remuneration aspects. The latter does matter in practice for example when a PPP is operated on the construction and maintenance of a highway. Although the

remuneration is based on end-user fees (tolls) there might exist the obligation of the public partner to ensure an appropriate remuneration by paying a "shadow toll" to the private partner.

Finally the "Kooperationsmodell" is characterized by the founding of a legal entity in which the public and the private partner participate. Depending on the distribution of ownership and on the legal embodiment this type of PPP-model may offer even more flexibility as well as advantages resulting from the public law and the private law.

ADVANTAGES OF PPP: In general PPP may offer advantages to the public partner, to the private partner and to the end-user. Main advantages for the public partner in the form of federal and municipal entities are the concentration on the core competences, the cutback in public borrowing and the transfer of risk. Shifting the fulfilment of certain tasks to specialized private sector enterprises enables the public authority to retrench on output specification, compensation and supervision. At a closer look the public sector entity is – depending on the particular project - still responsible for a variety of duties including for example the authorization of contracts, the evaluation of infrastructure needs, the payment for services, the monitoring of business and financial viability, etc. (Grimsey & Lewis, 2004: 94).

The adoption of PPP for large-scale infrastructure facilities like the construction of highways, hospitals, prisons, etc. is also a response to increasing budget problems of local authorities and a measure to substitute private investment for public spending. The tense situation has even got worse regarding the criteria of the European Union's Stability and Growth pact. As the existing public debt is a restriction to new infrastructure projects, PPP present a solution by offering a different, budget sparing financing. Generally high launching costs are transformed to anticipated, constant and smaller cash-flows over a long period of time (e.g. Hall, 1998: 123). Moreover PPP are treated off-balance and do not influence the criteria for the Stability and Growth pact negatively (Clarke & Healy, 2003: 20). Especially when the endusers remunerate the private partner directly in terms of fees or tolls the public partner is able to implement infrastructure facilities almost without increasing public spending because of the direct financing from the ultimate addressees (e.g. Kyvelou & Karaiskou, 2006: 601).

The transfer of risk is a very often stressed advantage of PPP. Although the risk taking is not for free because of the probably higher remuneration there do exist advantageous situations for the public partner. The crucial factor is whether the private partner can manage the specific risk easily for example because of special skills and therefore charges a remuneration that is lower compared to the cost arising from the assumption of risk by the public partner.

There are several other effects of PPP which also may have a positive impact on the public partner. If for example private sector enterprises enter into competition to become partner in a PPP there is a chance for the public partner to provide a service at even lower cost. Moreover the level of quality of the provided services between the private and the public sector can be higher compared to the traditional contractor-consignee relationship because of the private partner's responsibility not only for the construction of the facility but also for the maintenance. In the long run poor quality and dowdy construction can result in higher costs for maintenance and reparation for the private partner (Nisar, 2007: 154). Altogether the public sector may (also) benefit from an improved delivery of projects in terms of time, costs and quality, from the elimination of over-specification as well as from an improved maintenance of public infrastructure (Dixon, Pottinger, & Jordan, 2005: 414).

Private sector enterprises take share in PPP for various reasons. Public authorities generally represent secure contractors with good payment behaviour and low risk of insolvency. Furthermore this cooperation can offer access to new business segments or even to a kind of monopoly. Depending on the particular service a private partner may expand business by offering the service to different public sector entities, for example a private sector enterprise is leading in the surveillance and maintenance of school buildings and therefore offering this service to various communities.

The end-users (e.g. the citizens, society as a whole) may benefit from PPP insofar as services are improving in terms of quality, cost, diversity, innovation and speed. Besides this infrastructure facilities are refurbished or built although there is discipline in public spending.

Taxes and charges within PPP: Depending on the PPP-model and on the specific life cycle stage (e.g. Construction, maintenance, etc.) Taxes and charges influence the private partner and the public partner directly as well as indirectly. Before describing the situation in a PPP a closer look has to be taken to the individual fiscal treatment of the partners (especially of the public partner) at first.

Analyzing tax structures of different countries in Europe private sector enterprises and public sector entities are in general subject to taxation when producing value or interacting in private competition. While there is an economic and social justification for a government to participate on private sector profit by implementing taxes the situation is different with the public sector. Adopting the treatment of private sector entities to the public sector could lead to the somehow irritating situation that on the one hand public spending is tax-financed and on the other hand tax revenue is increased by taxing (other) public sector entities. Doubts remain even if the coherence between tax revenue and funding is complex and depending on the appropriation between the federal level and the municipal level.

An important distinctive feature for the fiscal treatment of a public sector entity can be found by focusing on the kind of duty provided by the public sector and by questioning the ultimate reason for the provision by the public sector. According to this there is a distinction between sovereign duties and other duties. Sovereign duties like the provision of exterior safety or jurisdiction are offered by public sector entities and must not be offered by private enterprises. Generally these sovereign duties do not cause any charges or taxes (e.g. value-added tax). By contrast there is no justification for excluding public sector entities if non-sovereign duties are provided – especially if the public sector tends to enter into business competition with private sector enterprises. In Europe this aspect is strongly reflected in the European Union's harmonization of the value-added tax structure. The main target is the equation (in terms of value-added tax) of public sector and private sector entities by refusing the exemption of the public sector if this exemption led to a major distortion of competition (e.g. Achatz & Leitner, 2001: 110 et seq.). Although this approach may include practical problems (e.g. the quantification of a major distortion of competition) it is a positive signal on making taxation dependent on the concrete action and its consequences instead of referring to abstract classifications.

Taxes and charges affect the private partner in a PPP concerning costing and pricing. At least two approaches can be made – one focusing on taxes and charges arising in a certain stage of the life cycle and the other influencing the business relationship between the private and the public partner. Regarding the business relationship and the design of the PPP-contract the expected remuneration for the service provision is an important element for the "purchasing" public sector even if terms like service-quality or experience also matter. Taxes and charges on the service provision (e.g. construction, maintenance) represent an expense factor to the private partner and therefore will be shifted to the public partner in the price calculation. Value-added tax can also become an expense factor if the tax structure only allows the deduction of input tax in combination with levying value-added tax. Whether the public sector can deduct the input tax often depends on the kind of service provided via the PPP (resulting in a deduction if the public sector charges value-added tax for its service). Regarding the public sector a non-deductible input tax represents an expense factor. Therefore it is advisable for the private partner to know or at least to preestimate the fiscal situation of the service receiving public sector entity. As a consequence the private partner will try to find ways not to burden the public sector with non-deductible tax to be competitive.

Depending on the PPP-model the private partner is confronted with taxes and charges the life cycle long. At the beginning of the cooperation, for example at the construction stage of a huge infrastructure facility the private partner usually faces charges in combination with the acquisition of real estate, in combination with the legal validity of contracts and also related to the provision of labour. There might be implications of the value-added tax at the beginning of a PPP but predominantly this is a matter of fact at the maintenance stage when the private partner is providing services like cleaning, surveillance, maintenance, reparation etc. Whether these services imply value-added tax is contingent on different circumstances. One important aspect is to find out if the specific service is subject to value-added tax and if the tax structure allows the deduction of input tax. Assuming that the provided service is not subject to

value-added tax the private partner is therefore not allowed to deduct the input tax in connection with services acquired to provide the special service.

Finally fiscal impacts may arise when the completed infrastructure facility (e.g. a built and operated hospital) is transferred from the private partner to the public partner. Especially charges for the transfer of assets as well as a capital gain from transfer are therefore reflected in the private partner's calculation.

THE TREATMENT OF PPP IN TAX STRUCTURES

Problem assignment and arising difficulties: Main difficulties in defining the proper tax treatment of PPP derive from the position of the public partner. Linked with the retraction of the public sector from economic life and the intensified appearance of private sector enterprises there is need to find or to retract the legal framework for the public sector. Regarding tax structures it is essential to prevent the distortion of competition and also the influence of taxes on decision-making.

From the benefit recipient's perspective the price of a service is a major reason for decision-making. As a consequence private sector enterprises suffer a disadvantage in competition whenever a public sector entity which is not subject to taxes and charges like the private competitor is offering similar services. Even when arguing that there are fundamental differences between public sector and private sector entities, for example the motivation for the service procurement or the financial facilities, there is no point to treat equal services differently for tax purpose.

On the subject of PPP as a special type of cooperation between private sector enterprises and the public sector there are at least two extreme positions in a tax structure. The first one is to integrate PPP in the existing tax structure by splitting up and focusing on the private partner as well as on the fiscal aspects concerning the public partner. One ulterior motive is that there is no need for a special legal treatment of PPP and moreover that it would be very difficult to define a concluding legal framework for PPP regarding the diversity of models. Negative aspects of this approach are that already existing problems with the taxation of the public sector might bet transferred to PPP as well as maybe increased costs for the public sector resulting from direct or indirect fiscal burden. If the public sector provides a sovereign service that is - depending on the tax structure - exempted from taxation and charges, via a PPP there is no justification for increased costs resulting from a different and maybe disadvantaging tax treatment (thus the sovereign service is not treated equally). In the final analysis a serious tax structure must not have an impact on an investment decision. Focusing on the public sector taxes and charges should not influence the decision whether the service is provided by a public sector entity or whether it is provided via a private sector enterprise in a PPP. Instead terms like quality, efficiency, the budgetary situation or the utilization of a private enterprise's core competence have to be crucial for the decision.

The second (extreme) position is the adaptation of the tax structure for PPP with a view to an advantaging treatment. Substantial arguments for this approach are the establishment of planning reliability and the provision of definite solutions. Concerning the taxation of PPP in Europe there is incertitude about the treatment of the specific, individual model and the problem of inexistent experience values. Moreover the long-term character of PPP implies that risks representing for example an unfavourable tax-rate change have to be taken into account during the planning and calculation process.

Certainly a tax treatment for PPP that includes tax exemptions or kinds of tax relief for the private partner attracts the private sector to cooperate with public sector entities. Therefore a specific tax treatment may be a kind of incentive that assures the public sector in finding an appropriate partner.

In general there are concerns about a special tax treatment for PPP. One aspect is similar to the ambiguous dealing with the public sector. There is no use in defining a specific tax treatment for PPP to simplify the system on the one hand and to imply herewith the problem of privileging the public sector on the other hand, no matter whether the public sector entity is providing a sovereign service or competing with private sector enterprises. This would correspond to a blanket treatment assuming that PPP are always a sub form of sovereign public service provision and never able to compete with (other) private sector enterprises resulting in a distortion of competition.

Attracting the private partner with an exemption from charges or a preferable tax structure may lead to a distortion of competition among private sector enterprises. As PPP projects are in general characterized by a large contract volume, public authorities tend to cooperate with large enterprises. If PPP offer attractive investments also because of the aligned tax treatment the distortion of competition even increases as small and medium size enterprises are inhibited to operate in a public private partnership.

Existing approaches in European countries: Although PPP stand for an attractive alternative in service provision for governments across Europe research has not yet really focused on the implications of taxes and charges. A reason for that might be the fact that taxes and charges do have influence but normally do not represent a "knock-out" criterion for or against a PPP. Nevertheless voices have been raised criticizing the incalculable situation and obvious problems regarding existent tax structures (in Germany e.g. Schenke & Gebhardt, 2005: 215 et seq.).

In Germany for example PPP are widely used for the construction of schools and also for the refurbishment of highways. Focusing on the public sector's perspective the question arises whether PPP are inhibited compared to the traditional service provision by public sector entities under the existing tax structure. Especially concerning the value-added tax PPP are confronted with problems resulting from putting the public partner in a worse situation (e.g. Schenke & Gebhardt, 2007: 6 et seq.).

When trying to analyze whether the approach of integration in the existing tax structure or the approach of a special treatment is dominant in Germany, no definite result can be provided. Instead of the creation of a "special" tax structure for PPP there is a tendency of trying to solve obvious problems by providing exceptions. Depending on the number of exceptions and on the aligned consequences this may lead to the establishment of a kind of "shadow tax structure". Regarding the property transfer tax in Germany a special treatment for PPP has already been created by implementing the "ÖPP-Beschleunigungsgesetz". Assuming the double-transfer of property in a PPP's life cycle, for example property is transferred from the public partner to the private partner at an early stage and the other way round at the end of the cooperation, the premises for property transfer tax were accomplished twice. The therewith arising burden is now cancelled if theses transfers of property are within a PPP (e.g. Weitemeyer, 2006: 1376). This approach is questionable insofar as for example the interaction with the public sector via PPP is fiscally favoured compared to a "normal" business relationship between a private enterprise and a public sector entity.

Analyzing the question of the taken approach regarding the tax treatment of PPP in the United Kingdom there are indicators referring to a special fiscal treatment. Especially at the start of the Private Finance Initiative there have been made huge subsidies also in terms of tax exemptions to attract the private partner (Terry, 1996: 10). In the meantime changes have been applied to this flat-rate subsidies approach by focusing on the kind of PFI-project, for example health, defence or education. One ulterior motive is to allow tax allowances for a PFI on condition that the advantages are at least indirectly shared between the public and the private partner (Sherwood, 2003: 4).

In various other countries in Europe (e.g. France, Switzerland, Greece, Portugal, Spain, etc.) governments have also recognized the need to reconsider the tax treatment of PPP as well as their general role in the legal framework. Considering taxation and charges especially the value-added tax and different indirect taxes and charges should be reviewed regarding existing tax exemptions and their justification (Bingisser et al., 2005: 25).

CONCLUSIONS

Taxes and charges at least indirectly influence the decision of a private sector enterprise and of a public sector entity whether to join in a PPP or not. For the private partner tax allowances or tax exemptions represent an incentive and make a business relationship via a PPP more attractive. Regarding the public sector advantages of a PPP in terms of quality or discharge might become less important if costs increase because of a disadvantaging fiscal situation.

At first sight a preferred fiscal treatment of PPP seems to be the favourable solution ignoring the negative consequences and the missing justification for a special treatment. The main problem, which causes distortion of competition in the end, derives from the public partner's position. In this context it has to be kept in mind that regarding the tax treatment of the public sector, similar problems have already existed before the emergence of PPP. However - doubts about distortion of competition have become more serious because private sector enterprises are involved in a PPP and therefore a possible misuse by a private sector enterprise is even worse.

Although the tax treatment of a PPP is never the main argument for or against such cooperation the governments across Europe are aware that changes of the tax structure should be considered at least to provide planning reliability and legal certainty. Depending on the approach of the taxation of PPP it might be necessary to rethink special legal requirements in order to institutionalize PPP in a positive and encouraging microeconomic as well as macroeconomic manner.

REFERENCES

Achatz, M., & Leitner, R. 2001. Körperschaften öffentlichen Rechts und ihre Privatisierung im Steuerrecht. Wien: Verlag Österreich.

Bingisser, S., & Bolz, U., & Cathomen, I., & Oehry, W. 2005. *Public Private Partnership – ein Lösungsansatz für die Schweiz*. Zürich: Schulthess Druck AG.

Broadbent, J., & Laughlin, R. 2002. Accounting choices: Technical and political trade-offs and the UK's private finance initiative. *Accounting, Auditing & Accountability Journal*, 15(5): 622-654.

Broadbent, J., & Laughlin, R. 2004. *Perils of partnership*. Australian CPA: 56-58.

Clarke, P., & Healy, K. 2003. Investigating aspects of public private partnerships in Ireland.

Irish Journal of Management, 24(2): 20-30.

De Luca, A. 2000. An economic and financial analysis of public private partnerships. *Working paper, University of Manitoba, Canada*.

Dixon, T., & Pottinger, G., & Jordan, A. 2005. Lessons from the private finance initiative in the UK: Benefits, problems and critical success factors. *Journal of Property Investment and Finance*, 23(5): 412-423.

Grimsey, D., & Lewis, M. 2004. The governance of contractual relationships in public-private partnerships. *The Journal of Corporate Citizenship*: 91-109.

Hall, J. 1998. Private opportunity, public benefit? Fiscal Studies, 19(2): 121-140.

Kyvelou, S., & Karaiskou, E. 2006. Urban development through PPPs in the Euro-Mediterranean region. *Management and Environmental Quality: An International Journal*, 17(5): 599-610.

Newman, P., & Verpraet, G. 1999. The impacts of partnership on urban governance: Conclusions from recent European research. *Regional Studies*, 33(5): 487-491.

Nisar, T. 2007. Value for money drivers in public private partnership schemes. International *Journal of Public Sector Management*, 20(2): 147-156.

Reuschke, D. 2001. Public private partnerships in urban development in the United States. *Working paper, University of California in Irvine, USA*.

Schenke, R., & Gebhardt, G. 2005. *Steuerrechtliche Probleme der Public Private Partnership (PPP)*. DStZ: 213-221.

Schenke, R., & Gebhardt, G. 2007. *Umsatzsteuerliche Gestaltungsoptionen bei Öffentlich Privaten Partnerschaften (ÖPP) / Public Private Partnership (PPP)*. Umsatzsteuer-Rundschau: 4-12.

Sherwood, B. 2003. Ministry closes PFI tax loophole. *Financial Times* [London edition], Feb 14 2003: 4. Terry, F. 1996. The private finance initiative – Overdue reform or policy breakthrough? *Public Money & Management*: 9-16.

Torres, L., & Pina, V. 2001. Public-private partnership and private finance initiatives in the EU and Spanish local governments. *The European Accounting Review*, 10(3): 601-619.

Weitemeyer, B. 2006. *Die Änderungen im Steuerrecht nach dem ÖPP-Beschleunigungsgesetz*. NVwZ: 1376-1378.

VALUE FOR MONEY IN SCHOOL PRIVATE FINANCE INITIATIVE (PFI) CONTRACTS IN THE UK: EMPIRICAL EVIDENCE FROM A SURVEY

Dr Iqbal Khadaroo School of Management and Economics Queen's University Belfast, UK Email: ikhadaroo@qub.ac.uk

ABSTRACT

The UK governments have increasingly used value for money (VFM) as the key rationale for using private finance initiative (PFI) contracts to modernize public services (HM Treasury 1995, 2000, 2002, 2003a&b). This paper contributes to prior PFI studies in the education sector, which have mostly examined risk transfer and affordability issues (Ismail and Pendlebury, 2006), by focussing on perceptions of costs, outputs and outcomes dimensions of VFM. It presents the results of a survey exploring perceptions of VFM of 141 PFI School Head teachers in the UK. The survey results show that many Head teachers perceived PFI to be costly and the payments made to the private sector to be unaffordable because of falling pupil numbers. However, consistent with prior studies, the results provide inconclusive evidence on the buildings and services delivered – the buildings were perceived more favorably that the associated PFI services. The results further suggest that PFI is having a favorable impact on the outcome objectives of improving staff's morale and pupils' behavior and delivering schools which are conducive to learning.

INTRODUCTION

Private Finance Initiative (PFI) has been introduced in the UK in 1992 as an alternative to traditional procurement of public services. It involves a contractual agreement between the public sector and a private sector consortium, responsible for designing, building, financing and operating the buildings and the providing facilities management services over a period of 25 to 30 years.

The government argues that PFI is "the Government's main instruments for delivering higher quality and more cost-effective public services...because the private sector achieves efficiencies in delivery by better design and management" (HM Treasury, 1995, para. 1.2). More specifically, VFM is expected to be achieved by, optimal sharing of risks between the public and private sectors and innovation in the buildings design and services delivery. PFI benefits are expected to outweigh the higher borrowing costs of the private sector relative to the public sector resulting in VFM.

VFM, defined in terms of costs, outputs and outcomes, is widely acknowledged in the academic literature, as a complex concept which is hard to operationally and measure (Glynn 1985; Glyn and Murphy, 1996; Hyndman and Anderson, 1995). At the pre-contract negotiation stage, the Treasury guidance states that VFM is ascertained by comparing the discounted costs of private sector bids *vis a vis* the discounted costs of a public sector comparator (PSC) (HM Treasury, 2003a). This practice has been numerously criticized on grounds of the subjective judgment involved in, estimating future cash flows; choosing the discount rate; and, valuing risks of the proposals (Froud, 2003; Heald, 2003; Shaoul, 2005). There is scant empirical evidence which suggests that the criteria used to evaluate VFM at the precontract negotiation stage are rarely followed up in practice (Broadbent, Gill and Laughlin, 2004).

Risks transfer is an essential part in the assessment of VFM considerations (Froud and Shaoul, 2001, Edwards and Shaoul, 2003, Froud, 2003, Heald, 2003, Ismail and Pendlebury, 2004). The preceding literature suggests that it is unlikely that many PFI proposals would be approved if the value of the risks transfers were not added to the PSC. Prior studies have widely criticized the issue of risks transfer on both conceptual and empirical grounds (Ismail and Pendlebury, 2004).

It is not the purpose of this study to address VFM measurement and the related issue of risks transfer and valuation. It is however to explore the VFM perceptions of 141 Head Teachers of up and running PFI schools in the UK. More specifically it explores their perceptions with regards to the costs

and affordability of PFI payments; buildings and services outputs delivered and their management; and, perceptions of the broader outcome objectives of school PFI contracts.

This paper is organized as follows. The next section briefly examines the relevant literature on VFM in PFI contracts and provides empirical evidence on the attempts to deal with VFM considerations. This is followed by a discussion of the research methodology used. The results of the survey are then presented. The concluding section highlights this study's limitations and provides some directions for further research.

LITERATURE REVIEW

Value for Money in PFI Contracts

PFI was introduced in 1992 in the UK as part of the global NPM movement premised on competition, contracting, networks, devolution, delegation and performance management (Hood 1991, 1995). The main argument for introducing PFI is that it provides access to the much needed private sector finance and VFM achieved mostly by leveraging private sector innovation and skills in the provision of public services. Under PFI, the public sector retains overall responsibility for the provision of public services to the required standards and ensuring that the wider public interests are safeguarded (HM Treasury, 2000).

VFM is a complex concept which is usually explained in terms of the 3Es of economy (or consideration of costs), efficiency (or consideration of outputs) and effectiveness (or consideration of outcomes) (see Glynn, 1985; Glynn and Murphy, 1996; Hyndman and Anderson, 1995; Kloot, 1999). The outputs and outcomes dimensions of VFM are difficult to 'quantify' and 'measure' primarily because they are subjective and rarely made explicit in programs such as PFI (Heald, 2003).

VFM in PFI poses additional difficulty because the contracts are long term in nature and are rigid, albeit, they contain change order mechanisms which are often costly. In addition, VFM evaluation of PFI contracts may be more of a political decision than an economic decision and may be influenced by the often conflicting perspectives the respondents subject to the evaluation process.

From the government perspective, VFM is quantified in terms of the difference between the Public Sector Comparator (PSC) and the PFI option. The PSC is used in the early stages of the procurement and is rarely revisited once the procurement process is over. If the discounted payments under PFI cost less than the PSC then the project may be regarded as providing VFM. However, calculating PSC is further complicated by the need to use opportunity costing principles for calculating and discounting all relevant cash flows in addition to estimating all the cost of risks transferred to the private sector. In this respect the Audit Commission (Audit Commission, 2002, p. 34) posits that although the PSC is used to inform judgment about whether a project will achieve good VFM, it falls short in two important ways - it compares a PFI scheme's cost with a hypothetical alternative, rather than an actual set of costs from comparable schemes; and it considers the projected PFI contract cost before the design is finalized rather than the actual outcomes of the final contract and design negotiations.

The Audit Commission, which is responsible for VFM audits of school PFI contracts in England and Wales, examined the quality and cost of buildings and services delivered under 17 Private Finance Initiative scheme in 2002 and those of conventional schools (Audit Commission, 2002). It found that the quality of the early PFI schools was inferior to those built through conventional procurement methods. While most school users were pleased to have a brand new school irrespective of how it was financed, they were unhappy with certain aspects of the PFI buildings, namely, lack of innovation; problems with heating, light and acoustic qualities; and poor quality of materials and furnishings used (p. 14). Some of the lapse in quality of buildings and services were not specifically attributable to PFI but reflected the need to have better managerial accountability processes. In the case of the 'successful' PFI schemes, the Head teachers were involved in project negotiations from the start to finish, and worked very closely with the architects and builders, to ensure that the PFI buildings and the services met the school's needs and expectations. Staff morale along with pupils' behavior were perceived to have improved (p. 12), albeit, there is no research available to assess any effects yet of the learning environment on the educational outcomes, pupils behavior, and 'productivity'. Participation and good working relationship among "all

stakeholders – school, LEA (local education authority) and contractor" were the key to making the partnership work and to obtain VFM over the longer term (p. 13). Overall the 'users' were pleased with their new schools primarily because of the advantages of being in a modern building, compared with the often dilapidated and outdated school it replaced (p. 15).

Audit Scotland published a report examining VFM in six operational PFI projects (or bundles) consisting of 65 schools (Audit Scotland, 2002). Its main findings were that the cost advantage of PFI vis a vis the PSC was narrow and was contingent upon the accuracy of the subjective estimates; in five of the six projects the PFI construction costs were higher than those included in the PSC and in all the six cases examined the operating costs of the PFI option were higher than the PSC; the local education authorities (as well as the private sector) incurred substantial consultancy costs; the private sector were faced with an average cost of capital of 7% to 13%; and, there were unbudgeted costs of staff time spent on PFI. The LEA provided long-term financial commitment to the PFI contracts which may constrain future spending and reduce flexibility in terms of budget management - the risks associated with changes in demand and the education policy rest with the public sector (See also, UNISON, 2003). Audit Scotland further advised that to help meaningful and unbiased appraisal of VFM, local authorities should be provided with 'real' non-PFI procurement alternatives. In sum, the PSC and PFI comparison on its own does not provide decisive evidence of best value (Audit Scotland, 2002, p. 63).

The Northern Ireland Audit Office reviewed the four pathfinder PFI schools in October 2004 (NIAO 2004a). Its main findings were that, although the school PFI deals were economically and financially feasible, the cost of the bids were very close with those of the Public Sector Comparators (PSC) leading to marginal VFM benefits of the PFI option to the public sector; the Department of Education in Northern Ireland (DENI) underestimated the cost consequences of procuring PFI – it was procuring multiple PFI projects at the same time which was time consuming, costly and caused delay; the public sector lacked the skills in project management, negotiation and contracting and this resulted in cost escalation; there was limited innovation in both building design and services delivery; there was inadequate coordination of long term enrolment planning across the local education authorities resulting in a significant gap between planned and actual enrolments in 2 of the 4 PFI schools examined; and, post project evaluation (PPE) of the PFI schools by the government department and local education authorities remained to be carried out.

Edwards and Shaoul (2003) examined how the control procedures designed to ensure VFM 'failed' in the context of the Pimlico PFI School. In particular, the conflicting interests of the LEA and the school, generated difficulties in addition to the already complex PFI appraisal methodology. This problem arose primarily arose because the PFI contract is between the private sector and the LEA not the school which had limited input in the PFI process. Yet, both contribute to the PFI payments – the capital element is borne by the LEA and the service element is borne by the school. The VFM implications of PFI contracting is that if the private sector finds it financially advantageous to take a penalty rather than meet the standards as laid down in the contract, the school and pupils may suffer. Although PFI schools monitor their respective contract, it is the LEA that needs to enforce them since the schools are not party to the contract. Nevertheless, the latter has no recourse to the LEA if it fails to enforce the PFI contract. In the case of Pimlico school PFI, the authors concluded that the regulation and control processes institutionalized in PFI failed because, firstly, the government would only make money available for PFI as opposed to conventional procurement, and the private sector would only undertake a new build which is more costly to the public sector and less risky for the private sector. Second, the rules for appraising options such as refurbishments, which offer more value to the public sector, may not generate projects that are attractive to the private sector. Thirdly, there is a tension between "promoting the use of PFI and ensuring that it is only used in ways that meet the objectives of greater efficiency and VFM" so that it does not 'drive' the procurement process (p. 383).

Ismail and Pendlebury (2005) surveyed 214 operational PFI schools to examine the affordability of PFI, its implementation and the perceptions of users about the quality of the buildings and services delivered. The main findings were that the share of PFI charge paid by the schools was 10% on average and the staffing costs averaged 80%. The implication of fixed PFI payments is that it reduces flexibility in

terms of budget management by the schools and may adversely affect staffing budgets in times of financial difficulties. The authors also found that the management of the PFI contract is more problematic in 'large' projects than in 'small' projects. In terms of buildings and services outputs, the majority of the respondents felt that the quality of the school buildings was good or very good whereas only half of the respondents felt that the quality of the services was good or very good. In terms of outcomes, 70% of the respondents agreed that PFI has improved staff morale whereas only about half of the respondents agreed that the productivity of staff was enhanced and the behavior of pupils improved.

RESEARCH METHODOLOGY

The objective of the questionnaire was to examine the perceptions of VFM of PFI school Head teachers. Head teachers were selected because, as service consumers, they are ultimately accountable for the provision of the 'core' education services. In this respect, they represent their school and interface with the PFI service providers on a day to day basis.

A survey questionnaire was developed from a review of the PFI literature and was administered between October 2005 and January 2006 to the Head teachers of 332 operational PFI schools in the UK. The survey database was developed by contacting the relevant local education authorities and the department of education in England, Wales, Scotland and Northern Ireland. The first round of questionnaire was sent to the Head teachers of these schools in the beginning of October 2005. School Head teachers who did not respond to the initial mailing were sent a follow-up questionnaire towards the end of November 2005. Follow up telephone calls were made to non-respondents in January 2006. 141 usable responses were received from the 332 UK PFI schools surveyed (160 replies in total were received - 16 responses were negative and 3 questionnaires were unusable). The usable response rate was thus 42% (141/332). Final sample sizes for some of the variables used in the analysis are less than 141 due to the problem of missing data (Cavalluzzo & Ittner, 2004).

RESULTS

The findings are presented within the context of the main research question of how school Head teachers perceive:

- 1) The costs and affordability of PFI contracts;
- 2) The buildings and services outputs; and,
- 3) The achievement of the outcome objectives of school PFI schemes?

Perceptions of Costs and Affordability

The survey questionnaire consisted of statements regarding the costs, outputs and outcomes components of VFM. The extent of the Head teachers' *agreement* with these statements was sought (where 1=no extent, 2=small extent, 3=moderate extent, 4=great extent, 5=very great extent). Table 1 shows a summary of the respondents' perceptions of PFI costs and affordability.

The respondents do not seem to be happy with the payments made to the service provider – only 19.2% (mean 2.53) agreed to a great and very extent that they were happy with the payments made. Overall, they were happier with the payments made for the buildings as compared to those made for the services (mean 3.31 compared to mean of 2.59). Only 30.7% (mean = 2.74) agreed to a great and very great extent that penalties provide incentives to the service provider to deliver the level of services agreed in the PFI contract. Many respondents perceived that that PFI payments payable under the PFI contract have reduced the flexibility of the schools to manage their annual budget (only 30% (mean = 2.65) agreed to a great and very great extent).

Table 1
Perceptions of costs and affordability

			una unoi			1	
	No extent: Number (%)	Small extent: Number (%)	Moderate extent: Number (%)	Great extent: Number (%)	Very great extent: Number (%)	Mean	Standard deviation
Our school is happy with its share of the payments paid to the service provider (n=135).	24 (17.8)	43 (31.9)	42 (31.1)	25 (18.5)	1 (.7)	2.53	1.014
Our school is happy with the services provided by the service provider, in return for its share of the payments paid (n=139).	23 (16.5)	39 (28.1)	53 (38.1)	20 (14.4)	4 (2.9)	2.59	1.020
We are satisfied with our new school building, given the payments paid to the service provider (n=138).	8 (5.8)	20 (14.5)	44 (31.9)	53 (38.4)	13 (9.4)	3.31	1.024
Penalties, such as reduction in payments, provides incentives to the service provider to deliver the level of services agreed in the PFI contract (n=137).	30 (21.9)	29 (21.2)	36 (26.3)	30 (21.9)	12 (8.8)	2.74	1.266
It is <i>likely</i> that our school will be able to afford its future payments payable to the service provider (n=133).	12 (9.0)	24 (18.0)	53 (39.8)	39 (29.3)	5 (3.8)	3.01	0.996
The PFI payments payable under the PFI contract have <i>not</i> reduced the flexibility of our school to manage its annual budget (n=137).	34 (24.8)	33 (24.1)	29 (21.2)	29 (21.2)	12 (8.8)	2.65	1.298

The survey supports the argument by Edwards and Shaoul (2003) that financial penalties in PFI contract are not effective for obtaining VFM. Contractors may be willing to take financial penalties if the cost of remedial action was higher. These sentiments were typically expressed by the Head teachers as follows:

Our experience with the additional new PFI school building which is now in its sixth year shows that PFI does <u>not</u> represent VFM. The PFI service provider is interested only in the actual contract wording and where penalties are limited, it will break the contract. They are very reluctant to see and do building alterations and improvements but want to make a huge profit on everything. They are <u>very slow</u> to get things moving, to react or to provide services. There is a huge culture clash! The school is fast paced, dynamic, creative and risk taking. The PFI provider is hugely risk averse, slow, unresponsive, dogmatic and totally uninterested! (Respondent ID = 93, emphasis in the original).

Many Head teachers highlighted the fact that the fixed payments payable to the contractor have reduced the flexibility in terms of management of their budget. For example:

Unitary charge leaves no flexibility in budget for other costs. Facilities management providers need to be aware of how schools work. Internal fixtures and fittings need to be suitable for children's use, not the usual office type. There needs to be an efficient system in place to resolve 'snagging' issues between the construction teams and facilities management (Respondent ID = 232).

Furthermore, they seem to be aware and wary of the significant demand risks to which they are exposed under PFI (Audit Scotland, 2002 and Ismail and Pendlebury, 2004). These sentiments were typically highlighted as follows:

PFI payments have no relationship to pupil numbers. If numbers on roll fall, income falls, but PFI payments remain the same (Respondent ID = 218).

PFI worked for us. However, the inflexibility in the unitary payments means that we have to manage staff budget very pro-actively and with clear cut forward planning in order to stay afloat (Respondent ID = 338).

Interestingly, many PFI schools were found to be operating below capacity and facing considerable demand risks. The maximum number of pupils that the PFI schools were originally designed to accommodate ranged from 60 to 1850 pupils while the actual number of pupils studying in these schools, at the date of the survey, ranged from 60 to 1870. Table 2 highlights that the PFI schools surveyed are operating at an average capacity of 89.8% (650.77/724.95) and some are currently facing demand risk and affordability problems in their early years of operation.

Number of pupils studying in PFI schools

	, starting 1111 E 1 1 1	# T 0 T
	Current	Maximum
	Number	Number
	of Pupils	of Pupils
Mean	650.77	724.95
Minimum	60	60
Maximum	1870	1850

Because of the inflexibility of PFI contracts and the penalty payable in case of breach of contract, the decision to close traditional schools in the public sector is often motivated by the need to sustain PFI schools or improve the viability of potential PFI projects – See for example, the proposed closure of Massereene Community College in Northern Ireland in August 2006 and the transfer of students to Parkhall College, which is awaiting for (PFI) funding approval by the DENI (DENI, 2005) and also the recent closure of a PFI school in England in August 2005 which was operating at 60% capacity (Mulholland, 2005). One survey respondent highlighted the demand risks facing PFI schools and the need for proper management of the education estate as follows:

A new school has been built in my catchment area in addition to upgrading my school and another. Sadly, a surplus of 600+ places has been created. This has precipitated a financial crisis for me now and it will affect the future of the new school (Respondent ID = 100).

Table 3 further analyses the PFI schools in terms of the actual pupil numbers as a percentage of planned pupil numbers in the original contract. The table highlights that affordability and demand risk problems are severe in many PFI schools – 34.8% of the schools were operating at below 90% of capacity and 7.8% of the PFI schools were operating at less than 60% capacity.

Table 3

Demand risks – Actual Pupil Numbers as a Percentage of Planned Pupil Numbers in Original PFI

Contract

		Percentag	Cumulative
	Number	e	percentage
Less than 40%	2	1.4	1.4
40% to less than 50%	3	2.1	3.5
50% to less than 60%	6	4.3	7.8
60% to less than 70%	9	6.4	14.2
70% to less than 80%	10	7.1	21.3
80% to less than 90%	19	13.5	34.8
90% to less than 100%	50	35.5	70.2
100% or more	42	29.8	100.0
Total	141	100.0	

32 out of the 141 PFI schools surveyed have fallen into financial difficulties since they opened. The Head teachers of these schools posit that falling enrolment; high operating costs, reduction in funding from the local education authority, high staffing costs and omissions in original PFI were the major factors contributing to their budget deficits. Some of these reasons cited were as follows:

Major government spending cut. PFI contract is significantly more expensive than our earlier budget spending on the relevant areas (Respondent ID = 44).

The PFI payments in particular as compared to our old school (Respondent ID = 30).

Falling rolls and fixed premises costs (Respondent ID = 183).

High repairs and maintenance of the building due to inadequacies of PFI and high staffing costs (Respondent ID = 251).

Less flexibility due to unitary payments and "topping up" for additional refurbishment works not covered by the contract (Respondent ID = 82).

Huge increase in rates; electricity charges are huge due to large amounts of technical equipment placed in school; consumable bill for ICT equipment is high e.g. projector bulbs. No contingencies provided by LEA for omissions in original contract e.g. playground markings and seating (Respondent ID = 167).

The preceding results suggest that in many cases, PFI is proving to be a costly procurement alternative which may cause inequity between PFI and conventional schools. Because of the contractual nature of PFI, PFI payments must be made and this may adversely impact the education estate in the future. The major concerns seem to stem from demand risks faced by the school; the inadequacy of the financial penalties in the payment mechanism; and the need to sustain PFI schools.

Perceptions of PFI Buildings and Services Delivered

The respondents had mixed views with regards to the PFI buildings and services provided by the service provider (See Table 4) - For example, 46% (mean = 3.25) of the respondents agreed to a great or very great extent that they were satisfied with the design of the building; 42.8% (mean = 3.06) of the respondents agreed to a great or very great extent that they were satisfied with the quality of the interior decorations of the building and, 59.3% (mean = 3.27) of the respondents agreed to a great or very great extent that they were satisfied are satisfied with the use of natural daylight. However, the survey findings

do not seem to support the Treasury's claim (HM Treasury, 1997b, 2003a; 2003b) that PFI offers the potential to obtain innovative buildings and services - only 11.4% (mean = 2.24) of the respondents agreed to a great or very great extent that the private sector was innovative in terms of the provision of maintenance services; 15.3% (mean = 2.22) of the respondents agreed to a great or very great extent that the private sector was innovative in terms of the provision of catering services in their school; and, 25.2% (mean = 2.56) of the respondents agreed to a great or very great extent that the private sector was innovative in terms of the building design of their school. For example, one respondent highlights the lack of innovation and a lack of understanding of the school needs as follows:

There is a lack of innovation — Outdated buildings, bulletins and rooms built to the minimum specifications. The school is not the client and the lack of business understanding at LEA level, resulted in the contract being tightly drawn to the benefit of the service provider. There is also bureaucracy and a lack of contract monitoring from the outset (Respondent ID = 248).

Table 4
Perceptions of buildings and services delivered

1 (1	ceptions of	Dunumgs	and service	les deliver	cu		
	No	Small	Moderate	Great	Very		
	extent:	extent:	extent:	extent:	great	3.6	Standard
	Number	Number	Number	Number	extent:	Mean	deviation
	(%)	(%)	(%)	(%)	Number		
					(%)		
		2.2	20	4.0	22	2.2.	1.201
We are satisfied with the design of the	14	23	38	42	22	3.25	1.204
building (n=139).	(10.1)	(16.5)	(27.3)	(30.2)	(15.8)		
We are satisfied with the quality of the	18	26	36	50	10	3.06	1.162
We are satisfied with the quality of the interior decorations of the building		(18.6)		(35.7)		3.00	1.102
	(12.9)	(18.6)	(25.7)	(33.7)	(7.1)		
(n=140).							
We are satisfied with the quality of the	11	23	35	54	17	3.31	1.125
exterior finishes of the building (n=140).	(7.9)	(16.4)	(25.0)	(38.6)	(12.1)	3.31	1.123
exterior finishes of the building (n=140).	(1.5)	(10.4)	(23.0)	(30.0)	(12.1)		
We are satisfied with the use of natural	14	21	36	51	18	3.27	1.168
daylight (n=140).	(10.0)	(15.0)	(25.7)	(36.4)	(12.9)	3.27	1.100
	(10.0)	(10.0)	(=017)	(501.)	(12.5)		
We are satisfied with the acoustics of the	20	26	37	46	11	3.01	1.187
rooms (n=140).	(14.3)	(18.6)	(26.4)	(32.9)	(7.9)		
,		, ,	, ,	,	, ,		
The private sector is innovative in terms	35	39	30	22	13	2.56	1.280
of the building design of our school	(25.2)	(28.1)	(21.6)	(15.8)	(9.4)		
(n=139).							
The private sector service provider is	42	42	40	13	3	2.24	1.050
innovative in terms of the provision of	(30.0)	(30.0)	(28.6)	(9.3)	(2.1)		
maintenance services (n=140).							
	4.5	2.4	21	1.4	,	2.22	1 170
The private sector service provider is	45	24	31	14	4	2.22	1.178
innovative in terms of the provision of	(38.1)	(20.3)	(26.3)	(11.9)	(3.4)		
catering services (n=118).							
DEI compige magnidentie necommenter to	31	56	34	16	2	2.29	0.989
PFI service provider is responsive to requests for service improvement made	(22.3)	(40.3)	(24.5)	(11.5)	2 (1.4)	2.29	0.989
by teachers (n=139).	(22.3)	(40.3)	(24.3)	(11.3)	(1.4)		
by teachers (II–137).							
We are satisfied with the overall	20	25	46	43	6	2.93	1.110
						, -	1 -1110

maintenance services of the school building (n=140).	(14.3)	(17.9)	(32.9)	(30.7)	(4.3)		
We are satisfied with the catering services (n=120).	20 (16.7)	22 (18.3)	39 (32.5)	29 (24.2)	10 (8.3)	2.89	1.194
We are satisfied with the heating system (n=139).	31 (24.1)	38 (23.4)	35 (20.6)	27 (20.6)	8 (8.5)	2.59	1.197
We are satisfied with the hours of <i>staff's</i> access into the PFI building (n=139).	17 (12.2)	19 (13.7)	33 (23.7)	50 (36.0)	20 (14.4)	3.27	1.225
We are satisfied with the hours of <i>pupils</i> ' access into the PFI building (n=139).	8 (5.8)	11 (7.9)	36 (25.9)	62 (44.6)	22 (15.8)	3.57	1.036

Strength in the facilities management aspect of PFI seems to be an important determinant of the quality of services provided to the schools. Only 12.9% (mean = 2.29) agreed to a great and very great extent that the PFI service provider was responsive to the requests for service improvement made by teachers. Concerns relating to the provision of facilities management services were typically expressed as follows:

Facilities management is an area that has proven problematic – problem usually is with PEOPLE (Respondent ID = 240, emphasis in the original).

Building processes went very well but major problems were encountered with the separate facilities management company who are only driven by profit motive, not provision of service. There are major time lapses between the onsite Facilities Manager's requests and overall PFI contractors' decisions. After one year of operation, there have been significant staff reductions resulting in poor performance in catering, cleaning and caretaking. The penalties in the contracts are not large enough to force improvements. I have had to allocate extra non-teaching staff just to deal with PFI related issues. Very much a "mixed blessing" for us (Respondent ID = 342).

I have been the Head teacher of two PPP schools and worked closely with each construction team. In my opinion, it is the FM side of the partnerships which needs to be improved. Timescales to get things done has been a major issue (Respondent ID = 112).

As regards access to the school buildings which are owned by the private sector under PFI, 60.4% (mean = 3.57) of the respondents agreed to a great or very great extent that they were satisfied with the hours of pupils' access into the building. However, only 50.4% (mean = 3.27) of the respondents agreed to a great or very great extent that they were satisfied with the hours of staff's access into the PFI building.

PFI contractors were perceived to have cut their cost by providing functional buildings and using poor quality materials. These sentiments were expressed in the following quotations:

Poor quality building work has led to defects. Still snagging and remedial work has not been done 4 years after opening. Materials used in building are of poor quality and not robust for school purposes (Respondent ID = 174).

Design is flawed and there is no financial capital until 2007 to make much needed changes (Respondent ID = 196).

There also seems to be delay to remedy construction defects in PFI schools due to disagreements between the public sector and the private sector. Some of the respondents highlight these issues as follows:

Difficulties in determining, at the post construction stage, which was responsible for design/build problems – was it the contractor or the local authority? We have several long running (over 2 years) problems which still have not been resolved (Respondent ID = 275).

Smaller problems are dealt with fairly swiftly. Some poor design features and poor quality material used. Delay in resolving large issues is solely due to disagreement over whose financial responsibility it is. Poor value for money from the services provided (Respondent ID = 37).

The buildings and services outputs of PFI seem to depend to a large extent on the inputs provided by the interested parties, during the consultation process. One Head teacher seemed very much satisfied with the building and some of the services delivered:

Fantastic building – The building was what the Head teacher asked for. Couldn't ask for a better partner – very responsive to requests. School meal sadly is hopeless – catering needs better input from Head to keep it running. The service provider is not making a profit at present (Respondent ID = 30).

However, other Head teachers argue that although the design of the building was adequate by meeting minimum standards of specifications and much thought was not provided to the educational needs:

Whilst great thought was put into the internal design of the building, the playground and external area was not given sufficient attention, resulting in a small area that is difficult to monitor at playtimes. No seating or play equipment is in place. Additional work, e.g. for erection of a notice board, is much more expensive as it includes provision for life maintenance to which the PFI company adds a slice for their own profit. No kitchen facilities were provided and storage of children's meal is difficult. PFI companies need to liaise with the school staff about all aspects of design. They seem to employ architects, not educationalists! (Respondent ID = 169).

Many Head teachers perceive that they did not have enough power to influence the PFI decision making process and as a result their requests were not taken into consideration. For example:

Our PFI contractor has an agenda that is not supportive of teaching and learning. Health and safety is a constant concern to us. As end user, rather than client, we have no power and the contractor invariably ignores school requests. The local education department has no concept of the day to day trivia we are consumed by due to the incompetence and disinterest of the PFI contractor. Major issues take too long to be resolved – for example, the roof is leaking for $1\frac{1}{2}$ years in the same place (Respondent ID = 149).

LEA need to listen to Head teachers about issues and learn from experiences. Providers need to realize that school is here for the educational needs of the children. More thought should go into the running costs of PFI schools and not just give some formula as other schools, if there has been an initial investment in resources such as technology - £180 PC/laptop and 16 interactive whiteboards cost a lot more to run!. There are different philosophies and agendas between school and PFI service provider; there is a lack of understanding of the school's obligations, duties and mission to children and parents (Respondent ID = 167).

Head teachers seem to have mixed views on the buildings and services provided by the PFI contractor were mixed. Nevertheless, what is clear from the survey is that the government's assertions that PFI offers the potential for innovation in the provision of public services has not materialized. These findings suggest that the private sector has cut down its costs and have met the standards laid out in the contracts but have not exceeded them. These findings are consistent with the NIAO report on the pathfinder PFI schools in Northern Ireland ((NIAO, 2004) on the buildings and services outputs provided by the private sector.

Perceptions of the Achievement of Outcome Objectives

The respondents also had mixed views on the achievement of outcome objectives of PFI (See table 5). The respondents generally perceived that PFI is having a favorable impact on staff's morale (50% agreed to a great or very great extent; mean = 3.40), staff's productivity (44.3% agreed to a great or very great extent; mean = 3.34) and pupils' behavior (43.9% agreed to a great or very great extent; mean = 3.16). PFI was also perceived to enable the achievement of the government's objectives of providing buildings and services which are conducive to learning (53.2% agreed to a great or very great extent; mean = 3.35). This was typically expressed as follows:

The end product of this PFI scheme is a very effective place for learning that has been designed to reflect the needs of the pupils within this specific area (Respondent ID = 343).

Table 5
Perceptions of outcomes objectives of PFI contracts

Terec	Judis of o	ı	ojecuves o	I I I I COIIL	acis		
	No	Small	Moderate	Great	Very		
	extent:	extent:	extent:	extent:	great		Standard
	Number	Number	Number	Number	extent:	Mean	deviation
	(%)	(%)	(%)	(%)	Number		
					(%)		
The PPP building and services	11	18	41	44	26	3.40	1.162
are having a favorable impact on	(7.9)	(12.9)	(29.3)	(31.4)	(18.6)		
staff's morale (n=140).							
The PPP building and services	19	14	45	48	14	3.17	1.169
are having a favorable impact on	(13.6)	(10.0)	(32.1)	(34.3)	(10.0)	3.17	1.105
staff's productivity (n=140).	(13.0)	(10.0)	(32.1)	(31.3)	(10.0)		
Start o productivity (in 110).							
The PPP building and services	14	16	35	58	17	3.34	1.143
are having a favorable impact on	(10.0)	(11.4)	(25.0)	(41.4)	(12.1)		
pupils' productivity (n=140).							
The PPP building and services	19	17	42	45	16	3.16	1.199
are having a favorable impact on	(13.7)	(12.2)	(30.2)	(32.4)	(11.5)		
pupils' behavior (n=139).							
PFI enables me to concentrate	46	31	25	24	15	2.51	1.376
on educational matters and	(32.6)	(22.0)	(17.7)	(17.0)	(10.6)	2.31	1.570
spend less time on maintenance	(32.0)	(22.0)	(17.7)	(17.0)	(10.0)		
services (n=141).							
(ii 111).							
PFI is helping to provide school	13	16	37	58	17	3.35	1.122
buildings and services which are	(9.2)	(11.3)	(26.2)	(41.1)	(12.1)		
conducive to learning (n=141).							

However, contrary to government publications that PFI enables schools Head teachers to concentrate more on educational matters by reducing their administrative burden, the respondents surveyed do not perceive this to be the case (only 27.6% agreed to a great or very great extent; mean = 2.51). These sentiments were typically expressed as follows:

The scheme is <u>not</u> value for money at all. Bursar and Head teacher spend a disproportionate amount of their time resolving facilities management and premises issues. I do not like PFI. It must stand for "Please Forward Invoice". We never get what we ask for. It is almost impossible to make financial plans properly. Maybe we are just unlucky with the company e.g. Atkins. Head teacher has passed a vote of no confidence in PFI. We are not getting a good service (Respondent ID = 196).

I have lived a nightmare with PFI, through Jarvis. It is the worst thing that ever happened to me-I have coped better with bereavement (Respondent ID = 252).

Lack of understanding of the amount of time we need to dedicate to monitoring FM issues and helpdesk. Constraints of the footprint of the buildings when looking at future needs. The difficulties Jarvis found themselves in during the build; our team who are now 'in charge' would have been far better off it was involved from the beginning (Respondent ID = 221).

PFI seems to have enabled the government to achieve the broad objectives of modernizing the public sector (Broadbent and Laughlin, 2005) by providing school buildings and services which are conducive to learning. However, PFI is not enabling the government to achieve its VFM objectives of enabling school Head teachers to concentrate on educational matters. Differences in culture and interest between the private sector and public sector are hindering the service delivery and negotiation processes and are causing Head teachers to be frustrated.

DISCUSSION

Overall, the results suggest PFI is proving to be a costly procurement alternative because of unbudgeted costs and significant excess capacity (demand risk) in the PFI schools surveyed. This may have repercussions on other non-PFI schools and cause inequity in the education estate. The Head teachers do not perceive PFI to be an economical procurement route primarily because of fixed PFI payments, the inability to implement financial penalties, expensive change order mechanisms, and the demand risks which have materialized in some of the schools surveyed.

The survey provides further empirical support to the findings by Edwards and Shaoul (2003) that PFI procurement processes are tightly controlled by the LEA which is the contracting partner and signatory to the PFI contract. The Head teachers surveyed perceived that the LEA and the private sector lack a proper understanding of 'educational' needs and this has further compounded to the problems associated with incomplete contracts. Many Head teachers perceive PFI as an important tool for enabling them to obtain a new school which they would otherwise have to do without. However, difficulties arose due to the inadequate consideration of their needs resulting in poorly drawn PFI contracts. The Head teachers perceive that PFI contractual terms are hard to implement and the process of obtaining additional services (that is, change order change order processes in the PFI contract) were inflexible, costly and bureaucratic.

The findings also supports Ismail and Pendlebury (2004) that head teachers were more satisfied with the PFI buildings than the services delivered. This may be attributable to poorly drawn PFI contracts, lack of power and the inability of Head teachers to influence their respective service providers.

The government's main arguments for using PFI in schools are that it enables VFM to be achieved by, proper sharing of risks; enabling innovation in building design and services delivery;

enabling school Head teachers to concentrate on the provision of education rather than facilities management; and providing facilities which are conducive to learning thereby improving staff morale and pupils behavior (See for example, HM Treasury, 2003a, 2003b; DENI, 2005b). However, many survey respondents do not perceive this to be the case. Although most of them agreed that PFI enabled the modernization of the education estate through the provision of school buildings and services which would otherwise have not been provided, many disagreed on some of the claimed VFM benefits of PFI. Contrary to government claims that PFI enables the provision of high quality and innovative public services, many respondents did not perceive this to be the case. In general the respondents seem to be satisfied with the buildings and services but they did not perceive them as innovative (See also Hurst and Reeves (2005) who found a lack of innovation in school PFI contracts in Ireland).

PFI is perceived to have achieved the outcome of enabling the provision of schools which are conducive to learning but has not enabled Head teachers to concentrate on education matters. It has introduced new administrative processes instead. An important and consistent message among the Head teachers was that good working relationship and a significant investment of time and personal commitment in the detailed design and development stages is essential if the VFM benefits of PFI are to be realized.

CONCLUSIONS

This paper has examined Head teachers' perceptions of VFM in school PFI contracts in the UK. The results suggest that PFI is a costly procurement alternative which may become unaffordable in the long term because of the significant demand risks retained by the public sector. However, PFI is perceived to have enabled the government to deliver schools which would otherwise not be provided and is having a favorable impact on teachers.

The long-term nature of PFI contracts and the subjective nature of VFM complicate its assessment. It may also be too early to reach definitive conclusions about the merits and worth of PFI contracts. Nevertheless, the preceding analysis highlights some of the important concerns raised by these important stakeholders and which need to be addressed if PFI is to deliver VFM over the longer term.

The scope of this research is limited to a survey of Head teachers of PFI schools – no comparison is made with the views of other PFI stakeholders or Head teachers of non-PFI projects. In the light of these inherent limitations, the following directions for future research are proposed. It might be useful to compare these findings with a survey of conventional PFI schools and possibly follow up these VFM issues through in-depth case studies of a PFI school with a broadly similar school procured under conventional method. Although there would be difficulties posed by the differences among schools (For example, in terms of size, location and curriculum), this exercise would be useful in terms of highlighting the strengths and weaknesses of PFI vis a vis conventional procurement and would provide a stronger basis for drawing conclusions on the merits and worth of PFI.

While the VFM appraisal of PFI contracts have been numerously explored many studies have highlighted the lack of and need for more post project evaluation. The findings of this study and in particular the 'qualitative' criteria used to evaluate PFI contracts may be used to benchmark the extent to which the projects are actually delivering their promised benefits. The long term nature of PFI contracts implies that such an assessment would be an ongoing process.

The PFI schools surveyed may need to be re-examined over the longer term to examine changes in perceptions of VFM over time. In addition, this study may form the basis for conducting a comparative analysis of 'successful' PFI schemes and those which are in difficulty to examine the essential ingredients for success and the nature of the problems and difficulties which subsequently arose. This type of detailed evaluation of PFI would require transparency and access to both public and private sector accounting records and may be used to steer the recent generation of operational PFI schools in procurement.

Further research may also examine the perspectives of other key stakeholders such as private sector contractors and financier. It is important to evaluate PFI from the perspectives of different stakeholders to better evaluate PFI and avoid bias when drawing conclusions.

REFERENCES

Audit Commission. 2002. PFI in schools - The quality and cost of buildings and services provided by early Private Finance Initiative schemes: *Audit Commission*, London.

Audit Scotland. 2002. Taking the Initiative: Using PFI Contracts to Renew Council Schools. *Accounts Commission*: Edinburgh.

Broadbent, J. & Laughlin, R. 2005. The Role of PFI in the UK Government's Modernization Agenda. *Financial Accountability and Management*, 21 (1):75-97.

Broadbent, J., Gill, J. & Laughlin, R. 2004. The Private Finance Initiative in the National Health Service. *CIMA Research Report*. London: CIMA.

Broadbent, J., Gill, J. & Laughlin, R. 2003. Evaluating the Private Finance Initiative in the National Health Service in the UK, *Accounting, Auditing and Accountability Journal*, 16 (3): 422-445.

Cavalluzzo, K. S. & Ittner, C. D. 2004. Implementing performance measurement innovations: evidence from government. *Accounting, Organizations and Society*, 29 (3-4): 243-267.

DENI. 2005a. Massereene Community College to close, News Release: 20 October.

DENI. 2005b. New Procurement and Delivery Arrangements for the Schools' Estate. *Northern Ireland: Department of Education*.

Edwards, P. & Shaoul, J. 2003. Controlling the PFI process in schools: a case study of the Pimlico project, *Policy & Politics*, 31 (3): 371-395.

Edwards, P., Shaoul, J., Stafford, A., & Arblaster, L. 2004. Evaluating the Operations of PFI in Roads and Hospitals. **ACCA research report**: Certified Accountants Educational Trust, London.

Froud, J. 2003. The Private Finance Initiative: risk, uncertainty and the state. *Accounting, Organizations and Society*, 28 (6):567.

Glynn, J. J.1985. Value for Money Auditing in the Public. Sector: London: Prentice-Hall).

Glynn, J. J., & M. P. Murphy. 1996. Public management: Failing accountabilities and failing performance review. *International Journal of Public Sector Management*, (9) 5&6: 125-137.

Heald, D. 2003. Value for money tests and accounting treatment in PFI schemes. *Accounting, Auditing & Accountability Journal*, (16)3: 342-371.

HM Treasury.1995. *Private Opportunity, Public Benefit: Progressing the Private Finance Initiative*. London: HMSO.

HM Treasury. 2000. Public private partnerships: The government's approach. London: HMSO.

HM Treasury. 2003a. *The green book: Appraisal and evaluation in central government*: London: HMSO.

HM Treasury. 2003b. PFI: Meeting the Investment Challenge. London: HMSO.

Hood, C. 1991. A public management for all seasons. *Public Administration*, (69)1:3-19.

Hood, C. 1995. The new public management in the 1980s: variations on a theme', *Accounting, Organizations and Society*, (20) 2&3: 93-109.

Hurst, C., & Reeves, E. 2005. An economic analysis of Ireland's first public private partnership, *International Journal of Public Sector Management*, 17 (5):379 – 388.

Hyndman, N. S., & Anderson, R. 1995. The use of performance information in external reporting: an empirical study of UK executive agencies. *Financial Accountability and Management*, (11)1:1-17.

Ismail, S. & Pendlebury, M. 2005. The Effectiveness of the Private Finance Initiative (PFI) – An Examination of Its Implementation in Schools. *British Accounting Association Conference*: Heriot Watt University, Edinburgh.

Kloot, L. 1999. Performance measurement and accountability in Victorian local government. *The International Journal of Public Sector Management*, (12)7: 565-583.

Mayston, D. 1999. The private finance initiative in the National Health Service: an unhealthy development in new public management? *Financial Accountability & Management*, (15)3/4: 249-274.

Mulholland, H. 2005. Revamped school closes after six years. *Education Guardian*: 1 August, 2005.

NIAO. 2004. Building for the future: A review of the PFI education pathfinder projects. **Belfast: Northern Ireland Audit Office**.

SIGNALING POWER OF CASH DIVIDENDS A STUDY OF THE MALAYSIAN CORPORATE SECTOR

Kok Lee Kuin L.V.L.N.SARMA

Multimedia University, Cyberjaya, Malaysia Email: lvlns@yahoo.com

ABSTRACT

This paper is addressed to gauge the power of cash dividends and debt to throw light on the future prospects of the company. The sample for this study is drawn from the 'Trading and services' sector of the Corporate Sector in Malaysia. Multivariate analysis is used to identify the potential of cash dividends and debt to predict future earnings' prospects. The empirical findings of the present study amplify the signaling significance of cash dividends and debt in the corporate sector of Malaysia. Dividends distributed to shareholders of companies in cash are considered to be a vehicle to reach the goal of wealth maximization for the shareholders. The seminal paper of Miller and Modigliani (1961) is considered unique in that it brought to the fore the "information content" of dividends. Companies being constantly confronted by the problems of asymmetric information leading to an yawning gap between the intrinsic value of their shares and the ruling market prices at the stock market, found an effective device in dividend policy to successfully convey information about future earnings Studies on asymmetric information by Akerlof, Spence and Stiglitz (Nobel Laureates of 2001 in Economics) created an awareness of and gave, through their earlier studies, a framework to analyze and assess the problems of asymmetric information. And Dividend Policy, along with other financial policy (viz., capital structure policy), was found to be an effective device to tackle asymmetric information.

INTRODUCTION

Earnings distribution policy is an important financial decision that companies have to face. Earnings generated by companies can be either reinvested in operating assets, used to acquire marketable securities, used to retire debt, or distributed to shareholders. This policy is important because it determines the amount of funds flow to investors and the amount of funds retained by the firm for reinvestment, and thus influencing the capital structure of the company. According to Frankfurter and Wood (1997), the history of company's earnings distribution to shareholders dates back to early sixteenth century, where the pay-outs of liquidating dividends used to take place upon the completion of sailing ventures. The profits and proceeds from asset sales were distributed to claim-holders. Due to inefficiencies induced by total liquidation, dividends began to be paid out from profits.

Management's decision to distribute earnings to shareholders, gives rise to three key issues:

- a) What amount should be distributed to shareholders?
- b) Should the distribution be as cash dividends, stock dividends (bonus shares), or should the cash be passed on to shareholders by buying back some of the stock they hold stock repurchases?
- c) What are the signaling implications of these corporate earnings disbursement methods for the investors, management and market participants?

The dividend distribution methods are believed to have their unique characteristics that convey some valuable signal / information to market about the management's view of company's future prospects. Therefore, they may serve as communication devices to disseminate information, which attempts to alleviate the problems of asymmetric information. The information asymmetry problem arises due to the corporate insider or manager having superior information than other interested outside participants. Thus, any financial decision made by managers can be viewed as a signal to the less informed about the future prospects of the company. In this study, however, we will focus on the signaling significance of cash

dividends, or to be more precise, the increases in regular cash dividends about the future earnings prospects.

LITERATURE REVIEW

The genesis of Financial Signaling Theory as applied to financial policies may be traced to Miller & Modigliani (1961) where they argued that the information content of dividends is the real power that brings out positive relationship between dividends and market value of company. This information content hypothesis may be considered as the precursor of dividend signaling theory.

The Nobel Laureates in Economics for the year 2001, viz., Akerlof (1970), Spence (1973) and Stiglitz (1985, 1994) made valuable contributions which help in imparting appropriate analysis to decision making in companies and gave another new direction for corporate finance research. In the context of asymmetric information, financial signaling has become an important component of the activities of the finance manager. Empirical evidence has been accumulating to the effect that price changes in the aftermath of dividend announcements are due to this important information or signaling content in dividend announcements, as they would serve as a surrogate for expected future prospects of the company.

Ross (1977) was the first to relate the 'incentive signaling' concept to financial policies, viz., dividend and debt policy in corporations in order to tackle asymmetric information problem. From his results, Ross found that an increase in dividend payment is a signal to the outsiders that company's future cash flows are sufficient enough to meet the debt and dividend payments; hence, a change in dividend payments will influence its stock price.

Bhattacharya (1979, 1980) developed the dividend signaling model, in which managers will signal the quality of an investment project by committing to a dividend policy. A crucial assumption of this model is that, if the returns from the project are not sufficient to cover the committed dividends, the firm will go to outsource financing which involves a higher transaction cost. Thus, if management is in doubt of the project's quality, they will not simply commit to any dividend policy.

The dividend signaling model developed by John and Williams (1985) utilized the tax disadvantage on dividends relative to capital gains as the cost of signaling. By providing a compelling explanation for the generous payout policies pursued by firms, John and Williams's model arrives at the following empirical implications: i) In the signaling equilibrium, firms expecting higher future operating cash flows optimally pay larger dividends. ii) Firms that declare dividends may sell shares simultaneously. iii) The optimal dividend is higher for smaller tax disadvantage of dividends relative to capital gains.

Miller and Rock (1985), on the other hand, examined dividends by focusing on the following key issues: the earnings announcement, the dividend announcement, the financing announcement and the impact of firm's policies on an optimal investment level. They found that earnings surprises and net dividend surprises convey the same information. An unexpected increase in dividends will increase shareholders' wealth, and an unexpected issue of new equity or debt will be interpreted as bad news about future prospects of the firm. Ambarish, John and Williams (1987) suggested an efficient signaling equilibrium, in which firms face competing signaling technologies. According to them, management can signal private information either through: i) dividends and investments; ii) dividends and stock repurchases; or iii) dividends and sales of new equity.

On the empirical side, Healy and Palepu (1988) documented the share price increase (decrease) upon dividend initiation (omission) and the earnings performance changes significantly around dividend initiation and omission. To examine the full implication of dividend policy and signaling theory, Sarma and Narayan (1992) tested the following three complementary hypotheses: Increasing Stream Hypothesis, Performance Signaling Hypothesis and the Signaling Hypothesis of corporate dividend policy. Their empirical findings led them to conclude that the dividends are perceived as signals from: i) management's point of view, ii) performance point of view, and also iii) market point of view. Michaely, Thaler and Womack (1995) found that market reacts dramatically to dividend announcements, the average excess return is +3% for initiation and that dividend omissionst will lead to a price fall of about 7%.

Lipson, Maquieira and Megginson (1998) concentrated their study on the dividend initiation performance of newly floated public firms. Dividend surprises are found more favorable for dividend initiating companies than the firms that went public but did not initiate dividends. Ryan, Besley and Lee (2000) examined the information content of dividend policy for NASDAQ companies, by focusing on the rationale for dividend initiation or omission. They concluded that cross-sectional weighted least-squares regression results provide strong support for dividend signaling hypothesis.

Green and McAree (2001) studied the information content of dividend and found support for future earnings prediction in Irish corporate sector, and the existence of interaction effect between earnings and dividend signals on future earnings. Arnott & Asness (2003) on the other hand, found that managers signal their earnings expectations through dividends, which offer a challenge to market observers who see the low dividend payouts as a sign of strong future earnings.

In Malaysia, Mansor and Subramaniam (1992) conducted a study on the companies listed in KLSE, from 1978 to 1984, to verify the impact of dividend and earnings announcements on share price. From the results, they pointed out that Malaysian market does react to such announcements. However, the market continued to react positively subsequent to the announcement week, regardless of the direction of changes; and such attitude is attributed to the market inefficiency. On the other hand, Nur-Adiana, Rosemaliza and Yusnidah (2001) used a standard event study methodology to examine the price reactions of 120 listed companies surrounding sixty days of the announcement dates. Their evidence demonstrated that dividend increases lead to positive abnormal returns, which supports the information content hypothesis. Another study which produced strong evidence in support of information content of dividends argument in the Malaysian corporate sector is by Sarma and Kok (2003). They concluded that the two financial policies – dividends and debt – have significant 'information content' about future earnings. Norhayati, Mohamad, Annuar and Shamsher (2003) also found that there are significant positive (negative) abnormal returns with the dividend increase (decrease) announcements. In a recent study by Sarma, Sarada and Ismail (2006) it was found that debt and dividends are effective signals of earnings' prospects in the Malaysian corporate sector.

Research Objective

The main objective of the present study is to verify the signaling hypothesis of cash dividends. In the presence of asymmetric information between investors and companies, any evidence on information content would help companies in their choice of signaling devices. Towards this objective, the following hypothesis is verified:

Hypothesis 1: Cash Dividends signal to the market the future earnings prospects of the company.

The presence of double taxation of corporate income makes dividend signaling more costly as compared with other financial signaling devices like debt, for example. In Malaysia, however, there is no capital gains tax and no double taxation of corporate earnings. In other words, company's earnings are taxed only once: either at personal income tax rate for earnings paid out as dividends, or at corporate tax rate for earnings that are retained for reinvestment. Dividends are paid from after tax net income and shareholders receive only net dividends. However, personal taxes are assessed on gross dividend, and shareholders will be given a credit for the amount of corporate tax the company has deducted. This is known as imputation tax system. With the special tax environment and the unique regulatory framework for distribution to shareholders in Malaysia, the study on the signaling significance of dividends should be able to shed some more light on the signaling hypothesis that has been widely acknowledged to-date to be possessing theoretical elegance and practical relevance.

As mentioned above during literature survey, debt quantities in capital structure also speak about the future earnings and, therefore, convey information about future earnings. Introduction of debt into capital structures entails cash outflows to service the same; non-fulfilment of these obligations results in bankruptcy. So, debt is also considered to be an effective signaling device. This study's objective, therefore, takes into its fold the verification of the following hypothesis also:

Hypothesis 2: Debt conveys information to the market about the future earnings' prospects of the company.

RESEARCH METHODOLOGY

Multiple regression technique is used to identify signaling power of dividends and debt about future earnings. Main board companies in the "Trading and Services" sector of Bursa Malaysia form the sample for the present study. This study is using cross-section analysis, which covers the years 2003 and 2004, and SPSS (Statistical Package for Social Sciences) is used to carry out the linear regression analysis. The criterion to admit the company to the sample-fold is that the company should have increased the cash dividends paid to its shareholders in the year of analysis over the previous year and it is a levered company. Based on these criteria a total of 29 companies emerged from this sector as eligible candidates for inclusion in the sample for this study.

The functional equation used to test the hypotheses identified for verification is:

$$E_{t+1} = f \text{ (chg Div}_t, G_t, D_t, R_t, AC_t, S_t)$$
(1)

The earnings measure of the following year (t+1) is regressed on the chosen independent variables of year-t (current year), consisting of 'Change in Cash Dividends', Debt and a few others. The Regression Equation used to test the two hypotheses is:

$$FCF_{t+1} = a_o + a_1 \Delta Div_t + a_2 Growth_t + a_3 Debt_t + a_4 Beta_t + a_5 Agency Cost_t + a_6 Size_t + \mu$$
......(2)

where:

 FCF_{t+1} = Free Cash Flow in year t+1;

 ΔDiv_t = Increase in cash dividends in year-t over t-1; Growth_t = a linear 3-year average growth rate in earnings;

Debt_t = Long term debt in the current year;

Beta_t = risk measure representing systematic risk of the company; $Agency cost_t$ = represented through institutional shareholder proportion; and

 $Size_t = size variable.$

The measures of the variables entering Equation-2 are given below:

FCF_{t+1} (Future earnings prospect)

Company's free cash flow in the following year is used to represent the future earnings' prospect as free cash flow is the most relevant factor to determine the company's ability to pay dividends. Free cash flows are taken as the sum of earnings available for common shareholders and depreciation of the concerned financial year.

ΔDiv_t (Change in regular dividends)

Change in regular dividends refers to the difference between the total regular dividends (which is inclusive of interim and final dividends, if any) declared in a particular financial year over the previous year dividends. In this study, we consider on dividend increasing companies only.

G_t (Growth variable)

Growth potential represents the opportunities the firm may have to invest at rates greater than normal rate of return. This study uses the linear three-year average growth rate of earnings available for common stock to represent the growth rate. The formula used to calculate the growth variable is:

$$\frac{1}{3} \left[\frac{AFC_t - AFC_{(t-3)}}{AFC_{(t-3)}} \right]$$

D_t (Financial leverage)

Financial leverage is an important variable in this context due to tax deductibility effect of interest payments. Long-tem debt is taken to represent financial leverage.

R_t (Risk)

Systematic risk, i.e. beta, is used to represent the risk of the concerned company relative to overall market portfolio.

AC_t (Agency cost)

This is the number of institutional shareholders accounting for 60% of total outstanding shares. According to agency cost explanation, if majority of the outstanding shares are owned by the institutional shareholders, the lower would be the agency conflict and, therefore, the agency cost incurred.

S_t (Size)

This is the size variable, which is measured as the natural log of fixed assets. It measures the influence of firm size on future earnings by recognizing that expected earnings of large firms may possibly differ systematically from small firms.

RESULTS

The signaling power of 'dividend increases' about future Free Cash Flow (Hypothesis-1 of this study) and also that of Debt about future Free Cash Flow (Hypothesis-2 of this study) are presented here.

Hypothesis 1

'Dividend increases' variable has emerged as a significant possessor of information about ensuing Free Cash Flow. 't' values of the variable are highly significant in both 2003 and 2004 (Table-1). The significant variable set used has exhibited a high explanatory power as revealed through the R² of 0.982 and 0.999 for the years 2003 and 2004, respectively. The relative explanatory significance is identified through the standardized coefficients (Betas) given in Table-2 for both the years along with Adjusted R²; the latter would enable assessment of the explanatory power of various models with different sets of predictors. Betas presented in Table-2 show that the "Dividend Increase" variable has the largest explanatory power. Stable dividend policies followed by the sample companies would impart explanatory power about the free cash flows, which by definition and as measured here, are the cash flows available to the capital suppliers. Another reason for the signaling significance of 'dividend increases' is, of course, the tax regime in Malaysia. Absence of double taxation of corporate income turns the dividend policy as the least cost signaling device. This tax aspect coupled with a dividend policy which is regarded by all concerned to be 'sticky' could be the important reasons for the signaling significance of dividends in Malaysia.

Table 1
Dividend Increases Debt and Future Cash Flow
Dependent Variable: FCF_{t+1}

Independent		Year: 2003		Year: 2004
Variable				
	't' value *	Significance Level	't' value *	Significance Level
Constant	-5.804	0.000	-2.974	0.007
ΔDiv_t	14.670	0.000	70.944	0.000
Growth _t	-4.551	0.000	8.241	0.000
Debt _t	14.942	0.000	76.851	0.000
Beta _t	4.279	0.000	-2.140	0.044
Agency cost _t	-1.326	0.198	-0.661	0.516
Size _t	5.552	0.000	4.125	0.000
		R ² : 0.982		R ² : 0.999

^{*&#}x27;t' value of each independent variable is – (its unstandardized coefficient ÷ standard error).

Table 2
Dividend Increases, Debt, and Future Cash Flow
Dependent Variable: FCF_{col}

Independent Variables	Standardized Coef	
	2003	2004
$\Delta \ Div_t$	0.555	0.525
$Growth_t$	-0.158	0.054
$Debt_t$	0.532	0.649
Beta _t	0.128	-0.014
Agency cost _t	-0.041	-0.004
$Size_t$	0.237	0.039
Adjusted R ²	0.977	0.999

Hypothesis 2

Debt Variable has emerged as another significant device to signal about future Free Cash Flow. Debt carries with it mandatory cash outflow obligations failure to meet, which would leave the company with dire consequences and may lead to a situation of bankruptcy. The costs associated with debt are very serious for the company and, therefore, enhance the credibility of debt as a device to signal future earnings prospects. The significant 't'values reported in Table-1 reveal the signaling power of debt. It is in the second position, next to dividend variable, from the point of relative contribution to the predicted variable (Table-2).

The results of this study are found to be consistent with the two hypotheses on the signaling significance of financial policies viz., dividends-dividend increases, and debt. Higher values of R² obtained in the analyses are, no doubt, encouraging but also would highlight the need for further scrutiny of data. 'Multicollinearity' is one aspect that readily comes to the fore as one of the issues for concern. As a matter of abundant caution two more confirmatory tests viz., Normality of residuals and Effect size and power are also carried out. These results are discussed hereunder.

i. Normality of Residuals

The 'Kolmogorov-Smirnov' statistic and 'Shapiro-Wilks' statistic are reported in Table 3. In both the years the significance levels of these statistics turned out to be greater 0.05. The inferences of significance of 't' values are, therefore, in order.

ii. Multicollinearity

Harmful collinearly would turn the coefficients insignificant by inflating the standard errors. To readily capture this possibility the 't' values are presented in Table-1. Five of the six independent variables are found to be highly significant. However, additional tests for multicollinearity are carried out and reported in Table 4. The 'Tolerance' and Variance Inflation Factor (VIF) do not indicate the problem of multicollinearity on reckoning with a threshold value of 0.30 for 'tolerance' and a permissible upper bound of 5.0 for VIF.

Table 3 Normality Tests (Unstandardized Residual)

	Normanty Tests (Onstandardized Residual)						
Year		Kolmogorov – Smirnov	Statistics		Shapiro-Wilks Statistics		
	Statistics	Degrees of Freedom	Significance	Statistics	Degrees of Freedom	Significance	
			-		-	-	
2003	0.093	29	0.200	0.979	29	0.811	
2004	0.095	29	0.200	0.978	29	0.796	

Table 4
Multicollinearity

Multiconnearity					
Independent Variables	Year: 20	Year: 2003		004	
•	TOLERANCE	VIF	TOLERANCE	VIF	
ΔDiv_t	0.567	1.764	0.722	1.384	
$Growth_t$	0.670	1.492	0.900	1.111	
Debt _t	0.638	1.566	0.634	1.578	
Beta _t	0.904	1.106	0.952	1.051	
Agency cost _t	0.864	1.158	0.883	1.133	
Sizet	0.446	2.244	0.469	2.133	

iii. Effect Size and Power

The ultimate purpose of analyzing sample data is to generalize conclusions about the overall behavior in the population. This capacity of a model is revealed through effect size (partial eta squared) and 'power' reported in Table 5. Since the effect size is greater than 0.14 and the power is above 0.80 for the independent variables under consideration, their signaling impact could be generalized. There are, of course, other tests which would enable researcher to be confident of the efficient and unbiased nature of the estimates generated; in the present study only three econometric issues, as mentioned above are analyzed. Complete consideration of the econometric issues underlying regression analysis is deferred to a subsequent study with enlarged sample addressed to some more hypotheses.

Table 5
Effect size and power

	Lilect biz	a una power		
Independent Variables	Year: 200)3	Year: 200)4
_	EFFECT SIZE	POWER	EFFECT SIZE	POWER
	(Partial Eta Squared)		(Partial Eta Squared)	
Constant	0.605	1.000	0.287	0.811
ΔDiv_t	0.907	1.000	0.996	1.000
$Growth_t$	0.485	0.991	0.765	1.000
Debt _t	0.910	1.000	0.966	1.000
Beta _t	0.454	0.983	0.172	0.534
Agency cost _t	0.074	0.245	0.019	0.097
Size _t	0.584	1.000	0.436	0.976

CONCLUSIONS

In a market where the problem of asymmetric information looms large, companies are compelled to search for 'effective' signaling devices. The role of such devices is to bridge the gap between the intrinsic value and market value of ordinary shares. Goal of wealth maximization demands of Finance Managers to identify such devices. The present study is primarily focused on culling out the 'signaling power' of an increase in dividends about future earnings. As an adjunct to this objective the signaling significance of corporate debt is also enquired into on a sample of companies drawn from the 'Trading and Services' sector of the Malaysian Corporate sector. This study brings out evidence on the efficacy of financial policies viz., dividends and debt, as signaling devices.

REFERENCES

Akerlof, G. A.1970. The market for 'Lemons': Quality uncertainty and the market mechanism. *Quarterly Journal of Economics*: 488-500.

Ambarish, R., John, K., & Williams, J.1987. Efficient signaling with dividends and investments. *Journal of Finance*, 42: 321-344.

Arnott, R. D., & Asness, C. S.2003. Surprise! Higher dividends = Higher earnings growth. *Financial Analysts Journal*, 59(1): 70-88.

Bhattacharya, S. 1979. Imperfect information, dividend policy, and 'the bird in the hand' fallacy. *Bell Journal of Economics*, 10(1): 259-270.

Bhattacharya, S.1980. Nondissipative signaling structures and dividend policy. *Quarterly Journal of Economics*, 95: 1-14.

Frankfurter, G., & Wood, R. 1997. The evolution of corporate dividend policy. *Journal of Financial Education*, 23: 16-33.

Green, J. P., & McAree, D. A research note on the information content of dividend and the corroboration effect of earnings and dividend signals: Irish evidence. *Irish Journal of Management*, 22(2): 67-82.

Healey, P., & Palepu, K.1988. Earnings information conveyed by dividend initiations and omissions. *Journal of Financial Economics*, 21(2): 149-176.

John, K., & Williams, J. 1985. Dividends, dilution, and taxes: A signaling equilibrium. *Journal of Finance*, 40(4): 1053-1070.

Lipson, M., Maquieira, C., & Megginson, G.1998. Dividend initiation and earnings surprises. *Financial Management*, 2: 36-45.

Mansor, M., & Subramaniam, V. 1992. The effects of dividend and earning announcement on stock prices in the Malaysia stock market. *Malaysian Journal of Economic Studies*, 29(1):35-49.

Michaely, R., Thaler, R., & Womack, K. 1995. Price reactions to dividend initiations and

Omissions. Overreaction or drifts. Journal of Finance, 50: 573-608.

Miller, M., & Modigliani, F.1961. Dividend policy, growth and the valuation of shares. *Journal of Business*, 34 (4): 411-433.

Miller, M., & Rock, K. 1985. Dividend policy under asymmetric information. *Journal of Finance*, 40(4): 1031-1051.

Norhayati, M., Mohamad, A. A. H., Annuar, M. N., & Shamsher, M.2003. Dividend profiling and dividend signaling on the Kuala Lumpur Stock Exchange. *Proceedings of the Malaysia Finance Association Fifth Annual Symposium*, 262-282.

Nur-Adiana, H. A., Rosemaliza, A. R., & Yusnidah, I. 2001. The effect of dividend announcement on stock returns for companies listed on the main board of KLSE. *Proceedings of the Malaysian Finance Association Fourth Annual Symposium*, 383-401.

Ross, S. 1977. The determination of financial structures: The incentive signaling approach. *Bell Journal of Economics*, 8, 23-40.

Ryan, P. A., Besley, S., & Lee, H. W. 2000. An empirical analysis of reaction to dividend policy changes for NASDAQ firms. *Journal of Finance and Strategic Decisions*, 13(1): 35-44

Sarma, L. V. L. N., & Kok, L. K. 2003. Financial policies and asymmetric information: A study of signaling significance of dividends in Malaysia. *Proceedings of the Malaysia Finance Association Fifth Annual Symposium*: 375-393

Sarma, L. V. L. N., & Narayan, S. R.1992. Dividend policy and signaling. *Indian Journal of Finance and Research*, 2(2), 1-12.

Sarma, L. V. L. N., Sarada, L., & Mohd., I. A.2006. Asymmetric Information and Signaling Devices for Corporate Earnings' Prospects. *The ICFAI Journal of Accounting Research*, V(3): 24-33.

Spence, A. M. 1973. Job market signaling. *Quarterly Journal of Economics*, August: 355-379.

Stiglitz, J. E. (1985, May) Credit market and the control of capital, *Journal of Money*, *Banking and Credit*, 17(2): 133-152

Stiglitz, J. E. 1994. On the irrelevance of corporate financial policy. *American Economic Review*, 64(6): 851-866.

TRADE GLOBALIZATION AND POLITICAL LIBERALIZATION: A GRAVITY APPROACH

Miaojie Yu China Center for Economic Research, Peking University, China Email: mjyu@ccer.pku.edu.cn

ABSTRCAT

Previous studies pay very little attention to a positive endogenous nexus between trade globalization and political liberalization. In this paper, I apply a structural approach to investigate their two-way causality based on the gravity trade theory, using data from a sample of 134 IMF countries over the period 1962-1998. An extensive search shows that trade globalization dampens political liberalization, though political liberalization fostered trade globalization during this period. The paper also presents ample evidence of simultaneous bias when such bi-directional causality is ignored.

INTRODUCTION

One of the important components of globalization is the growing trade flow. Since the 1960s, trade globalization has advanced tremendously. In 2005, the world trade in goods and services reached \$10.51 trillion, accounting for more than a quarter of the global produced goods and services (WTO, 2006). For many industrialized countries, the level of merchandise trade relative to gross domestic product (GDP) remained to have a stable share during the last few decades. Since there is a faster growth of the service sector (Rodrik, 1996), the world is much more integrated today than at any time before when we measure merchandise trade relative to merchandise value-added instead (Feenstra, 1998). For example, the average bilateral trade volume grew twice as fast as country GDP for OECD countries from 1958 to 1988 (Baier & Bergstrand, 2001). On the other hand, the level of merchandise trade relative to GDP for developing countries increased from around 50% in the early 1960s to 75% in the late 1990s (Rudra, 2005).

Simultaneously, the world has made significant progress toward democracy over these decades. Stimulated by the first wave of democratization which begun in America in the early 19th century, political liberalization experienced a second wave that started at the end of World War II, and a the third wave that pattered by the early 1960s (Huntington, 1993). In particular, there were about 36 countries that had democratic regimes in that era (Papaioannou & Siourounis, 2005), and this number has increased dramatically. Since the late 1980s, 70% of developing countries made substantial improvements for political liberalization (Rudra, 2005).

This paper tries to take a step towards understanding the endogenous nexus between trade globalization and political liberalization. A country's political liberalization has a significant effect on globalization. The democratization of a nation, which is a standard index of political liberalization, essentially implies that political power is transferred from non-elected elites to a wider population group, which in turn pushes their government to choose a trade policy favorable to them. Accordingly, trade volume is changed due to a change in trade policy (Milner & Kubota 2005). Without a doubt, the effects of democratization on trade are different between developed and developing countries (O' Rourke & Taylor, 2006, Yu, 2006). On the other hand, there is a reverse causality of trade globalization on political liberalization. Trade does not only change the consumption possibility set by trading partners but also creates a channel for people to communicate ideas, which would be a spillover from a country to its trading partner (Lipset, 1960).

Previous studies pay very little attention to the two-way causality relationship. Most of the works only mention one of the two causal connections. Some researchers emphasize the effects of democratization on trade. They include, among others, Grofman and Gray (2000), Fidrumc (2001), Quinn (2000), Milner and Kubota (2005), Giavazzi and Tabellini (2005), O' Rourke and Taylor (2006), and Yu (2006). Their studies are distinguished from one other by various perspectives such as theoretical setups, operation channels, empirical methodology, democracy measurement, countries coverage, and time span,

yet they all reach a similar result: democracy fosters trade. On the other hand, some other studies such as those by Bussmann (2002), Li and Reuveny (2003), Lopez-Cordova and Meissner (2005), Papaioannou and Siourounis (2005), Rigobon and Rodrik (2004), and Rudra (2005) focus on how trade affects democracy. The findings from such studies diverge. For example, Lopez-Cordova and Meissner (2005) and Rudra (2005) find a positive effect of trade on democracy; conversely, Li and Reuveny (2003) and Rigobon and Rodrik (2004) argue a negative impact instead. Studies like Bussmann's find no impact of trade globalization on democracy at all.

Those studies that concentrate on a one-way effect could suffer from the estimation bias since globalization and democratization are mutually affected. Democracy is an important index of institution, which is clearly endogenous (Acemoglu, Johnson, & Robinson, 2001). Democratization affects globalization, which in turn affects the next stage of democratization. Few studies treat them as jointly evolving phenomena. Recent studies such as those of Giavazzi and Tabellini (2005) and Eichengreen and Leblang (2006) take an important step forward. Particularly, Giavazzi and Tabellini (2005) present evidence that countries that liberalize the economy followed by democratization perform much better than those countries that pursue the opposite sequence, using the difference-in-difference empirical methodology. Eichengreen and Leblang (2006) provide fruitful estimations to argue the existence of a bidirectional positive causality between trade openness and democracy, using long historical data from years 1870-2000.

To completely investigate the mutual effects of trade and democracy, this paper considers their bidirectional causality in line with the works of Giavazzi and Tabellini (2005) and Eichengreen and Leblang (2005). However, in contrast to previous studies, the estimations in this paper have a theoretical guidance. Particularly, a gravity model is used to underpin the effects of democracy on trade. In its simplest form, the gravity model mentions that trade globalization is positively proportional to trading countries' GDP but is negatively related to their transportation costs. The importer's democratization could affect artificial transport costs (e.g., tariffs) and then change bilateral trade volume (O'Rourke & Taylor, 2006). Also, empirical evidence shows that a democratic regime could become a favorable exporter in international trade. One possible explanation for this phenomenon is that products produced in highly democratic countries have a relatively high quality due to their intrinsic institutional stability and relatively strict quality regulation, *ceteris paribus* (Yu, 2006). Given this theoretical background, I therefore choose bilateral export as a measure of trade openness, which is different from the economic liberalization indicator used in the two above-mentioned papers.

I then perform a structural approach to estimate the bidirectional causality between trade globalization and political liberalization, using data from a sample of 134 countries over the period 1962-1998. My data coverage is broadly similar to Giavazzi and Tabellini's (2005). As compared to that in the work of Eichengreen and Leblang (2006), my data set is shorter but involves more countries. With regard to the empirical methodology, counter to the difference-in-difference approach used by Giavazzi and Tabellini (2005) and the Generalized Methods of Moments (GMM) used by Eichengreen and Leblang (2006), I use three-stage-least-squares (3SLS) estimation to take full account of the error-term correlations between the two equations. Generally speaking, I do not see positive bidirectional causality between trade and democracy. An extensive search shows that trade globalization dampens political liberalization, though political liberalization fostered trade globalization during the period 1962-1998. Various robustness checks using different measurements of democratization confirm such findings.

The rest of the paper is organized as follows. Section 2 reviews the theory. Section 3 presents the data description and measurements. Section 4 presents the estimation results and the sensitivity analysis. Section 5 concludes the paper.

LITERATURE REVIEW

This section describes the specification of the trade globalization equation, the democracy equation, and the simultaneity of trade and democracy.

Determinants of Trade Globalization

The growing trade globalization is already a widespread concern for intellectuals. Today, current wisdom believes that the growing GDP in trading countries plays the most important role in trade globalization. Furthermore, declining transportation costs and trade liberalization are two other important determinants of growing trade (Feenstra, 1998).

The gravity model is perhaps the unique approach that has consistently been proven to be a useful tool for the analysis of bilateral trade flows. Tinbergen (1962) is the first one to use the gravity model to explain trade globalization. He mentions that in its simplest form, the bilateral trade volume is positively related to their GDP but is negatively related to their geographical distance. For many years, the gravity model was regarded only as an empirical specification without any theoretical guidance. Recently, however, Anderson (1979) provides a micro-foundation for the gravity equation using a standard constant elasticity substitution (CES) utility function. Shortly after that, Anderson and van Wincoop (2003) develop a general equilibrium framework to estimate the determinants of trade flow. In fully discussing these determinants, it is helpful to investigate several categories: growing GDP, declining transportation costs, trade liberalization, and democratization.

The contributions of growing GDP to trade globalization are significant and easy to understand. The gravity model has two implications for the growing GDP. First, larger countries trade more because they produce more goods which in turn lead to more trade. Second, world trade increases when trading countries become more similar in size (Helpman, 1987). The iceberg transportation costs raised by Samuelson (1952) mentions that in order to have one unit of a commodity reach the destination country, there should be more than one unit of such a product shipped from its departure since some of these products will "melt" during transportation.

Aside from this, various preferential trade agreements such as customs unions, free trade agreements, and GATT/WTO membership significantly reduce trade barriers for their members' countries, hence the increase in trade volume. An economic similarity such as a common colonization and common official language between trading partners also have positive effects on trade (Rose, 2004).

More interestingly, how does a trading country's democratization affect trade globalization? Democratization in developing countries could push governments in those countries to choose a pro-trade policy which in turn fosters trade globalization. The economic rationales for this argument are the following. First, according to the Heckscher-Ohlin theorem, most developing countries are labor-abundant countries that export relatively labor-intensive products and import relatively capital-intensive products. Second, an increase in the import tariff of capital-intensive good increases the real return of capital, hence benefiting capital owners but harming labor owners, according to the Stolper-Samuelson theorem (1949). Third, democratization implies that political power is switched from non-elected elites to the labor group, which in turn would push the government to choose a pro-trade policy (O' Rourke and Taylor, 2006). Finally, trade liberalization fosters world trade growth. Following this logic, the democratization of developed countries would therefore hamper trade growth.

Determinants of Political Liberalization

Political liberalization is not exogenously given, but it is affected by many factors such as a country's trade openness, standard of living, colonial history, and ethno-linguistic differences (Barro, 1999, Papaioannou & Siourounis, 2005). Many existing democratization works ignore the possible direct contributions of trade globalization to democratization. Fortunately, a few important exceptions occur. De Long and Shleifer (1993) find strong evidences that trade globalization and the consequent emergence of the middle class have substantially affected the first wave of democratization in Western Europe. An empirical investigation by Papaioannou and Siourounis (2005) confirms that political liberalization is more likely to emerge in countries that are open to international trade. Aside from this, Lipset (1960) also offers another channel of globalization toward democratization: trade creates a channel for people to communicate ideas. Accordingly, the dogma and ideology that are dominant in rich clubs would easily spill over to poor countries.

Democratization is also affected by a country's standard of living indicators such as GDP and GDP per capita. The ruling elite in wealthy nations are in favor of some democratic reforms as well as the

associated wealth redistribution (Lipset, 1960). Likewise, a growing GDP fosters democracy. Economic growth may increase income inequality which in turn leads to the emergence of special interest groups (Feng & Zak, 1999). According to the theory initiated by Aristotle and later developed by Huntington (1993), democracy is the most appropriate political regime for a country with many social classes and ethic groups. Hence, a country's GDP could serve as one determinant of its democracy. Finally, a country's urbanization rate is also an important factor to determine political liberalization since it could affect the managerial ability of the central authority (Barro, 1999).

History affects democratization as well. Studies conducted by Acemoglu, Johnson, and Robinson (2001) argue that historical colonization shaped early European institutions which in turn affected current institutions. In other words, historical colonization affects political liberalization since democracy is one of the important indicators of institution formation. Similar arguments apply to geographical indicators. Geographical difference, such as country size and climate difference, partially explain productivity differences which in turn lead to different income levels across countries (Sachs and Warner, 2001). Finally, the ethno-linguistic heterogeneity could make it more difficult for a country to sustain democracy (Barro, 1999). It also suggests a possibility that dogma and ideas could be switched between countries that have some common cultural background (e.g., using a common language). I therefore take common language usage into account as well.

In a nutshell, the determinants of a country's democratization include, among others, trade globalization, GDP per capita, GDP, historical colonization, country size, and language usage.

Simultaneity of Trade and Democracy

To estimate the interactions between trade globalization and political liberalization as stipulated above, I consider the following simultaneous equations model (SEM):

$$\ln X_{ijt} = \alpha \cdot z_{jt} + \gamma Q_{ijt} + \varepsilon_{ijt},$$

$$z_{jt} = \beta \cdot \ln X_{ijt} + \varsigma Q_{ijt}^* + \mu_{ijt},$$

where $\ln X_{ijt}$ is the logarithm level of bilateral export from country i to country j at year t, z_j is importer j's democracy level, Q_{ij} collects measures of the determinants of trade globalization, Q_{ij}^* collects measures of the determinants of democracy, and $(\varepsilon_{ijt}, \mu_{ijt})$ is a bivariate normal residual vector. The coefficients α and β take into account the simultaneous feedback from changes of trade and democracy, while the vectors of coefficients γ and ζ capture the effects of the predetermined variables.

I follow the literature on the gravity model using a logarithm function of bilateral export to measure trade volume (e.g., see Baier & Bergstrand, 2001; Feenstra, 2003; Anderson & von Wincoop, 2003). The logarithm model adopted here can control for a potential nonlinearity between trade and democracy. The advantages of using bilateral export as the indicator of trade globalization will be carefully introduced in the next section. Similarly, I will offer a careful scrutiny of measuring political liberalization in the next section.

My main interests for this SEM are the signs of the coefficients of and . Since the error terms in the SEM, generally speaking, are correlated with the dependant variables, the estimated coefficients using conventional methods, such as Ordinary Least Square (OLS) and Generalized Least Square (GLS), will be inconsistent. Instead, the Three-Stage Least Squares (3SLS) will be an appropriate method for estimation since it takes into consideration the error-term correlations between the two equations. Particularly, one needs three steps to perform the 3SLS estimations: (1) obtaining the Two-Stage Least Squares (2SLS) of the identified equations; (2) applying the 2SLS estimates to perform estimations for the structural equations' errors, and then using these errors to calculate the simultaneous variance-covariance matrix of the structural equations' errors; and (3) using the GLS method on the large equation representing all of the identified equations of the system (Wooldridge, 2002).

The endogenous variables in this SEM are importer j's democracy level and the logarithmic bilateral trade volume $\ln X_{ijt}$. Guided by the theory presented above, I include many variables listed in Table 1 as exogenous variables for this SEM. In particular, exporter i's democracy is included in both equations for two reasons. First, a democratic exporter would directly lead to more trade due to the possible upgrading of their products' quality; hence, z_i enters the trade equation. Second, an exporter's democracy could indirectly affect its import counterpart's democracy via other channels such as international political cooperation and educational interaction; hence, z_j enters the democracy equation. Various geographical variables (e.g., distance, land-locked dummy, common land border dummy, number of island countries, and number of landlocked countries) serve as exclusive exogenous variables of the democracy equation. Correspondingly, variables including a country's GDP per capita, urbanized ratio, infant mortality rate, and dummy of death penalty abolition serve as exclusive exogenous variables of the trade equation, though the validity of such instruments will be explored in a later section.

REESEARCH METHODOLOGY

Data Descriptions and Measurements

Table 1 lists all regressors in the estimation whose sources are described in Appendix A. My sample covers 134 countries for about four decades, from 1962 to 1998, which is the period of trade globalization and the third wave of democratization. The literature usually has three different ways to measure trade openness. First, studies like Baier and Bergstrand's (2001) used bilateral export to measure a country's trade openness. Second, some other studies like that of Eichengreen and Leblang (2006) define trade openness as exports plus imports relative to a country's GDP. Third, Sachs and Warner (1995) initiate a dichotomous indicator to measure economic liberalization, which includes trade openness. A country is defined as a closed economy when average tariffs are higher than 40%, or when non-barriers on importable items cover more than 40%.

Here, I choose the first indicator for estimations for three reasons. First, it has a solid theoretical micro-foundation. The gravity equation specified by Anderson and von Wincoop (2003) is derived from a general equilibrium model which clearly suggests that a measurement of bilateral log-export is a good experiment. Second, as compared to the second trade openness measurement (i.e., the sum of imports and exports relative to a country's GDP), bilateral export can clearly describe the direction of trade that specifies the source and destination countries. Accordingly, trade data are more disaggregated and the samples are much larger, which in turn can reduce the possible multicollinearity problem among regressors and avoid aggregated bias (Wooldridge, 2002). Finally, the discrete indicator is too simplified to capture the detailed thickness of trade globalization though it is a good proxy for measuring broadly economic liberalizations.

The institutionalized democracy index from the Polity IV data set is perhaps the most widely accepted measurement of democracy (e.g., see an investigation by Eichengreen and Leblang, 2006, Table 1).

Table 1
Regressors in the Trade Globalization Equation

Regressors	Descriptions and Measurements
Export	Logarithmic export from exporter i to importer j
GDP	Logarithmic GDP of exporter i and importer j
GDP per capita	Logarithmic GDP per capita of exporter i and importer j
Democracy	Using data from Polity IV, Bollen's liberal democracy index, and
	Freedom House indicator, respectively, to measure exporter and
	importer's political liberalization level
Distance	The great-circle geographical distance between two trading countries'
	capital, measured at a logarithmic level.
Border Dummy	Whether or not two trading countries share the common land border
Number Landlocked	Number of trading countries that are landlocked
Number Islands	Number of trading countries that have islands
Land Area	Log Product of trading countries land area
WTO membership	A dummy to measure whether or not a country is a member to the
	GATT/WTO
Regional Trade Agreements	A dummy to measure whether or not a country is a member of various
	regional trade agreements such as CU or FTA
Common Colony	A dummy to measure whether or not two trading partners are colonized
	by a common country
Common Language	A dummy to measure whether or not two trading partners use the same
	official language
Urbanization Ratio	Percentage of people who live in an urban area
Death Penalty Dummy	A dummy to measure whether or not a country outlaws death penalty
Infant Mortality Rate	Number of infants that die before reaching one year of age, per 1,000 live
	births in a given year

In particular, it includes annual composite indicators measuring both "institutionalized democracy" and "institutionalized autocracy" for just about every independent regime with a population over 500,000. The political liberalization index is thus defined as the difference between the democracy indicator and the authoritarian indicator. Each indicator is an additive eleven-point scale (0-10).

Various preferential trade agreements such as customs unions and free trade agreements are also included in my estimations. My coverage directly follows the work of Rose (2004). For the purpose of identification, I include four variables in the democracy equation which are exclusive of the trade equation: importer's infant mortality ratio, urbanized ratio, GDP per capita, and dummy of death penalty abolition. As recognized by Barro (1999), the first three variables are important exogenous determinants of democracy. Infant mortality ratio is positively related to democracy but not necessarily related to trade. In democracy literature, urbanized ratio is also argued to affect the organizational ability of the government, though its significance is unclear in theory. More importantly, GDP per capita is one of the most important determinants of democracy but not of trade. The gravity equation merely emphasizes that larger countries trade more. It has no implication that richer countries trade more instead. This is the main reason why seminal gravity literature does not include GDP per capita in their estimations (e.g., see Baier & Bergstrand, 2001; Anderson & von Wincoop, 2003).

Another variable serving as an exclusive exogenous variable for the trade equation is the indicator of death penalty abolition. Specifically, I consider four death-penalty regimes according to whether or not the death penalty is (1) absolutely outlawed (e.g., Austria); (2) allowed in extreme cases (e.g., Brazil); (3) de facto banned, that is, death penalty is sanctioned by law but has not been practiced for 10 or more years (e.g., Congo Republic); and (4) permitted. For example, during 2004, more than 3,797 people were executed in 25 countries, and more than 7,395 people were sentenced to death in 64 countries. To avoid an arbitrary scoring assignment for these four types of countries, I therefore construct a binary dummy variable which is zero if the death penalty is allowed at a particular year in a country and one otherwise.

RESULTS AND DISCUSSION

Estimates

This section presents the estimation results of the trade and democracy equation. The structural parameters of the simultaneous equations system are estimated using the 3SLS. The sensitivity analysis will be discussed in the next section, and the main findings of the paper are shown to be robust to the different specifications and data set choices.

Choices of specifications: Tables 2A and 2B report the 3SLS estimates of the simultaneous equations system. In Specification (1) of Table 2A, I take the simplest form of the gravity equation to estimate the effects of democracy on trade. Except for the importer's endogenous democracy, bilateral export is only affected by two trading countries' GDP. Simultaneously, as shown in Specification (1) of Table 2B, importer's democracy is affected only by two exogenous variables (i.e., importer's GDP per capita and its urbanized ratio) which are the essential determinants of democracy in the literature (Barro, 1999).

The benchmark estimation results in Table 2A show that democracy fosters trade significantly at the conventional statistical level, and as predicted in the standard gravity literature, a higher GDP leads to more trade. Turning to Table 2B, one can observe that a higher GDP per capita and a lower urbanized ratio leads to a higher democracy, respectively. Rich countries are probably more aware of civil rights and hence promote democracy, as hypothesized by Aristotle. At the same time, when more citizens of a nation live in the rural area, that is, a lower urbanized ratio, it is more difficult for the central dictator to control and suppress them. Most importantly, the estimation results also suggest that trade hinders democracy, though it is insignificant at the conventional level. Since these asymmetric findings of the bidirectional causality cast doubt on traditional wisdom, which hypothesizes intuitively that trade should encourage democracy, and to some extent, distinguish previous empirical findings like those in the work of Eichengreen and Leblang (2006), I search further for more evidence by adopting different specifications.

My first enrichment, Column (2) in Tables 2A and 2B, provides significant supportive evidence to the asymmetric endogenous nexus between trade and democracy, controlling trading partners' geographical factors in the trade equation where infant mortality ratio and death penalty abolition are included in the democracy equation. Trade dampens democracy significantly, whereas its reverse casualty is positive. The reasons to include such controlling factors in Specification (2) follow. Geographical endowments have been fully recognized as substantial factors of international trade (see, for example, Rose, 2004) but are not directly connected to democracy. In contrast, a country's infant mortality ratio and death penalty abolition are exogenous but highly correlated with its democracy in an economic and statistic sense. Particularly, in my sample of 114,193 observations, the partial correlation of an importer's democracy with its infant morality ratio is -0.58, while with the dummy of death penalty abolition is 0.25. The estimates in Table 2B confirm our traditional belief that a high democratic regime is highly associated with a low level of infant mortality ratio and generally abolishes the death penalty. Turning to the effects of geographical factors on trade, the findings are encouraging and consistent with the gravity literature: (a) countries with a long distance between them trade less; (b) countries that share a common land border trade more; (c) landlocked countries trade less; and (d) island countries trade more.

Table 2A	
3SLS Estimates of Democracy on T	rade

Regressand: Bilateral Export	(1)	(2)	(3)	(4)	(5)
Importer's Democracy	0.10**	0.06**	0.04**	0.04**	0.04**
Exporter's GDP	(51.84) 2.22**	(25.03) 2.15**	(18.16) 2.29**	(18.22) 2.26**	(14.70) 2.23**
-	(245.83)	(178.83)	(175.79)	(162.16)	(161.64)
Importer's GDP	1.75** (203.32)	1.86** (138.36)	2.04** (134.96)	2.03** (134.90)	1.99** (134.64)
Distance		-1.10**	-1.00**	-1.00**	-1.02**
		(-80.03)	(-70.67)	(-70.63)	(-71.43)
Common Border Dummy		0.48**	0.52**	0.52**	0.61**

# of Landlocked Countries # of Island Countries		(7.71) -0.26** (-12.78) 0.60**	(8.35) -0.27** (-13.15) 0.39**	(8.37) -0.27** (-13.06) 0.39**	(9.98) -0.36** (-17.87) 0.34**
Common Colony		(29.47)	(18.32) 0.20**	(17.99) 0.22**	(16.26) 0.50**
Ever Colony			(4.53) 0.66**	(5.14) 0.65**	(11.61) 0.87**
Common Language			(7.55) 0.47**	(7.47) 0.47**	(10.14) 0.47**
Land Products			(18.88) -0.10**	(18.62) -0.09**	(18.77) -0.09**
Exporter's Democracy			(-22.83)	(-21.50) 0.01**	(-19.64) 0.00
Both WTO Members				(6.31)	(0.68) 0.14**
One WTO Member					(2.61) 0.10*
FTA					(1.81) 1.46** (19.02)
GSP					0.77**
# of Observations First Stage F-value Anderson Likelihood-ratio	114,913 9,568*** 13096***	45,792 5,977*** 17174***	45,792 5,160*** 15,565***	45,792 5,950*** 17,044***	45,792 5,113*** 15,608***
Test Cragg-Donald F-statistic	15180***	20838***	18,538***	20,649***	18,597***
Anderson-Rubin χ^2 Statistic	1,597***	1,281***	880***	1353***	758.03***
Shea Partial R ² R ²	0.25 0.52	0.31 0.55	0.29 0.57	0.31 0.57	0.29 0.59

Notes: Numbers in parenthesis are t-value. *(**) indicates significance at 1 (5) percent level. *** indicates p-value of the statistic is less than 0.001.

Table 2B 3SLS Estimates for Effects of Trade on Democracy

Regressand: Importer's	(1)	(2)	(3)	(4)	(5)
_ ^	(1)	(2)	(3)	(4)	(3)
Democracy					
Bilateral Export	-0.04	-0.11**	-0.15**	-0.13**	-0.05**
	(-1.59)	(-7.19)	(-9.00)	(-7.47)	(-3.06)
Importer's GDP per	11.21**	6.06**	6.09**	6.09**	5.77**
capita					
-	(182.10)	(48.22)	(47.98)	(47.97)	(42.13)
Importer's Urbanized	-0.07**	-0.09**	-0.09**	-0.10**	-0.09**
Ratio					
	(-47.85)	(-44.93)	(-46.66)	(-46.73)	(-45.92)
Importer's Infant		-78.92**	-81.52**	-80.83**	-79.32**
Mortality Ratio					
-		(-59.81)	(-60.07)	(-59.27)	(-58.61)
Importer's Death Penalty Abolition		2.35**	2.37**	2.43**	2.48**

Common Colony		(39.33)	(39.92) -0.48** (-3.83)	(39.68) -0.55** (-4.36)	(40.45) -0.55** (-4.36)
Ever Colony			0.81**	0.80**	0.64**
Common Language			(3.11) 0.75** (10.14)	(3.06) 0.74** (10.09)	(2.45) 0.75** (10.14)
Land Products			0.06**	0.05**	0.01
Exporter's Democracy			(5.69)	(4.80) -0.02**	(0.88) -0.03**
Importer's GDP				(-4.70)	(-6.29) 0.22** (4.48)
# of Observations	114,913	45,792	45,792	45,792	45,792
First Stage F-statistics	16,209***	8,603***	7,434***	7,174***	4,660***
Anderson Likelihood- ratio statistic	25,420***	33,442***	30,502***	25,331***	27,185***
Cragg-Donald test statistic	33,981***	49,259***	43,347***	33,830***	37,118***
Anderson-Rubin χ^2	9.44**	452.85***	30,502***	500.43***	2017***
Statistic					
Shea Partial R ²	0.43	0.52	0.29	0.43	0.45
R ²	0.34	0.40	0.40	0.40	0.41

Notes: This table reports the estimates of the democracy equation in the SEM. Numbers in parenthesis are t-value. *(**) indicates significance at 1 (5) percent level. *** indicates p-value of the statistic is less than 0.001.

My second extension again confirms the asymmetric findings between trade and democracy by taking colonial history and languages into account. I include two variables (i.e., common colony and ever colony) to measure simultaneously the effects of colony in both equations. The estimates from Specifications (3) and (4) suggest that these two variables are positively associated with bilateral trade and democracy, respectively. These are consistent with the findings of Acemoglu, Johnson, and Robinson (2001). Colonial history affects the formation of current institutions, which in turn affects a country's openness and its political liberalization level by at least two means. A country's current democracy level could benefit from its colonial history, which replaces the much worse system of feudalism or slavery in the country. One good example is the case of Hong Kong which was controlled by the impotent Qing Empire before colonization by Great Britain about 150 years ago. Furthermore, a shared colonial history fosters bilateral trade, in line with Rose's (2004) work.

Specification (5), a complete version of my estimations, once again confirms that trade dampens democracy, whereas democracy encourages trade. Aside from geographical factors, I also include memberships to GATT/WTO and various regional trade agreements as exclusive exogenous variables of the democracy equation. Simultaneously, I still keep GDP per capita, urbanized ratio, infant mortality ratio, and dummy of death penalty abolition as exclusive exogenous variables of the trade equation. Finally, land products, which measure trading countries' sizes, and exporter's democracy, are included in both equations as well. It is easy to understand that various international trade negotiations affect trade, yet it is hard to convince people that such agreements could affect democracy directly. Their effects on democracy, if any, go through trade. Accordingly, such trade agreements are included in the trade equation but are excluded in the democracy equation. Evidently, I need to check the validity for such specifications before I move too far.

To check the validity of exclusive instruments in my empirical specifications, I first report the first-stage F statistics in the 3SLS for each specification that is used to test the exclusion of the

instruments from the first stage. The null hypothesis that the model is misspecified is rejected at the 0.1% level. Second, to check whether or not the excluded instruments are correlated with the endogenous regressors, I perform Anderson's (1984) canonical correlation likelihood-ratio test to verify the null hypothesis that my specification is under identified. The rejections at 0.1% level for each specification again show that my specification is identified. Third, I also go a step forward to see whether or not such excluded instruments are weakly correlated with the endogenous regressors. If so, then the estimates can perform poorly in this SEM. The Cragg and Donald (1993) F statistics provide strong evidence to reject the null hypothesis that the first stage is weakly identified at a highly significant level. Fourth, the Anderson and Rubin (1949) test for the significance of endogenous regressors in the structural estimation being estimated is included as well. All specifications reject the null hypothesis that the coefficients of the endogenous regressors in this SEM jointly equal zero. Finally, I include Shea's (1997) partial R-square which takes into account the inter-correlation among instruments. In a nutshell, such various statistical tests give me sufficient confidence that the specification is indicated well.

Simultaneous Bias

Table 3 provides novel evidence for the simultaneity bias by comparing estimates of different econometric models like OLS, 2SLS, and 3SLS. Suppose one falsely takes democracy as exogenous given, the trade equation can then be estimated separately from the democracy equation. Accordingly, the trade equation is reduced to a single-equation OLS model.

As seen in isolation in Panel A of Table 3, the key parameter, , in most of these single-equation OLS estimates still have the predicted positive sign with a high statistical significance. However, when one compares such OLS estimates with our previous 3SLS findings, their differences are substantially huge. For example, in Specification (4), the single OLS estimate reports α_{OLS} =.004 (t=3.02), whereas α_{3SLS} =.04(t=18.22). The simultaneous equation estimate of the impact of democracy on trade is around 10 times larger than its single-equation counterpart. The most striking difference is the estimates in Specification (5). The magnitude of the effect of democracy on trade in the 3SLS estimation is over 20 times larger than its single-equation OLS counterpart (α_{3SLS} =.04; α_{OLS} =-.004), and perhaps more strikingly, they have different significantly predicted signs (t_{3SLS} =14.70; t_{OLS} =-1.83). Thus, these results suggest that a group of evidence of simultaneous bias in the endogeneity issue between trade and democracy is ignored.

Table 3
Evidence of Simultaneity Bias

Model Selection	(1)	(2)	(3)	(4)	(5)
	Panel A: Esti	mates of Demo	ocracy on Trade		
Simultaneous equations	0.10**	0.06**	0.04**	0.04**	0.04**
	(51.84)	(25.03)	(18.16)	(18.22)	(14.70)
Single equation, OLS	0.02**	0.01**	0.00**	0.00**	-0.00*
	(17.59)	(9.87)	(2.78)	(3.02)	(-1.83)
Single equation, 2SLS	0.09**	0.06**	0.05**	0.06**	0.04**
	(49.85)	(25.05)	(17.99)	(26.07)	(14.24)
	Panel B: Esti	mates of Trade	on Democracy		
Simultaneous equations	0.04	0.11**	0.15**	0.13**	0.05**
	(1.59)	(7.19)	(9.00)	(7.47)	(3.06)
Single equation, OLS	0.06**	0.08**	0.10**	0.11**	0.11**
	(8.55)	(8.23)	(10.05)	(9.66)	(9.66)
Single equation, 2SLS	0.01	0.06**	0.09**	0.09**	0.03**
	(1.10)	(4.03)	(6.04)	(5.72)	(2.13)

Notes: a. This table reports the coefficients of key variables and in each model specification. The numbers in parenthesis are the t-value. *(**) indicates significance at the 1 (5) percent level. The number of observations in estimate (1) is 114,913, while that in estimates (2)-(5) is 45,792.

b. This is the OLS with robust standard errors.

c. This is the IV (2SLS) regression with robust standard errors. In (1), the instruments for the importer's democracy in the trade equation are its urbanized ratio and GDP per capita, whereas those for bilateral export in the importer's democracy equation are two trading countries' GDP. From (2) to (4), the instruments for the importer's democracy in the trade equation are its urbanized ratio, GDP per capita, infant mortality ratio, and death penalty abolition dummy; the instruments for the bilateral export in the democracy equation are bilateral trading partners' GDP, geographical distance, common land border dummy, number of landlocked countries, and number of islands countries. In (5), the instruments for bilateral trade in the importer's democracy equation include various trade agreements, as well as those covered in (2)-(4); the instruments for the importer's democracy in the bilateral trade equation are the same as those in (2)-(4).

One might argue that such a simultaneous bias could be mainly mitigated using the single-equation 2SLS estimation. Admittedly, it is true to some extent, if one can have truthful exogenous instruments. For example, the single-equation 2SLS estimations in all specifications in Panel A are fairly close to their counterparts in the 3SLS estimates.

However, we cannot take the single-equation 2SLS too faithfully. Turning to the estimates of trade on democracy, as shown in Panel B of Table 3, the single-equation 2SLS estimates do reduce the simultaneous bias caused by the single-equation OLS. Various validity tests for instruments such as the Anderson (1984) canonical correlation likelihood-ratio test, the Cragg and Donald (1993) F statistics, and the Anderson and Rubin (1949) test confirm that each model's specification is warranted. However, we still find a substantial difference between estimates of 2SLS and 3SLS. For example, in Specification (5), the estimate from 3SLS, β_{3SLS} =-.054, is much higher than its counterpart in the 2SLS, β_{2SLS} =-.032, in the relative term.

Robustness Checks

I go further to investigate the endogenous nexus between trade and democracy, separating all of the countries into different income groups according to the World Bank's classification. Table 4 reports the estimates varied according to different income groups. For the rich club such as the high income OECD and high income non-OECD countries, high democracy is associated with low bilateral trade. In other words, democracy has a negative effect on trade; simultaneously, trade also has a negative impact on democracy as shown in Panel B of Table 4. Such a finding is consistent with the theoretical prediction. Generally speaking, rich countries are capital abundant countries with import labor-intensive products according to the Heckscher-Ohlin theorem. A rise in import tariff would benefit the workers' group. On the other hand, democracy essentially implies a transfer of power from non-elected elites to wider population groups such as workers. Accordingly, the workers' group would push the government to choose a high tariff which in turn diminishes trade. In a nutshell, trade will shrink when a rich country's democracy increases. However, the reverse argument for the developing world does not always hold true. The effects of democracy on trade are negative for the low income and lower-middle income group, respectively, though it still maintains a significant positive sign for the upper-middle income group. Regarding the effect of trade on democracy, the least developed world (i.e., the low income group) is also an interesting exception. Trade globalization fosters democracy in such a group, perhaps because trade provides a channel for people to communicate ideas. Accordingly, dogma and ideology, which are dominant in rich clubs, spill over to the least developed world easily and successfully.

Table 4
Simultaneous Effects between Trade and Democracy Varied by Income Groups

Simultaneous	Effects between	i irade and l	emocracy vari	iea by income	Groups		
Income Group	(1)	(2)	(3)	(4)	(5)		
Panel A: Estimates of Democracy on Trade							
Low Income	-0.01	0.01*	-0.00	-0.00	-0.02**		
	(2.18)	(1.89)	(-0.04)	(-0.74)	(-3.20)		
Lower-middle Income	0.03**	0.04**	0.04**	0.04**	-0.01**		
	(6.79)	(11.11)	(9.50)	(9.29)	(-1.96)		
Upper-middle Income	0.03**	0.03**	0.03**	0.03**	0.02**		
	(2.80)	(6.53)	(11.59)	(5.72)	(4.59)		
High Income OECD	0.05**	-0.07**	-0.04**	-0.04**	-0.05**		
_	(2.62)	(-5.91)	(-3.67)	(-3.53)	(-5.19)		
High Income Non-OECD	-0.08**	-0.10**	-0.07**	-0.06**	-0.06**		
	(-7.02)	(-14.02)	(-9.62)	(-8.39)	(-8.15)		
	Panel B: Estin	nates of Trade	on Democracy				
Low Income	0.70**	0.21**	0.20**	029**	0.09**		
	(11.18)	(7.03)	(6.48)	(8.81)	(2.67)		
Lower-middle Income	-0.89**	-0.48**	-0.38**	-0.39**	-0.06**		
	(-13.23)	(-16.21)	(-11.17)	(-11.26)	(-1.89)		
Upper-middle Income	0.67**	0.34**	0.11**	0.16**	-0.03		
	(7.01)	(8.78)	(2.29)	(3.29)	(-0.70)		
High Income OECD	-0.66**	-0.67**	-0.65**	-0.76**	-0.54**		
-	(-5.98)	(-11.19)	(-11.04)	(-12.45)	(-9.30)		
High Income Non-OECD	0.14	0.07	0.04	0.11**	-0.06**		
-	(0.90)	(1.35)	(0.82)	(2.22)	(-1.41)		

Notes: This table reports the coefficients of key variables and in each model specification. Countries are separated into five categories according to the importer's income level based on the World Bank's classification standard. The numbers in parenthesis are the t-value. *(**) indicates significance at the 1 (5) percent level.

Table 5 shows the estimation results varied by geographical regions. The findings are volatile. Regions like Europe and Latin America have a positive two-way causality between trade globalization and political liberalization. East Asian countries also have a positive nexus between trade and democracy though the effect of trade on democracy is statistically insignificant. In contrast, regions such as North America, South Asia, and Mid-east have negative bidirectional causality. In addition, the issues of trade and democracy will be particularly interesting for transitional countries since these countries have experienced a dramatic change recently. I therefore isolate the 20 transitional countries from the rest of the world to check bi-directional causality. The complete version of my investigation, Specification (5), suggests that the effects of democracy on trade, and vice versa, are not statistically significant.

Table 5

Simultaneous Effects between Trade and Democracy Varied by Regions

G.	imuitancous Em	ces between 11	auc anu Democ	racy variou by	regions
Regions	(1)	(2)	(3)	(4)	(5)
		Estimates of De	mocracy on Trad	de	
East Asia	0.11**	0.12**	0.10**	0.09**	0.05**
	(15.93)	(20.36)	(28.90)	(16.18)	(9.18)
South Asia	0.05**	-0.02**	-0.02	-0.02*	-0.04**
	(3.04)	(2.19)	(-1.59)	(-1.86)	(3.73)
Mid-east	0.09**	-0.02**	-0.04**	-0.04**	-0.06**
	(7.81)	(-2.65)	(-5.27)	(-5.05)	(-7.17)
Sub-sahara	0.03**	0.04**	0.01**	0.01*	-0.00
	(4.28)	(7.34)	(2.02)	(1.69)	(-0.25)
Europe	0.24**	0.11**	0.10**	0.10**	0.08**

	(27.29)	(18.07)	(14.93)	(14.54)	(11.18)
North America	-0.25**	-0.09**	-0.05**	-0.04**	-0.05**
	(-3.09)	(-4.20)	(-2.75)	(-2.75)	(-3.91)
Latin America	-0.00	0.07**	0.07**	0.07**	0.03**
	(-0.06)	(13.51)	(12.45)	(12.39)	(6.06)
Transition	0.13**	0.04**	0.02*	0.02*	0.01
	(10.97)	(5.02)	(1.70)	(1.78)	(1.54)
		Estimates of Tra	ade on Democra	cy	
East Asia	-1.83**	-0.33**	-0.48**	-0.46**	0.04
	(-16.32)	(-9.97)	(-21.11)	(-12.85)	(1.10)
South Asia	1.38**	0.29**	0.10*	0.12**	-0.31**
	(8.00)	(5.59)	(1.80-)	(2.17)	(-5.39)
Mid-east	-1.41**	0.45**	-0.48**	-0.08	-0.10*
	(-8.69)	(-8.15)	(-8.38)	(-1.52)	(-1.83)
Sub Sahara	-0.27**	-0.27**	-0.20**	-0.11**	-0.23**
	(-3.72)	(-7.52)	(-5.56)	(-2.95)	(-5.77)
Europe	0.49**	0.08**	0.09**	0.03	0.13**
	(3.83)	(2.39)	(2.40)	(0.87)	(3.46)
North America	-1.03**	-0.19	-2.79**	-3.32**	-3.51**
	(-3.90)	(-1.19)	(-6.19)	(-6.88)	(-5.33)
Latin America	0.03	0.08**	0.24**	0.23**	0.15**
	(0.37)	(2.61)	(6.25)	(5.75)	(4.28)
Transition	0.91**	0.05	0.05	0.09	0.03
NI (TILL)	(2.80)	(0.62)	(0.63)	(1.00)	(0.32)

Notes: a. This table reports coefficients of key variables and _{ }in each model specification. Countries are separated by importer's geographical location according to the World Bank's standard. Numbers in parenthesis are t-value. *(**) indicates significance at 1 (5) percent level.

CONCLUSIONS

Previous literature highlighted the importance of the effects of political liberalization on trade globalization, or vice versa. However, very few studies consider their endogenous nexus. This paper thus fills the gap by providing ample evidence to show that trade globalization discourages political liberalization, though political liberalization fosters trade globalization.

A recent study by Eichengreen and Leblang (2006) investigates such a close issue and find positive endogenous bidirectional causality between democratization and globalization. My study differs from theirs in three ways. First, my study's results are different but not necessarily conflicting. Eichengreen and Leblang (2006) suggest the existence of positive two-way relationships between globalization and democracy, yet it was insignificant during the Bretoon Woods era. By concentrating on the third wave of democratization period, I go further in my goal to provide fruitful evidence to confirm that trade globalization hinders democratization though the reverse effect is positive. More importantly, I adopt a structural approach using the simultaneous equations system to perform estimations, which is important and helpful to reduce the simultaneous bias caused by considering a one-way estimation separately. As shown in the text, ignorance on the simultaneous effects in previous works can cause severe and substantial bias. Finally, the paper has a theoretical guidance, particularly for trade democracy. All of the determinants of the trade equation are directly guided by the gravity trade theory with a microfoundation base. It offers empirical insights into the determinants of the democracy equation as well.

Turning to the economic interpretation of my findings, it is relatively easy to understand that democratization fosters trade globalization, as explained in the text and by many other studies (e.g., Milner & Kubota, 2005, O' Rourke & Taylor, 2006). Nevertheless, it is interesting to ask what causes democratization if trade globalization does not work. In brief, one of the important factors is a country's GDP per capita, as suggested by Barro (1999) and as shown in the paper. An increase in the people's

b. This column reports the simultaneous effect between trade and democracy for the 21 transitional countries.

standard of living calls for a rise in democracy. If so, however, what causes a distinction of income across a country? The endogenous growth theory suggests that this is due to the technology difference across borders. However, technology itself is not exogenous either. In all cases, these topics are beyond the current paper's objective and thus call for further research in years to come.

Acknowledgements: I would like to thank Robert Feenstra, Peter Lindert, Justin Yifu Lin, Joaquim Silvestre, Deborah Swenson, Bruce Blonigen and conference participants in the 6th Annual Asian Pacific Rim University Conference at Eugune, Oregon, for their very helpful comments. All errors are mine.

REFERENCES

Amnesty International. 2005. *Working to project human rights worldwide*. Online documentary available at: http://web.amnesty.org/pages/deathpenalty-index-eng.

Anderson, J., & van Wincoop, E. 2003. Gravity with gravitas: A solution to the border puzzle. *American Economic Review*, 93 (1): 170-192.

Anderson, T.W. 1984. Introduction to multivariate statistical analysis, 2nd ed. New York: John Wiley & Sons.

Anderson, T. W., & H. Rubin. 1949. Estimation of the parameters of a single equation in a complete system of stochastic equations. *Annals of Mathematical Statistics*, 20: 46-63.

Acemouglu Daron, Simon Johnson, & James A. Robinson. 2001. The colonial origins of comparative development: An empirical investigation. *American Economic Review*, 91 (5): 1369-1401.

Acemouglu Daron, Simon Johnson, & James A. Robinson, and Pierre Yared. 2004a. *Income and democracy*. Unpublished manuscript, MIT and Harvard University.

Baier, Scott, & Jeffrey H. Bergstrand. 2001. The growth of world trade: Tariffs, transport costs, and income similarity. *Journal of International Economics*, 53: 1-27.

Barro, R. 1999. Determinants of democracy. Journal of Political Economy, 107(S6): S158-183.

Bollen, Kenneth A. 1998. *Cross-national indicators of liberal democracy* 1950-1990. 2nd ICPSR version, Chapel Hill, NC: University of North Carolina.

Bollen, Kenneth A., & Robert W. Jackman. 1989. Democracy, stability, and dichotomies. *American Sociological Review*, 54: 612-621.

Bussmann, M. 2001. *Examining causality among conflict, democracy, openness, and economic growth*. Unpublished manuscript, University of Alabama.

Cragg, J.G. & S.G. Donald.1993. Testing identifiability and specification in instrumental variables models. *Econometric Theory*, 9: 222-240.

De Long, Bradford J. & Andrei Shleifer. 1993. Princes and merchants: European city growth before the industrial revolution. *Journal of Law and Economics*, 36(2): 195-225.

Eichengreen Barry & David Leblang. 2006. Democracy and Globalization. *NBER Working Paper No.* 12450.

Feenstra, R. 1998. Integration of trade and disintegration of production in the global economy. Journal of Economic Perspectives, 12 (4): 31-50.

Feenstra, Robert C. 2004. *Advanced international trade: Theory and evidence*. Princeton University Press.

Feenstra, Robert, Robert E. Lipsey, Hanyan Deng, Alyson Ma & Hengyong Mo. 2005. World trade flow: 1962-2000. *NBER Working Paper*, *No. 11040*.

Feng, Y. 2003. Democracy, governance, and economic performance: Theory and evidence. MIT Press.

Feng, Yi & Paul J. Zak. 1999. *Determinants of democratic transitions: Theory and empirical evidence*, 42: 162-177.

Frankel, Jeffrey A. & David R. 1999. Does trade cause growth? *American Economic Review*, 89 (3): 379-399.

Friedman, M. 1962. Capitalism and freedom. Chicago, IL: University of Chicago Press.

Givazzi, Francesco & Tabellini, G. 2005. Economic and political liberalizations. *Journal of Monetary Economics*, 52: 1297-1330.

Gurr, T. R., Jaggers, K., & Moore, W. 1990. *Polity II: Political structure and regime change*. Ann Arbor: Inter-University Consortium for Political and Social Research.

Gwartney, J., & Lawson, R. 2005. *Economic freedom of the world: 2004 annual report*. Cato Institute, Washington D.C.

Hayek, Friedrich A. 1960. *The constitution of liberty*. Chicago, IL: University of Chicago Press.

Helpman, E. 1987. Imperfect competition and international trade: Evidence from fourteen industrial countries. *Journal of the Japanese and International Economics*, 1: 62-81.

Huntington, S. P. 1993. *The third wave: Democratization in the late twentieth century*. Oklahoma: University of Oklahoma Press.

Krgman, P. R. 1995. Growing world trade: Causes and consequences. *Brooking Papers on Economic Activity*, 1995 (1), 25th Anniversary Issues: 327-377.

Li, Q., & Reuveny, R. 2003. Economic globalization and democracy: An empirical analysis. *British Journal of Political Science*, 33: 29-54.

Lipset, S. M. 1960. *Political man-The social bases of politics*. Garden City: Doubleday & Company.

Lopez-Cordova, E., & Meissner, C. 2005. The globalization of trade with democracy 1870-2000. *NBER working paper*, *No.11117*.

Mansfield, E.D., Milner, H.V. & Rosendorff, B. P. 2000. Free to trade: Democracies, autocracies, and international trade. *American Political Science Review*, 94(2): 305-321.

Marshall, M. G. & Jaggers, K. 2004. *Polity IV project: Political regime characteristics and transitions* 1800-2002. University of Maryland, College Park.

McCallum, J.R. 1995. National borders matter. American Economic Review, 85: 615-23.

Milner, Helen & Keiko, K. 2005. Why the move to free trade? Democracy and trade policy in the developing countries. *International Organization*, 59: 107-143.

Morrow, James D., Siverson, Randolph M. & Tabares, T. E. 1998. The political determinants of international trade: The major powers, 1907-90. *American Political Science Review*, 92(3): 649-661.

O' Rourke, Kevin & Taylor, A. 2006. *Democracy and protectionism in the nineteenth century*. Unpublished manuscript, Trinity College, Dubin and University of California.

Papaioannou, E., & Siourounis, G. 2005. *Economic and social factors driving the third wave of democratization*. Unpublished manuscript, London Business School.

Przeworski, A., Alvarez, M., Jose A., Cheibub & Limongi, F. 1996. What makes democracies endure? *Journal of Democracy*, 7: 39-55.

Rigobon, R., & Dani, R. 2004. Rule of law, democracy, openness, and income: Estimating the interrelationships. *NBER Working Paper*, *No.10750*.

Rudra, N. 2005. Globalization and the strengthening of democracy in the developing world. *American Journal of Political Science*, 49: 704-730.

Rodrik, D. 1997. *Has globalization gone too far?* Institute for International Economics: Washington, D.C.

Rose, A. K. 2004. Do we really know that the WTO increases trade? *American Economic Review*, March 2004, 94(1): 98-114.

Sachs, J., & Warner, A. 1995. Economic reform and the process of global integration. *Brookings Papers on Economic Activity 1*: 1-118.

Samuelson, P. 1952. The transfer problem and transport costs: The terms of trade when impediments are absent. *Economic Journals*, 62: 278-304.

Shea, J. 1997. Instrument relevance in multivariate linear models: A simple measure. *Review of Economics and Statistics*, 49(2): 348-352.

Tinbergen, J.1962. Shaping the world economy. New York: Twentieth Century Fund.

Wooldridge, J. M. 2002. Econometric analysis of cross section and panel data. MIT Press.

Yu, M. 2006. *Trade, democracy, and the gravity equation*. Unpublished manuscript, University of California.

SUSTAINABILITY OF EXTERNAL IMBALANCES FOR 22 LEAST DEVELOPED COUNTRIES: AN EMPIRICAL INVESTIGATION

Tuck Cheong Tang Russell Smyth Monash University, Australia

ABSTRACT

This study examines the sustainability of external imbalances in 22 least developed countries (LDCs) as classified by the World Bank employing unit root tests with level shifts and finds that external imbalances in eight of the countries are sustainable.

INTRODUCTION

External imbalances in the current account have raised several research questions that have received attention from economists. Wu et. al. (1996, p.193) highlighted that short run or temporary current account deficits are not 'bad' as they reflect reallocation of capital to the country in which capital is more productive. However, long run or persistent deficits can have serious effects. Long run deficits might result in an increase in a country's interest rate in order to attract foreign capital, result in changes in a managed foreign exchange rate regime and, from an inter-temporal perspective, impose an excessive burden on future generations as the accumulation of large external debt owing to persistent deficits implies higher interest payments and a lower standard of living.

Much of the discussion in the empirical literature on external imbalances has focused on their sustainability. According to Mann (2002, p.143), if the current account is sustainable, external imbalances do not generate economic forces that change the trajectory of the current account. From a domestic viewpoint, a sustainable current account trajectory is one in which the feedback effects from the current account to consumption or investment are relatively weak in comparison to other macroeconomic forces that affect these expenditure categories. From an international viewpoint, a sustainable current account is one in which the feedback effects from international portfolio rebalancing to a country's interest rates or exchange rate are relatively weak in comparison to other macroeconomic forces that affect asset prices and portfolio choices.

The empirical literature that has examined the sustainability of external imbalances has adopted one of two major empirical approaches. The first approach is to examine whether exports and imports are cointegrated. Finding that exports and imports are cointegrated is a necessary, but not sufficient condition for a country to satisfy its inter-temporal budget constraint. For cointegration to imply sustainability, the estimated coefficient on the exports variable must equal one and, if this restriction is rejected, external imbalances are not sustainable (see Wu et. al., 1996). The second approach to examining the sustainability of external imbalances is to test for a unit root in the current account. Using this method, if the current account or trade balance is found to be stationary, this implies that external imbalances are sustainable and that the international budget constraint is satisfied. If, however, the trade balance is non-stationary this is either a reflection of bad policies or indicative of the productivity gap hypothesis. For those countries for which trade flows are nonstationary this can be regarded as the outcome of permanent technological shocks on the domestic economy. (Irandoust & Ericsson, 2004).

To this point the results in the empirical literature on the sustainability of external imbalances is mixed. Among studies for developed countries, Husted (1992) and Fountas and Wu (1999) used quarterly data for the periods 1967-1989 and 1967 to 1994 respectively to examine whether exports and imports are cointegrated in the United States. While Fountas and Wu (1999) found no long-run relationship, Husted (1992) found that exports and imports were cointegrated. Employing quarterly data from 1971 to 1997 Irandoust and Ericsson (2004) found that exports and imports were cointegrated in Germany, Sweden and the United States. Bahmani-Oskooee (1994) found that Australian exports and imports are cointegrated, and that the cointegrating coefficient was close to one, suggesting that Australia's external account is sustainable. Using quarterly data Bahmani-Oskooee and Rhee (1997) found that South Korea's exports

and imports are cointegrated and the coefficient on exports was positive. This result implies that South Korea is not in violation of its international budget constraint.

There are also a number of studies for one or more developing countries. Baharumshah *et al.* (2003) applied the Gregory and Hansen (1996) cointegration test to examine the sustainability of external imbalances in Indonesia, Malaysia, the Philippines and Thailand using annual data from 1961 to 1999. They found that exports and imports are cointegrated in Indonesia, the Philippines, and Thailand, but not Malaysia. However, applying the bounds test for cointegration developed by Pesaran *et al.* (2001) to annual data for the period 1968 to 1998 (1974 to 1998 for Singapore) Tang (2002) found cointegration between exports and imports for Malaysia and Singapore, but not for the Philippines, Indonesia and Thailand. Narayan and Narayan (2004) also employed the bounds test to examine whether there was a long-run relationship between exports and imports in Fiji and Papua New Guinea. They found that while exports and imports were cointegrated in both countries, the coefficient on exports was only one for Fiji.

Several studies have utilized multi-country databases. Arize (2002) used quarterly data for the period 1973 to 1998 for 50 OECD and developing countries. He found that for 35 of the 50 countries there was evidence of cointegration between exports and imports and 31 of the 35 countries had a positive export coefficient. Tang and Mohammad (2005) applied the Engle and Granger (1987) two-step test for cointegration to examine the sustainability of external imbalances in 27 Organization of Islamic Conference (OIC) member economies. Tang and Mohammad (2005) found that only four of 27 OIC member economies exhibit a long run relationship between exports and imports. Lau and Ahmad (2005) tested for mean-reverting behavior in the current account for a panel of twelve Asian countries and found that the null of non-stationarity is rejected for only three of the countries in their sample; namely, Bangladesh, Korea and Singapore. Narayan and Narayan (2005) examined whether there is a long-run relationship between exports and imports in 22 least developed countries (LDC) as classified by the World Bank. Their results indicated that exports and imports were only cointegrated for six of the 22 countries and that the coefficient on exports in each case was less than one.

The objective of this study is to empirically investigate whether the external accounts of the 22 LDCs as used in Narayan and Narayan (2005) are sustainable. The study, however, differs from Narayan and Narayan (2005) in the following respects. First Narayan and Narayan (2005) used exports and imports as shares of GDP. These ratios may not reflect the actual pattern of exports and imports over time because increases in GDP may decrease these ratios. In practice, policymakers are interested in the levels of trade flows rather than the ratios in designing trade policies. In contrast to Narayan and Narayan (2005) this study uses the real trade balance series, which captures more precisely the behavior of the external balance. Without a priori restrictions on the parameters of the cointegrating equation (unrestricted form), cointegration between exports and imports does not tell us much about whether external imbalances are sustainable. To satisfy the intertemporal budget constraint, we have to restrict the cointegrating parameters to the values zero (intercept) and one (slope) (Wu et. al., 1996, p.195). In contrast to Narayan and Nayan (2005) this study employs real external imbalance series which has been derived after imposing those restrictions, Second, after imposing the necessary restrictions, this study examines the stationarity of the real trade balance series rather than testing for cointegration between exports and imports. To achieve this, the study employs the recently developed unit root test with unknown level shift proposed by Lanne et al., (2002) and Saikkonen, and Lütkepohl, (2002). If the real trade balance variable is stationary, we conclude that external imbalance is sustainable.

RESEARCH METHODOLOGY

Analytical Framework

Irandoust and Ericsson (2004, p. 51) have shown that the international budget constraint for a given country can be written as $EX_t = \alpha + \beta MM_t^* + e_t$, where MM measures imports of goods and services, and EX is exports. Theoretically, for an economy to satisfy its intertemporal budget constraints, β should be equal to one, and e_t should be stationary (Wu et. al., 1996, p. 194). As highlighted in

Irandoust and Erisson (2004, p.51), a strong form condition for the intertemporal budget constraint model is assumed with $(\alpha, \beta) = (0, 1)$. Substituting into the international budget constraint gives $EX_t = MM_t^* + e_t$ and $e_t = EX_t - MM_t^* \equiv TB_t$ where TB_t is the real trade balance. By imposing a priori restrictions on the cointegrating vector as suggested by theory, TB_t approximates e_t . Rejection of the null hypothesis of a unit root in the real trade balance variable, suggests the sustainability of external imbalances (Lau & Ahmad, 2005).

Methodology

The conventional unit root tests (or stationary test) can be carried out by using Augmented Dickey-Fuller (ADF), Phillips and Perron (PP), and Kwiatkowski-Phillips-Schmidt-Shin (KPSS) tests. It is important to note that these specifications assume no structural break. Perron (1989) was the first to point out that power to reject the unit root null declines if the data contains a structural break that is ignored. In this relation, a specification takes into account a structural break is necessary in empirical analysis whether the current account balances are stationary (sustainable). Therefore, this study applies recently developed unit root tests with an unknown level shift proposed by Lanne et al. (2002), and Saikkonen, and Lütkepohl (2002) to examine the stationarity of the trade balance variable. Saikkonen and Lütkepohl (2002) and Lanne et al. (2002) have proposed unit root tests for the model $y_t = \mu_0 + \mu_1 t + f_t(\theta)' \gamma + x_t$ which are based on estimating the deterministic term first by a generalised least squares (GLS) procedure under the unit root null hypothesis and subtracting it from the original series. Following this, an ADF type test is performed on the adjusted series which also includes terms to correct for estimation errors in the parameters of the deterministic part. As in the case of the ADF statistic, the asymptotic null distribution is non-standard. Critical values are tabulated in Lanne et al. (2002). Because the break date is unknown, Lanne et al. (2002) have recommended choosing a reasonably large autoregressive order (AR) in the first step and then selecting the break date which minimizes the GLS objective function used to estimate the parameters of the deterministic part. A shift function, which is here denoted by $f_t(\theta)'\gamma$, may be added to the deterministic term μ_t of the data generation process. Hence, a model $y_t = \mu_0 + \mu_1 t + f_t(\theta)' \gamma + x_t$, is considered, where θ and γ are unknown parameters or parameter vectors and the errors x_t are generated by an AR(p) process with a possible unit root. Three possible shift functions can be implemented which are:-

- 1. A simple shift dummy variable with shift date T_B , $f_t^{(1)} = d_{1t} := \begin{cases} 0, t < T_B \\ 1, t \ge T_B \end{cases}$. This function does not involve an extra parameter θ . In the shift term $f_t^{(1)}\gamma$, the parameter γ is a scalar. Differencing this shift function leads to an impulse dummy.
- 2. The second shift function is based on the exponential distribution function which allows for a nonlinear gradual shift to a new level starting at time T_B , $f_t^{(2)}(\theta) = \begin{cases} 0, t < T_B \\ 1 \exp\{-\theta(t T_B + 1)\}, t \ge T_B \end{cases}$ In the shift term $f_t^{(2)}(\theta)\gamma$, both θ and γ are scalar

parameters. The first scalar parameter is confined to the positive real line ($\theta > 0$), whereas the second scalar parameter may assume any value.

3. The third shift function can be expressed as a rational function in the lag operator applied to a shift

dummy
$$d_{1t}$$
, $f_t^{(3)}(\theta) = \left[\frac{d_{1,t}}{1 - \theta L} : \frac{d_{1,t-1}}{1 - \theta L}\right]'$. The actual shift term is

 $\left[\gamma_1(1-\theta L)^{-1}+\gamma_2(1-\theta L)^{-1}L\right]d_{1t}$, where θ is a scalar parameter between 0 and 1 and $\gamma=(\gamma_1:\gamma_2)'$ is a two-dimensional parameter vector.

Note here that both $f_t^{(2)}(\theta)\gamma$ and $f_t^{(3)}(\theta)'\gamma$ can generate sharp one-time shifts at time T_B for suitable values of θ . Thus $f_t^{(2)}(\theta)\gamma$ and $f_t^{(3)}(\theta)'\gamma$ are more general than $f_t^{(1)}\gamma$.

Data

The 22 LDCs are Bangladesh, Burkina Faso, Burundi, Chad, Central African Republic, Gambia, Guinea-Bissau, Haiti, Lesotho, Madagascar, Malawi, Mali, Mauritania, Nepal, Niger, Rwanda, Sao Tome, Senegal, Sierra Leone, Togo, Uganda, and Zambia. While these countries are the same as in Narayan and Narayan (2005), this study updates the dataset used in Narayan and Narayan (2005) utilizing the latest data from the World Bank, *World Tables*. The sample period of each countries used in analysis is reported in Table 1 Imports and exports data are measured in real terms (deflated by the import and exports price deflator, respectively). The real trade balance variable is measured by ratio of real exports (EX) to real imports (MM) and all variables are expressed in natural logs.

RESULTS AND DISCUSSION

Table 1 shows the results for the unit root tests with unknown level shift on the trade balance series. For the unit root test with shift dummy, the unit root null is rejected for six countries (Burkina Faso, Central African Republic, Haiti, Madagascar, Mauritania and Uganda). For the unit root test with impulse dummy, the unit root null is rejected for four countries (Central African Republic, Gambia, Mauritania and Nepal). For the unit root test with exponential shift the unit root null is rejected for six countries (Central African Republic, Mauritania, Nepal, Rwanda, Uganda and Zambia). For the unit root test with rational shift, the unit root null is rejected for 11 countries (Burkina Faso, Central African Republic, Gambia, Haiti, Mauritania, Nepal, Niger, Sao Tome, Togo, Uganda and Zambia). Clearly, the results differ across shift functions, $f_t^{(1)}$, $f_t^{(2)}$ and $f_t^{(3)}$.

Unit Root Tests (with Level Shift) for Real Trade Balance

Country:-	Impulse dummy	Shift dummy	Exponential shift	Rational shift
Bangladesh	-0.3347 (3)	-1.6781 (3)	-1.0197 (3)	-0.9538 (3)
(1960-2002)	[1973]	[1973]	[1973]	[1973]
Burkina Faso	-1.3679 (2)	-4.5612 (0)*	-2.0298 (2)	-5.1775 (0)*
(1960-2002)	[1968]	[1988]	[1965]	[1988]
Burundi# (1960-	-0.5001 (2)	-1.9558 (1)	-2.111 (1)	-1.9532 (1)
2002)	[1997]	[1996]	[1996]	[1996]
Chad#	-2.3013 (3)	-2.0018 (3)	-2.0587 (3)	-0.1538 (0)
(1960-2002)	[1982]	[1985]	[1985]	[1985]
Central African	-3.5277 (0)*	-2.8189 (0)*	-2.7227 (0)*	-3.3926 (0)*
Republic	[1968]	[1968]	[1968]	[1968]
(1960-2002)				
Gambia	-2.8212 (1)*	-1.7972 (1)	-1.7893 (1)	-3.2434 (1)*
(1966-2002)	[1979]	[1979]	[1979]	[1979]
Guinea-Bissau#	-1.2433 (0)	-0.6057 (0)	-0.5829 (0)	-2.2573 (0)
(1970-2002)	[1992]	[1992]	[1992]	[1992]
Haiti	-1.3792 (0)	-2.7773 (2)*	-2.1769 (2)	-5.9717 (2)*
(1960-2001)	[1981]	[1993]	[1993]	[1993]
Lesotho	-0.7287 (0)	-1.3785 (0)	-1.3055 (0)	-0.1454 (0)
(1960-2002)	[1977]	[1978]	[1978]	[1978]
Madagascar#	-1.7320(1)	-2.8077 (0)*	-0.9040 (1)	-2.3981 (1)
(1960-2002)	[1989]	[1989]	[1990]	[1989]
Malawi	-1.6548 (0)	-2.59 (0)	-2.6184 (0)	-2.3551 (0)

(1960-2002)	[1964]	[1964]	[1964]	[1964]
Mali	-1.1339 (0)	-1.0435 (0)	-1.0526 (0)	-1.0182 (0)
(1967-2002)	[1977]	[1978]	[1978]	[1978]
Mauritania	-3.0717 (1)*	-2.7677 (1)*	-2.7256 (1)*	-2.8325 (1)*
(1960-2002)	[1982]	[1983]	[1983]	[1983]
Nepal	-2.8308 (0)*	-3.7839 (0)	-3.7946 (0)*	-2.9287 (0)*
(1965-2002)	[1974]	[1969]	[1969]	[1969]
Niger	-1.7263(0)	-1.7693 (0)	-1.7562 (0)	-4.4365 (0)*
(1960-1999)	[1974]	[1975]	[1975]	[1975]
Rwanda	0.5235 (2)	-1.6867 (3)	-2.9238 (0)*	0.7036(2)
(1960-2002)	[1994]	[1993]	[1993]	[1994]
Sao Tome	-1.8478 (0)	-1.9322 (0)	-1.8947 (0)	-3.4275 (0)*
(1970-2002)	[1984]	[1989]	[1989]	[1989]
Senegal	0.2123 (2)	1.2769 (2)	1.2819 (2)	0.6751(2)
(1960-2002)	[1994]	[1978]	[1978]	[1978]
Sierra Leone	-1.8102 (0)	-0.9628 (0)	-0.9339 (0)	-2.0084 (0)
(1964-2002)	[1997]	[1987]	[1987]	[1987]
Togo	-2.6310(0)	-2.2538 (3)	-2.2012 (3)	-5.2184 (3)*
(1960-2002)	[1979]	[1971]	[1971]	[1971]
Uganda#	-1.6911 (0)	-3.5221 (0)*	-3.6209 (0)*	-4.0203 (0)*
(1960-2002)	[1979]	[1987]	[1987]	[1987]
Zambia [#]	-1.1005 (1)	-2.9906 (1)	-3.1242 (1)*	-4.8253 (1)*
(1960-2002)	[1976]	[1976]	[1976]	[1976]

Note: * denotes rejection of the null hypothesis of a unit root at 10% level. The critical value is -2.67 from Lanne et al. (2002, Table II, p. 678). The lag order used in unit root equations (constant is included) as in (.) which was suggested by Hannan-Quinn criterion from a maximum lag length of 3 by considering the use of annual data. [.] is the break date searched endogenously using the method proposed in Lanne, et al. (2003). # denotes cointegration between imports and exports as documented in Narayan and Narayan (2005, p.377).

The unit root null is rejected for the Central African Republic and Mauritania across the board and for Burkina Faso, Gambia, Haiti, Nepal, Uganda and Zambia with two or three unit root tests. Given the unit root tests suggest different results, which is preferable? Based on Monte Carlo simulations, Lanne *et al.* (2002, p.682) found that the performance of the tests tends to be inferior if one of the more complicated shift functions $f_t^{(2)}$ or $f_t^{(3)}$ is employed. Where the tests give different results, the findings from $f_t^{(1)}$ are preferable. Hence, we conclude that the external accounts for Burkina Faso, Central African Republic, Gambia, Haiti, Madagascar, Mauritania, Nepal, and Uganda are sustainable. These results can be compared with Narayan and Narayan (2005) who found external imbalances sustainability for six out of 22 LDCs (see the countries marked with # in Table 1). While the proportion of countries for which external imbalances are found to be sustainable is similar in both studies, Madagascar and Uganda are the only countries for which both studies suggest that their external imbalances are sustainable.

Table 2
Events Associated with the Break Dates Identified in Table 1

Country:-	Break dates	Event(s)
Bangladesh	1973	In February 1973 following the devaluation of the US. Dollar Bangladesh announced that the effective rate for the Taka would continue to float through its link to the Pound Sterling.
Burkina Faso	1965; 1968; 1988	From 1968-74 there was a severe drought. Burkina Faso became a member of the Multilateral Investment Guarantee Agency in 1988.
Burundi	1996; 1997	Burundi was subject to a regional economic embargo 1996-1999
Chad	1982; 1985	Political instability from 1976 to 1982 left large sections of the country beyond any

form of central control and during this period the state had very few finances. Despite a measure of political stability after 1982, the situation worsened in 1985 with the collapse of cotton revenues.

Central African Republic	1968	In early 1968, the Central African Republic left the Union Douanière et Economique de l'Afrique Centrale (UDEAC) to join a union with Zaire and Chad, but in December 1968 it returned to the UDEAC.
Gambia	1979	Under a one-year standby agreement with the International Monetary Fund (IMF) in 1979, Gambia promised to undertake reforms, including a reduced budget deficit, in return for a \$US68 million IMF support program and \$US27 million in IMF Trust Fund loans.
Guinea-Bissau	1992	In 1992 the African Party for the Independence of Guinea accepted a multi-party system and legalized many opposition parties. Presidential and legislative elections initially planned for November 1992 finally took place in July 1994.
Haiti	1981; 1993	In 1981 the International Monetary Fund and the World Bank instituted a new "structural adjustment program" for Haiti. In 1993, the American Federation of Labor and Congress of Industrial Organizations (AFL-CIO) filed a petition to remove Generalized System of Preferences (GSP) benefits from Haiti for failure to provide internationally recognized worker rights.
Lesotho	1977; 1978	The local currency, the loti (plural maloti), was introduced in 1979.
Madagascar	1989	In the late 1980s Madagascar drew four times on the IMF and received four adjustment loans from the World Bank for industrial rehabilitation (1985US\$60 million), agricultural reform (1986US\$60 million), trade and industry adjustment (1987US\$100 million), and public sector reform (1988US\$127 million).
Malawi	1964	Malawi attained political independence in 1964
Malawi Mali	1964 1977; 1978	Malawi attained political independence in 1964 The "Second Republic" was founded in Mali in 1979 following a decade of military dictatorship.
		The "Second Republic" was founded in Mali in 1979 following a decade of military
Mali	1977; 1978	The "Second Republic" was founded in Mali in 1979 following a decade of military dictatorship. In 1983 the Mauritania government launched a program to reform and rehabilitate the
Mali Mauritania	1977; 1978 1982; 1983	The "Second Republic" was founded in Mali in 1979 following a decade of military dictatorship. In 1983 the Mauritania government launched a program to reform and rehabilitate the public sector. In February 1969, Nepal became a member of the International Centre for Settlement of Investment Disputes. In 1974 the Industrial Enterprises Act was introduced which
Mali Mauritania Nepal	1977; 1978 1982; 1983 1969; 1974	The "Second Republic" was founded in Mali in 1979 following a decade of military dictatorship. In 1983 the Mauritania government launched a program to reform and rehabilitate the public sector. In February 1969, Nepal became a member of the International Centre for Settlement of Investment Disputes. In 1974 the Industrial Enterprises Act was introduced which shifted the government's emphasis on growth from the public to the private sector. In 1975 uranium became Niger's major export. With uranium revenues, government
Mali Mauritania Nepal Niger	1977; 1978 1982; 1983 1969; 1974 1974; 1975	The "Second Republic" was founded in Mali in 1979 following a decade of military dictatorship. In 1983 the Mauritania government launched a program to reform and rehabilitate the public sector. In February 1969, Nepal became a member of the International Centre for Settlement of Investment Disputes. In 1974 the Industrial Enterprises Act was introduced which shifted the government's emphasis on growth from the public to the private sector. In 1975 uranium became Niger's major export. With uranium revenues, government undertook massive public expenditures. Following civil war and ethnic cleansing, peace accords were signed in August 1993,

		other multilateral and bilateral creditors have been supporting the Government of Senegal's structural and sectoral adjustment programs.
Sierra Leone	1987; 1997	In 1987 civil unrest led Sierra Leone to declare a state of economic emergency. In 1997 the Consultative Group (CG) for Sierra Leone pledged US\$640.0 million to support reconstruction
Togo	1971; 1979	The terms of trade in Togo were stable in the 1960s but deteriorated quite significantly from 1971 to 1973. Togo turned to the IMF for assistance in 1979 following a period of economic crisis.
Uganda	1979; 1987	President Idi Amin Dada fled from Uganda in 1979. After 1986 the National Resistance Movement (NRM) succeeded in stabilizing most of the nation and began to diversify agricultural exports away from the near-total dependence on coffee.
Zambia	1976	In 1976: Zambia declared support for Patriotic Front (PF) guerrillas fighting to topple the white-dominated regime in Rhodesia.

There is considerable variation in the break dates identified in Table 1 across countries which is a consequence of the very long observation period covering a number of important events. Some of the break dates are associated with international events such as the first and second oil price shocks, while other break dates are associated with country-specific issues such as drought, political instability, terms of trade instability and intervention by multilateral lending agencies. A list of country-specific events which may help in explaining the break date(s) for all 22 LDCs is provided in Table 2.

CONCLUSIONS

For the preferred form of the unit root test - the unit root test with shift dummy - the unit root null is rejected for eight of the countries in the sample. These findings provide slightly more evidence that external imbalances are sustainable in the LDC than found by Narayan and Narayan (2005). The implications of the findings in this study are that the countries for which the unit root null is rejected are (i) not in violation of their international budget constraint; short-run imbalances are temporary and are sustainable in the long-run and (ii) macroeconomic policies have been effective in bringing exports and imports to converge in the long-run. For those countries for which the unit root null cannot be rejected, this finding is indicative of either bad policies or permanent technological shocks to the domestic economy. As suggested by Irandoust and Ericsson (2004), sustainability of external imbalances does suggest the countries are not in violation of their international budget constraints and, more importantly, there is no productivity gap between the domestic economy and the rest of the world, implying a lack of permanent technological shocks to the domestic economy.

However, this study has two drawbacks. First, only one structural break is taken into account in this analysis. If the trade balance series exhibits more than one structural break then this study should be considered for further investigation. It is always the case when a study employs a long time series such as this study which the suggested bread dates are different for a country (such as Burkina Faso) when different specifications were used. Alternatively, the Lagrange Multiplier (LM) unit root tests with one and two structural breaks proposed by Lee and Strazicich (2003, 2004) can be employed for further study. Second, the sample countries used in this study are limited to 22 countries which Narayan and Narayan (2005) employed, so that it does not cover a whole representative of LDCs. In fact, there are 50 LDCs available, and the further investigation should involve more sample countries (http://www.un.org/special-rep/ohrlls/ldc/list.htm).

REFERENCES

Arize, A. C. 2002. "Imports and Exports in 50 Countries Test of Cointegration and Structural Breaks," *International Review of Economics and Finance*, 11(1), 101-115.

Baharumshah, A. Z, E. Lau, & S. Fountas. 2003. "On the Sustainability of Current Account Deficits: Evidence from Four ASEAN Countries," *Journal of Asian Economics*, 14(3), 465-487.

Bahmani-Oskooee, M. 1994. "Are Imports and Exports of Australia Cointegrated?," *Journal of Economic Integration*, 9(4), 525-533.

Bahmani-Oskooee, M. & H.-J. Rhee. 1997. "Are Imports and Exports of Korea Cointegrated?," *International Economic Journal*, 11(1), 109-114.

Engle, R. F. & C. W. J. Granger. 1987. "Co-Integration and Error Correction: Representation, Estimation, and Testing," *Econometrica*, 55(2), 251–276.

Fountas, S. & J. L. Wu. 1999. "Are the U.S. Current Account Deficits Really Sustainable?," *International Economic Journal*, 13(3), 51-58.

Gregory, A.W. & B. E. Hansen. 1996. "Residual-Based Tests for Cointegration in Models with Regime Shifts," *Journal of Econometrics*, 70 (1), 99-126.

Husted, S. 1992. "The Emerging U.S. Current Account Deficit in the 1980s: A Cointegration Analysis," *Review of Economics and Statistics*, 74(1), 159-166.

Irandoust, M. & J. Ericsson. 2004. "Are Import and Exports Cointegrated? An International Comparison," *Metroeconomica*, 55(1), 49-64.

Lau, E. & Ahmad Zubaidi Baharumshah. 2005. "Mean-Reverting Behavior of Current Account in Asian Countries," *Economics Letters*, 87(3), 367-371.

Lanne, M., H. Lütkepohl, & P. Saikkonen. 2003. "Test Procedures for Unit Roots in Time Series with Level Shifts at Unknown Time," *Oxford Bulletin of Economics and Statistics*, 65(1), 91-115.

Lee, J. & M.C. Strazicich. 2003. "Minimum Lagrange Multiplier Unit Root Test with Two Structural Breaks," *Review of Economics and Statistics*, 85, 1082-1089.

Lee, J., & M.C. Strazicich. 2004. Minimum LM Unit Root Test with One Structural Break, *Manuscript*, *Department of Economics*, *Appalachian State University*.

Mann, C. L. 2002. "Perspectives on the U.S. Current Account Deficit and Sustainability," *Journal of Economic Perspectives*, 16(3), 131–152.

Narayan, P. K. & S. Narayan. 2004. "Are Exports and Imports Cointegrated? Evidence from Two Pacific Island Countries," *Economic Papers*, 23(2), 152-164.

Narayan, P. K. & S. Narayan. 2005. "Are Exports and Imports Cointegrated? Evidence from 22 Least Developed Countries," *Applied Economics Letters*, 12 (6), 375-378.

Perron, P. 1989. "The Great Crash, the Oil Price Shock and the Unit Root Hypothesis," *Econometrica*, 57(6), 1361-1401.

Pesaran, M.H., Shin, Y., & Smith, R. J. (2001) "Bounds Testing Approaches to the Analysis of Level Relationships," *Journal of Applied Econometrics*, 16, 289-326.

Saikkonen, O., & Lütkepohl, H. (2002) "Testing for a Unit Root in a Time Series with a Level Shift at Unknown Time," *Econometric Theory*, 18, 313-348.

Tang, T. C., & Mohammad Haji Alias (2005) "Are Imports and Exports of OIC Member Countries Cointegrated? An Empirical Study," *Labuan Bulletin of International Business & Finance*, 3, 33-47.

Tang, T. C. (2002) Are imports and exports of the five ASEAN economies co-integrated? An empirical study, *International Journal of Management*, 20, 88-91.

Wu, Jyh-lin, Fountas, S., & Chen, Show-lin. (1996) Testing for the sustainability of the current account deficit in two industrial countries, *Economics Letters*, 52, 193-198.

EXPORT PERFORMANCES OF CHINA AND ASEAN-5 IN ELECTRONICS PRODUCTS

Abdul Latif Salleh,
University of Malaya, Malaysia
Siow I Rene
Serdang Agriculture Institute, Selangor, Malaysia
Email: abdul_latif@um.edu.my

ABSTRACT

The 1990s saw the emergence of China as the world's new economic powerhouse. China's vast potential market and cost competitiveness have combined to attract substantial foreign investment especially in electronics production. China's dominance in electronics production as reflected in its export performance may jeopardize the position of ASEAN-5 countries, which have previously been the established locations for electronics production. This paper sets to assess the impact of China's impressive growth and ascendancy on its ASEAN-5 neighbors by examining the trends in their export performances with respect to selected groups of electronics products.

INTRODUCTION

Since embarking on its economic reform and open door policy in 1978-79, China has experienced rapid and sustained economic growth. Its accession into the World Trade Organization (WTO) in 2001 further accelerated the growth and China's progress has begun to make a significant impact on economic prospects of East Asia and beyond. According to Woodall, P. (2004), China has become a locomotive for the rest of East Asia, accounting for half of the total export growth of the other East Asian economies in 2003.

While China's vast and expanding market offers exciting opportunities, its immense productive capacity poses potential threat to its Asian neighbors. For ASEAN-5 countries of Indonesia, Malaysia, the Philippines, Singapore, and Thailand, China's huge and cheap labor force and its cost competitiveness could eat into ASEAN's market shares in their traditional export markets such as the U.S., EU and Japan as well as threaten ASEAN industries in their domestic markets. China's cost competitiveness in production and its rapidly growing domestic market could also divert Foreign Direct Investment (FDI) from ASEAN to China. However, its vibrant economy and market of 1.3 billion consumers could turn China into a new regional growth engine that would benefit its ASEAN counterparts.

This paper examines export performances of selected electronic product groups from China and ASEAN-5 into the United States market. The first part of the paper introduces the patterns of economic growth of China and ASEAN-5 countries. This is followed by a brief description of the emergence of China as a new force in the global electronics industry and ends with a comparative analysis of the export trends and market shares of selected electronic products.

LITERATURE REVIEW

China's Economic Growth

Table 1 shows the trends in Gross Domestic Product (GDP) growth for China and ASEAN-5. The figures indicate that since the 1990, all countries of ASEAN-5 have been lagging behind China in terms of economic growth. Two major drivers of China's growth have been identified: exports and investments in fixed capital China's exports had been growing at more than twice the world average for over a decade prior to 2002 and in 2002 its exports accounted for 4% of world trade.

Table 1
GDP Growth (%) by Countries

			· / •		
	1990-2000	2001	2002	2003	2004
China	10.3	7.5	8.0	9.1	8.5
Indonesia	4.2	3.4	3.7	4.1	4.5
Malaysia	7.0	0.3	4.1	5.2	7.0
Philippines	3.3	3.4	4.4	4.5	5.0
Singapore	7.7	(-2.4)	2.3	1.1	7.5
Thailand	4.2	1.8	5.4	6.7	6.5

Source: UNCTAD Trade and Development Report (2004).

It is noted that China has now become the location of choice for foreign firms especially among electronics manufacturers. The importance of China as the favored destination *vis-à-vis* its Asian neighbors is reflected in Table 2, which shows a consistent and fast growing inward investments into China (UNCTAD Trade and Development Report, 2004).

Table 2
Inward FDI (USD billions)

	1994	2000	2001	2002	2003	2004	2005
	-1999						
China	40.7	40.7	46.9	52.7	53.5	60.6	72.4
Southeast Asia	27.4	23.5	19.6	15.8	19.9	25.7	37.1
World	548.1	1,409.6	832.2	617.7	557.9	710.8	916.3

Source: Adapted from UNCTAD World Investment Report (2006).

The Electronics Industry in Asia

The modular nature of most electronic products allows electronics production to become easily fragmented and spatially dispersed. Hence, electronics production is generally organized through geographically distributed global production networks. These networks opened up opportunities for countries that lack sizeable market, technological sophistication, or marketing capabilities to participate the global production chains, albeit to perform low-skilled activities (Lall et al. 2004; Salleh 2000).

During its infancy in 1960s, Asian electronics production was dominated by Japanese firms that used Hong Kong, Taiwan, and South Korea as low-cost platforms to penetrate export world market, particularly the United States. The 1970s saw an influx of large vertically-integrated U.S. electronic firms setting up operations in these countries and several countries of Southeast Asia. By mid-1980s, these early initiatives have spawned off domestic producers and suppliers within the East Asian countries, notably in Taiwan and South Korea, and the ASEAN-5 (Salleh, 1997). Early 1990s saw China entering the scene as another center for electronics production in Asia. By 2005, Asia Pacific region has accounted for 38% of global electronics output (Reed Electronics Research, 2006), China's share of global exports, between 1995 and 2001, rose from 2.9% to 3.9%, while exports from countries in ASEAN began to stagnate. In the four years leading to 2002, China has overtaken both Malaysia and Singapore in electronics exports to the United States (Zumwalt, 2002).

Classification of Electronic Products and Analysis of Export Trends

Comparing the various findings of different studies relating to electronic products is fraught with problems because of the different ways those products are classified. This is caused by at least two reasons namely, the different needs for data compilation and the convergence of technologies and industries. Nevertheless, the general approach has been to use the SITC classifications (Ng and Yeat, 2004; Lall et.al., 2004).

This study uses US import figures for several groups of products as the basis for analysis. As U.S. remains the largest market for electronic products, the choice is appropriate. The trade statistics for exports by China and ASEAN-5 countries into the U.S. are derived from data compiled by the U.S. Department of Commerce, the U.S. Treasury, and the U.S. International Trade Commission, which are made available under USITC of US General Imports (USITIC 2005). However, the product groups used in the analysis are limited to three - those classified under SITC 751 (Office Machines), SITC 752 (ADP Machines), and SITC 764 (Telecommunication Equipments). Limiting our analysis to these three classes of products, while obviously restrictive, is still meaningful given the importance of these products to the nations concerned and thus illustrative of their export competitiveness.

RESULTS

The following describes the export trends of China and the ASEAN-5 individual countries for the period 1989 to 2004. The analysis covers export values, export growth, export shares, and export shares of ASEAN-5 relative to China.

Office Machines (SITC 751)

Office machines include typewriters, cheque writing machines, calculators, cash registers, and other types of office machines. Figure 1 and Table 3 show exports of SITC 751 into the US market, in terms of value and growth rates.

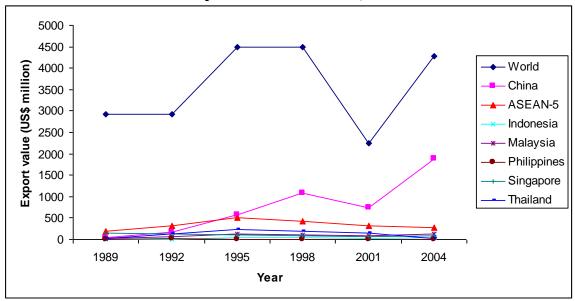


Figure 1 Export Trends of SITC 751, 1988 - 2004

Source: Authors' calculation

World imports of SITC 751 grew steadily at 15.4 % between 1992 and 1995, dipped sharply during the period of 1998 and 2001, and grew again at a tremendous of 24% between 2001 and 2004. The world export value shows that there has been a sharp fall from US\$ 4.5 billion in 1998 to US\$ 2.2 billion in 2001. During this period, growth rates were negative for all countries of interest.

Table 3
US imports of SITC 751 (1989-2004)

Export Value ((100 i					
Export value (1989	1992	1995	1998	2001	2004
World ¹	2913606	2930652	4500995	4498388	2249330	4290154
China	49905	168287	567771	1083074	751003	1893872
ASEAN-5	181363	322063	503481	429278	320383	278184
Indonesia	na	140	35335	44718	14162	35706
Malaysia	19840	73454	123059	104839	94680	119554
Philippines	na	11888	3610	6716	2964	8056
Singapore	137929	118105	104733	91112	63451	85763
Thailand	23594	118476	236744	181893	145126	29105
Growth Rate		1989-92	1992-95	1995-98	1998-01	2001-04
World ¹		0.2%	15.4%	0.0%	-20.6%	24.0%
China		50.0%	50.0%	24.0%	-11.5%	36.1%
ASEAN-5		21.1%	16.1%	-5.2%	-9.3%	-4.6%
Indonesia		na	532.0%	8.2%	-31.8%	36.1%
Malaysia		54.7%	18.8%	-5.2%	-3.3%	8.1%
Philippines		na	-32.8%	23.0%	-23.9%	39.6%
Singapore		-5.0%	-3.9%	-4.5%	-11.4%	10.6%
Thailand		71.2%	26.0%	-8.4%	-7.3%	-41.5%

Source: Author's calculation from ITC dataWeb

Note: 1 World represents all the countries exporting to the US export including China and ASEAN-5 countries.

The global liberalization of the telecommunications industry and the explosion of the Internet could be the cause of the decline in demand for typewriters and calculators due to the influence of the multi purpose usage of computers. However, world exports of office machines grew again at 24% between 2001 and 2004. Comparatively, the export share of ASEAN-5 in 1989 was 3.6 times that of China, but from 1995 onwards they began to lose ground that in 2004 the ratio has diminished to only 0.15 times of China's exports (Table 4). China's cost competitiveness may have contributed to its rising exports and large share of world exports of office machines into the US. Among ASEAN-5, Thailand has fared the worst in recent years (negative 41.5% growth between 2001 and 2004), and its share stood at 0.68% in 2004. Singapore also fared very badly, with a share of only 0.05 that of China compared to 2.76 times in 1989.

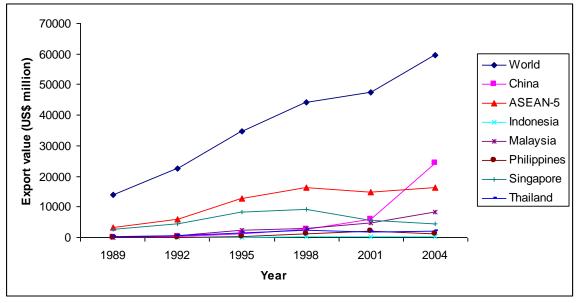
ADP Machines (SITC 752)

ADP machines include analogue and hybrid data processing machines, complete computers, micro-processors, storage units (e.g. hard disk drives), peripherals including control and adapting units, and off-line processing equipments. Unlike, office machines which have been declining, US imports of SITC 752 have increased from about US\$ 14 billion in 1989 to \$60 billion in 2004. This steady increase may have been due to increased competition among US computer hardware vendors, which led to the lowering of prices of computers and peripherals, and fueling demand for imports. Growth in Internet use, electronic commerce, and corporate investment in computer infrastructure to implement Internet or Internet-like technologies (intranets, extranets) may have certainly played a part too.

Table 4
Shares of US imports of SITC 751 (1989-2004)

Export Share						
F	1989	1992	1995	1998	2001	2004
World	100%	100%	100%	100%	100%	100%
China	1.71%	5.74%	12.61%	24.08%	33.39%	44.14%
ASEAN-5	6.22%	10.99%	11.19%	9.54%	14.24%	6.48%
Indonesia	0.00%	0.00%	0.79%	0.99%	0.63%	0.83%
Malaysia	0.68%	2.51%	2.73%	2.33%	4.21%	2.79%
Philippines	0.00%	0.41%	0.08%	0.15%	0.13%	0.19%
Singapore	4.73%	4.03%	2.33%	2.03%	2.82%	2.00%
Thailand	0.81%	4.04%	5.26%	4.04%	6.45%	0.68%
Comparator Co	untries / Chin	a Shares Ratio				
-	1989	1992	1995	1998	2001	2004
ASEAN-5	3.63	1.91	0.89	0.40	0.43	0.15
Indonesia	na	0.00	0.06	0.04	0.02	0.02
Malaysia	0.40	0.44	0.22	0.10	0.13	0.06
Philippines	na	0.07	0.01	0.01	0.00	0.00
Singapore	2.76	0.70	0.18	0.08	0.08	0.05
Thailand	0.47	0.70	0.42	0.17	0.19	0.02

Figure 2 Export Trends of SITC 752, 1989 - 2004



Source: Authors' calculation

Again, as evidenced from Figure 2 and Table 5, China has made an enormous gain on its ASEAN-5 counterparts, especially after 2001 when it overtook Singapore, which had previously been the leading exporter among ASEAN-5. As indicated in Table 6, in 1989, the export share of ASEAN-5 was 22.46% (compared to a meager 0.1% share of China), and its export value was 254 times bigger than China. This ends around 2001 when China's share rose to 12.5% - higher than any other ASEAN-5 nations. By 2004, its share of imports into the US stood at 41%, which is higher than the combined share

of ASEAN-5 at 27.5%. Among ASEAN-5, Singapore, which had a share of about 19% in 1989, is the biggest loser, with only 7.5% of the share in 2004. Malaysia seemed to have been able to maintain a steady increase in its share from only 0.66% in 1989 to 14% in 2004.

US imports of SITC 752 (1989-2004)

Export Value (US\$ '000)							
	1989	1992	1995	1998	2001	2004	
$World^1$	14070515	22527462	34779139	44137369	47595999	59708126	
China	12429	227044	1276412	2809449	5960962	24460628	
ASEAN-5	3160120	6003543	12665030	16244899	14708794	16422202	
Indonesia	116	40540	68795	251585	441543	423214	
Malaysia	93011	739772	2448959	3008322	4824354	8389994	
Philippines	10171	127395	247138	1249525	1951278	1045112	
Singapore	2653447	4380961	8283134	9288200	5685269	4454328	
Thailand	403375	714875	1617004	2447267	1806350	2109554	
Growth Rate							

Gra	wth	Rate	
1111	** LII	Nau	

1989-92	1992-95	1995-98	1998-01	2001-04
17.0%	15.6%	8.3%	2.5%	7.9%
163.4%	77.8%	30.1%	28.5%	60.1%
23.9%	28.3%	8.7%	-3.3%	3.7%
604.4%	19.3%	54.1%	20.6%	-1.4%
99.6%	49.0%	7.1%	17.1%	20.3%
132.2%	24.7%	71.6%	16.0%	-18.8%
18.2%	23.7%	3.9%	-15.1%	-7.8%
21.0%	31.3%	14.8%	-9.6%	5.3%
	163.4% 23.9% 604.4% 99.6% 132.2% 18.2%	17.0% 15.6% 163.4% 77.8% 23.9% 28.3% 604.4% 19.3% 99.6% 49.0% 132.2% 24.7% 18.2% 23.7%	17.0% 15.6% 8.3% 163.4% 77.8% 30.1% 23.9% 28.3% 8.7% 604.4% 19.3% 54.1% 99.6% 49.0% 7.1% 132.2% 24.7% 71.6% 18.2% 23.7% 3.9%	17.0% 15.6% 8.3% 2.5% 163.4% 77.8% 30.1% 28.5% 23.9% 28.3% 8.7% -3.3% 604.4% 19.3% 54.1% 20.6% 99.6% 49.0% 7.1% 17.1% 132.2% 24.7% 71.6% 16.0% 18.2% 23.7% 3.9% -15.1%

Source: Authors' calculation using data from ITC dataWeb

Note: 1 World represents all the countries exporting to the US export including China and ASEAN-5 countries.

Table 6 Shares of US imports of SITC 752 (1989-2004)

Export Share						
-	1989	1992	1995	1998	2001	2004
World	100%	100%	100%	100%	100%	100%
China	0.09%	1.01%	3.67%	6.37%	12.52%	40.97%
ASEAN-5	22.46%	26.65%	36.42%	36.81%	30.90%	27.50%
Indonesia	0.00%	0.18%	0.20%	0.57%	0.93%	0.71%
Malaysia	0.66%	3.28%	7.04%	6.82%	10.14%	14.05%
Philippines	0.07%	0.57%	0.71%	2.83%	4.10%	1.75%
Singapore	18.86%	19.45%	23.82%	21.04%	11.94%	7.46%
Thailand	2.87%	3.17%	4.65%	5.54%	3.80%	3.53%
Comparator C	ountries/ China	a Shares Ratio				
	1989	1992	1995	1998	2001	2004
ASEAN-5	254.25	26.44	9.92	5.78	2.47	0.67
Indonesia	0.01	0.18	0.05	0.09	0.07	0.02
Malaysia	7.48	3.26	1.92	1.07	0.81	0.34
Philippines	0.82	0.56	0.19	0.44	0.33	0.04
Singapore	213.49	19.30	6.49	3.31	0.95	0.18
Thailand	32.45	3.15	1.27	0.87	0.30	0.09

Telecommunication Equipments (SITC 764)

Products grouped under SITC 764 include telecommunication equipments and parts of apparatus for TVs, radio, gramophones and telecommunication equipments. According to USITC (2000), US imports consisted mostly of low-end commodity-type products such as telephone sets, cellular telephones, and parts. The USITC also reports that in 1999, US imports of cellular telephones replaced cordless telephone sets as the leading import within the product group.

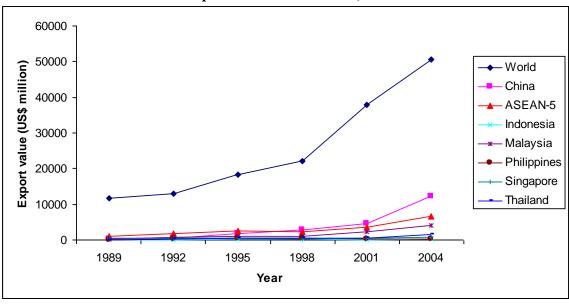


Figure 3 Export Trends of SITC 764, 1989 - 2004

Source: Authors' calculation

Figure 3 shows the pattern of world exports of SITC 764 into the US. Import of SITC 764 grows slowly prior to 1998 to be followed by a sharp increase in 2001 and 2004. As shown in Table 7, it grows from US\$ 11.5 billion in 1989 to US\$ 50.6 billion in 2004. Although China has registered an impressive growth, except for the Philippines, ASEAN-5 countries have done equally well, especially Thailand, which had 50% growth in export between 2001 and 2004.

Similar to the case of SITC 751 and SITC 752, China has, again, fared better than all ASEAN-5 countries. The figures in Table 8 indicate that by 1995, China's share of exports into the US has surpassed that of every individual ASEAN-5 nation. Among these ASEAN countries, Malaysia seemed to have been the best performer, followed by Thailand. Still, in 2004, Malaysia's export of USD 4 billion was only one-third of China's share of world exports of SITC 764 into the U.S.

The continued expansion and upgrade of the digital wireless infrastructure and increased use of cellular telephones have apparently boosted sales of telecommunication equipments in the US market. Similarly, the need for greater data carrying capacity associated with greater Internet usage and new services might have prompted telecommunications carriers, the primary customers for this product group, to increase spending on new equipment.

Table 7 US imports of SITC 764 (1989-2004)

Export Value	e (US\$ '000)					
-	1989	1992	1995	1998	2001	2004
World ¹	11577310	12845017	18290870	22127035	37937117	50581010
China	327121	633816	1826122	2822678	4689936	12097215
ASEAN-5	1076332	1841903	2523298	2367652	3584573	6732433
Indonesia	933	72384	145774	194119	112938	176527
Malaysia	280218	699505	1072491	968891	2294321	4088806
Philippines	97825	228569	491942	496074	310348	176166
Singapore	613516	496786	424608	203567	399332	695601
Thailand	83840	344659	388483	505001	467634	1595333
Growth Rate	2					
		1989-92	1992-95	1995-98	1998-01	2001-04
$World^1$		3.5%	12.5%	6.6%	19.7%	10.1%
China		24.7%	42.3%	15.6%	18.4%	37.1%
ASEAN-5		19.6%	11.1%	-2.1%	14.8%	23.4%
Indonesia		326.5%	26.3%	10.0%	-16.5%	16.1%
Malaysia		35.7%	15.3%	-3.3%	33.3%	21.2%
Philippines		32.7%	29.1%	0.3%	-14.5%	-17.2%
Singapore		-6.8%	-5.1%	-21.7%	25.2%	20.3%
Thailand		60.2%	4.1%	9.1%	-2.5%	50.5%

Source: Authors' calculation using data from ITC dataWeb

Note: World represents all the countries exporting to the US market including China and ASEAN-5 countries.

Table 8 Shares of US imports of SITC 764 (1989-2004)

Export Share	2					
	1989	1992	1995	1998	2001	2004
World	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
China	2.83%	4.93%	9.98%	12.76%	12.36%	23.92%
ASEAN-5	9.30%	14.34%	13.80%	10.70%	9.45%	13.31%
Indonesia	0.01%	0.56%	0.80%	0.88%	0.30%	0.35%
Malaysia	2.42%	5.45%	5.86%	4.38%	6.05%	8.08%
Philippines	0.84%	1.78%	2.69%	2.24%	0.82%	0.35%
Singapore	5.30%	3.87%	2.32%	0.92%	1.05%	1.38%
Thailand	0.72%	2.68%	2.12%	2.28%	1.23%	3.15%
Comparator	Countries/ Ch	ina Shares R	atio			
	1989	1992	1995	1998	2001	2004
ASEAN-5	3.29	2.91	1.38	0.84	0.76	0.56
Indonesia	0.00	0.11	0.08	0.07	0.02	0.01
Malaysia	0.86	1.10	0.59	0.34	0.49	0.34
Philippines	0.30	0.36	0.27	0.18	0.07	0.01
Singapore	1.88	0.78	0.23	0.07	0.09	0.06
Thailand	0.26	0.54	0.21	0.18	0.10	0.13

CONCLUSIONS

The above analysis of import trends into the U.S. for the period between 1989 and 2004 suggests that the emergence of China has certainly affected the performance of ASEAN-5 countries in the exports

of electronics products. The analysis indicates that by 2004, China has surpassed not only individual countries, but the whole ASEAN-5 combined, for all three product groups. Although the analysis is limited to only three product groups, and only imports figures for the U.S. market, nonetheless the analysis points to a very clear trends of the rising dominance of China in electronics production and exports at the world level.

The findings tend to support Ozawa's (1993) model of comparative advantage recycling in labor-intensive goods. The model explains how Asian economies have successfully initiated a succession of export-driven growth by developing and exporting labor-intensive goods mostly to the relatively open markets of the U.S. In this model, China becomes the latest Asian country to follow the earlier trodden steps of Japan, NIEs (Hong Kong, Taiwan, South Korea, and Singapore), and ASEAN-4 (Malaysia, Thailand, Indonesia, and the Philippines).

As argued by Kwan (2003), China has become the new "factory of the world", i.e. China's spectacular export growth is dependent on low wages and exploitation of scale economies. Evidently, China's wage level was only a small fraction of those in the U.S. and Japan, and it was considerably lower than those of ASEAN countries (Chia, 2004). Not surprisingly, among ASEAN-5, Singapore is the only country that has experienced a continuous decline in export shares for the entire electronic product group from 1989 to 2004. This is consistent with the fact that Singapore has an increasing labor cost plus the fact that there's been a shift of emphasis in its Government's trade specialization policy (Chua, 2001).

While other ASEAN nations have not suffered as badly as Singapore, the overall trends, and especially the figures for 2004, suggest that these other ASEAN countries may soon suffer the same fate as Singapore. Based on comparative wage level as appeared in UNCTAD Trade and Investment Report (2002), Singapore's wage level (23 times that of China) is relatively very high, but even Malaysia (5.2 times), the Philippines (4.1 times), and Indonesia (2.2 times) have a disadvantage in terms of labor cost. Although this paper does not seek to provide competing explanations for the decline of ASEAN countries *vis-à-vis* China in electronics export performance, the pattern seems to support the comparative costs argument.

This study looks at the export trends of China and ASEAN-5 into the United States markets for the period between 1989 and 2004. While limiting the study to the U.S. imports has its advantages, it would certainly be interesting to examine the patterns at the global level. Future studies should also explore the trends after 2004, and extend them to include other electronics product groups.

REFERENCES

Chia, S.Y. 2004. ASEAN-China Free Trade Area. *Proceedings of the AEP the Conference 2004 held on 12-13 April in Hong Kong*: 1-31.

Chua, B.L. 2001. Declining global market shares of Singapore's electronics exports: Is it a concern? *Thunderbird International Business Review*, 45(1): 1-13

Reed Electronics Research. 2006. 38% of global electronics output now produced in Asia Pacific. *In-Stat Press Release*. Available at www.instat.com/

Kwan, C.H. 2003. The accelerating shift of Japanese direct investment to China – Competition between ASEAN and China. *RIETI, China in Transition Series*.

Lall, S., Albaladejo, M. & Zhang, J. 2004. Mapping fragmentation: Electronics and automobiles in East Asia and Latin America. **Oxford Development Studies**, 32(3): 1-30.

Ng, F & Yeats, A. 2003. Major trends in East Asia: What are their implications for regional cooperation and growth? *World Bank Policy Research Working Paper 3084*: 1-93

Ozawa, T. 2003. Pax Americana-led macro-clustering and flying geese-style catch-up in East Asia: Mechanisms of regionalized endogenous growth. *Journal of Asian Economics*, 13 (6): 699-713.

Salleh, A. L. 1997. Competition coalitions, and coordination in the global personal computer industry. *Unpublished PhD dissertation, Duke University*.

Salleh, A. L. 2000. Global networks and regionalization: Changing roles of SMEs in the global personal computer industry. *Proceedings of Conference on SMEs in a Global Economy* held on 16-17 June, Wollongong: 230-237.

UNCTAD World Investment Report. 2006. Available at www.unctad.org/fdstatistics.

UNCTAD Trade and Development Report. 2004. Available at www.unctad.org/.

UNCTAD Trade and Development Report. 2002. Available at www.unctad.org/.

USITC. 2005. ITC trade data web. Available at http://dataweb.usitc.gov/

USITC. 2000. Shifts in U.S merchandise trade in 1999. Investigation No: 332-345, Publication 3353.

Woodall, P. 2004. The dragon and the eagle. *The Economist*, October.

Zumwalt, J. P. 2002. How WTO membership affects China. *Economic Perspectives*, Available at http://www.usembassy-china.org.cn.

THE FUTURE DIRECTIONS TO DEVELOP THE TRADE TRANSACTIONS AMONG THE GCC COUNTRIES UNDER THE INTERNATIONAL ECONOMIC CHANGES

Dr. Mohammed Naim Chaker Qatar University, Doha, Qatar

ABSTRACT

The trade among GCC countries has a special importance because these countries are considered huge markets for many products. There is also an increasing demand for goods and services in the markets of GCC countries because of huge economic development projects, the growth of population, and the industrial and academic expansions. The GCC countries are trying to evaluate and analyze the current volume of trade to determine the difficulties and obstacles that limit the trade among the members of GCC countries. They seek to remove these trade obstacles and barriers and look forward to improving the future trade among the members of GCC countries. This conceptual paper will try to shed the light on future horizons and directions to improve the commercial trade among the GCC countries within the new international economics developments and globalization. The paper starts by discussing the current obstacles of trade that lead to slow growth of trade and might delay the economic and trade union among the GCC countries; as the members countries plan to achieve. Then, the paper presents some future directions to be as guidelines to the policymakers in GCC countries. The final section presents the conclusion and the recommendations.

INTRODUCTION

International trade among nations and countries has been arising. This is significant with the technological, industrial, economic, and social developments. The international trade became a vital resource of the national consumption, investment, national output and GDP growth. There are many trade agreements and trade groups among countries and organizations to facilitate the trade and accelerate the rates of trade. The Gulf Cooperation Council (GCC) was founded in 1981, the aim of this collective is to promote coordination between member states in all fields in order to achieve unity and consist of Saudi Arabia, Kuwait, Bahrain, Qatar, the United Arab Emirates, and the Sultanate of Oman.

While economics were secondary in the formation of the GCC, the GCC Economic Agreement, passed in June 1981, did set out certain economic objectives for the organization:

- Implementing a free trade area with no barriers on regional products and common tariffs on foreign imports
- Consolidating bargaining power in negotiations with external trading partners
- Establishing a common market that grants citizens the right to travel, work, own, and inherit in all member states
- Harmonizing development plans to promote integration
- Adopting a common oil policy
- Coordinating industrial policy, particularly with respect to petroleum based products
- Promoting joint projects to coordinate chains of production
- Adopting a common legal framework for regional trade and investment
- Linking transportation networks

Economic and trade-related objectives were further specified in the United Economic Agreement (UEA) signed in November 1981. These included free trade in all agricultural products, animals, industrial products, and natural resources that originated within the member states, the introduction of a common external tariff and trade policy; and a coordination of economic development within the GCC.

Working toward diversifying their economy, the GCC countries are promoting heavy industry, such as petrochemicals, fertilizers, textiles, cement, furniture, fertilizers, fiberglass products, desalination, food processing, and the manufacturing of building materials, which includes plastics, cement, and metal pipes

and steel. To decrease its reliance on oil revenues, the governments are striving to diversify GCC countries' economy by attracting more commercial companies, and trade among themselves and other countries.

The trade among GCC countries has a special importance because these countries are considered huge markets for many products. There is also an increasing demand for goods and services in the markets of GCC countries because of huge economic development projects, the growth of population, and the industrial and academic expansions.

The GCC countries are trying to evaluate and analyze the current volume of trade to determine the difficulties and obstacles that limit the trade among the members of GCC countries. They seek to remove these trade obstacles and barriers and look forward to improving the future trade among the members of GCC countries. The leaders of GCC countries are aware of the importance and the advantages of trade to their countries, therefore they discuss the trade issued during their regular meetings and summits in order to improve and increase the rates of exchange and trade among their countries. A lot of specialized conferences and workshops take place in GCC countries at different times through the year to discuss the current issues and the future of the trade among the members of GCC countries. These meetings are organized by the local trade organizations, the chamber of commerce, and the department of trade. The main objective of these functions is to improve the trade and achieve high rates of growth of exchange among GCC countries.

This conceptual paper will try to shed the light on future horizons and directions to improve the commercial trade among the GCC countries within the new international economics developments and globalization.

The paper starts by discussing the current obstacles of trade that lead to slow growth of trade and might delay the economic and trade union among the GCC countries; as the members countries plan to achieve. Then, the paper presents some future directions to be as guidelines to the policymakers in GCC countries. The last section presents the conclusion and the recommendations.

LITERATURE REVIEW

The current trade obstacles and barriers can be classified by two main groups. The first group is related to the custom regulations and laws applied by each of GCC country. The second group is technical barriers related to the production, distribution, delivery, administrative laws and regulations, and financial procedures.

The Custom Related Obstacles

The custom regulations and laws play an important role of smoothing the trade among countries because of its direct impact on volume of trade transactions. Therefore, the GCC countries leaders in their summit, in December 2002 approved the establishment of "Custom Union" among GCC countries effective of January 2003. The supreme council has approved the process and procedures which were discussed by the economic and financial cooperative committee of the GCC countries.

The "Custom Union" among GCC countries depends on the following principles:

- 1- Unified custom tariff for dealing with foreign countries.
- 2- The system of unified "Custom Law" for all members of GCC countries.
- 3- Applying similar custom procedures and systems for all members of GCC countries.
- 4- Unified custom regulations and procedures regarding imports, exports, and re-exports in the GCC countries.
- 5- One entrance point system to collect the unified custom tariffs.
- 6- The movement of commodities among GCC countries without any custom or non-custom barriers. With the exception of restricted and illegal commodities and applying special procedures for agriculture products.
- 7- The treatment of commodities which produced within any GCC country as national or local products that not subject to customs procedures.

The leaders of GCC countries discussed, in their summit in December 2005, a report on the process of applying the "Custom Union" and the positive impacts on increasing trade transactions among GCC countries members. They agreed upon extending the transition period of applying the "Custom Union" to the end of the year 2007. Also, the leaders granted an exemption of some commodities from the custom tariffs.

The Technical Barriers of Trade

There some trade barriers related to production, distribution, delivery, administrative laws and regulations, and financial procedures. These barriers may include:

- 1- Economic resources mobility among GCC countries and the restrictions on individuals, commodities and funds movements in these countries.
- 2- The cost of production, distribution, shipping, and custom tariffs for the commodities in the GCC countries.
- 3- The duplication of production and industries in different sectors leads to producing similar goods exceeds the market needs.
- 4- The long distance among the markets in GCC countries that increases the cost of shipping and delivery among the GCC countries.
- 5- The process of custom checking and documentation approval on the borders among GCC countries is considered one factor of goods delivery.
- 6- The problem of dumping the markets with some products at prices lower than the local prices.
- 7- The standardizations and quality measures are not unified among the GCC countries members.
- 8- The adopted administrative laws and regulations create some problems and slow down the trade transactions.
- 9- The commercial laws and the courts system to solve commercial disputes take a longer time.

DISCUSSION

To improve the rate of trade among GCC countries and remove the trade obstacles a serious attention and policies changes must be taken in consideration. There are a lot of process and procedures to take place on different levels of individuals, private and public organizations, and the government. The efforts cover all aspects related to trade such as economic, legal, administrative, financial, communication, and marketing activities.

The future directions can be used as guidelines to help the policy makers to follow the right path and apply the appropriate actions. All resources must be utilized to achieve the goals and increase the trade among GCC countries.

The Actual and Right Application of the "Custom Union" Agreement among GCC Countries

The "Custom Union" agreement covers different aspects and provides solutions to a lot of problems that counted as obstacles of trade. The following are some of the points that were under the study by the new "Custom Union" law and provide solutions for them.

- 1- One entrance point of goods for all GCC countries: The one point entrance is considered as one of the most important principles to establish the custom union for any group of countries. The one entrance principles mean that the first custom point receives the imported goods from foreign countries to any GCC countries will perform the check and the proper documentation. Also, the first entrance will check whether the actual imported items are matching those on the documents and there are no any illegal items among them. Then, the center will collect the due custom tariffs.
- 2- Unified custom tariffs for "Custom Union" members toward all other countries: The custom tariff is determined to be 5% on all imported foreign goods from outside the GCC countries members of the union. The custom tariff on cigarettes is 100%. There is a list of some exempted goods that includes about 417 items and it is reviewed periodically.

- 3- The common customs law for GCC countries: The new system of customs based on the new common custom law will be implemented soon at all customs departments in GCC countries.
- 4- Collection of custom tariffs for the members of the custom union: The custom tariffs and dues will be collected at the first custom point of arrival to GCC countries where the imported products enter GCC countries. Then the share of each country will be distributed based on the final destination of the imports.
- 5- The mission and function of each custom center of GCC countries will be determined according to the new customs law. This will be implemented gradually.
- 6- Allowing the custom clearance agencies to practice their profession in all GCC countries: there will be a permission to custom clearance agents from GCC nationals to work across GCC countries.
- 7- The internal system for imports, exports and re-exports, and transit transactions: There will be a system of one point entry and all governmental, private, and diplomatic exemptions will be determined according international agreement. The new law sets all procedures about the export and transit products.
- 8- Applying the international standards and measures of quality within the members of custom union. The principles of accepting and recognizing all local and national standards of quality which applied in each country till there will be unified Gulf standards for all domestic and imported goods.
- 9- Protecting the domestic industries after establishing the custom union among GCC countries. The protection includes combating of dumping and all other precautionary measures.
- 10- Keeping a record of domestic and international trade among GCC countries for the purposes of statistical analysis. There should be unified customs forms to be developed and implemented.

The final press release of the GCC countries leaders' summit that was held in the UAE in 2005, insisted that the leaders discuss a report about the process of applying the custom union and its positive impacts on increasing trade volume among GCC countries and to facilitate the movement of products among them. Also, the leaders approved to extend the transition period to the end of 2007. In addition, they decided to grant an exemption to some goods from the custom tariffs.

The Proposal of Establishing the Currency Union and Issuing the Unified Currency

The 22nd summit of GCC leaders has approved to establish the currency union and to issue a common currency by the end of 2010. The specialized committees of finance ministries, directors of central banks will develop the proper criteria to set up the currency union and the time table to implement it.

Applying the unified currency in GCC countries would help reduce the negative impacts of exchange rates fluctuations of domestic currencies with each other and with major currencies. These fluctuations usually lead to a lot of losses to domestic importers or exporters.

Establishing a Free Trade Zone among GCC Countries Will Ease the Trade and Make Smoother Movement of Domestic Goods

This creates many opportunities to current industries to expand its markets and increase the trade. A requirement of a free trade zone is to liberate the movement's economic resources among GCC countries and remove the restrictions on movements of capital, individuals and goods.

Currently, the domestic goods produced in free zone areas face discrimination of treatment that prevents these goods from entering GCC market even though they are domestic products. Some GCC countries consider the products of free zones areas as foreign imported goods and imply tariff fees on these goods. A special seminar on trade issues held in Dubai in 1997, has recommended reconsidering the "certificate of origin" that applied on domestic products. The current law defines the domestic product that is exempted from the custom fees as the product that has no less than 40% of value added

domestically and requires that the GCC nationals have no less than 51% of the factories. Many experts suggest lowering the value added condition to a 20 % or 30% since most of industries are in their early stages of establishment. Also, a special consideration should be given to the type of the industry, by not applying one percentage on all industries. This change in classification of products would increase trade among GCC countries.

The leaders of GCC countries in their summit in 2005 that held in UAE have followed up the steps and the process to adopt the common Gulf market and what has been done in different aspects such as the ownership and trade of stocks. The council approved the proposal to allow the GCC nationals to practice economic activities such as private hiring companies, car renting, and cultural functions. Also, the council members have recommended finishing all the process to having the complete "Gulf Common Market" by the end of year 2007.

Applying the trade free zone area, gulf common market, and fair treatment of all GCC nationals to practice trade and work in any GCC country with the origin citizens of the country, would lead to achieve the economic development.

Activating and Strengthening the Economic Relationships of GCC Countries with International Trade Groups and Other Countries

More efforts should be directed to increase the international trade, and at the same time increase the regional trade among GCC countries. The emerging economies and the recent global economic changes indicate that this era is the era of cooperation among huge allies such as the partnership with the European Union, WTO, and other regional trade groups and blocks. The trade cooperation negotiations between EU and GCC countries started in 1988 and still going on aim to remove the all trade barriers between EU and GCC countries. There is no doubt that completing the deal of cooperation agreement with EU would have significant effects on the economics of GCC countries because of the size of investments that might be injected by the European countries to Gulf region. Also, the political, security, and economic gains along with support from EU and an increase of Gulf investments in Europe.

In this regard, the leaders of GCC countries have emphasized during their 2005 and 2007 summits the importance of trade negotiation with EU and looking toward the final agreement on "free trade treaty". Also, the leaders were pleased with the progress of trade negotiations to establish free trade zones with China and Turkey.

Promoting the Financial Cooperation and Allowing National Banks to Open Branches in Other GCC Countries

This decision became effective among GCC countries and some national started opening branches in other GCC cities. The National Bank of Bahrain got permission to open a branch in Riyadh (SA), the Emirates Bank to open a branch in Riyadh (SA), the Kuwait Bank to open a branch in Jeddah (SA), and the Abu Dhabi Bank to open branch in Bahrain.

Increasing the number of operating banks and having additional branches would help to ease the payments transactions, provide the needed funds, and improve the financial services that are considered as the foundations of commercial trade.

High Cooperation in Transportation

This cooperation might include:

- 1- Air travel and air cargo: to allow national air line companies to sell tickets directly to customers without a need for travel agencies, to have one common office for the international civil aviation organization in GCC countries, having cheap and reasonable air travel among GCC countries, using one common insurance policy for air line companies, applying similar security measures, and reducing the rates of air cargo among GCC countries.
- 2- Roads cargo: an agreement to develop main highways to connect major cities in GCC countries, specifying the roads conditions, setting up the driving safety rules on roads, and

encouraging public transportation companies to carry passengers and goods among GCC countries.

3- Ports and sea shipping: Simplifying the custom procedures, sea shipping, safety procedures, and reducing the time of loading and unloading to increase the trade transactions.

4-

Coordinating the Industrial Activities among GCC Countries

In order to achieve the industrial integration, the GCC countries should cooperate to avoid duplicating of industries. Duplication of industries will limit the trade transactions where, each country have sufficient amount of goods and services. Also, the cooperation should include identifying the investments opportunities in each country, specialization, and efficient use of available resources at each country. More attention should be given to the heavy industries and not only to light industries. Large amounts of light industries will lead to less marketing opportunities and difficulties to export these products to foreign countries. Duplication of light industries would also lower the rates of capacity utilization, which will increase the cost of production and lowers the competition abilities in local and regional markets.

Increasing the Joint Investments and Industrial Projects among GCC Countries

Some heavy industries require large amounts of funds and capital such as IT, chemicals, and petroleum industries. Joint investments require setting up a common strategy about the type of industries, cost-benefit analysis for proposed projects, and the marketing and distribution opportunities.

Activating the Cooperation among Chambers of Commerce in GCC Countries

Full cooperation will strengthen the role of chambers of commerce to support the trade among GCC countries. Chambers of commerce can develop trade transactions by:

- 1- Organizing seminars, workshops, and conferences about the current and future challenges of trade in GCC countries.
- 2- Organizing exhibitions and special fairs for goods produced in GCC countries.
- 3- Making a list of available investments opportunities in each of GCC countries.
- 4- Offering training programs for exports, imports, and quality management to producers.
- 5- Communicating with other regional and international chambers of commerce to get support for the products produced in GCC countries.

Improving the Quality of Products Produced in GCC Countries

Higher quality products would make consumers highly satisfied with the products they buy and this increases the demand on these goods. The quality of product can be improved by different way such as:

- 1- Using advanced technology and new methods of production.
- 2- Hiring highly skilled and qualified employees and making them aware of the importance of improving quality.
- 3- Applying the incentives system to motivate employees and improve the quality of products.
- 4- Conducting more quality tests during the production process to check the quality.
- 5- Obtaining the international certificates of quality and standards like ISO.
- 6- Organizing quality contests by government agencies and chambers of commerce among producers and provide awards to the winners.

Educating and Encouraging Consumers to Buy Domestically Produced Products

Most consumers believe that foreign products are superior to domestic products in quality because of the advertisement campaigns by foreign corporations. This policy can be achieved by:

- 1- Implementing the international quality standards to domestically produced products.
- 2- Placing labels on domestic products to inform consumers about the ingredients and the nutrition facts to increase the consumer's confidence in these products.

- 3- Launching effective advertisement campaigns to promote domestically produced products.
- 4- Organizing specialized exhibitions on regular bases and invite the public and media to see these products.

Emphasizing the Effective Role of Media to Promote Trade among GCC Countries

Newspapers, magazines, T.V. coverage, and the internet play an important role promote trade through different aspects.

- 1- Informing the consumers about the domestically produced products.
- 2- Covering the exhibitions, seminars, conferences, and all commercial functions related to trade.
- 3- Publishing specialized articles and having special issues about trade challenges and local products by expert in this field.

Adopting and Promoting E-Commerce

The current statistics indicate that the size of e-commerce is growing in many countries. The GCC countries are at the early stages of e-commerce but they have the technical foundation required for it.

A lot of countries in GCC started building the structure of e-commerce and processing all trade documents electronically.

Using the Available Privileges and Rights of Membership of WTO

GCC countries must use the benefits of being members of WTO and coordinating their decisions and standing during the regular meeting of WTO.

The membership of WTO provides some benefits to member's countries.

- 1- Higher trade opportunities and legal competition among members.
- 2- The GCC countries have petrochemicals, cement, aluminum, and garments which creates a competitive advantage.
- 3- The WTO agreements prevent the trade dumping policy. Dumping is one of major challenges of trade in GCC countries.
- 4- The WTO membership grants some privileges to its members only such as the tariffs and custom exemptions and removing the restrictions on movement of some goods and services.

Establishing a Partner Relationship and Mutual Cooperation between Trade agencies, Chambers of Commerce, and Universities and Academic Institutions

This relationship will create new venues of trade development in different aspects.

- 1- Devoting some of faculty members' research at colleges of business to analyze the current problems and challenges of trade in GCC countries and provide perspectives of the future directions
- 2- Encouraging undergraduate and graduate students to conduct term papers, projects, case studies, thesis, and dissertations on trade related areas of production, management, accounting, finance, and marketing.
- 3- Preparing and providing a database about trade figures and statistics to be used by researchers to conduct their analysis and studies.
- 4- Using the community service activity of universities faculty members to achieve more benefits to the society and increase the economic development.
- 5- Offering scholarships and awards to faculty members and graduate students to motivate them to be more involved in trade related functions and activities.

Simplifying the Administrative Procedures and Reducing the Time Needed to Solve the Commercial Disputes in Courts

The volume of trade usually is affected by the existing administrative and commercial laws. Therefore, a lot of things can be done in this area.

- 1- Simplifying the customs administrative procedures, good clearance, and license requirements to make the trade transactions more efficient.
- 2- Reducing the paper forms and moving toward online services to complete the required exports and imports procedures.
- 3- Increasing the authorities given to commercial courts for quick and faster ruling on commercial disputes cases.
- 4- Setting up a small claim courts to solve small disputes between customers and business companies or among companies.

CONCLUSIONS AND RECOMMENDATIONS

This paper presented the current trade obstacles and challenges among GCC countries in order to shed the lights on the future directions under the global economic changes. The purpose of the study is to assist the policy makers in GCC countries in making their decisions about trade and foster proper policies to develop the trade relationships among these countries.

The future directions to improve the trade among GCC countries cover different aspects of customs, economic, administrative, technological, financial, education, communication, and transportation.

The GCC countries have the potential of achieving the economic development and higher trade transactions because they have the resources, the abilities, the logistics, and the willingness to achieve prosperity and success.

The policy makers and economic decision makers of GCC countries should use the following recommendations to develop the trade transactions and achieve high rate of economic growth in the era of globalization.

- Completing the process of the application of the "Custom Union" Agreement among GCC Countries.
- Establishing the Currency Union and Issuing the Unified Currency.
- Establishing a Free Trade Zone among GCC Countries.
- Activating and Strengthening the Economic Relationships of GCC Countries with International Trade Groups and Other Countries.
- Promoting the Financial Cooperation and Allowing National Banks to Open Branches in Other GCC Countries.
- Higher Cooperation in Transportation.
- Coordinating the Industrial Activities among GCC Countries.
- Increasing the Joint Investments and Industrial Projects among GCC Countries.
- Activating the Cooperation among Chambers of Commerce in GCC Countries.
- Improving the Quality of Products Produced in GCC Countries.
- Educating and Encouraging Consumers to Buy Domestically Produced Products.
- Emphasizing the Effective Role of Media to Promote Trade among GCC Countries.
- Adopting and Promoting E-Commerce.
- Using the Available Privileges and Rights of Membership of WTO.
- Establishing a Partner Relationship and Mutual Cooperation between Trade agencies, Chambers of Commerce, and Universities and Academic Institutions.
- Simplifying the Administrative Procedures and Reducing the Time Needed to Solve the Commercial Disputes in Courts.

REFERENCES

A report on *The Efforts of economic integration in GCC countries*. Available at http://www.arabss.com/gcc/documents/part_3.htm (Accessed December 12, 2005).

A report on Estimation of e-commerce in GCC countries. Available at http://www.gcc_sg.org/ecommerce/xs002.html (Accessed December 22, 2005).

The Council of GCC Countries. 2003. Procedures and steps of Applying the custom union of the GCC countries.

Bahrain Chamber of Commerce. 1999. *The industrial cooperation and integration among GCC countries*.

AL Watan. 2005. The gulf trade problems. Al-Watan Newspaper, December 29, 2005.

Looney, R. 2003. Economic integration in the gulf region: Does the future hold more promise than the past? *The Center for Contemporary Conflict (CCC)*, www.ccc.nps.navy.mil, USA, March 2003

Al Riyadh. 2004. Obstacles of trade among GCC countries. Al-Riyadh Newspaper, May 9, 2004.

Al Bayan. 2001. The barriers of trade among GCC countries. *Al-Bayan Newspaper*, September 30, 2001.

The Final Press Release of the GCC Leaders' Summit, UAE, December 20, 2005.

Trade blocks and volume of trade, Available at http://www.mosgcc.com, December 20, 2005.

CHALLENGES FACING THE KUWAITI BANKING SYSTEM IN THE GLOBALIZATION ERA

Dr. Abbas A. Al-Mejren

Kuwait University

Email: econmill@yahoo.com

ABSTRACT

The paper focuses on the potential impact of foreign banks entry in Kuwait. As it is too early to investigate such issue empirically, due to the fact that liberalization of the Kuwaiti banking sector has just started out in 2004, the present paper probes into the issue through relevant literature, published studies, reports, and investigative interviews with prominent local and foreign bankers. The paper is divided into three parts: the first part reviews the issue's pros and cons in applicable literature; the second examines the present relevant institutional structure of the Kuwaiti banking sector; while the third part is devoted for the discussion of the possible effects and challenges brought about by the foreign banks entry into the Kuwaiti market. In the conclusion, the paper determines that licensing of five foreign banks, in a relatively short period of time, after long history of state shield inflicts serious burdens on the domestic banking industry. Add to this that Kuwait did not take significant measures to prepare the local banks for foreign banks entry. The paper also suggests particular views to deal with some of these effects.

INTRODUCTION

Along with the worldwide movement toward liberalization of financial markets during the past twenty years, the banking sector, which had been heavily regulated and protected from foreign rivals in most countries of the world, became increasingly liberalized. A host of political, social and economic transforms and changes in various parts of the World were behind the acceleration of this movement. However, capital-surplus oil-exporting countries, such as Kuwait, have been obliged recently to ease up their legal barriers to foreign banks entry in conformity with their economic reform programs on one hand, and the principles of the World Trade Organization's GATS and the IMF set of guidelines on the other hand. Hence, growing foreign ownership in the banking sector raises several interesting questions about the entry effects on domestic economies, in general, and local banking sector, in particular.

The present study focuses on the potential impact of foreign banks entry in the Kuwaiti market. To investigate such issue empirically, there is a need to evaluate the performance of foreign banks vis-à-vis domestic banks by comparing their major financial ratios and operating and management indicators. However, balance sheets or financial statements of foreign bank branches are unattainable because the data of BNP Paribas and HSBC, which are the only two foreign banks with a period of operation that exceeds a year in Kuwait, are unpublished; leave aside the fact that it is too early to assess the performance of these branches using a single year data. Therefore, the present paper can only probe into the issues of probable impact of foreign bank entry on the Kuwaiti banking system, given the present environment of the banking industry in Kuwait and the relevant set of laws and regulations. To this end, the researcher's relied in the methodology of this paper, on relevant literature, published studies, reports, and investigative interviews with prominent bankers in domestic conventional banks, specialized banks and the foreign branches to collect as much as possible information about the issue.

Therefore, the paper is divided into three parts: the first part reviews the issue's pros and cons in applicable literature; the second examines the present relevant institutional and legal structure, strengths and weaknesses of the Kuwaiti banking sector; while the third part is devoted for the discussion of the possible effects and challenges brought about by the foreign banks entry in the Kuwaiti market.

LITERATURE REVIEW

Throughout the recent years, various studies and researches have attempted to provide theoretical and empirical responses to the question of the overall impact of foreign banks' entry into host economies, but results are mixed.

Advocates of entry argue that foreign bank entrants and particularly large international banks have positive impact on local banking activity in developing countries as they increase the capacity of local banking sectors to lend and support development and introduce international practices and know-how, which spills over to domestic banks and increases the efficiency of financial intermediation. They provide evidence that foreign banks lead to higher quality of services, reduce costs and diversify products; all of which are benefits to consumers, producers and to the national economy in the long run.

Opponents, on the other hand assert that international banks are too powerful and thus their presence deprives domestic banking industry of a chance to grow. At the same time, several researchers note that international banks typically favor large and foreign-owned corporations at the expense of local entrepreneurs. Diverse case studies provide evidence for the dominance of powerful foreign banks, which outperform domestic banks in returns on equity and return on assets despite operating with much smaller numbers of branches. The more efficient performance of foreign banks is attributed to professional management and international-linkage advantages as well as a more proactive approach to business and a focus on high-profit models.

One of the main distinctions in literature, which rely mostly on empirical estimates, is related to the difference between the foreign banks impact on developed versus developing economies. In the case of developed economies, most studies have found that domestic banks are more efficient than foreign competitors. Evidence of a good number of studies on cases from developing countries suggests that foreign banks typically outperform domestic ones. However, in both groups, there are some contradictory outcomes (Sagari, 1992; Buch, 1999; Papi & Revoltella, 1999; Clarke et al., 1999).

Leader-follower vs. comparative advantage models

Clarke, et al. (1999) categorized the positions toward the role of foreign banks into two views. The first, referred to as the traditional view (Aliber, 1984), is that foreign banks follow their domestic clients to finance their trade and service their needs in other countries. Empirical support comes from a number of papers that find a positive relationship between the presence of banks from a given country and the level of trade between that country and the host country.

The second view envisions a more active role for foreign banks in the development of the host country's banking sector. Drawing on the theory of comparative advantage, Grubel (1977) and Kindleberger (1983) posit that banks use management technology and marketing know-how developed for domestic uses at very low marginal cost abroad. Effects on domestic banks depend, therefore, on whether they provide services in an area where foreign entrants have a comparative advantage. Levine (1996) suggests that in developing countries potential overlaps may not be great. He predicts that foreign banks will typically provide more sophisticated financial services than domestic banks.

While individual papers emphasize one view over the other, most recognize that leader-follower and comparative advantage both play a role in explaining developments in a given banking sector. Kindleberger (1983) and Levine (1996) both emphasize that banks will sometimes follow and other times lead.

Preference of banking activity

Clarke, et al. (1999) also found that foreign banks devote a much higher share of credit to manufacturing, and indicate that profit and interest margins are lower for domestic banks focusing in this area. Conversely, domestic banks with greater consumer lending, an area where foreign banks have not been heavily involved, have higher net margins and higher profits. These results are consistent with the hypothesis that foreign banks enter specific areas where they have a comparative advantage, putting pressure on the domestic banks already focusing on those types of lending.

Competitiveness count on liberalization

Using a structural model, Claessens and Laeven (2003) have estimated competitiveness indicators for a large cross-section of countries. By relating these indicators to a number of country characteristics, they found that greater foreign bank presence and fewer activity restrictions in the banking sector can make

far more competitive banking systems. As well, based upon a comprehensive cross-country database, Barth et al. (2001) proved that tighter restrictions on entry into banking industry (whether for foreign or domestic banks) are associated with higher net interest margins and overhead costs.

Likewise, Kasmana, Adnan et al. (2005) acknowledged the importance of the local environment. Also, Battese and Coelli (1995), based on a panel of 427 banking firms from 16 countries, reveal the importance of the environmental variables in explaining the efficiency differences among countries. Besides, Lensink and Hermes (2004) find that in the short term, foreign bank entry is associated with higher costs and margins for domestic banks at low levels of economic development, while effects at higher levels of development are unclear.

Access to credit

Large number of Studies have analyzed whether foreign bank entry has an adverse effect on credit allocation to local small and medium-sized enterprises. Early empirical evidence suggests that while foreign banks tend to devote smaller shares of their portfolios to small businesses than other banks, there are some signs that technological changes are enabling large foreign banks to serve this sector. In this track, Detragiache et al. (2006), based on a sample of 57 countries with low per-capita income concluded that total lending, cost efficiency, and welfare do not necessarily improve with foreign bank entry.

Foreign entry as source of instability

Haas and van Lelyveld (2003) find that foreign banks policies, to a certain extent, are influenced by decisions of their holding companies. On the positive side, a parent bank may act as a "back-up facility" or lender of last resort during crisis periods. (Stein, 1997). This may then translate into a more stable credit supply of the foreign based subsidiary. Contrary to this, foreign banks' credit supply may be less stable than credit by domestic banks if foreign banks react more cyclically to changes in the host country macroeconomic environment. A reason for such behavior could be that the parent bank reallocates capital over different geographical regions on the basis of expected risks and returns, while domestic banks may not have such foreign alternative opportunities.

In their 2001 paper, Clarke et al., evidence suggests that foreign banks entry will be broad enough to exert competitive pressure, which could cause some domestic banks to fail, which could be destabilizing.

Foreign banks could pose another source of instability to developing countries if they reduce their exposures to those countries during times of crisis. Additional concerns are about exposing developing countries to the economic fluctuations in the home countries of foreign banks, or the fluctuations of other developing countries where these banks operate. For Clarke et al. (2001), having foreign entrants from a diversified group of countries could minimize these risks. Similarly, Kraft (2002), on the effect of foreign banks entry on Croatian banking activity, suggests entry of banks from areas whose business cycles are less correlated with Croatia, as in the case of Malaysia (Detragiache and Gupta 2004).

Correspondingly, Jeon, Yongil, et. al. (2003) indicate that foreign banks possess a lower probability to fail when Korean economic and financial market conditions worsen, as they rely more heavily on foreign currency deposits as a source of funds. Alternative evidence indicates, however, that foreign banks do not use these external sources of funds to increase loans. However, Haber and Musacchio (2005) conclude that Mexico's 1990s credit crunch appears to be unrelated to foreign bank entry, but appears to be driven by a factor that affects all banks, both foreign and domestic, such as difficulty in enforcing contracts due to deficient regulatory and judiciary systems.

Competition and efficiency effect

Kasmana, Adnan et al. (2005) observe that foreign banks are more cost-efficient on average than domestic banks in 12 out of 15 countries used in their study. On the other hand, foreign banks are more profit efficient than domestic banks in 11 countries. The main conclusion of the paper on the impact of foreign ownership is positive. Hence, entry of foreign banks should be promoted since it, as also shown by other studies (Claessens et al. 2001; Weill, 2002; and Kasman, 2004), increases the efficiency of the system. Moreover, Haber and Musacchio (2005) have realized that the effects of foreign bank entry in Mexico are

broadly consistent with the findings of the literature, i.e., declines in administrative costs, interest margins, and non-performing loans.

The pioneering work of Demirgüç-Kunt and Huizinga (1999) also find that, foreign banks have higher interest margins and profits than domestic banks in less developed countries, while the opposite is true in developed countries. Nonetheless, Kim and Lee (2004) found out that foreign bank penetration did contribute to greater cost efficiency on the part of the Korean private banks, presumably by intensifying competitive pressures. But there is no evidence that foreign bank entry has improved local banks' profits. Unite and Sullivan, (2001) on Philippines economic reforms find evidence that interest rate spreads narrow and operating expenses decline with greater foreign bank entry. This supports the hypotheses that foreign entry reduces interest rate spreads as both domestic and foreign banks compete for the same business. Moreover, Crystal, Dages and Goldberg (2002) assert that differences in efficiency between foreign and domestic banks may reflect the ability to select and capture high quality customers, and this would justify the trend in loans (repayment or losses). On the other hand, Schulz (2006) confirms that foreign bank entry has improved the efficiency, and the asset quality of local banks, which accelerated the reduction of bad debt in the banking system.

Micco, Alejandro, et al. (2004) paper find that, in developing countries, the entry of foreign banks plays a useful role by making domestic banks more efficient in terms of lower overhead cost and lower interest margins. As these two factors tend to balance each other, the authors found no significant correlation between foreign bank entry and profitability.

The importance of pre-regulatory foundation

Lee (2004) believes in gradual liberalization of banking industry. He is in preference of domestic regulatory foundation prior to the foreign bank entry. As the author states "ex-ante prudential regulation is better than ex-post shock therapy, or acquisition of domestic banks in the aftermath of financial crises". Case studies show possible benefits of regulating foreign banks operations until the domestic banking sector is prepared for the increased competition.

The banking cluster in Kuwait

The Kuwaiti banking sector comprises of 16 banks, of which there are 6 foreign-owned banks. The Kuwaiti national banks are classified into three types, conventional commercial, Islamic, and sector-specialized banks. The oldest local and now the largest commercial bank in Kuwait, the National Bank of Kuwait (NBK), have been operating since 1952. However, while the British Bank of the Middle East (BBME) was operating in Kuwait since 1941, subsequent laws prohibited foreign banks from conducting business in the Kuwait.

Prior to the 2004, the Bank of Bahrain and Kuwait (BBK) which is a Bahraini bank with 50% Kuwaiti equity has been the only foreign bank to operate in Kuwait, aside from BBME. Nevertheless, in January 2004, the parliament passed a bill allowing licenses for foreign banks. In August 2004, BNP Paribas won the first license as a foreign bank in Kuwait. HSBC-Middle East and Citibank followed. In October 2005, the CBK approved the establishment of National Bank of Abu Dhabi (NBAD) branch, and in December 2006, Qatar National Bank (QNB) was also permitted. With regard to ownership, most of local commercial and Islamic banks are privately owned and usually controlled by a family or close related group of shareholders, while, only one bank has diffuse ownership. This family domination of ownership represents a major obstacle for merger or acquisition probability in the Kuwaiti banking industry. The Central Bank, in different incidents, calls upon banks to consider the issue more seriously, but asserts that it rests on banks' shareholders to make such strategic decisions. Given the above noted ownership concern and strong capital ratios of the Kuwaiti banks, it is unlikely that mergers will occur in near future. Nevertheless, the government, directly or indirectly, is still in hold of sizable interests in two conventional banks. Besides, the bulk of one local bank's capital is now controlled by a bank which is registered in Bahrain. Cross participation among banks, and between banks and other financial institutions, seems to be limited. The banking market is concentrated, with the two largest banks accounting for about half of local banks' total assets, loans and deposits.

Presently, the ten Kuwaiti banks have about one billion KD of paid up capital, 8000 staff number, and operate from a large network of more than 250 domestic locations, 550 ATMs, and 14 foreign branches. However, among all these banks, National Bank of Kuwait (NBK), which is categorized among the top 300 banks of the world and fifth among Arab banks, continues to retain its leadership position as the bank with the largest network of domestic branches (52), foreign branches (10), and ATMs (above 100), followed by the Commercial Bank of Kuwait in terms of local branches, and by the Islamic banking corporate, KFH as the bank with the biggest staff number (1900). The total assets of all Kuwaiti banks stands at about 25 billion KD, which include a variety of loans valued at nearly 15 billion KD. Total liability deposit is almost 20 billion KD. The largest base of deposits (5.5 billion KD) is with NBK followed by KFH (3.5 billion KD). However, in term of loans, NBK has the same share as the KFH (3.5 billion KD) which is well ahead their rivals.

However, due to increased competition, mainly from Islamic banks, as well as entry of new players including investment institutions, the market share of conventional banks in total banking assets has been declining over the recent years. Concerning the utilization of funds, between 2000 and 2005, on average, the three largest conventional banks (Commercial, NBK, and GB) have shown the most efficient utilization rates as they recorded the highest ROA. In view of profitability return to stockholders, the same three banks were well ahead of rivals' ratios. Table 1 shows the ROA and ROE ratios for all conventional banks from 2000 to 2005. Yet again, on average, the NBK pays the highest cost per employee but enjoys the highest net profit per labor expense. Such profit stems from widely diversified assets compared to rivals.

Bank	2005	Average ROA	2005	Average ROE
ABK	2.3	1.5	17.8	11.5
ВКМЕ	2.5	1.5	19.5	11.7
Burgan	2.2	1.5	17.1	12.0
СВК	3.5	2.7	21.6	18.5
Gulf	3.3	2.5	24.1	19.4
NBK	3.3	2.5	26.8	21.9
KREB	1.3	1.8	6.1	10.0
IBK	3.3	2.5	8.2	6.9
Total	2.7	2.1	17.7	14.0

Source: Financial operating Report, Institute of Banking Studies, 1998-2001 and 2002-2005 Issues.

Jabsheh (2001) summarizes some of the current strengths and weaknesses of the Kuwaiti banks. On the strength side there are mainly; the good average net profits compared to regional counterparts, the low expenditures to total assets, the high average assets and average profits per employee. The weaknesses, on the other hand, are unsteady average return to assets, low spending on R&D, reduced confidence in the Kuwaiti banks' ability to compete with other banks in the region, high turn over of manpower, other numerous employee related problems, especially with regard to absenteeism and the involuntary severance of contracts, and poor performance in spite of efforts to reform and retrain and lack of team work skills amongst bank employees.

However, foreign banks are permitted to operate in the local market through a single branch which is considered as one bank, and the minimum requirement of capital for such branch is 15 million KD which is less than the capital requirement of a local bank (75 million KD). The 2003 legislative amendment also brought the Islamic financial institutions under the full supervision of the CBK. However, there are some challenges in extending supervision to such institutions, as they have some activities which fall beyond the monetary authority's areas of interest. Islamic banks are permitted to accept all types of deposits,

and to carry out financing operations for all terms, using special contracts, such as Murabaha, Musharakah and Mudarabah.

Furthermore, Islamic banks are authorized to conduct financial and direct investment for their own account, for other parties and in partnership with others. Branches of foreign Islamic banks are also authorized to operate, and each considered as one bank.

Moreover, local conventional banks are also authorized to establish Islamic subsidiaries; but CBK has not approved any of the conventional banks' frequent requests to carry out such concession. All banks and financial institutions in Kuwait have to maintain 50% minimum ratio of nationals in their labor force. However, foreign banks are also bound to comply with this ratio within 3 years from the date of their license.

With regards to Basel II capital adequacy requirements, Kuwait has been one of the first countries to implement such obligations in its conventional banking sector, and the CBK is working to implement Basel procedures in the Islamic banking sector. As indicated by the IMF report on Kuwait (2004), in the past few years, CBK has made progress in bringing banking supervision into line with international standards. The CBK strictly enforces prudential safety and soundness requirements through both on-site and off-site supervision, and significant progress has been made in developing an early warning system.

Foreign banks: Challenges and prospects

In 2001 the government approved its new Foreign Direct Investment law, which authorizes foreigners to own up to 49% of a local bank, subject to the CBK approval. However, in January 2004, the National Assembly gave final approval to a bill permitting 100% foreign ownership of banks. Thus, the new law disregarded requirements that a foreign bank needed a Kuwaiti partner to operate in Kuwait. Based on this approval, in August 2004, the government granted a license to BNP Paribas to be the first foreign bank to operate in Kuwait; followed at the end of February 2005 by a license to HSBC, and in September 2005, by a license to Citibank. Aside from these three World known banks, Kuwait licensed two other GCC banks, National Bank of Abu Dhabi in November 2005, and Qatar National Bank at the end of 2006. However, an approved bank can not operate before its registration in the CBK Bank Register. Thus, the PNB Paribas branch and the HSBC Middle East branch, for example, become operational just in March and August 2005 respectively.

Prospects of competition: In fact, long before their physical existence in Kuwait, foreign banks used to compete with the Kuwaiti banks in two major areas of banking activity, namely corporate banking and assets and private wealth management. Such competition especially in the private wealth management area was carried out trough representatives of foreign banks who used to travel to the country, stay in five star hotels and have direct contact with prominent clients.

According to Kuwaiti bankers, competition has clearly been felt in the corporate assets management and institutional banking areas where many public corporations along with large private corporate tend to invest their surplus funds through channels that are managed and controlled by foreign banks or their affiliated foreign investment companies. Foreign banks have been also working for certain Kuwaiti corporate clients in the areas of advisory services, corporate restructuring, merger, acquisition, and listing in foreign stock exchange.

For many years, local banks have been also experiencing foreign banks' competition in the area of mega project finance such as substantial petrochemical complexes and waste water treatment project. According to the NBK, for the last three decades, their main competitors in areas of corporate finance and corporate assets management have been mainly foreign banks rather than national rivals.

In fact, for many years, every Kuwaiti bank used to have some sort of affiliation with one or more of the well-known foreign banks which help them in aspects of technical management and assist them with specific products or services. Business relationship between major Kuwaiti banks (like NBK) and foreign banks, as well as other foreign financial intermediaries also goes back to as early as the Seventies. Most of these foreign institutions used to enter into the local market through domestic banks, either to join the list of syndicate loan providers, or to participate in financing large infrastructure projects such as highways,

bridges, seaports and petroleum plants. Such projects are usually executed by European, Japanese, Korean, or American companies. However, some top Kuwaiti bankers believe that foreign contractors may prefer to deal directly with the local foreign banks in future Kuwaiti projects rather than going through local banking channels. Thus, Kuwaiti banks believe that they have lost the opportunity to work as agents for foreign banks in conducting their business in Kuwait, as they can offer their banking business straightforwardly.

On top, the three international banks that have been licensed and start operating in Kuwait, also have long covered the Kuwaiti market out of their other regional center such as Bahrain or Dubai. There is, however, concern that the presence of these banks may affect significantly the business of local banks, given the fact that these banks are well aware of the need and nature of the Kuwaiti economy, and well aware of the strengths and weaknesses of local banks as they have serviced these banks in the past, and have powerful long-term relationships with local businesses and wealthy families.

Hence, foreign banks are expected to introduce diverse and innovative new products and services, which most of the local banks do not have. Because they know the market, they are able to introduce specific tailored products which satisfy the needs and wants of local businesses and individuals. They could also use their vast expertise and experience to enlarge their existing base of high-net-worth customers. Additionally, investment banking service will mostly be affected; as Kuwaiti banks still need to advance their know-how in this segment of banking.

According to managers of some Kuwaiti banks, the foreign banks in Kuwait are presently active in providing letters of credits to Kuwaiti oil importers, financing of BOT projects, and corporate asset management. Yet, because government department in Kuwait prefer to have a national bank assurance when obtaining finance to a public or public-private partnership project, foreign banks typically obtain such assurance from local banks, and hence transfer the risk to these banks.

Although, Kuwait, unlike Qatar which restricts foreign banks from entering into the area of retail banking, foreign banks licenses in Kuwait has no restriction on any type of conventional banking activities, including retail banking. Yet, retail banking seems to be the only immune banking area, where these new entrants pose no threat. This is due to the fact that local commercial banks are well established with a network of more than 250 branches and more than 500 ATMs all over the country, while each foreign bank is allowed to operate from a single premise only. Hence, foreign banks are not interested, at the moment, in this type of banking activity. (Al-Qabas, Kuwaiti daily, January 28, 2007).

Thus, through a single premises, a bank can not attract sufficient local deposits, and with relatively high cost of servicing limited base of deposit, a foreign bank can neither offer the same level of interest on deposits as other Kuwaiti banks, nor it can provide competitive loans to individual customers, thus the foremost line of business for such bank will be confined mainly to the above noted areas of banking, i.e., asset management and corporate banking.

Additionally, foreign banks can not enter into the area of intensive competition between the Kuwait banks for customer deposits, which is motivated by the current high economic growth and availability of sizeable business projects that are valued at more than 20 billion KD. In year 2006, such competition has pushed up the average cost on interest bearing liabilities to 3.8% from its 2005 level of 2.4%. (Commercial Bank of Kuwait 2006 Annual Report)

Nevertheless, given their size and worldwide networks, foreign banks enjoy some cost advantage in the credit card business. As a result, they are expected to attract good portion of the credit card issuance market. This is also due to the fact that bank clients would prefer to hold a card from prestigious worldwide based bank like HSBC or Citibank rather than from a relatively small size domestically-oriented Kuwaiti bank. Yet, many of the local banks' clients rely on credit card transactions largely outside the country, i.e., when they travel for business or leisure rather than for local transactions. Such preference is an effective element, given the large number of Kuwaitis and other residents who travel to different destinations during their summer break. Besides, being almost every where in the world could be another pulling point in favor of international foreign banks; and so, they may penetrate retail banking domain via this channel. Internet banking could be another potential outlet to such domain. However, because of the limited number of internet business users in the local market, such outlet does not look promising, from foreign banks perspective, at the present time.

In general, most local banks believe that foreign banks branches in Kuwait, as in other markets, have some other cost advantage. Such branches do not have to pay costs for residing professional leading bankers, as they may rely on management resources at their parent corporate where they have professional senior advisors who come to Kuwait when the need arise to negotiate or to give advise and consultancy services to corporate, investors, and borrowers. Local banks also believe that competition with foreign banks branches in the area of Islamic banking instruments is not on an equal footing, as these branches may trade units of their Islamic mutual funds which are issued by their holding banks, or carry out Islamic contracts through their other regional branches where Islamic products of conventional banks are permitted. Some local banks believe that while foreign branches may have indirect access for funds at their parent corporate, local banks are facing restrictive loan to deposit ratio and limits on credit to a single barrower. However, whereas these ratios aim at protecting the soundness of the bank, many local banks claim that the present 80% LDR and 15% maximum capital equity ratio to a single borrower represent unnecessary restrictions. The LDR has been introduced when a particular bank LDR has exceeded 120%, while the single borrower credit restriction, as they believe, is impractical when a credit—worthy corporate needs some sizable credit.

However, due to the narrow size of their capital which is 15 million KD, the single borrower restriction has been increased for foreign bank branches from 15% to three times of their capital. Thus, Kuwaiti banks looks for some sort of ease in the above mentioned ratios. Nevertheless, foreign banks assert that one of the most effective restrictions for them is not having access to their parent corporate source of funds.

Being licensed as an independent concern rather than a branch, as is the case of foreign banks in Kuwait means that the bank would not be able to book funds available at their holding corporate, or to calculate their financial ratios based on their parent corporate balance sheet, which deprive the branch from the advantage of the holding corporate' economies of scale, and divest local investors from the benefit of full access to large sources of capital. Moreover, due to official bureaucratic setting, the cost for a foreign bank to operate in Kuwait is higher than those in some other regional centers like Dubai or Bahrain. This is due to many concerns such as the difficulty in obtaining an entry visa, delay in exiting the airport upon arrival, the need of 3-4 months to install telephone lines in offices, inefficient domestic postal services, lengthy process to obtain residency permit, inefficient real estate market to find a proper housing, unsafe traffic system despite the availability of modern road infrastructure, inefficient channels of job recruitment, insufficient supply of local qualified bankers, and still having one of the highest corporate income tax in the world (55%).

Foreign banks may also suffer of time-consuming process that is needed to obtain for an official approval of any banking business application. The paperwork needed in order to complete the formality of obtaining the bank license and to register at the CBK registrar in order to establish the branch itself may take more than six months. Also, months are needed to attain approval for new products, according to some bankers estimate. This is mainly due to the requirement of numerous transfers and signatures, large quantities of paperwork, and numerous redundancies. Moreover, Due to the lengthy process of permitting foreign banks to issue and sell mutual fund units or to introduce a new range of financial instruments, banks may lose the market momentum of such funds or instruments, especially in today's highly volatile and unpredictable world of business. Besides, some foreign branches face difficulties as relevant authorities' correspondences are sent to them in Arabic, which is the official language in Kuwait, but English is also used as a second language in business communications. Given such unfriendly environment to business, some Kuwaiti bankers believe that banks that apply for licensing in Kuwait, must have an existing sufficient base of significant clients and they only want to seize the opportunity to serve their clients from nearby.

Problems and issues of labor force

The number of qualified bankers in Kuwait is limited, hence, most local banks suffer from the shortage of sufficient expertise that can develop their business. Due to such limitation, foreign banks entry increases the degree of competition which already exists in the local market for skilled bankers. Most Kuwaiti banks, thus, expect a rise in the cost of human resources as a result of this rising competition. In

addition to that, due to the continuous expansion of the banking industry, as well as other competitive sectors such as the investment activity which offer higher salaries than those offered by banks, and hence attract a large number of capable banking staff, there is a very high turn over rate among the banks' employees. This adds up an extra burden to local banks as they lose trained employees, and have to find appropriate replacement. Hence, their continuous reliance on fresh graduates increases their operational cost.

In fact, over the last five years, the number and weight of non-bank financial institutions have increased significantly. As of March 2007, there were 73 investment companies at the registrar of the CBK, which also has approved 17 similar new companies. (Al-Qabas, Kuwaiti daily, February 10, 2007). Most of the activity of these investment companies is heavily concentrated in foreign markets, while the remaining part is domestic. Many of them are competing with the conventional banks especially in areas of assets and wealth management, initial public offering of newly established shareholding companies, government and corporate advisory business, .merger and acquisition management. However, these investment companies are taking some additional activities from the Kuwaiti banks. Among these activities are the Almost all Kuwaiti bank and especially the three largest ones, i.e., NBK, Gulf and commercial banks have lost some businesses in these areas to investment companies.

Due to the above noted shortage in skills, licensed foreign banks, which are obliged to meet the 50% national employment ratio, will have no choice but to assign unimportant or marginal jobs to nationals. In fact, even Kuwaiti banks which comply with the 50% national employment ratio assign most Kuwaiti graduates less important positions. Although, the ratio of national college graduates of the total banking labor force is quite high, most of those graduates work in domestic branches which generally handle retail banking business. Even as, there are several bank branches which rely 100% on Kuwaiti staff, there is less number of nationals in middle management group as well as upper positions. Nevertheless, Kuwaiti employees related problems are many, especially with regard to their poor performance, in spite of efforts to reform and retraining, lack of team work skills among bank employees, frequent absence and the involuntary severance of contracts. Furthermore, the government support of salaries for national graduates that work in the private sector compelled some of these banks to provide a forged list of names of Kuwaitis in order to get hold of the government compensation on their behalf.

Technology issues

Due to their superior base of technology and proficiency, foreign banks will always be in an advantageous position which enables them to offer new banking instruments and services; while local banks will consistently seek to adopt such new techniques of banking service. However, in order to speed up the process of technology transfer, the monetary authority could follow a more favorable venue by asking every licensed foreign bank entrant to select a particular local bank as a partner to work with in the local market. Such partnership can be realized by allowing foreign banks to have a specific ownership stakes in local banks, while keeping the majority equity for national stockholders, or through some other kind of dealings. However, with regard to the embodied technology, the Kuwaiti banks, unlike the situation in many underdeveloped markets, are in advantageous position as their high capital and earning enable them to use up—to—date technology, the matter which deprive foreign entrants from having such technological preeminence over the local banks.

Skeptical local banks

With all restrictions imposed on foreign banks, the Kuwaiti banks, which have been accustomed to a government protection since their early days of formation, are still sheltered from an uncontrollable competition. Besides, as stated earlier, each of the Kuwaiti commercial banks is privileged of being controlled by a very close group of relatives and related families, the matter which provide them with secured share of the market, along with an undeniable degree of dominance power. However, this type of environment has created a sentiment of fear of competition among these banks, and brought about the noticeable hesitation of most Kuwaiti banks from entering foreign markets. Even an ambitious bank like the NBK with a reasonable number of foreign outlets has been accustomed to establish outside branches to

mainly provide banking services to Kuwaitis who live abroad or spend their annual summer vacations in the small number of countries, where the present branches of NBK exist.

Yet, in order to survive the possible impact of full liberalization, some Kuwaiti banks has to merge, whether with other Kuwaiti banks, regional banks or with foreign banks, in order to diversify risk, increase assets and market dimension. Some other local banks have to cross the border. Until now, only NBK is considering a serious plan for expansion into new markets. The delay in executing such plan is due to the shortage in expertise. They, yet, believe that success depends on their penetration of international market, enhancement of banking operation; hence, they are evaluating other opportunities such as hiring abroad professional banking managements, merger, acquisition or some other options.

Positive outcomes

Foreign banks, however opens new opportunities for Kuwaiti banks. Since they start their operation in Kuwait, they arranged for several sizable syndicated loans to large Kuwaiti corporate and some Kuwaiti banks did participate in funding such loans. However, in certain cases, Kuwaiti banks decline to participate because the rate is too low, from their point of views. Another positive impact, in an important move, as certain long-standing restrictions and controls were lifted in 2006, local banks are now allowed to deposit KD with foreign banks; carry out foreign currency swaps and outright operations against KD with foreign banks; and conduct trading and hedging activities, in derivative products including options, futures, interest rate swaps (IRS), and forward rate agreements (FRA) and putting the local banks on par with their foreign counterparts.

CONCLUSIONS

There is no doubt that the licensing of five foreign banks, in a relatively short period of time, after long history of state shield inflicts pressures on the domestic banking industry. Add to this that Kuwait did not take significant measures to prepare the local banking industry for foreign banks entry. Yet, at this point, as stated earlier, it is too difficult to estimate the real consequences of the new foreign bank entrants into the Kuwaiti market; first because, as stated earlier, of the unavailability of data, and second due to the fact that, the Kuwaiti economy has been, over the last three years, in a course of remarkable growth and expansion due to the record increase in crude oil prices, and hence there were ample opportunities and mounting absorptive capacities in most sectors of the domestic economy.

One may realize that, in the short run, the informational advantages enjoyed by local banks about domestic major clients and activities ensure that foreign banks will not drive them out of the market. However, in the long run, local banks may face critical competition in financing large and medium-sized enterprises, in corporate assets management, in wealth management and other areas where foreign rivals have a comparative advantage. Thus, local banks have to act responsibly towards merger initiatives and must be ready to cross the border.

If the reason behind the licensing of foreign banks as independent institutions rather than branches is to have better monetary control on the flow movement of capital, the Kuwaiti monetary authority may utilize a less costly means of control by requesting foreign banks to report any foreign-source transfer of capital from outside the country. This may also have the advantage of transferring the risk of asset loans to the holding bank, which has more capacity than a local sub-bank to book more loan loss provisions against faulty credits.

On the national labor issue, Kuwait may not gain much from the obligatory national employment ratio in foreign banks as nationals are assigned marginal posts. Instead, the national concern should be directed toward professional training of national graduates rather than forcing foreign banks to provide them with job opportunities. Demand for properly trained graduates is on the rise by the banking sector, and banks shall compete to offer those certified skills some leading positions rather than secondary jobs.

Regarding the high turnover rate, a fine management practice similar to the best world class of management in top international banks which involve their employees in different levels of decision-making process or compensate them for their exceptional efforts will encourage staff to be loyal to their

institutions. Some Kuwaiti banks still depend on a pyramid system where work has to be carried out by order procedure; thus, tend to lose more employees as competition intensified.

REFERENCES

Aliber, R.Z. 1984, International banking: A survey. *Journal of Money, Credit and Banking*, 16(4).

Al-Qabas. 2007. Kuwaiti Daily, 12089: 38, January 28, 2007.

Al-Qabas. 2007. Kuwaiti Daily, 12102: 45, February 10, 2007.

Battese, G. E. & T. J. Coelli, 1995. A model for technical inefficiency effects in a stochastic frontier production function for panel data. *Empirical Economics*, 20(2).

Claessens, S & L Laeven. 2003. What drives bank competition? Some international evidence, *World Bank*, 36(2).

Claessens, S., A. Demirguc-Kunt, & H. Huizinga. 2001. How does foreign entry affect domestic banking markets? *Journal of Banking and Finance*, 25(5).

Clark, G., Cull, R., D'Amato, L., & Molinari, A. (1999), The effect of foreign entry on Argentina's domestic banking sector. Mimeo, World Bank.

Clarke, G, Cull, R., & Martinez, M.R.. 2001. Does foreign bank penetration reduce access to credit in developing countries? Evidence from asking borrowers. *Policy Research Working Paper Series 2716, The World Bank*.

Clarke, G., Cull, R., Martinez, M., & Sdncbez, S. 2001. Foreign bank entry, experience: Implications for developing countries, and agenda for further research. *Policy Research Working Paper Series 2698, The World Bank*.

Commercial Bank of Kuwait. 2006. Annual Report.

Demirgüc-Kunt, A, Laeven, L., & Levine, R. 2004. Regulations, market structure, institutions, and the cost of financial intermediation. *Journal of Money, Credit, and Banking*, 36(3).

Demirgüç-Kunt, A., & Huizinga, H. 1999. Determinants of commercial bank interest margins and profitability: Some International Evidence. *World Bank Economic Review*, Oxford University Press, 13 (2).

Detragiache, E., Thierry, T., & Gupta1, P. 2006. Foreign banks in poor countries: Theory and evidence. *IMF Working Paper*. (18).

Grubel, H. 1977. A theory of multinational banking. *Quarterly Review*, Banca Nazionale del Lavoro, Rome, Italy.

Haas, Ralph de, & Iman van Lelyveld. 2003. Foreign banks and credit stability in Central and Eastern Europe: Friends or foes? A Panel Data Analysis, *MEB Series*, 04, Research Series Supervision no. 58.

Haber, S. 2005. Banking with and without deposit insurance: Mexico's banking experiments, 1884-2004. *Latin America Program Working Papers*, 266, Stanford Center for International Development.

IMF Executive Board Concludes. 2006. *Article IV Consultation with Kuwait*, Public Information Notice (PIN) No. 06/35, March 29, 2006.

Institute of Banking Studies. 2006. Financial operating Report 2002-2006, Kuwait.

Jabsheh, F. 2001. *The GATS agreement and liberalizing the Kuwaiti banking sector*. Kuwait Institute for Scientific Research.

Jeon, Y., Miller, S. & Natke, P. 2003. Do foreign bank operations provide a stabilizing influence in Korea? *Department of Economics Working Paper Series*, University of Connecticut, 21 (August).

Joint Center for Housing Studies of Harvard University. 2004. *The State of Mexico's Housing 2004*. Joint Center for Housing Studies, Harvard University.

Kasmana, A., Kirbas-Kasmanb, S. & Carvalloc, O. 2005. Efficiency and foreign ownership in banking: An international comparison. *Discussion Papers Series*, No. 05/03, Department of Economics, Dokuz Eylul University.

Kim, H., Lee, B, Y. 2004. *The effects of foreign bank entry on the performance of domestic banks in Korea.* Background Paper, BIS CGFS Working Group on Financial Sector FDI, March.

Kindleberger, C.P.1983. International Banks as Leaders or Followers of International Business. *Journal of Banking and Finance*, No. 7.

Kraft, E. 2002. Foreign Banks in Croatia: Another look *A Croatian National Bank paper*, 11 (November). Kuwait Institute of Banking Studies. 2000. *Competitiveness of the GCC banking sector in case of opening the domestic market to GCC banks*.

Lee, H. 2004. Regulating multinational bank entry and participation in less developed countries: Where do we draw the lines? *Economics*, 721.

Lensink, R., & Hermes, N. 2004. The short-term effects of foreign bank entry on domestic bank behavior: Does economic development matter? *Journal of Banking and Finance*, 28.

Levine, R. 2002. Denying Foreign Bank Entry: Implications for Bank Interest Margins. In L. Ahumada & R. Fuentes (Eds.), *Bank competition*, Banco Central de Chile.

Micco, A., Panizza, U., & Yañez, M. 2004. *Bank Ownership and Performance, Inter-American Development Bank*, Working Paper Number 518, Washington, DC.

Papi, L., & Revoltella, D. 2000. Foreign Direct Investment in the Banking Sector: A Transitional Economy Perspective. In Claessens, S., & Jansen, M. (Eds.). *The internationalization of financial services—Issues and lessons for developing countries*, Kluwer Law International, London/The Hague/Boston.

Schulz, H. 2006. Foreign Banks in Mexico: New Conquistadors or Agents of Change? Paper presented at the annual meeting of the *Midwest Political Science Association*, Chicago, Illinois, Available at http://www.allacademic.com/meta/p140377_index.html.

Stein, J.C. 1997. Internal capital markets and the competition for corporate resources. *Journal of Finance*, 52.

Uiboupin, J. 2004. *Effects of foreign banks entry on banks performance in the CEE*. Faculty of Economics and Business Administration Working Paper Series, Tartu University Press, 33.

Unite, A,. & Sullivan, M. 2001. *The impact of liberalization of foreign bank entry on the Philippine domestic banking market*, PASCN Discussion Paper Series, 8, Philippine APEC Study Center Network, Manila.

United Nations Galaxy as the Ultimate Born-Global Organization: Contributions to the Study of FDI and TNCs

Tagi Sagafi-nejad⁵
Texas A&M International University, Laredo, Texas, USA
Email: tagi.sagafi@tamiu.edu

INTRODUCTION

The changing character and increasing complexity of the *problematique*⁶ of the relationship between TNCs and nation-states has been reflected in the way the various entities of the UN galaxy have perceived and performed their mandate and faced emerging challenges during the past half-century. With respect to TNC-host country relations and particularly FDI and the related subject of corporate conduct, two competing institutional paradigms have persisted - one legalistic, the other moralistic. Followers of the legalistic approach have argued that, in order to be efficacious, rules of conduct and behavior must have legal teeth, i.e., courts, cops, and penalties. Moralists, on the other hand, have relied on less formal incentive structures, e.g., mutual benefit, good citizenship, corporate social responsibility, engagement, dialogue, and the learning process.

New York and Geneva have formed the axis for United Nations activities on TNCs, and UNCTC and UNCTAD in these cities have played pivotal roles. However, other UN agencies, scattered worldwide, have played their specific, and sometimes significant, roles. Each is part of the United Nations constellation that has contributed to knowledge and understanding about TNCs and FDI, and contemplating the relative merits of these alternative approaches, as they have discharged their respective duties. To fully comprehend the magnitude of the system's role in enhancing this knowledge and understanding about TNCs, a brief review of these institutions is necessary. Within their particular natures and mandates, each has added value, and continues to contribute to a better appreciation of the subject. If a global compact, accord, convention, or rules of engagement to TNC activity are ever to emerge, it will most likely be a result of the confluence of these seemingly disparate efforts.

An exhaustive review and analysis of the two organizational focal points for matters dealing with TNCs and FDI – UNCTC and UNCTAD – have been done elsewhere⁷. The present essay surveys TNC-related work undertaken by other UN agencies. The International Labor Organization (ILO) has made significant contribution to the work on labor issues; over the last thirty years or more, its studies on "multinational enterprises and social policy" have led to a particularly noteworthy policy statement, the "Tripartite Declaration", to be described later. The guardianship of intellectual property rights under the World intellectual Property Organization (WIPO) dates to the Paris Union of 1883 and the Berne Convention of 1886. Work of the World Health Organization (WHO) has dealt with topics such as the marketing of breast milk substitutes by TNCs and the convention on tobacco control. As its name implies, the United Nations Industrial Development Organization (UNIDO) has been particularly interested in the extent to which, and the ways in which, TNCs help promote the industrial restructuring of developing countries. Other UN entities which are part of this constellation are the United Nations Educational, Scientific and Cultural Organization (UNESCO); United Nations Environmental Program (UNEP);

⁵ The author is the Radcliffe Killam Professor of International Business and Director of the PhD Program in International Business Administration at Texas A&M International University, Laredo, Texas. This paper is part of a larger project, *The UN and Transnational Corporations: Eye of the Storm – from Code to Compact* (Indiana University, forthcoming), sponsored by the UN Intellectual History Project, whose support is gratefully acknowledged.

⁶ The term is short-hand for the bundle of complex issues which form the relationship between nation-states and TNC.

⁷ See Tagi Sagafi-nejad, in collaboration with John H. Dunning, *The UN and Transnational Corporations: Eye of the Storm – from Code to Compact* (Indianapolis: Indiana University for the UN Intellectual History Project, forthcoming).

United Nations Development Programme (UNDP); United Nations Children's Fund (UNICEF); and the three Bretton Woods institutions - the World Bank, International Monetary Fund and GATT, [later, the World Trade Organization (WTO]). The last of these may yet be thrust onto center stage. The future of this constellation will be later examined in light of 21st century developments, the pressures of globalization, and the initiatives under way to, once again, "reform" and "restructure" the United Nations system. Each of these UN entities has left its own indelible mark, reflective of its mission and culture. Some have seen their relations vis-à-vis TNCs as a practical one; others have been driven more by advocacy. A glance at the agenda of each reveals continuity at the systemic level, as well as differences in approach, strategy and tactic between constituent parts, and some important changes over time.

There are some thirty UN agencies that interface with TNCs. Nearly a dozen of them have a more intense interest in TNC/FDI matters, thus forming what we will refer to as the United Nations galaxy. Each member of this system has, in some way or other, contributed to our understanding of the interaction between TNCs and the countries which are host to their activity. However, the exact nature of the relationship depends on three contextual parameters, the stakeholders, the issues and the time. By virtue of its mandate, each agency deals with a set of discrete issues each of which necessitate certain stakeholders' involvement. For example, pharmaceutical TNCs are more likely to have a stake in health initiatives designed and implemented by the World Health Organization (WHO) than, say, TNCs in the information and entertainment services which would be more likely to have a greater stake in policies that impact trans-border data flows and information services.

Time, the third element, impacts the relationship between TNCs and host countries and the role each UN agency plays; the players, the issues, the agenda, and the overall tone and tenor change with time. In addition, the inter-organizational dynamics, that is, the interface between and among these members, and their common interests around the common cause has a potential impact on policies that may emerge from each agency. The constellation of UN agencies with a stake in the subject of TNCs and FDI is illustrated in Figure 1.

This paper identifies the key members of this galaxy – setting aside the UNCTC-UNCTAD component - and reviews their respective roles, with emphasis on the International Labor Organization (ILO), the World Health Organization (WHO), and the World Intellectual Property Organization (WIPO). After a more cursory look at others in this constellation, we will end with an analysis of the UN Global Compact, an initiative launched by Kofi Annan in 1999 designed to bring together TNCs and other organizations to follow some minimum set of voluntary behavioral standards rooted in the very existence of the UN spirit and anchored in its many declarations, resolutions, and mandates, most notably the Millennium Development Goals, which have come to serve as an anchor for all parts of the UN galaxy.

THE INTERNATIONAL LABOR ORGANIZATION

The International Labor Organization (ILO) was established in 1919, the same year as the Paris Peace Conference and the Versailles Treaty that ended World War I, and two years after the October Revolution in Russia. When the United Nations was created in 1946, the ILO became its first specialized agency. Through its unique tripartite structure of governments, workers and employers, the organization seeks to promote social justice and internationally recognized human and labor rights insofar as they relate to commercial transactions between employers and employees. The ILO Charter states that universal peace can be achieved only if based on social justice, and labor conditions characterized by "injustice, hardship and privation to large numbers of people" could produce "unrest so great that the peace and harmony of the world are imperiled". Indeed, in the opinion of Kari Tapiola, one of ILO's four executive directors under Director-General Juan Somavia, the creation of the ILO arose from the social injustices and tensions in the workplace had fuelled "conflict, revolt, revolution and war".

By 1939, the ILO had already covered issues regarding hours of work, employees' minimum age, workers' compensation, workplace safety, insurance, and abolition of forced labor in some 67 separate Conventions. The original declaration had already established that:

- Labor is not a commodity;
- Freedom of expression and association are essential to sustained progress;

- Poverty anywhere constitutes a danger to prosperity everywhere; and
- The war against want requires national effort, supported by concerted international effort in which the representatives of workers and employers, enjoying equal status with those of governments.

These principles were reaffirmed in the 1944 Declaration of Philadelphia (see Box 1) on May 10, 1944, the details of which are set out in Box I. The Declaration laid the groundwork for the incorporation of the ILO into the newly-born United Nations system. Franklin Roosevelt, then US Secretary of Labor headed the US delegation to the convention, which reaffirmed the initial 1919 mandate. The Declaration was a potent expression of the conviction that labor rights were high on the agenda of this international organization, and that "the failure of any nation to adopt humane conditions of labor was an obstacle in the way of other nations which desire to improve the conditions in their own countries".

The Communist slogan "workers of the world, unite!" may have remained unfulfilled by the creation of ILO, but the philosophy underscoring it undoubtedly gave impetus to the cause that the organization was to champion. At least that is how the Soviet bloc viewed the organization's mission. After all, it was the only major international organization in which "workers" which Communism saw as its natural ally, were directly represented on equal footing with firms and governments.

This organization formulates international labor standards in the form of Conventions and Recommendations, setting minimum standards for basic labor rights, including the right to organize, collective bargaining, equality of opportunity and treatment, and other standards regulating conditions across the entire spectrum of work-related issues. The ILO also provides technical assistance in vocational training and vocational rehabilitation, employment policy, labor administration, labor law and industrial relations, management development, cooperatives, social security, and labor statistics and occupational health and safety. It's Director-General in 2006, Juan Somavia (see Chapter 4 on UNCTC) believes that its tripartite structure, unique among UN agencies, has workers and employers participating as equal partners with governments.

Box 1

The Philadelphia Declaration

The Philadelphia Conference on May 10, 1944 made it the solemn obligation of the International Labor Organization to further among world nations, programs which will achieve:

- (a) full employment and the raising of standards of living;
- (b) the employment of workers in the occupations in which they can have the satisfaction of giving the fullest measure of their skill and attainments and make their greatest contribution to the common well-being:
- (c) the provision, as a means to the attainment of this end and under adequate guarantees for all concerned, of facilities for training and the transfer of labor, including migration for employment and settlement:
- (d) policies in regard to wages and earnings, hours and other conditions of work calculated to ensure a just share of the fruits of progress to all, and a minimum living wage to all employed and in need of such protection;
- (e) the effective recognition of the right of collective bargaining, the cooperation of management and labor in the continuous improvement of productive efficiency, and the collaboration of workers and employers in the preparation and application of social and economic measures;
- (f) the extension of social security measures to provide a basic income to all in need of such protection and comprehensive medical care;
- (g) adequate protection for the life and health of workers in all occupations;
- (h) provision for child welfare and maternity protection;
- (i) the provision of adequate nutrition, housing and facilities for recreation and culture;
- (j) the assurance of equality of educational and vocational opportunity.

Source: www.ILO.org

Whether indeed harmony has always been the order of the day is an open question. Even if that is the case in early 21st century, it was not always so. A former Director-General Francois Blanchard recalls the tough1970s, marred by "the oil crisis, unemployment going up sharply in Western countries, and poverty spreading everywhere in the world", as the context within with the organization was attempting to arrive at its own "very heated discussion in the International Labor Conference and also in the governing body of the ILO on topics ranging from conditions of work, of course freedom of association, but mainly poverty and unemployment". It was in this context that the problem of Multinational Corporation was brought up, especially at the insistence of the trade union federation, according to Blanchard. He elaborated further:

"In the governing body we have a group of 14 workers representative of major trade unions in the world who became very vocal about the conduct, so to say, of multinational corporation—a notion, a concept which emerged very sharply and dramatically from this economic context, namely the fear expressed on all sides about the future and about the problems of the working people. The discussion started in the ILO in extremely difficult circumstances because the employers group was extremely reluctant to enter this debate the workers groups were pushing hard and governments extremely were divided. The USSR came back into the ILO in 1954. And the USSR and its allies were trying to use the ILO as a platform".

The organization had witnessed much tumult during its early years - in the interwar period that E. H. Carr called the "twenty year crisis". As the ILO was being born, the world was recovering from war, soon to slide into protectionism and depression, only to be thrust again into a second world war. After World War II ended, the ILO became caught in the middle of the East-West rivalry. Its tripartite structure consisting of governments, employers, and labor, became both its strength and its weakness. Because Soviet bloc countries made little distinction between government and labor representatives, since all means of production was government-controlled, it was difficult to distinguish between the two stakeholders. This became an added complication for the organization.

On its fiftieth anniversary in 1969, ILO received the Nobel Peace Prize. In 1977, the United States created a minor crisis by withdrawing its membership and financial support. The US was not pleased with what it considered left-leaning propensities, and the fear, real or imagined, of Soviet infiltration into the organization's ranks. It returned to the fold in 1980, during Ronald Reagan's first year as President.

As the activities of TNCs and FDI grew, so the ILO also began to take interest in their implications for labor and human resource development. However, it was not until the 1970s, when the organization went into high gear. At its 1971 General Conference, the ILO adopted a resolution on the "Social Problems Raised by Multinational Undertakings", which, *inter alia*, set out a program of work, including studies, conferences and consultations involved its three constituent groups. At the same time, organized labor in the United States and Western Europe also began to expand beyond national confines. Trade unions such as the US-based United Auto Workers (UAW) and its Canadian and European affiliates set out to improve workers' conditions by collectively striving to harmonize labor practices. Under the auspices of trade unions, numerous meeting were held with TNCs such as Philips, General Electric, Shell, Nestle, and Grace.

At its 185th Session in Geneva, February-March 1972, the ILO Governing Body decided to convene a meeting on the subject of TNCs and social policy. A group of 24 experts drawn from governments, employers, and workers' groups attended this meeting in Geneva in October and November of that year. In a brief series of seven conclusions, the group recommended that more data be collected and more studies be conducted on the subject. In its penultimate paragraph, the experts requested the Governing Body to instruct the ILO Director-General to undertake "a study of the usefulness of international principles and guidelines in the field of social policy relating to the activities of multinational enterprises, and the[ir] elements and implications".... It added that if this study were to prove that they were feasible and useful, the Governing Body should initiate action to establish them.

It is interesting to note that the ILO expert group's reference to "principles" and "guidelines" and the tone of its recommendations stands in sharp contrast to those of the Group of Eminent Persons that were to come two years later. The ILO was content with voluntary guidelines in the hope that they would subsequently take the form of law as member countries ratified and adopted them, the ILO route to the regulatory approach.

While ECOSOC and UNCTAD were perhaps most heavily involved members of the UN galaxy, as noted in Chapters Four and Five, the ILO was making its own contribution to capacity-building, knowledge-creation and policy with respect to TNCs or, in ILO parlance, multinational enterprises – MNEs - and FDI. Its work included a number of studies which started in the late 1960s and continued into the 21st century. Abebe Abate, an ILO officer who was involved in the early work related to the topic, related that, even before the General Assembly resolution led to the creation of the UN Centre, the ILO's International Institute for Labor Studies had carried out a number of studies on industrial relations and TNCs, which led to subsequent ILO work.

Once the UNCTC was established, the ILO constituents, the organization itself and particularly its Governing Body, came to believe that the ILO should deal with the labor and social aspects of TNC activities. The interest in the ILO work was as keen from workers as it was from governments, especially developing country governments. Employers were more ambivalent, but were involved nonetheless. Although the Soviet bloc countries were present during these discussions, there was much more interest from the G-77 countries because they believed that their political independence was being undermined by their strong economic dependence on former colonizers and their allies. Consequently, these countries viewed TNCs with a degree of suspicion, as if they were surrogates for the erstwhile colonial masters. As Abate, Blanchard and other ILO staff saw it; this was the crux of the problem in the 1970s. The sentiment was subtle but was nonetheless there.

Between 1969 and 1974, the ILO conducted a number of studies, established working groups, and held meetings of experts on the subject of multinational enterprises. These studies convinced the staff that something had to be done to contain the "negative" influence that MNCs were having on governments and the economy of developing countries. As a result of these studies and formal and informal discussions among interested parties, a consensus emerged to have a "voluntary code" that could be enforced and monitored and to propose a "declaration" addressed to employers, including TNCs, governments, and workers' organizations.

Thus was born the Tripartite Declaration. Early contributors to the development of ideas included François Blanchard, a French scholar-diplomat who had worked at various international organizations before taking the leadership position in ILO in the later 960s. He had strong ideas about labor relations and the role of employment in economic development.

Early ILO studies, all within the context of "multinational enterprises", focused on "wages and working conditions" and their impact on "employment and training" (1976); "social and labor practices in the Petroleum industry" (1977); "employment effects in developing countries" (1981); "technology choice and employment generation in developing countries" and "safety and health practices" (1984); "women workers in developing countries" (1985); and "multinationals and employment: the global economy of the 1990s" (1993).

Examples of later work related to multinational enterprises include those under the "Multinational Enterprise Programme Working Paper Series" on subjects such as "technological and regulatory changes affecting multinational enterprises in telecommunications"; "export processing zones in the Philippines"; "export processing zones in Bangladesh"; and "multinational enterprises in the courier service industry. Some periods have seen a flurry of publications; at other times they have been scant. On the policy front, by contrast, the ILO has made steady progress, coming face-to-face with adversarial and controversial issues such as child labor and right to work. Consistent with the ILO's overall mission, each study adds knowledge about TNC practices and their effects on employment. Whereas a superficial similarity can be

_

⁸ Interview with the author, Geneva, in 2002.

noticed between these studies and similar ones undertaken by UNCTC/UNCTAD, OECD or the World Bank, the ILO focus has, naturally, always been on labor.

The ILO's first major policy publication, which led to the formulation of the Tripartite Declaration, came in the form of a 1973 study, *Multinational Enterprise and Social Policy*. This was to the ILO what the 1973 background report for the Group of Eminent Persons, *Multinational Corporations in World Development* was to ECOSOC in New York. As noted in Chapter Four, the latter laid the foundations for the United Nations organizational architecture related to TNCs. Similarly, most, if not all, subsequent work on TNCs within ILO can be traced to this 1973 report on the impact of TNCs on workers.

In a style resembling its ECOSOC counterpart, this ILO report drew upon submissions by governments and labor, its own in-house expertise, and upon scholarly work. For example, pioneering studies of labor and employment-related aspects of MNEs had been done in the US by Raymond Vernon and his colleagues and students at Harvard, and by other US scholars including Jack Behrman, Robert Hawkins, Duane Kujawa, and Stephen Magee; and, in Europe by John Dunning, W. B. Reddaway, Danny van den Bulcke, and Sidney Rolfe among others. These studies had generally concluded that the international expansion of TNCs, partly driven by differential labor costs around the world, had had a positive impact on employment in both home and host countries although different sectors were affected differently.

The ILO report examined the nature and growth of TNCs, their geographic and industrial concentration, their impact on labor and employment, types of headquarters-subsidiary arrangements, technology transfer, and the structure of trade. It attributed the "emotional responses" that TNCs had evoked "in all areas it has touched – political, fiscal, economic and, not least, social" to the complexity of the relationship.[p. 24] It emphasized both mutuality and conflict of interests between firms and nation-states. The report was succinct and even-handed, devoid of the rhetoric that had spilled into some of the earlier debates.

The report devoted a chapter to the effect of TNCs on manpower in both home and host countries. It concluded that, in the absence of detailed and rigorous case studies, the only warranted generalization was that TNCs could be exemplars of enlightened and effective management in their labor relations and employment development programs in developing countries. The employer-employee relationship, if based on fairness and reciprocal respect, could benefit both the firm and the host country p. 62]. The report dealt with work conditions and their international harmonization and the impact of cultural differences on them, and on wage parity, welfare facilities, and living conditions. The articulation of fair international labor standards was a persistent theme of the report and became enshrined a quarter century later in the 1998 Declaration on Fundamental Principles and Rights at Work, which updated the original declaration, and placed particular emphasis on the abolition of child labor, to be discussed later.

The original 1973 study concluded that more work was needed on how TNCs impacted on working conditions and how industrial relations might function in a multinational context. Appended to the report was a 60-page summary by the expert group on the relationship between TNCs and social policy, its composition, and its recommendations. Earlier, the expert group had consisted of eight representatives from each of the three pillars of the ILO, employers, employees, and governments. Observers from UN agencies, other international organizations, and employee and employer organizations also participated.

The Tripartite Declaration

After a multitude of background studies and months of discussion, in November 1977 and negotiations, in November 1977, the governing body of the ILO adopted a statement of principles on TNCs and labor-related issues. The declaration was unique in having been blessed by it three groups of stakeholders – governments, employers and employees. From this tripartite vantage point, the ILO had been concerned with certain social issues related to TNCs for many years. Noting efforts underway within the UNCTC and OECD, it established a series of guidelines for its three stakeholders. This "Tripartite

Declaration", noted the "substantial benefits" to home and host countries that result from the activities of TNCs, through FDI and other means. Its aim was to encourage positive contributions TNCs can make to economic and social progress and to minimize and resolve the difficulties to which their various operations may give rise, taking into account the United Nations resolutions advocating the Establishment of a New International Economic order. This last phrase, while giving expression to the sentiments of developing countries, incurred the wrath of Western governments by linking the document to the divisive and confrontational concept of the NIEO. The Declaration also addressed other specific and relatively non-controversial matters pertaining to labor relations, including employment promotion, equality of opportunity and treatment, employment security, training, safety and health, industrial relations, freedom of association and the right to organize, collective bargaining, consultation, examination of grievances, and settlement of disputes. Each statement was grounded in one (or more) previous ILO conventions or recommendations, thus giving the instrument further legal legitimacy. Even if this Declaration was not used by governments to create its national laws on labor matters, at the very least, it served as an educational tool.

The administration and implementation of the Declaration proved to be a more difficult task as the organization became caught in political tensions that arose from East-West rivalry. The ILO began developing a series of training programs around its basic principles. More significantly, some provisions of the Declaration did indeed find their way into the national legislation of various countries, albeit in varying degrees. Meanwhile, the organization continued the task of fine-tuning labor standards, through capacity-building, dialogue and research. As with similar initiatives, the Declaration took on a life of its own. A review process was initiated to monitor adherence and to report on progress to the ILO governing body.

The 1998 ILO Declaration on Fundamental Principles and Rights at Work

Some two decades after the initial Declaration, the ILO governing body as well as its leadership under Juan Somavia concluded that changed global labor relations required a revisiting. Worsening conditions of work caused by outsourcing, lay-offs, and footloose industries demanded a commensurate response on behalf of labor. Thus, in 1998, the Declaration on Fundamental Principles and Rights at Work (Rights at Work) were adopted as an update to the original 1976 Declaration. It reaffirmed the rights of workers to collective bargaining and free association, but put the spotlight on the abolition of child labor and of employment discrimination. Seeing the cloud of protectionism hanging over the global economy and the stalled multilateral trade negotiations, it also cautioned states against the use of labor standards as a pretense to engage in protectionist policies.

The Rights to Work declaration was a commitment by governments, employers and workers' organizations to uphold basic human rights of freedom of association and the right to collective bargaining; the elimination of forced and compulsory labor; the abolition of child labor; and the elimination of discrimination in the workplace.

Box 2

The 1998 ILO Declaration on Fundamental Principles and Rights at Work

- 1. Freedom of Association and Protection of the Right to Organize
- 2. Right to Organize and Collective Bargaining
- 3. Forced Labor
- 4. Abolition of Forced Labor
- 5. Discrimination (Employment and Occupation)
- 6. Equal Remuneration
- 7. Minimum Wage
- 8. Worst Forms of Child Labor

Source: www.ilo.org

Since 1998, the ILO has sought to put these ideas into action by maintaining an active interest in areas of extensive TNC involvement, particularly where this involvement might give rise to conflicts between management and labor. It conducts training for all three stakeholders, but more often to

developing countries seeking advice on labor-related matters. It also dispatches missions to mediate labor-related disputes or complaints. Mission reports are submitted after the conclusion of an official visit, but, due to the sensitivity of the parties to any negative publicity or repercussions, reports on such meetings are usually confidential. Nevertheless, this type of hands-on activity demonstrates areas where theory and policy meet.

Between its establishment in 1919 and 2006, the ILO had adopted nearly 200 separate conventions, covering the entire spectrum of labor relations, which are collectively called "core labor standards". The organization has been more frequently embroiled in controversy than UNCTAD not only because of its views on labor-related issues but, more importantly because many of these conventions lead to regulatory action at the national level. It was thrust in the midst of a crisis in Myanmar in 2001 when it took on the issue of child labor - the 8th Convention of the 1998 Declaration. A year earlier, two Myanmar workers, Aye Myint and Su Su Nwe, had lodged complaints of forced labor with the ILO and the Myanmar government. The ILO field officers pursued the matter even though they received death threats. Enraged, the government threatened to withdraw from the ILO. ILO leaders were angry, and its Governing Body expressed "grave concern" and "firmly rejected" what it viewed as "attempts to influence the ILO's position through various forms of pressure and intimidation". After negotiations involving Myanmar's UN ambassador in Geneva and an ILO mission to the country in 2006, the Myanmar government decided to cooperate rather than to withdraw. However, the situation was unchanged, and the matter was placed on the agenda of the International Labor Conference at its annual general assembly in June of that year. Thus, some five years after the aggrieved workers had filed their complaints, the ILO continues to exercise its soft power on their behalf. In his 2006 report to the ILO Governing Body written before the Conference, Director-General Somavia acknowledged that the only way there could be progress on this matter was through the cooperation of the government of Myanmar. His statement confirmed the supremacy of the nation-state vis-à-vis the international organization.

The ILO has also been involved in other complaints filed under article 26 of its Constitution. One was its 2004 investigation into whether the government of Belarus had violated the ILO convention of 1948 on freedom of association and protection of the right to organize as well as the 1949 collective bargaining convention. The ILO Governing Body expressed concern that Belarus not only had not cooperated; but that the country was on a path toward the elimination of all remnants of an independent trade union movement. The ILO initiated an investigation of similar complaints filed against Venezuela that charged it with violating the same conventions on freedom of association and collective bargaining.

The Myanmar case and others illustrates the extent to which a voluntary international organization can project its limited "soft power" vis-à-vis nation-states, a power itself that emanates from this tripartite group of stakeholders. The government, as part of this group, ideally can be a balancing force by virtue of its representing all citizens. Moral suasion, awareness, and education among stakeholders may be the most that can be expected.

In summary, while the Tripartite Declaration has proved its staying power, it has also been tempered in accordance with changing times. The governing body issued a revised version of the Declaration in 2000, widening the social content of the original document to take account of the changes in the global economy and the added emphasis on social responsibility issues. In 2004 a Committee was established to oversee the implementation of the Declaration. The Organization has also spearheaded other proactive initiatives under Somavia, including the establishment in 2002 of a World Commission on the Social Dimensions of Globalization. To be sure, the organization has had to navigate a delicate path, not an easy task given the tripartite structure of eh organization and the diversity within each of the three groups. Jill Murray, one of these critics of TNCs, worked within the ILO system at ACTRAV - the Bureau of Workers' Activities. She observed:

In an important decision in 1988, the Committee on MNE clarified the "balance" which the Declaration seeks to strike between the interests of MNEs and member states. To take the view that the minimizing negative social repercussions *per se* fulfils the overall purpose of the Declaration is therefore not correct.....Such action must also ... contribute to economic and social progress.

Murray concluded that the ILO Declaration cannot be used to redress misuse of MNE power, even when such power is used in breach of the Declaration itself. Nevertheless, in 1998, the Governing Body produced a major follow-up initiative, discussed above, namely the Declaration on Fundamental Principles and Rights at Work, demonstrating both the persistence as well as the resilience of the ideas first articulated in 1977. Director-General Juan Somavia has summed up the contributions of the ILO this way:

In many respects, the whole ILO convention system on workers' rights, which is negotiated here because we have legislative capacity, ... is adhered to on a voluntary basis because you have to ratify a convention for it to become a commitment—it is a mixture of international decision-making plus national decision-making, ... [and it] has been very successful because it is the basis of most labor legislation in the world.⁹

On the structure of the ILO, Somavia believes:

The strength of the ILO structure [lies in the fact that] the people sitting in the governing body for the employers represent the international organizations of employers, which ... [are] active in [more than] 130 ... countries.... And the fourteen workers, most of them come from the International Confederation of Free Trade Unions (ICFTU), and the World Confederation of Labor, who represent in total about 220 million organized workers throughout the world. So these are real democratic structures in terms of the fact that the people who get here are elected by their peers. (Somavia interview with Tom Weiss, 2001, P. 65)

Such is also the case with the Global Compact, the UN Secretary-General Kofi Annan's initiative to cajole TNCS into good corporate citizenship, discussed more fully later in this chapter. However, first, we examine the legislative approach taken under the World Health Organization to curb tobacco use, advertising and trade. It is an example of an alternative approach to the ILO Tripartite Declaration, relying more on national legislation than soft power, taking a regulatory rather than a normative approach.

THE WORLD HEALTH ORGANIZATION (WHO)

As the global guardian of public health, the World Health Organization has wrestled with TNC issues on a number of occasions. This specialized UN agency, established in 1948 to promote heath, especially in developing countries, has challenged the marketing practices of manufacturers of breast milk substitutes, thereby bringing about changes in how TNCs market their products to poor rural inhabitants of Third World countries. On medical matters, it has called to task the world's pharmaceutical giants by drafting codes of conduct. On another global health matter - smoking - it has focused attention on tobacco companies. Although there are other examples of the interface between WHO and TNCs, these three deserve particular attention.

The Framework Convention on Tobacco Control

It has been long recognized that tobacco smoking is a serious health hazard. The thousands of deaths associated with tobacco-related illnesses and staggering health care costs demonstrate tobacco's deleterious health effects in unequivocal terms. Extensive research by the US National Institutes of Health, the World Health Organization, and court rulings in several countries, provides further confirmation. The history of efforts to control tobacco consumption and the advertising, production, manufacture and trade in tobacco, is lengthy and amply documented.

The hundreds of millions of individual smokers constitute the main stakeholders. Next are the producers, manufacturers and traders of tobacco. As guardians of public health, national governments and international agencies must also be included as stakeholders, as their mandates are to protect the health and welfare of their constituents. The latter organizations include the United Nations, through its

_

⁹ Source: Somavia interview with Tom Weiss, p. 60.

specialized agency, the WHO. Ancillary groups – consumer associations, civil society organizations and other interest groups - are active at the margin. Each of these groups then, in one way or another, have a stake in the outcome of the tobacco initiatives, be this the livelihood of tobacco producers and their workers, governments that bear the costs of health care and forgo tax revenues lost when consumption declines, and tobacco users, whose health (and choice) may be at risk.

Although the harmful effects of tobacco have long been known, the attack on the tobacco industry began in earnest when individuals and groups brought suit against US tobacco companies in American state and federal courts, seeking reimbursement for health care expenditures incurred to treat their citizens' tobacco-related diseases. In 1985, a subcommittee of the US House Committee on Energy and Commerce, held hearings on the harmful health effects of tobacco. Ten years later, Dr. Jeffrey Wigand, who had worked for the multinational tobacco manufacturer and distributor, Brown and Williamson, became a celebrated whistle-blower when he revealed that tobacco companies had, over the years, withheld information from the public, and had "spiked" their products to render them more addictive, and incidentally, carcinogenic.

Over the following decade, other states, groups, and individuals brought suit. As defendants, tobacco companies lost many battles, succeeded in a few, and had some cases against them dismissed. Private and public agencies like Blue Cross/Blue Shield, the Food and Drug Administration, and the Federal Trade Commission each instituted litigation. This protracted tug of war between the tobacco companies and their opponents continued with mixed effects. Some companies like Liggett declared bankruptcy; some diversified; some further internationalized; and others developed aggressive and combative counterstrategies.

In 1997 tobacco manufacturers and a group of state attorneys-general in the United States reached a nationwide settlement of all claims - the Tobacco Resolution. It contained some of the same elements that ultimately found their way into the master settlement, namely consent by tobacco companies to refrain from certain behavior deemed harmful to citizens' health, including advertising. A year later, a Master Settlement Agreement was reached between forty-six states, the District of Columbia, and Puerto Rico and major tobacco companies, including Philip Morris, R. J. Reynolds Tobacco Co., Brown & Williamson Tobacco Corp., and Lorillard Tobacco Co. in which the companies agreed to pay \$246 billion over the ensuing 25 years in exchange for liability releases on past and future damages. Tobacco manufacturers unsuccessfully challenged the constitutionality of the Master Settlement, but the US Supreme Court affirmed its legality in 2002.

It was not long before the issues raised by litigations in the US percolated into the international arena. In 2000, following the recommendations of a United Nations inter-agency task force, the World Health Organization took up the challenge of investigating and publicizing the harmful effects of tobacco at the global level. The Organization's objective was to seek a global solution to a worldwide health hazard. Armed with its own studies and those of numerous medical researchers around the world, the WHO warned smokers, governments, and tobacco companies that smoking had become "the single biggest preventable cause of death". It estimated that in 2003, there were 1.3 billion smokers worldwide, half of whom were expected to die prematurely of a tobacco-related disease.

Efforts by the WHO to develop global rules to curb the advertising, promotion and sales and smuggling of tobacco products soon bore fruit. In May 2003 the Framework Convention on Tobacco Control (FCTC) was unanimously adopted during the 56th World Health Assembly in Geneva by the WHO member nations. It was the first international legal instrument negotiated under the auspices of the WHO, aimed at curbing the global spread of tobacco products. By the June 29, 2004 ratification deadline, 88% of the member nations had become signatories to the Convention. Of these, thirty became "parties" to the treaty by virtue the subsequent steps of ratification, acceptance, approval, formal confirmation, or accession.

The tobacco industry was united in its opposition to the WHO initiative. When the 191 nations of the WHO began negotiations in 2000 on FCTC, the world's seven largest global tobacco companies, including Philip Morris and Japan Tobacco were attempting to preemptively develop a voluntary pact. However, this pact was superseded by what transpired under the World Health Organization. The industry

association's web site did not explicitly refer to the WHO or the FCTC. Instead, it focused on tax revenues collected by governments from sales of tobacco products. The tobacco companies' response to the FCTC was a resilient and positive one comprised a complex mixture of strategies, akin to their post-Master Settlement behavior. These companies showed considerable resilience in the face of these hostile political and social environments by employing various strategies that have resulted in an industry performance on a par with, or better than, the manufacturing industry as a whole. One such strategy was product diversification. Several tobacco manufactures diversified into food and other products. Another was expansion through global acquisitions – particularly in Central and Eastern Europe and China.

Philip Morris, the largest, pursued a twin strategy of product and geographic diversification, aggressively diversifying its product portfolio by acquiring food, beverage, and other companies while also restructuring into Philip Morris International and Philip Morris USA to more effectively expand in the global market. However, even as it diversified its product profile away from tobacco, the company expressed its agreement with some FCTC objectives. In its own words:

"Among the areas where we share common ground with the WHO are the prevention of youth smoking; reasonable restrictions on marketing; efforts to continue to inform the public about the health consequences of smoking and the benefits of quitting; regulation of the content of tobacco products; package labeling requirements; reduction and elimination of cigarette smuggling; and reasonable restrictions on smoking in public places."

Other major players have pursued similar strategies, although R.J. Reynolds Tobacco Company (not to be confused with R. J. Reynolds, Inc.) was silent with respect to the FCTC. Others including BAT and Japan Tobacco faced the Convention head-on. Japan Tobacco, which traces its heritage to 1898, was reconstituted after its purchase of R. J. Reynolds, Inc. in 1999. As manufacturer of three of the world's most recognizable brands - Camel, Salem, and Winston – in 2004, Japan Tobacco controlled three-quarters of the Japanese tobacco market. The company testified and provided other documentation to challenge the premises of the FCTC:

"We represent not only our 45,000 employees worldwide, but also millions of people who depend on us for their livelihoods – tobacco growers, suppliers, and retailers.... While we are willing to cooperate and work with the WHO, the principle of "proportionality" demands that the impact of a proposed regulation needs to be proportional to its expected benefit. The FCTC fails to meet this key test."

BAT echoed many of the sentiments expressed repeatedly by others in the industry:

"As the producers of a legal product we assert the right to communicate with adult consumers and also the right to participate in international trade. We take issue with the notion that the world in the 21st century is faced with a tobacco "epidemic" that is "spreading across national borders"... that international tobacco companies are ... "spreading the epidemic" and that advertising is claimed to be the "tool" to do so....[T]obacco use was widespread in all countries in the world for centuries, well before the advent of either international tobacco companies or mass

market advertising.

We have always recognized the right of governments to regulate tobacco products at a national level.... We believe that it is our right to participate in the regulatory process, and we are concerned about efforts to preclude our participation or to undermine our legally protected fundamental rights. If there is to be a convention, it should for the majority of issues be limited to non-binding guidelines for national governments. ...[W]e do recognize the role of the WHO in supporting governments with health policy advice based on sound science... [and] it is appropriate for the WHO to advise on tobacco control measures within its field of expertise."

In this statement, BAT recognized a role for the WHO, but one more limited than that envisioned by the FCTC. The industry was, nevertheless, steadfast in its belief that it had rights, too, and that only

governments can regulate, so any international accord can not be more than voluntary. These arguments have the echo of similar debates when, a quarter century earlier, codes of conduct were being crafted fro TNCs under the auspices of the UNCTC. Here the path to regulation, emanating from national governments, percolating up to the international level, taking the form of a Convention, which in turn worked its way down into the national level and takes the form of national legislation, meant that the process had come full circle and ended in a tangible instrument armed with legal teeth.

While the tobacco companies appeared to have accepted the underlying premise of the FCTC, namely, the harmful health effects of tobacco, and have shown some willingness to move toward the fulfillment of the Convention's goals, it is clear that there is some disagreement in the industry as to how far the FCTC should go in curbing companies' production, marketing and distribution, traditionally the domain of private enterprise. Most, if not all, tobacco companies oppose a binding international instrument proposed by the FCTC. Secondly, others prefer to invoke the widest possible spectrum of stakeholders or stress basic rules of competition in a free market system, and individual choice. Thus there is no "intra-stakeholder unanimity" on how to countenance this external challenge. This was evidenced by some companies breaking ranks during the litigation process.

This uneasy, if not hostile, environment continues to cast its shadow over the tobacco companies. In 1999, the US Justice Department had begun preparations to file a massive suit in US federal court, again charging tobacco companies with conspiracy to defraud consumers by denying the dangers of smoking, and by deliberately marketing cigarettes to underage youth while knowing about the causal link between smoking and disease. After five years, federal prosecutors brought this action for damages in September 2004, demanding that the companies "disgorge" \$280 billion in "ill-gotten gains". Based on the 1970 Racketeer Influenced and Corrupt Organizations (RICO) Act, originally aimed at the Mafioso, the action was certainly one of the, if not the, largest judicial assaults ever launched by government on a legal industry. Plaintiffs' attorneys sought \$120 Billion in damages, charging tobacco companies with making claims that light cigarettes were healthier. If convicted under this law, companies would have to pay triple damages of \$260 billion.

Tobacco companies responded vigorously, denied the charges, and went on the attack as they had in earlier court battles. It is noteworthy that press coverage of this case did not mention the WHO or its Framework Convention on Tobacco Control (FCTC). A federal appellate court later reversed the decision. Yet the legal battle continued on several fronts through the US court system. Meanwhile, the WHO continued its efforts to seek ratification of the Convention by member-nations, while the tobacco industry fought a series of court battles in the United States and other countries. Remarkably, no tobacco companies went bankrupt. On the contrary, as noted earlier, the industry enjoyed an above-average profit margin in an increasingly hostile environment.

WHO vs. Nestle

Several years earlier the World Health Organization was embroiled in a well-published controversy involving the marketing and distribution of infant food products. In the 1970s, Nestle, the giant Swiss TNC, was accused by activists in Western Europe and North America of engaging in unfair and unethical marketing practices in developing countries, primarily Africa, where it sold its powdered milk and other infant food products. Critics claimed that the company engaged in deceptive marketing practices by dressing its sales force in white doctor-like garb, giving free samples to induce mothers to change from nursing their babies to feeding them infant formula, and bribing doctors to advocate breast milk substitutes. Activists, primarily in Western Europe and North America, mobilized and initiated a worldwide boycott of Nestle products. Concerted campaign was spearheaded by Douglas A. Johnson at the Newman Center in Minneapolis, Minnesota, who organized Infant Formula Action Coalition (INFACT) and sought a widespread consumer boycott of all Nestle products. The grass roots campaign in the US, Germany and various other countries to boycott Nestle turned out to be very effective. Organizers argued that children fed infant formula had an infant mortality rate three times as much as those breastfed; beside; breast milk also served as a natural contraceptive; and poor and illiterate mothers diluted the milk to stretch their meager income, causing diarrhea and other childhood disease. Other claims included

the charge that Nestle dresses its sales personnel in nurse-like attire, giving the impression that formula food was medically acceptable, especially since some doctors, at the instigation of the company, also tried to convince mothers and hospitals to switch to powdered milk.

Nestle vehemently rejected these accusations at first and asserted instead that it was producing a product that was inherently safe and health, while also helping developing countries' economic development by promoting hygiene, scientific dairy farming, education and the creation of jobs. The intensity of the campaign caused some newspapers to ask whether the campaign, and claims than "Nestle kills babies' was fair. Under pressure, the company reversed its position and, with the assistance of the World Health Organization, and the nongovernmental organizations that had championed the boycott, worked toward change.

In 1981, WHO, in cooperation with UNICEF, Nestle, and other breast milk substitute manufacturers, crafted a voluntary code of conduct which established a number of parameters for marketing these products, especially in developing countries. As a gesture of good will, it agreed to establish an independent auditing committee, headed by the senior US Senator Edmund S. Muskie of Maine, who had just stepped down from the Senate and subsequently from a short stint as US Secretary of State. The company agreed to allow these outside auditors to monitor its compliance with the agreement. Some of its key provisions are set out in Box 3.

Box 3 Key provisions of the 1981 WHO code on the Marketing of Baby Food

Companies may not:

- promote their products in hospitals, shops or to the general public;
- give free samples to mothers or free or subsidized supplies to hospitals or maternity wards;
- give gifts to health workers or mothers;
- promote their products to health workers: any information provided by companies must contain only scientific and factual matters;
- promote foods or drinks for babies;
- give misleading information;
- contact mothers through baby milk company sales personnel;
- produce labels which are not in a language understood by the mother and which do not include a clear health warning:
- show baby pictures on baby milk labels;
- produce labels with language that idealizes the use of the product.

Source: http://www.babymilkaction.org/regs/thecode.html, retrieved June 12, 2006.

Critics seemed pacified by these steps, at least temporarily, although they did insist on continued adherence to these marketing restrictions by milk substitute manufacturers. Soft power seems to have hit Nestle hard, proving that results can be achieved this way, a route perhaps less difficult than through national legislation. In recent years a new wave of protest, albeit not as vociferous as the earlier ones, has been gathering momentum, but does not seem to have the voracity of earlier protests.

Other WHO Contributions

Similar controversies arose with respect to the manufacture of AZT, an anti-HIV drug in the 1980s. Pharmaceutical companies were pressured by NGOs, with some cajoling by the WHO, into complying with a code of conduct for the marketing of pharmaceuticals such as AZT. In 1988, WHO developed "Ethical Criteria for Medicinal Drug Promotion", based on a survey by Jean Boddewyn, a professor at Baruch College. Ten years later, the code still was found to be useful and thus was revised and updated. In 2006, under the aegis of WHO, GlaxoSmithKline agreed to lower the price of its

HIV/AIDS drug in developing countries inflicted with AIDS epidemic.

These two examples demonstrate a continuing interface with the World Health Organization and TNCs as both increasingly view collaboration as more beneficial and productive than confrontation.

UN GLOBAL COMPACT

Unlike the WHO initiative on tobacco, where the approach is regulatory, and the focus on control through legal teeth, the Global Compact initiative is normative, relying on the voluntary cooperation of TNCs. It is also intended as a general instrument and not specifically directed to any particular group of TNCs. Although the two UN efforts had similar aims - aiding developing countries and encouraging good global corporate citizenship, they differed on issues of rights and responsibilities and on tone and tenor. The WHO involvement in tobacco control was an essentially unilateral and confrontational approach, carried out in national legal courts through litigation (in the US) and legislative fiat. The Global Compact is first and foremost an ethics-based concept and instrument.

As the new millennium approached, United Nations Secretary-General Kofi A. Annan had seen the transformations in the economic and social structure wrought by globalization and its discontent as both a warning and an opportunity. The warning was the violent reaction of a coalition of erstwhile disparate groups against globalization and the international trading system typified by the demonstrations in Seattle in September of that year. The opportunity was to aim for a general consensus on the fundamental conditions under which global commerce, in all its forms, might be peacefully and productively conducted.

On January 31, 1999, at the World Economic Forum in Davos, Switzerland, the Secretary-General challenged the world business leaders there present, the elite of global capitalism, to rise to their social and ethical responsibilities by joining the United Nations in a global compact. The UN was ready to take the lead in this endeavor, and the TNCs and other large firms were invited to join this partnership mission, a compact to promote "responsible" global capitalism answer basic human needs in the areas of human rights, labor, and the environment. Annan advocated the principle that corporations can do well by doing good. The original nine Principles of the Global Compact in these three areas were grounded in one or more of the fundamental principles that constituted the *raison d'etre* of the 1948 United Nations Universal Declaration of Human Rights. A tenth principle, which addressed the problem of corruption, was added in June 2004 after the United Nations adopted the Convention against Corruption. These ten principles are listed in Box 4.

In furtherance of the Compact, a special section of the Secretary-General's office is responsible for providing general background information, nurturing new partnerships, developing case studies, and arranging dialogues throughout the world, all with a small staff and modest budget. Georg Kell, the director, reports directly to the Kofi Annan, his chief mentor in this effort. The operational phase of the Compact was launched at UN Headquarters in New York on July 26, 2000. Chaired by the Secretary-General, the meeting brought together senior executives from some 50 major TNCs and other leaders of labor, human rights, environment, and development organizations. The Compact, undertaken in partnership with each of the UN agencies, non-governmental agencies (NGOs), and other stakeholders, is based on dialogue and discourse. It is also linked to the UN's broader Millennium Development Goals, a "global partnership for development" which were enunciated in September 2000 and aiming at the eradication of poverty and hunger, universal primary education, gender equality, reduction of child mortality, mental health improvement, combating HIV/AIDS, malaria and other diseases, and environmental sustainability.

Box 4

Global Compact: The Ten Principles

The Global Compact asks companies to embrace, support and enact, within their sphere of influence, a set of ten principles in the areas of human rights, labor, the environment and anti-corruption. These principles were derived from:

- The Universal Declaration of Human Rights
- The International Labor Organization's Declaration on Fundamental Principles and Rights at Work
- The Rio Declaration on Environment and Development, and
- The United Nations Convention Against Corruption

Human Rights

- <u>Principle 1</u>: Businesses should support and respect the protection of internationally proclaimed human rights; and
- Principle 2: make sure that they are not complicit in human rights abuses.

Labor Standards

- <u>Principle 3</u>: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
- Principle 4: the elimination of all forms of forced and compulsory labor;
- Principle 5: the effective abolition of child labor; and
- <u>Principle 6</u>: the elimination of discrimination in respect of employment and occupation.

Environment

- <u>Principle 7</u>: Businesses should support a precautionary approach to environmental challenges;
- Principle 8: undertake initiatives to promote greater environmental responsibility; and
- Principle 9: encourage the development and diffusion of environmentally friendly technologies

Anti-Corruption

• <u>Principle 10</u>: Businesses should work against all forms of corruption, including extortion and bribery.

Source: UN Global Compact web site:

http://www.unglobalcompact.org/AboutTheGC/TheTenPrinciples/index.html, retrieved June 13, 2006.

Goals. Means for achieving these goals included trade and foreign direct investment.

Once the Global Compact was launched, UN staff began to propagate the concept and encourage companies to participate. In its 2001 pilot phase, companies were asked to enunciate their strategy for conforming to the tenets of the Compact by submitting specific examples in their business operations that touched on one or more of the principles. Forty-two companies submitted statements which indicated that they were addressing one or more of the nine principles. British Telecom (BT), for example, stated that it was addressing all nine principles, while Indian Oil Corporations, Ltd. indicated that it had implemented several principles through its community development activities which emphasized health care. Global companies such as BASF, DaimlerChrysler, Deloittte Touche Tohmatsu, Dupont, Royal Dutch/Shell, SAP, UBS and Unilever each described their corporate involvement in one or more of the Compact's principles.

Since the Compact's first progress report in 2001, it has continued to gain support. Hundreds more companies and organizations have engaged in the Compact and it has embraced more partners from business associations, labor, civil society, academia, cities, and even stock exchanges. A list of companies that have joined the Compact shows its multifarious nature; these corporations come from both developed as well as emerging market economies and developing countries. They consist of large and well-known TNCs such as Bayer, BMW, BASF, DaimlerChrysler, Deloit Touch Tohmatsu, DuPont, Nike, Royal Dutch/Shell, SAP and Unilever, as well as those lesser known.

As Global Compact gained momentum, it developed monitoring and reporting mechanisms for companies and other organizations that had endorsed its tenets. One such instrument was a self-reporting system. Critics of the approach had argued that companies may be quick to endorse the ten principles, but

slow to implement them, driven by a desire to gain endorsement and publicity, or what the *Economist* called "blue-washing". The response came in the form of a reporting system we call "grey-listing"; by listing companies that had signed on but failed to report on exactly what they were doing in compliance with the terms of the Compact, the United Nations was, well, grey-listing them. Public display of such indiscretion (or non-compliance) could itself serve as an instrument of moral suasion. While this is an interesting approach to exercising soft power, the jury is still out on its efficacy. The incorporation of Compact tenets into company practices is a welcome and positive development, but it is too early to tell whether it will influence corporate conduct in the long term. More systematic research is needed to gauge the effects of these tactics. Champions of the Compact have vigorously employed the power of moral suasion, through "grey-listing", to convince TNCs to join, but skepticism still persists.

Since the original aim of the Global Compact was to create a consensus among major players in the global network of economic activities, the UN has reached out to organizations beyond TNCs, including civil society organizations interested in labor, environment, and human rights. Proponents argue that the Global Compact at least provides a response to some of the negative consequences of global capitalism that cannot be remedied by legal means, thus paving a path toward the betterment of mankind, the same noble goals that underlie the existence of the United Nations. Moreover, the Compact is a "multi-stakeholder initiative" consistent with the exigencies of today's global economy. Its critics argue that it is, at best, a benign but toothless effort. Some companies that have not joined the Compact claim that they already adhere to their own or their industry's standards and codes of conduct, and therefore see little advantage in joining. Other critics claim that some TNCs join to reap public relations benefits, without subjecting companies to rigorous scrutiny.

Debates on the relative merits of voluntary versus mandatory, legal versus moral, normative versus regulatory instruments to control the activities of TNCs, date back to the 1970s, such as the work on codes under UNCTC and similar efforts under UNCTAD on a technology transfer code. As noted elsewhere, those initiatives ultimately led nowhere. Global Compact takes a normative path, one anchored on corporate social responsibility. We shall return to this dichotomy after a cursory look at some of the other activities going on in other parts of the UN galaxy.

UNESCO and TNCs: Demand for a New International Information Order

In the 1970s, developing countries had called for a New International Economic Order (NIEO). About the same time, some countries in this group pursued a parallel demand for a New International Information Order (NIIO). The United Nations Educational, Scientific and Cultural Organization (UNESCO) became the forum for discussions relevant to this new demand. Many developing countries believed that many, if not most, information systems were biased toward developed countries, and therefore these global information and media corporations were NIIO's primary targets. Attacks on cultural imperialism and cultural pollution were commonplace in developing countries, and some of the more radical governments believed that state control of national media was necessary to guide the development process without external pressures. Non-democratic leaders are known for disdain for a free press. But, emboldened by the success of their OPEC brethren and the passage of the NIEO declaration, potentates tried to seize the moment to curb free press and exercise control over the media, in the name of sovereignty and protection of their people from foreign influence. This was one of the early reflex reactions against globalization; mass media was blamed for encouraging "consumptive emulation" and the revolution of rising expectations.

Western countries were understandably unenthused, as were members of the global media. But neither governments nor the media took the matter seriously, attributing t instead to a few Third World dictators (like Idi Amin) who were threaten by a free press; and steam soon went out of the debate. Ultimately the movement fizzled and the term NIIO was not to be heard from again – except as a brief footnote in the history of rebellion against the encroachment of foreign influences and globalization.

Bretton Woods Institutions: World Bank and International Monetary Fund

The World Bank and International Monetary Fund are specialized agencies of the United Nations. These two Bretton Woods institutions have also impacted FDI and TNCs. We will explore the role of the International Finance Corporation (IFC), the World Bank subsidiary most directly involved with private investment. Unlike the Bank, the IFC is permitted to lend money for private projects and, in fact, take equity positions in them. This brings the Bank – through the IFC - in direct contact with TNCs.

The third of the of Bretton Woods institutions, the World Trade Organization (WTO) succeeded the General Agreement on Tariffs and Trade (GATT) in 1995. The domain of the newly configured organization expanded relative to its predecessor. The Marrakech Agreement that ratified the Uruguay Round of trade negotiations already included investment issues under its trade-related investment measures (TRIMs) and Trade-related Intellectual Property System (TRIPS) and the General Agreement on Trade in Services (GATS). Under the Doha Round which launched the latest round of multilateral trade negotiations, investment was given even greater emphasis. This development signifies an expanded role for WTO, and will be further discussed in Chapter Nine.

UNIDO AND LIMA DECLARATION

The United Nations Industrial Development Organization (UNIDO), was created to promote industrialization "on the ground" in developing countries. Its focus has also brought UNIDO in direct contact with TNCs, although there is scant reference directly to these entities in documents of the organization. The need for action toward industrialization in developing countries was galvanized by the Lima Declaration of 1976. Since then, and with several restructuring efforts, especially after the fall of Communism, the organization has continued to provide training and technical assistance to developing countries.

Food and Agricultural Organization (FAO)

Based in Rome, and another agency in the UN galaxy, the FAO has been at the forefront of global food security since inception. It works with private sector partners across the agricultural and food chain as well as fertilizer manufacturers and big grain commodity trading companies. The organization can have a potentially significant role in achieving the Millennium Development Goals which aim to eliminate hunger by 2015.

Think Tanks: UNITAR, UNRISD, ITC

The United Nations Institute for Training and Research (UNITAR), based in New York, has been active in the areas of training programs and research. The Institute produced a series of case studies on technology transfer in the 1970s, including an overview by Walter Chudson. Later it gave refuge to scholars such as Sidney Dell, who had earlier been the UNCTC director of the UN Centre for Transnational Corporations, as noted in Chapter Five. In more recent years, the Institute has again emerged as a center for intellectual contributions on a variety of fronts, including work on codes of conduct and other facets of activities of TNCs. Research activities at UNIAR have ebbed and flowed depending on personalities, issues, and funding.

The same can be said about the United Nations Research Institute for Social Development (UNRISD) in Geneva, another autonomous UN agency engaged in multidisciplinary research on the social dimensions of contemporary problems affecting development. Working with a network of national research centers, UNRISD has conducted research on such topics and civil society and social movements; democracy, governance and human rights; identities, conflict and cohesion; social policy and development; and technology, business and society. One of its recent publications is a resource guide on regulating TNCs, an annotated list of recent initiatives at corporate, national and international levels to regulate TNCs.

The International Trade Centre, a partnership between WTO and UNCTAD, and tasked with conducting training programs for developing countries on trade issues, is yet another example of interagency collaboration, and one with a reasonable degree of success. Drawing on expertise from both parent institutions, but working with a good deal of autonomy, the Institute has conducted many

workshops, particularly for countries seeking entry into WTO, or in the early stages of their participating, and in need of trading and expertise.

Research activities have ebbed and flowed in most of these specialty think tanks depending on personalities and funding.

The Food and Agricultural Organization

The Food and Agricultural Organization (FAO) has dealt with TNCs in matters involving production and used of fertilizers, pesticides and herbicides, and broadly having to do with production and distribution food and agricultural products. Among FAO initiatives, one can point to "Codes Elementaris" whose dominant theme is the role of TNCs in food safety standards, and the International Treaty on Plant Genetic Resources for Food and Agriculture, approved in 2001 and entered into force on June 29, 2004.

WORLD INTELLECTUAL PROPERTY ORGANIZATION

Intellectual property rights have been an international concern since the industrial revolution. This revolution necessitated a regime of protection for artistic and literary works and the promotion of Schumpeterian entrepreneurship. In the knowledge-intensive global economy of the 21st century, the World Intellectual Property Organization (WIPO) whose genesis goes back to the 1883 Paris Union, has become important to technology and intellectual property activities of TNCs. This is so because the protection of these non-tangible but strategically important assets must be assured and their flow across national boundaries facilitated to encourage technological development and innovation by TNCs.

Host countries and local firms seek the same protection of these assets in their own quest for development and growth. Its *raison d'etre*, to shepherd an international regime for intellectual property protection which strikes a balance between the producers and users of technology, and between encouragement of innovation and discouragement of abuse of the monopoly power of the holder of that right - has remained essentially unchanged over the last century. In the absence of a universal system for the protection of intellectual property, one of its most significant contributions has been the drafting of "model laws". Many of its nearly 100 member-nations have incorporated some of these model laws into their own national legislation.

A country's adoption of WIPO's model laws can have consequences at the multilateral level. As more countries adopt these model laws in their countries' legislation, the ultimate result may well be the emergence of a global convergence may well result on specific intellectual property issues. For example, when other international rule-making bodies like the WTO and WHO contemplate the drafting of multilateral rules in their fields of expertise and action, they are cognizant of WIPO's precedent. This may create a gradual convergence, for example, the work of WIPO on intellectual property protection and that of the World Trade Organization on Trade-Related aspects of Intellectual Property (TRIPs). According to Guriqbal Jaiya, a WIPO official, it was lack of progress on the revision of the world intellectual property regime that caused the inclusion of that issue into the GATT negotiations and the resulting TRIPs agreement. Jaiya believes that this agreement has consequently caused the World Trade Organization to become the main forum for negotiations on intellectual property rights (IPRs).

Nevertheless, WIPO continues to be critically important to both TNCs and developing countries, for it is in the interest of all to have a level playing field. He added:

All market failures have to be corrected. The IPR regime corrects only one type of such failures. ... The appropriability [cost and conditions of control and use] of intellectual property will remain imperfect at best for the foreseeable future" Moreover, in addition to the focal point on patent registry through the Patent Cooperation Treaty, WIPO now provides technical assistance to both developing countries and TNCs.

This potential confluence will be further explored in Chapter Nine as a part of a look into the future of the TNC-FDI-host country matters.

The protection of intellectual property has always been a major issue in the area of technology transfer. During the debates and negotiations on a code of conduct for transfer of technology in the mid-

1970s to early 1980s, TNCs insisted on receiving guarantees for their patents, trademarks, trade names, and copyrighted technology before agreeing to transfer it. No code emerged because the gap between contending parties, namely, the U.S. and its western allies and the Group of 77 developing countries regarding key policy issues could not be bridged. During this period, WIPO was largely sidestepped while UNCTAD took a dominant role.

UNITED NATIONS CHILDREN'S FUND (UNICEF)

UNICEF is another UN agency which has developed partnership with TNCs to promote its cause of helping the world's needy children. Perhaps one of the most well-known is UNESCO's "Change for Good" program, a partnership that UNESCO has developed with several international air carriers to collect coins from passengers as they exit a country. Between 1991 and 2006, this partnership including British Airways, IKEA, ING, Quantas, IVECO, and Emirate Airlines, had collected over \$53 million.

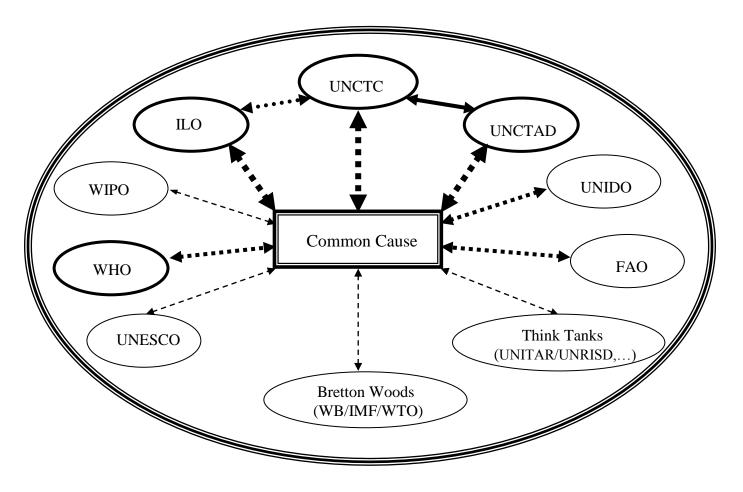
Are the scattered agencies complementary or redundant? Do they duplicate one another's work, or do they augment and reinforce each other? An example of complementarities is the work on the tobacco industry by the World Health Organization and the World Bank. While WHO was championing the "tobacco initiative", research at the World Bank in documented the economic impact of tobacco control, thus reinforcing WHO's findings.

CONCLUSIONS

So how do these various members of the constellation relate to one another, and what do they contribute to the common cause? The answer is mixed and changes with time and political climate. One conclusion that must be drawn is that invariably action has preceded the emergence of a cause, which in turn has been picked up by a zealous champion or champions. More will be said about this in the Conclusion, when this point will be more fully discussed. Key personalities have included De Seynes Somavia, Blanchard, Hansen, Karl Sauvant, and Georg Kell.

With respect to the ILO, while the original Declaration served as a foundation for policies, guidelines, and national laws that followed, reference to the Declaration itself seems to have waned with time. The 1998 statement regarding the right to work was ambitious and declarative in tone, but lacked legal teeth. Although ILO leaders would wish to set standards and serve as guiding light or moral compass with respect to labor relations and working conditions, the ultimate proof must come from the reality on the ground, that is, through corporate action or inaction. This can not be determined until a rigorous international study can establish a link between corporate behavior, national legislation, and ILO declarations and proclamations. Such a study is needed on the efficacy of ILO work as well as that of other international bodies whose work falls short of legislation. That is not to say that efforts such as the Global Compact or other voluntary instruments or instruments of soft power are ineffective. Research also needs to establish opportunity costs and unintended consequences of pursuing soft power in the face of hard realities. Declaring murder against the law has not stopped homicide; merely declaring corporate (or any other) conduct illegal is not a sufficient condition for eliminating it. When debating the relative merits of soft vs. hard power, one must weigh the relative merits of each.

The United Nations Galaxy:
The Institutional Constellation of Organs Relevant to FDI/TNCs



Memos:

- 1. Solid lines indicate a direct relationship.
- 2. Dotted lines indicate the existence of a less formal relationship.
- 3. The intensity of the relationship corresponds to the thickness of the line.

Source: Sagafi-nejad, with Dunning, op cit.

This essay has described some of the members of the United Nations galaxy's efforts to engage transnational corporations in the development process and in the articulation of a set of multilateral rules of engagement. Approaches have differed at times, between moral suasion on one hand and "courts and cops" on the other. The tobacco control initiative, spearheaded by WHO is intended to be binding, containing details – from advertising and labeling to illicit trade and sponsorship of events. The UN Global Compact has more charm, and appeals to the good in corporate action, citizenship while at the same time making the point often made in the literature that good behavior means good bottom line. Which will save us in the end?

To answer this question, one must view the multitude of approaches in terms of the seven parameters of legitimacy, namely the desirability and feasibility of the instrument or approach, the extent to which there is consensus among members of a stakeholder group on desirability and feasibility, how clearly stakeholder groups perceive one another, the extent of trust between different groups and whether each group concedes a legitimate role for the others in the process, and perhaps most importantly, the legal status of such a regime.

A comparison of the Framework Convention on Tobacco Control and Global Compact reveals certain distinguishing features; the first is intended to be binding, the second voluntary; one has caused clear delineation of lines between adversaries who think the other side fails to see it from their perspective; the other aims to build on commonalities between groups. Other agencies have focused more on capacity-building and knowledge-creation. There is general agreement that nothing short of the survival of mankind is at stake on matters of rule-making. Without rules of engagement multilaterally arrived at and dutifully adhered to, all players risk losing. Ethical rules, whether emanating from individual corporations, nation-states, or international bodies, must ultimately gain legitimacy by all stakeholders to be effective. Unilateral and binding rules can also ascend up to the global level. It was, after all, the massive anti-smoking campaign and the extensive litigation in the United States that provided the initial momentum for global rule-making with respect to tobacco. Is it conceivable that multilateral rules that emanate from national roots have greater prospect of being ultimately adopted at the global level – in a bottom-up process, than rules contemplated in the insularity of international organizations?

The United Nations is at a crossroads, and the very premises of liberal economic thinking are being challenged. Can the system serve as a catalyst in the process of norm-setting for the activities of TNCs? As this essay has demonstrated, each member of the UN galaxy has played a role in contributing to rules of the game that can benefit countries and firms.

REFERENCES

Fairclough, G., & Branch, S. 2001. Tobacco giants prepare new marketing curbs ahead of UN treaty. *Wall Street Journal*, September 11.

Joossens, L. & Ritthiphakde, B. 2000. *Role of multinationals and other private actors: Trade and investment practices*. The WHO International Conference on Global Tobacco Law: Towards a WHO Framework Convention on Tobacco Control. New Delhi, India.

Jones, R. 1997. *Strategic management in a hostile environment: Lessons from the tobacco Industry*. New York, NY: Quorum Books.

Perlmutter, H. V., & T. Sagafi-nejad 1981. *International Technology Transfer: Codes, guidelines and a muffled quadrilogue*. New York, NY: Pergamon Press.

Saffer, H. 2000. *Tobacco Control in Developing Countries*. Oxford, New York, NY: Oxford Univ. Press. Sagafi-nejad, T., & Perlmutter, H.V. 2001. Perception Gaps and Mistrust as Obstacles to Multilateral Solutions. In S.J. Patel, P. Roffe, & A. Yusuf (Ed.) *International technology transfer: The origins and aftermath of the United Nations negotiations on a draft code of conduct*: 247-56. The Hague and Boston: Kluwer Law International.

Saloojee, Y. 2001. *Fatal Deception: The tobacco industry's "new" global standards for tobacco marketing*. International Non-Governmental Coalition Against Tobacco (INGCAT).

Saloojee, Y. & Dagli, E. 2000. Tobacco industry tactics for resisting public policy on health. *Bulletin of the World Health Organization*, 2000, Vol. 78, No. 7.

Economics of tobacco control. The World Bank, (www.worldbank.org)

World Health Organization 2002. *Framework convention on tobacco control: Intergovernmental Negotiating Body*. List of relevant documents, including the agenda, report by the Secretariat, and background reports presented by various groups; (http://www.who.int/gb/fctc/) [Retrieved October 14, 2002]

World Health Organization (WHO) <u>Fifth session of the INB</u> (14-25-October 2002) http://www.who.int/gb/fctc/E/E inb5.htm

World Health Organization (WHO), <u>Fourth session of the INB</u> (18-23-March 2002) <u>www.who.int/gb/fctc/E/E inb4.htm</u>

World Health Organization (WHO), <u>Third session of the INB</u> (22-28 November 2001) www.who.int/gb/fctc/E/E_inb3.htm

World Health Organization (WHO), <u>Second session of the INB</u> (30 April - 5 May 2001 www.who.int/gb/fctc/E/E_inb2.htm

World Health Organization (WHO), <u>First session of the INB</u> (16-21 October 2000) <u>www.who.int/gb/fctc/E/E_inb1.htm</u>

World Health Organization (WHO) <u>Second Meeting of the Working Group (27-29 March 2000)</u> (www.who.int/gb/fctc/E/E_wg2.htm)

World Health Organization (WHO), <u>First Meeting of the Working Group</u> (25-29 October 1999) (<u>www.who.int/gb/fctc/E/E_wg1.htm</u>)

United Nations, "The Global Compact: Report on Progress and Activities (UN Global Compact Office, July 2002)

 $\frac{http://www.unglobalcompact.org/irj/servlet/prt/portal/prtroot/com.sapportals.km.docs/documents/Public \@20Documents/progrep2002.pdf$

Determinants of Foreign Direct Investment in ASEAN

Dr. P.R. Bhatt

Indian Institute of Management Kozhikode, Kerala, India E-mail: prbhatt@iimk.ac.in

ABSTRACT

The ASEAN region has become one of the attractive investment locations in the developing world and attracted FDI to the tune of \$ 19 billion in 2003. Among ASEAN countries Singapore topped the list with \$11 billion FDI inflows followed by Malaysia (\$2.5 billion), Brunei (\$2.0 billion), and Vietnam (\$1.5 billion) in 2003. There was a spurt in growth of global FDI flows of 40% during 1996-2000. An attempt has been made in this paper to understand the determinants of FDI in ASEAN. The empirical model is estimated for five countries of ASEAN and ASEAN region as a whole for the period 1976-2003. The estimation of the model shows that there is a positive influence of the size of the economy (GNI) on FDI inflows in the case of Indonesia and Singapore. The infrastructure is significant for Indonesia and Malaysia in attracting FDI. Exchange rate had influence on FDI for Malaysia. The openness of the economy was significant in attracting FDI for Indonesia. The model is estimated for panel data of ASEAN region by pooled least square method and fixed effect model. In the case of pooled least square method, gross national income (GNI) is a very significant and having expected sign. This implies that market size attracted FDI in the ASEAN region. The depreciation of the currency attracted FDI inflows in ASEAN as indicated by the variable XR which is significant with negative sign. Infrastructure is another significant variable in this model. Openness variable is significant but negative sign. When the model was estimated by fixed effect model it is found that all variables are significant with expected sign except in the case of the variable openness.

INTRODUCTION

Foreign direct investment (FDI) is defined as an investment involving a long-term relationship and reflecting a lasting interest and control by a resident entity in one country (foreign direct investor or parent enterprise) in an enterprise resident in an economy other than that of the foreign direct investor (FDI enterprise or affiliate enterprise or foreign affiliate). FDI implies that the investor exerts a significant degree of influence on the management of the enterprise resident in the other country.

Flows of FDI comprise of capital provided (either directly or through other related enterprises) by a foreign direct investor to an FDI enterprise or capital received from an FDI enterprise by a foreign direct investor. FDI in general has three components: equity capital, reinvested earnings and intra-company loans.

Equity capital is the foreign direct investor's purchase of shares of an enterprise in a country other than its own. Reinvested earnings comprise the direct investor's share (in proportion to direct equity participation) of earnings not distributed as dividends by affiliates or earnings not remitted to the direct investor. Intra-company loans or intra-company debt transactions refer to short-or —long term borrowing and lending of funds between direct investors (parent enterprises) and affiliate enterprises.

Foreign direct investment provides the much needed foreign exchange to help bridge the balance of trade deficit. It raises the technology standards, levels of efficiency and competitiveness of the host country. There was a spurt in the growth of global FDI flows of 40% during 1996-2000. However, there was fall in FDI growth during 2001-2003 and marginal increase in 2004.

Table 1
World FDI Inflows and Outflows

Item	Value of Current Prices billions of \$			Annual growth rate							
	1982	1990	2003	2004	1986- 1990	1991- 1995	1996- 2000	2001	2002	2003	2004
FDI inflows	59	208	633	648	22.8	21.2	39.7	-40.9	-13.3	-11.7	2.5
FDI outflows	27	239	617	730	25.4	16.4	36.3	-40.0	-12.3	-5.4	18.4
FDI inward stock	628	1769	7987	8902	16.9	9.5	17.3	7.1	8.2	19.1	11.5
FDI outward stock	601	1785	8731	9732	18.0	9.1	17.4	6.8	11	19.8	11.5
Cross-border M + As ^a	-	151	291	381	25.9 ^b	24.0	51.5	-48.1	-37.8	-19.6	28.2
GDP (in current prices) ^c	11758	22610	36327	40671	10.1	5.2	1.3	-0.8	3.9	12.1	12.0
Gross Fixed Capital formation	2398	4905	7853	8869	12.6	5.6	1.6	-3.0	0.5	12.9	12.9

Source: UNCTAD, World Investment Reports 2005.

Notes: a. data are available only from 1987 onwards, b. 1987-1990 only and c. based on data from the IMF, World Economic Outlook April 2005.

FDI inflows and outflows by region can be seen in Table 2. Developed economies have absorbed 59% of the total FDI inflows where as developing countries have absorbed 36% in 2004. Within developing countries, FDI inflows of South East Asia constituted 11% in 2004. Developed economies contributed 87% of the total outflows and developing economies the rest. Within developing economies South East Asian group contributed 17% of the FDI outflows.

FDI inflows by ASEAN countries are presented in Table 3. The total FDI inflows in ASEAN were \$19 billions in 2003. Among ASEAN countries Singapore topped the list with \$11 billion FDI inflows followed by Malaysia (\$2.5 billion), Brunei (\$2.0 billion), and Vietnam (\$1.5 billion) in 2003.

Table 2 FDI Flows by Region

(\$ billions)

Dagion	FDI Infl	ows		FDI Outflows		
Region	2002	2003	2004	2002	2003	2004
World	716	633	648	652	617	730
Developed Economies	548	442	380	600	577	637
Europe	428	359	223	397	390	309
North America	93	63	102	162	141	277
Developing Economies	156	166	233	48	29	83
South East Asia	15	17	26	6	6	14
South Asia	5	5	7	1	1	2

Source: UNCTAD, World Investment Report 2005

Table 3
Inward FDI Flows by host countries

(Millions of US \$)

					\	
Countries	1980	1985	1990	1995	2000	2003
Brunei Darussalam	-19.6	3.67	3	582.8	549.2	2009.0
Cambodia	1	0.0	0.0	150.7	148.5	87.0
Indonesia	180	310.0	1092.0	4346.0	-4550	-597
Lao PDR	0.0	-1.62	6.0	88.4	34.0	19.5
Malaysia	993.9	694.7	2611.0	5815	3787.6	2474.0
Myanmar	0.4	0	225.1	317.6	208	128.1
Philippines	-106.0	12.00	550.0	1574.0	1345.0	319.0
Singapore	1235.8	1046.8	5574.8	11591.1	17216.8	11408.9
Thailand	189.4	163.6	2575.0	2070.0	3350.3	1802.0
Vietnam	0.4	-0.08	180.0	1780.4	1289.0	1450.0
ASEAN	2580.5	2229.1	12,816.9	28315.9	23,378.4	19,100.5

Source: UNCTAD, World Investment Reports 2000, 2004, and 2005.

FDI inflows in ASEAN had increased from \$2.6 billion in 1980 to \$28.3 billion in 1995 but fallen to \$23.3 billion in 2000 and \$19.1 billion in 2003. Except Brunei all countries of ASEAN experienced the same trend.

FDI inflows as a percentage of gross fixed capital formation is given in Table 4. It can be seen from the table that the Singapore has the highest percentage of 46% of FDI in its gross fixed capital formation followed by Vietnam (15.2%), Cambodia (12.3%) and Malaysia (10.8%).

Table 4 FDI inflows as a percentage of Gross fixed capital formation

Countries	1980	1985	1990	1995	2000	2003
Brunei	-13.4	0.0	0.0	0.0	0.0	0.0
Darussalam						
Cambodia	0.0	0.0	0.0	34.6	29.1	12.3
Indonesia	1.2	1.5	3.4	7.6	-13.9	-1.8
Lao PDR	0.0	-1.0	6.1	19.3	9.1	5.2
Malaysia	12.2	7.5	17.9	15.0	16.4	10.8
Myanmar	0.0	0.0	.0.	0.0	0.0	0.0
Philippines	-1.2	0.2	5.4	9.6	8.4	2.2
Singapore	25.9	14.0	46.8	41.3	62.8	45.7
Thailand	2.1	1.5	7.5	3.0	12.4	5.2
Vietnam	0.0	0.0	21.5	33.8	15.0	15.2
ASEAN						9.9

Source: UNCTAD, World Investment Report, 2000, 2004, 2005

FDI inflows as a percentage of gross domestic products of ASEAN countries are given in Table 5. It can be seen from the table that Singapore has the highest FDI inflows as a percentage of gross domestic product of 161.3% followed by Brunei Darussalam (156%), Malaysia (57.2%), Vietnam (51%) and Cambodia (46.4%).

Table 5
FDI inflows as a percentage of Gross Investment product of ASEAN countries

	DI IIIIIOWS as	a per centage	of Oross Hive	stillellt produ	Ct OI TIDETIII	Countries
Countries	1980	1985	1990	1995	2000	2003
Brunei	0.4	0.8	0.7	12.1	89.4	156.0
Darussalam						
Cambodia	2.4	2.0	3.4	10.8	43.3	46.4
Indonesia	13.2	28.2	34.0	25.0	40.4	27.5
Lao PDR	0.3	0.0	1.5	11.4	31.6	30.1
Malaysia	20.7	23.3	23.4	32.3	58.5	57.2
Myanmar	0.0	0.0	0.0	0.0	0.0	0.0
Philippines	3.9	8.5	7.4	8.1	17.1	14.5
Singapore	52.9	73.6	83.1	78.2	121.5	161.3
Thailand	3.0	5.1	9.7	10.5	24.5	25.8
Vietnam	0.2	1.1	4.0	27.8	48.2	50.6
ASEAN						

Source: UNCTAD, World Investment Report, 2000, 2004, 2005

Outward FDI flows by host country are given in Table 6. It can be seen from the table that FDI outflow from Singapore was the highest to the tune of \$5.5 billion followed by Malaysia (\$1.4 billion) Thailand (\$0.6 billion), Philippines (0.2 billion) and Indonesia (\$0.1 billion) in 2003.

Table 6 Outward FDI flows by host country

(US \$ millions)

Countries	1980	1985	1990	1995	2000	2003
Brunei	-	-	-	20.0	-3.48	4.60
Darussalam						
Cambodia	-	-	-	-	6.59	9.66
Indonesia	6.00	33.00	-11.0	1319.00	150.00	130.22
Lao PDR	-	-	-	0.30	168.00	76.01
Malaysia	201.11	209.78	129.00	2488.00	2026.00	1369.50
Myanmar	-	-	-	-	-	-
Philippines	1.00	-3.00	22.00	98.00	-108.00	158.00
Singapore	97.61	237.71	525.83	4467.30	5298.40	5536.20
Thailand	3.04	0.85	154.00	887.21	-22.00	557.16
Vietnam	-	-	-	-	-	-
ASEAN						

There was a dramatic increase in FDI outflows in Singapore from \$0.5 billion in 1990 to \$5.5 billion in 2003. Similarly FDI outflows from Malaysia increased from \$129 million to \$1.4 billion during the same period.

The paper is organized as follows: Section 2 reviewed FDI policies in ASEAN countries. Section 3 gives select survey of literature, section 4 outlines the empirical model and section 5 analyzed the results of the model. Section 5 concludes the discussion.

LITERATURE REVIEW

FDI Policies in ASEAN Countries

The ASEAN region has become one of the attractive investment locations in the developing world and attracted FDI to the tune of \$19 billion in 2003. FDI is not only a source of capital funds and foreign exchange, but also a dynamic and efficient vehicle to secure the much needed industrial technology, managerial expertise and marketing knowledge and networks to improve on growth, employment, productivity and export performance.

ASEAN countries with the exception of Singapore and Brunei had followed import substitution policies from the early 1960's to the mid 1980's.

Investments targeted at the host market characterized the first wave of manufacturing FDI in ASEAN in the 1960s and were in response to the widespread adoption of import substituting industries. Investments to produce manufactures for export had become increasingly important in 1980s, particularly liberalization policies after 1985. ASEAN countries have always maintained a favorable stance towards FDI. However until recent years, there were wide diversities in policies and attitudes among them. Singapore welcomed FDI without any reservation at a time when the FDI role was hotly debated in developing countries. In the post 1985 period, the ASEAN has revamped and modified their investment policies. As a result there has been a convergence of FDI policies with respect to both the level and range of investment incentives offered and relaxation of performance requirements and other restrictive regulations.

Malaysia and Thailand introduced amendments to their legislative framework to attract foreign investment dates back to 1950s whereas Indonesia was cautious towards FDI till 1990s. While Malaysia adopted foreign equity participation in their new economic policy announced in 1970, Thailand adopted foreign equity participation only in 1984. Indonesia allowed foreign equity participation in 1990s and allowed 100 per cent foreign ownership of non-bank financial firms including insurance companies. Malaysia guaranteed up to 51 per cent foreign equity participation in existing insurance companies by current holders. Philippines introduced Foreign Investment Act in 1991 that liberalized the rules and regulations on foreign equity. Malaysia allowed 100 per cent foreign equity in all new projects in manufacturing including for expansion and diversification and need not meet any export requirements. Thailand relaxed the regulations of Board of Investment in 1997 for companies with financial difficulties so that they could have foreign ownership of more than 51 per cent on the condition that Thai shareholders of that company agreed and shared their acceptance in writing of the change in ownership to the Board of Investment.

The incentives given by ASEAN countries ranged from tax holidays, accelerated depreciation allowance, export incentives, import duty exemption, and concession and low-cost credit facilities to subsidized infrastructure facilities such as industrial estate. 100% foreign equity is currently permitted in all ASEAN countries, although in some cases, these are conditional upon fulfilling certain performance requirements. Performance requirements are widely adopted by ASEAN countries and generally pertain to the minimum level of investment, employment of local personnel, local sourcing of inputs, level of exports and technology transfers. Among ASEAN countries, Singapore has the most efficient bureaucracy and the least restrictive rules and performance requirements. All ASEAN countries have established investment boards or one stop investment centers to promote, coordinate, and monitor FDI viz. the Indonesian Capital Investment Coordinating Boards (BKPM), the Malaysian Industrial Development Authority (MIDA), the Board of Investment (BOI) in Philippines and Thailand and Singapore's Economic Development Board (EDB). ASEAN countries established industrial estates and EPZs to create a favorable atmosphere for FDI.

The benefits of FDI largely depend on the institutional and policy environment of host countries. Countries where trade, industrial and competition policy regimes result in a distorted incentives structure, as is usually the case with import substitution and where government bureaucracies are incompetent and corrupts, foreign MNCs are more prone to inefficiency and rent seeking activities. In general, countries that pursue market-oriented and export oriented policies have better experience with FDI. Countries which impose highly restrictive performance requirements on equity ownership, localization of personnel,

local sourcing inputs and transfer of technology without parallel measure to improve domestic supplies and human resource development will be unable to maximize the benefits from FDI. A strong, incorrupt and efficient open trade policy that emphasis efficiency and competitiveness contribute to inducing good corporate behavior among foreign firms.

ASEAN countries had been successful in containing inflation, balancing their budgets and maintaining their currencies stable in 1980's and 1990's till 1997 crisis. ASEAN countries adopted various measures to tackle 1997 crisis. Thailand and Indonesia adopted restrictive fiscal and monetary policies including merger of banks and companies. Malaysia applied capital controls where as Singapore adopted wage restriction and retraining of their manpower.

Singapore's pursuit of export oriented industrialization and its small domestic market ensures that FDI is both export-oriented and efficient. Singapore has no performance requirements on recruitment of local personnel. Instead, it actively encourages foreign MNCs to provide manpower training at all levels to supplement and complement government efforts in providing education and training for industry through the rapid expansion of science, technology, computer and business-based education in universities and polytechnics and technical and vocational education and training under the vocational and Industrial Training Board and the Economic Development Board. The incentives for employers to provide training, both in house training and external programs include subsidies from the Skills Development Fund established through an employment levy introduced in 1979.

Foreign investors contribute to the transfer of technology in three possible ways viz. the introduction of new technology, the transfer of know-how to their local employees and the diffusion of know-how to local enterprises via backward and forward linkages.

Singapore imposes no rules and regulations on technology transfer by FDI. Foreign investors are free to choose, with few exemptions, the type of industries and products they wish to produce, although only those considered crucial to Singapore's development are eligible for fiscal incentives.

ASEAN Free Trade Area entails the removal of barriers to intra-ASEAN trade in manufactures, including capital goods and process of agricultural products, but excluding agricultural products and services. The mechanism to achieve this is the Common Effective Preferential Tariff (CEPT) which took effects on first January 1993 and would lead to tariff liberalization over next 15 years.

ASEAN leaders adopted ASEAN Vision 2020 in 1997 to integrate economies and to encourage free flow of investment in the region. They pursued FDI-led export oriented policy. They have understood that they could attract FDI if they pursue a policy of building institutions such as financial institutions, regulatory bodies, policy of strengthening infrastructure such as roads, power etc and providing incentives to investors. As a result the region became the most favored destination among Asian countries.

In pursuit of accelerating investments in the region the Framework Agreement on the ASEAN Investment Area (AIA) was designed in October 1998. The objective of AIA was to attract sustainable investments flows as suggested in ASEAN Vision 2020. AIA encouraged free flow of all direct investment except portfolio investment with non discrimination and transparency of rules and regulations, policies and procedures. It also entailed free flow of skilled labor, professionals and technology.

Determinants of FDI in ASEAN Countries

There is an emerging consensus that FDI inflows depend on the motives of foreign investors. Motives of foreign investors can be broadly classified as (i) market seeking (ii) resource or asset seeking and (iii) efficiency seeking.

Market seeking FDI is to serve local and regional markets. Tariff-jumping or export-substituting FDI is a variant type of this FDI. Market size and market growth of the host country are the main drivers. In the case of resources or asset seeking FDI, investors are looking for resources such as natural resources, raw materials or low-cost labor. This vertical-export oriented FDI involves relocating parts of the production chain to the host country. Resources like oil and natural gas, iron ore, cheap labor attracted FDI in these sector. Efficiency seeking FDI occurs when the firm can gain from the common governance of geographically dispersed activities in the presence of scale and scope.

One important variable explaining the geographical distribution of FDI is agglomeration economics. Investors simply copy investment decision taken by others. The common sources of these positive externalities are knowledge spillovers, specialized labor, and intermediate inputs. A seminal work by Wheeler and Mody (1992) makes a strong case for agglomeration (and market size) in US investors' location decisions. Cheng and Kwan (2000) also supported agglomeration economic theory.

Factor endowments theory argues that FDI is drawn to those countries whose lower wages and more abundant natural resources prevail. On the other hand, the theory of agglomeration economics argue that once countries attract the first mass of investors, the process will be self-reinforcing without needing a change in policies (Wheeler and Mody 1992).

Dunning's eclectic paradigm developed a comprehensive and holistic approach to explain the level and the pattern of international production (Dunning 1988, 1993). Dunnings analyzed FDI inflows based on three sets of factors viz., ownership specific advantage (O), locational advantage (L) and presence of superior commercial benefits in exploiting both O-type and L-type advantage internally (I) and directly rather than in exchanging them on market through licensing or cooperation agreements with an independent foreign firm.

Ownership advantages are those that are specific to a particular firm and that enable it to take advantage of investment opportunities abroad. Locational advantages are those advantages specific to a country which dictate the choice of production site. Internalization advantages determine whether foreign production will be organized through markets (licensing) or hierarchies (FDI). The location of FDI has been traditionally been explained through the classical sources of comparative advantage (Ricardo). Firms locate production operation abroad to generate locational advantages that arise from direct access to growing markets, lower labor costs, reduced transportation and communication costs, avoidance of tariffs and non-tariffs barriers and direct access to raw materials and intermediate products that are indispensable for the production of certain goods. Locational factors that ensure cost minimization are determined by relative factor prices, market size and growth (Kravis & Lipsey 1982; Veugelers, 1991) as well as transportation cost (Aliber 1970).

The ownership advantage of firms are ownership rights over patents, trade marks, commercial secrets and production process there by effectively denying access to both foreign and domestic competitors.

FDI is often used to overcome barriers to entry into a foreign market, including tariff and non-tariff barriers (Motta 1992). Markuseu and Venables (1995) argued that multinational enterprises (MNEs) reduced the agglomeration forces that arise when international factor mobility is allowed. Wheeler and Mody (1992) had identified three sources of agglomeration economics viz., infrastructure quality, the degree of industrialization and the existing level of FDI.

The location preference of foreign investors attempts to link the host country choice with basic motivation for undertaking the investment (Dunning 1998). Resource seeking investors locate production plants where necessary resources are available while efficiency seeking foreign investors is attracted to those countries well endowed with factors of production such as low-cost labor. Market seeking firms choose countries that offer the best opportunities for entering and expanding within the domestic or regional market while strategically motivated FDI may link one of the above motivations with strategic consideration. Strategic FDI is quite similar to resource seeking FDI (Dunning 1998).

According to Mundell (1957) FDI flows into those countries that are importing goods from abroad. Vernon (1966) argues that adequate infrastructure is required to migrate production abroad.

A few studies on empirical research on determinants of FDI inflows are analyzed here to understand the major factors responsible for FDI inflows in developing countries. Oscar Bajo-Rubio and Simon Sosvilla-Rivero (2001) carried out an empirical analysis of FDI inflows in Spain during the period 1964-84. In their analysis, FDI was explained by GDP (proxy for the size of Spanish market), inflation rate (INF) (proxy for macroeconomic instability), unit labor cost (ULC), unit capital cost (UCC), a measure of trade barriers (PROT), real effective exchange rate of the Peseta against the industrialized countries (REER), a dummy variable for the year after the Spanish integration into EC (DEC) and the

lagged value of the foreign capital stock. The analysis was done for inflows in manufacturing and non-manufacturing as also FDI inflows from the EC and the US.

Their results indicated that there existed a long-run equilibrium between the FDI and its determining variables. They found a positive effect of GDP on FDI. Inflation (INF) was negatively related to FDI suggesting inflation would hinder FDI inflows. Trade barriers (PROT) was positively related to FDI. Both Unit labor costs (ULC) and user capital cost were insignificant. Even when relative labor costs between Spain and the rest of the world were jointly included in the regression, the coefficient turned out to be negative, but insignificant. Similarly when user capital costs between Spain and the rest of the world were jointly included were positive but insignificant. The lagged foreign capital stock has negative and significant impact on FDI. The effect of exchange rate on FDI was negative but not significant.

Authors did not find a significant long-run relationship between total FDI inflows and variable proxying integration into EC, even though its coefficient showed the expected sign. The regression equation was also estimated separately for manufacturing and non-manufacturing.

In the case of manufacturing and non-manufacturing the results indicated that real GDP and inflation have the same effect as that of total FDI. User cost of capital has negative and significant effect on FDI in manufacturing whereas unit labor cost has negative and significant impact on FDI in non-manufacturing. This fact might provided a rationale for the lack of significance of factor costs on total FDI since the significant effect of capital and labor costs on manufacturing and non-manufacturing FDI could cancel on average.

The determinants of FDI from European Community were also analyzed. The most significant variables in this case also were real GDP, inflation, the lagged capital stock and dummy variable proxying Spanish integration into the EC. However, there was no significant relationship with unit labor costs, the user cost of capital, trade barriers and real effective exchange rate. After testing the order of integration of the variable, they found long run relationship between FDI and several macroeconomic variables in all equations.

In the short-run equilibrium, there was significant role for the real effective exchange rate, the user cost of capital. Trade barriers have significant impact on FDI in manufacturing sector. They also found that there was no sign of misspecification in all equations.

The implication of the study is that a stable and growing economy is a necessary condition to keep a high level of FDI inflows in Spain. The significance of labor costs is non-manufacturing sector suggests that higher labor costs in Spain should not be taken as a serious threat to FDI growth, at least in manufacturing FDI. FDI is attracted by a skilled labor force rather than cheap unskilled labor and natural resources.

Stephen P Ferris, G. Rodney Thompson and Calin Valsan (1994) studied FDI inflows in Latin America as also their determinants in order to understand the application of the result in emerging Romanian economy. They have identified determinants of FDI in Latin American countries and estimated the model for eleven Latin American countries for the period 1963-85. The countries they have selected were Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, Paraguay, Peru, Uruguay and Venezuela.

The results indicated that all variables such as imports, exports, GDP, number of commercial vehicles used and political risks were significant and having expected sign. Commercial vehicles were used as a measure of infrastructure development. Imports, exports, GDP and commercial vehicles were specified in a per capita format. Again, imports, exports and GDP were lagged by one year because of the possible problems of reaction time as well as possible problem of endogeneity. The RISK variable here captured the degree of democracy of the political system rather than political risk of the nation.

All variables were found significant and having expected sign. The positive effect of imports indicated that the volume of investment inflows was directly related to the volume of foreign imports. The negative and significant variable of exports indicated that the smaller the volume of exports from developing country, the more likely that the country would receive FDI. GDP was positively related to

FDI. There was positive and significant relationship between the number of commercial vehicles in use and the level of FDI. The political rights variable was not significant.

Authors believed that the determinants of FDI in emerging market economics like Latin American countries could be applied to Romania as Romanian economic structure is more or less same as Latin American structure.

Yang, Groenewold and Tcha (2000) addressed the issue of determinants of FDI inflow into Australia and found that FDI inflow was explained by short-term interest rate, real GDP, the tradeweighted index (TWI) of the exchange rate, international trade as a fraction of GDP, a measure of labor disputes, wage costs and inflation rate. The module was estimated with quarterly data for the period 1985-94. Only GDP and TWI were not significant in either current or lagged form.

Erdal and Tatoglu (2000) estimated the model for determinants of FDI inflows in Turkey during the period 1980-1998. The results indicated the existence of a linear relationship between FDI and the size of domestic market, openness of the economy to foreign trade, infrastructure of the host country, attractiveness of the domestic market, external and internal economic stability. External economic stability was measured by appreciation/depreciation of the local currency and internal economic stability was explained by interest rate.

Halicioglu (2001) estimated the model of determinants of FDI inflows in Turkey from four major geographical regions and at aggregate level during the period 1975-99. The regions considered were Europeans Union, the non Europeans Union, OECD countries, Islamic countries of Middle and Northern Africa and other Islamic countries and rest of the world which included East Europe, Russia, South East Asia and Latin America.

The results of the estimated model indicated that the EU and non-EU OECD based firms were less concerned with the market size compared to the firms of the Middle east and the rest of the world countries. The labor cost was very important factor to invest for the firms of the Middle East and non-EU OECD countries compared to the firms of the rest of the world and the EU. Real exchange rate was not significant variables in all groups. Integration process of Turkey in EU attracted FDI from all the groups. With regard to the total FDI, estimation of the model indicated that overall results were consistent with the regional estimates.

Ramirez (2002) estimated a basic foreign investment function that included real GDP, the real exchange rate and dummy variables to explain the variations in FDI flows to Mexico during 1956 -1996. Dummy variables included to capture the relaxation of restrictions on profit remittances, entry into strategic sectors during the Salinas sexenio and the debt conversion program of the late 1980's and to capture periods of political turmoil such as Tlateloco student massacre of 1968, the emergence of major rural guerrilla groups on 1972, the expropriation of large tracts of fertile land in the northern state of Sonora belonging to powerful business groups in 1976, the political uncertainty following the disputed presidential elections of 1988 and the assassinations of important political leaders in 1994 such as the Institutional Revolutionary Party's presidential candidates Luis Donaldo Colosio.

The estimation of the model suggested that the lagged level of real GDP has a positive and significant effect on FDI inflows. The lagged real exchange rate was also significant and positive which indicated that a real increase in depreciation of domestic currency increased FDI inflow to Mexico.

Bouoiyour (2003) has estimated regression model for FDI inflows in Morocco for the period 1960-2001. He found that market size proxied by GDP was a significant variable to attract FDI inflows in Morocco. The proxy variable to measure labor cost was significant and has expected sign which indicated that FDI inflows were explained by the differences in relative factor endowments (labor cost). The ratio of national investment on GDP has positive effect. The significant inflation variable with expected sign suggests that macro-economic stability was an important determinant of FDI inflows. The coefficient of economic growth was not significant. The model confirmed the complementarily of FDI and trade. Exchange rate was also a significant variable to explain FDI inflows in Morocco.

Janicki and Wunnava (2004) estimated the determinants of FDI inflows in nine central and east European countries (CEEC) from 14 European Union countries for the year 1997. In the estimation of the regression model they included GDP, imports, labor cost and the institutional investor country risk. The

estimated model suggested that all variables were significant and having expected sign. International trade proxied by imports was the most important determinant of investment. Market size proxied by GDP was also a significant variable in his model. Difference in labor cost constituted a significant variable to explain FDI inflows. Country risk variable proxied by Institutional Investor country risk rating was found to be significant and positively related to FDI.

Farrell, Gaston, Slurm (2001) studied to identify the determinants of Japanese FDI (JFDI) covering 8 manufacturing industries in 16 countries during the period 1984-95. Their industry-country pooled econometric model suggested that JFDI was mainly affected by market size and the level of trade with the country and the industry in question. They found that the trade protection as measured by the level of anti-dumping actions initiated was insignificant. JFDI was affected by the cost of finance in Japan. The relative wage difference was also not significant factor to attract JFDI. While imports were strongly and positively related to JFDI, exports were not significant determinant of JFDI. Higher the nominal interests rate in Japan higher the outflow of FDI. However, real interest rate was negatively correlated with JFDI which could be interpreted as when the Japanese economy inflated JFDI rose as well. Yen vis-à-vis host country currency was insignificant.

The model was also estimated industry-wise during the same period. It was found that size of the market was insignificant determinants in Food & Beverages, Primary metals, General machinery, Electrical and Transport equipments. However, market size was significant in textile and Apparel, Lumber and Pulp and Chemicals. There was strong evidence that exports and JFDI were strongly complementary in food and electronic industries. Trade barriers have strong impact on FDI in machinery and equipment industries. Imports also have positive and significant impact on imports in Food and Beverages, Textile and Apparel and Transport equipment. However, imports have negative and significant impact on JFDI in General machinery. Japan's real wage rates have negative and significant impact on JFDI in food and Beverages, Chemicals and Transport Equipments. Country specific antidumping actions were significant but negative in Textile and Apparel, Lumber and Pulp and General Machinery. However, country specific anti-dumping actions were significant but negative in Food & Beverages and Primary metals. Industry-specific anti-dumping actions were significant but negative in Food & Beverages, Chemicals, whereas positive and significant impact on JFDI in General Machinery. The countries which increasingly resorted to the use of anti-dumping actions were less likely to receive JFDI.

Elizabeth Asiedu (2003) examined the determinants of FDI to Africa during the period 1984-2000. Large market, natural resource endowments, good infrastructure, low inflation, an efficient legal system and good investment framework promoted FDI whereas high inflation, corruption and political instability have the opposite effect.

Nicholas Billington (1999) analyzed the factors that determined the choice of location for FDI. He estimated a multi-country model with seven industrialized countries and eleven regions of UK. At country level, he found that market size variables (income and growth), unemployment, level of host country imports and policy such as corporate tax and interest rates were significant determinants of location for FDI inflows. In his study, the effect of unemployment on FDI was confirmed. At regional level, population density, unit labor cost and unemployment were the most influential factors.

At the country level, there was a negative linear relationship between FDI inflows and corporate tax rate. FDI and exports were complements rather than substitutes. Higher GDP attracted more FDI. Growth rate of real GDP was significant and having expected sign indicating higher growth rates attracted greater capital inflows. Similarly low interest rate encouraged MNEs to raise more funds in the host nation. The model also suggested that high unemployment attracted FDI because it was a sign of both labor abundance and a willingness to work for a lower wage.

At regional level, FDI was negatively related to UWC. Population density was highly significant and positive variable in the model which suggested that many consumers and the market influenced FDI inflows. FDI was also attracted by unemployment.

Results of country level and regional level estimation were in general complementary to each other. Results of the model have policy implications. A cut in the corporate tax rate attracts FDI inflows.

There is no need to reduce import levels as higher the imports, higher the FDI inflows. Unemployment in a country means availability manpower which would attract FDI inflows.

Campos and Kinoshita (2003) studied the determinants of FDI inflows in 25 transition countries of Central Europe and in the former Soviet Union for the period 1990-1998. The main determinants of FDI inflows to these countries were agglomeration which were proxied by lagged FDI, labor cost, abundance of natural resources, economic reforms, good institutions and quality of bureaucracy. Any restriction on FDI would deter inward FDI.

The results varied across CIS and non-CID countries. Under non-CIS countries agglomeration, economic reforms, institutions and quality of bureaucracy were the main determinants of FDI inflows where as for CIS countries, natural resources, infrastructure, economic reforms, institutions and quality of bureaucracy were the determinants.

Nonnemberg and Cardoso de Mendonca (2002) have studied the determinants of FDI inflows for 38 developing countries including transition economies for the period 1975-2000. They found that both the size of the economy as measured by GDP and average rate of growth positively affected the inflows of FDI. Degree of openness, inflation and capital market growth proxied by Dow Jones were significant variables and having expected sign in their estimation of the model.

Laura Resmini (2000) investigated the determinants of European Union FDI in the Central and East European Countries (CEECs) at sectoral level during the period 1991-95. GDP per capita, population, the Operation Risk Index and wage differentials were significant and having expected sign. Neither the degree of openness of the host countries nor the size of the manufacturing sector played any role in the investor's decision process. Host country's progress towards a market economy exerted a strong positive impact on FDI inflows in science based and capital intensive sectors while wages differentials affected FDI in the scale-intensive and science-based sectors. The degree of openness of the economy and the possibility of exploiting agglomeration economics influenced FDI flows only in traditional sectors while proximity to Western Europe has an advantage particularly in capital intensive and science based sectors. The important implication of the above study is that structural reforms are crucial for attracting FDI.

Erdal and Tatoglu (2002) provided an empirical analysis of location-related determinants of FDI inflows in Turkey for the period 1980-1998. Their empirical results showed that the size of the domestic market was positively related to FDI inflows. Physical infrastructure, openness of the economy and market attractiveness proxied by growth rate of real GDP were other significant variables with expected sign in the model. It was also found in the model that a highly volatile currency would discourage foreign investors to engage in FDI in Turkey. Instability measure of interest rate was insignificant in the model.

EMPIRICAL MODEL OF DETERMINANTS OF FDI INFLOWS IN ASEAN

In the light of the above survey of literature, the specification of the empirical model is given by:

$$FDI_{t} = \beta_{0} + \beta_{1}GNI_{t-1} + \beta_{2}\Delta GNP_{t} + \beta_{3}\left(I/GNI\right)_{t-1} + \beta_{4}X R_{t}$$

$$+\beta_{5}OP_{t} + \beta_{7}INFRASTRUCTURE_{t-1} + u_{t}$$

$$FDI - Foreign Direct Investment$$

$$GNI - Gross National Income$$

$$I - Domestic Investment$$

XR - Exchange Rates

OP - Openness

Variables used in the model

Market size: GNI is proxied for market size of an economy. Bigger the size of the market, larger will be the inflow of FDI. Markusen & Maskus (1999) found that host country market size was more important for local sales by multinationals than for their production for export sales. Dunning (1993) explained FDI as market seeking phenomenon. A large market size allows the attainment of economies of scale and transaction costs are thought to be lower in countries with higher level of economic

development (Zhao & Zhu, 2000). Kindleberger (1970) asserted that foreign investment required a sufficiently large host-country market to accommodate the increase in local supply. Wheeler & Mody (1992) made a strong case for agglomeration (and market size) in US investors location decision.

Economic growth represented by change in GNI (Δ GNI) attracts FDI inflows. The change in GNI may be the result of inter alia, the policy changes such as economic liberalization.

Domestic investment $(I/GNI)_{t-1}$ provides the indication of the existence of good infrastructure such as roads, ports, railways, energy, telecommunications and auxiliary institutions. Higher the domestic investment higher the attraction for foreign direct investment.

Exchange rate (XR_t) plays an important role in attracting FDI in host country. Ceteris paribus a depreciation of real exchange rate should increase the profitability which induces FDI inflows (Aliber 1970). According to Aliber, a multinational firm in a hard currency area is able to borrow at lower rate in a soft currency country than local firm based on their reputation effects and hence there will be FDI inflows from hard to soft currency area.

There is a close relationship between FDI and Openness $\left(OP_{t}\right)$ measured by share of trade in GDP (Asiedu 2002; Noorbaksh et. al., 2001). Host countries in search of FDI and with external economic ties are expected to fit more easily into global production and trade patterns and thus would be more attractive to foreign investors (Vernon 1966, Roof & Ahmed 1978). In an open economy, it is easier to import raw materials or capital goods which are necessary for the investment and also to export the finished product.

Inflation (INF $_t$) has been used to capture the stability of macroeconomic policy (Schneider & Frey 1985, Bajo-Rubia & Sosvilla-Rivero 1994). It is hypothesized that lower the inflation higher the FDI inflows.

Good infrastructure (INFRASTRUCTURE,) increases the productivity of investment and therefore stimulates FDI inflows (Wheeler & Mody, 1992; Morisset, 2000). Proxies for infrastructure are: expenditure on road transport (Hill & Munday 1991, 1992, 1994), Energy utilization (Mudambi, 1995), general transportation/urbanization index (Glickman & Woodward 1988). Vernon (1966) suggested that for production to migrate abroad, the host nation must provide an adequate infrastructure.

DISCUSSION

The empirical model is estimated for five countries of ASEAN and ASEAN region as a whole for the period 1976-2003. The model estimates of ASEAN countries are given Table 1 through Table 4. Test for unit root is given in Table 1. All variables have unit root at level. Hence variables in first difference are used to estimate the model. It can be seen from the table 1 that domestic investment ($\Delta(I/GNI)_{t-1}$) and openness (ΔOP_t) are significant for Indonesia. For Philippines only infrastructure is significant whereas in the case of Thailand, exchange rate $\Delta(XR)_t$ and infrastructure are significant variable with expected sign. None of the variables are significant for Malaysia and Singapore.

The model was re-estimated by dropping some of the insignificant variables and results are reported in Table 2. In the re-estimated model, it is found that market size, domestic investment and exchange rate are significant for Indonesia. Domestic Investment $(\Delta(I/GNI)_{t-1})$ is significant for Indonesia only. The only variable significant for Thailand. is $\Delta(XR)$.

The model is also estimated for level variable with time lag and is presented in Table 3. It can be seen from Table 3 that domestic investment $\left(I/GNI\right)_{t-1}$ is significant only for Indonesia. Openness (OP) is significant for Indonesia and Philippines. The exchange rate $\Delta(XR)_t$ is significant for Thailand and infrastructure is significant for Philippines.

Finally we estimated the model for level variable and without any time lag. It can be seen from the Table 4 that gross national income (GNI) proxied for market size of each country of ASEA is significant for Indonesia, Malaysia and Philippines. Domestic investment as a percentage of gross national income is significant at 10% level of significant for Malaysia. Openness is significant for Philippines. Real effective exchange rate (XR) is significant for Malaysia and Thailand and infrastructure is significant for Indonesia and Philippines.

Application of the likelihood ratio (LR) test showed that the null hypothesis of no integrating relationship can be rejected at the 1% level, thereby suggesting that at least one linear combination of the non-stationary variable (in level form) such as FDI_t , GNI_{t-1} , $(I/GNI)_{t-1}$, XR_t , OP_t , $INFRASTRUCTURE_{t-1t}$ is stationary.

As a result, we estimated error correction models for Indonesia, Malaysia, Philippines, Singapore and Thailand that capture both the short- and long-run behavior of FDI relationship estimated above. The estimated error correction model is given. It can be seen from the table that short-term estimates given in Tables are consistent with results reported in Tables 1-4. In the case of Indonesia a two year change in GNI has a positive impact on FDI and three year change in GNI has impact on FDI for Singapore.. Similarly a one year and two year change in openness has a positive impact on FDI. A one year change in infrastructure also has an impact on FDI for Indonesia and Malaysia. A one year change in exchange rate has a positive influence on FDI for Thailand.

The model is estimated for panel data of ASEAN region by pooled least square method and fixed effect model. In the case of pooled least square method, gross national income (GNI) is a very significant and having expected sign. This implies that market size attracted FDI in the ASEAN region. The depreciation of the currency attracted FDI inflows in ASEAN as indicated by the variable XR which is significant with negative sign. Infrastructure is another significant variable in this model. Openness variable is significant but negative sign.

When the model was estimated by fixed effect model it is found that all variables are significant with expected sign except in the case of the variable openness. When the model is estimated with cross sectional weight it is found that gross national income and infrastructure are significant with expected sign.

The model for panel data was re-estimated with one year lag in gross national income and domestic investment and the results are presented in Table 6. It can be seen from the table 6 that all variables except domestic investment are significant in the pool least square method and fixed effect model. When the model is estimated with cross sectional weight is found that gross national income and infrastructure are significant with expected sign However the variable openness has negative sign in all estimation.

The model is estimated for variables in the first difference and the result is presented in Table 6. It is found that none of the variables is significant in all models. When the model is estimated for variables in the first difference as also with time lag of one year in gross national income and domestic investment, it is found that only exchange rate is significant in all models.

SUMMARY AND CONCLUSION

The ASEAN region has become one of the attractive investment locations in the developing world and attracted FDI to the tune of \$ 19 billion in 2003. Among ASEAN countries Singapore topped the list with \$11 billion FDI inflows followed by Malaysia (\$2.5 billion), Brunei (\$ 2.0 billion), and Vietnam (\$1.5 billion) in 2003. There was a spurt in growth of global FDI flows of 40% during 1996-2000. The estimation of the model shows that there is a positive influence of the size of the economy (GNI) on FDI inflows in the case of Indonesia and Singapore. The infrastructure is significant for Indonesia and Malaysia in attracting FDI. Exchange rate had influence on FDI for Malaysia. The openness of the economy was significant in attracting FDI for Indonesia. The model is estimated for panel data of ASEAN region by pooled least square method and fixed effect model. In the case of pooled least square method, gross national income (GNI) is a very significant and having expected sign. This implies

that market size attracted FDI in the ASEAN region. The depreciation of the currency attracted FDI inflows in ASEAN as indicated by the variable XR which is significant with negative sign. Infrastructure is another significant variable in this model. Openness variable is significant but negative sign. When the model was estimated by fixed effect model it is found that all variables are significant with expected sign except in the case of the variable openness.

In our regression analysis, we could include only five countries of ASEAN. Error correction Model is not applied for the pooled data. Qualitative variables in regressions could have been used with the help of dummy variables. The model is estimated for the period 1976-2003 as data was not available for beyond 2003. Many variables could have been included in the regression equation. However due to non-availability of data, we could not include them.

REFERENCES

Aliber, R Z.1970. A theory of foreign direct investment. In Kindleberger, C.P. (Ed.), *The international corporation:* 17-34, Cambridge,

Asiedu, E. 2003. Foreign direct investment in Africa: The role of government policy, institutions and political instability. Unpublished paper.

Baja-Rubio, O & Sosvilla-Rivero, S. 2002. On the determinants of FDI to developing countries: Is Africa different? *World Development*, 30(1): 107-119

Baja-Rubio, O., & Sosvilla-Rivero, S. 1994. An econometric analysis of FDI in Spain. *Southern Economic Journal*, 61(2): 104-20.

Baja-Rubio, O., & Sosvilla-Rivero, S. 2001. An econometric Analysis of foreign direct investment in Spain, 1964-89. *Paper presented at The Second Conference on International Economics*, Valladolid.

Bhatt, P.R. 2000. Foreign direct investment in ASEAN economies. *Prajnan*, 29(2): 127-42

Bhatt, P.R.2000. India-ASEAN investment flows: Policies and trends. *Foreign Trade Review*. 35 (2&3):70-90

Billington, N.1999. The location of foreign direct investment: An empirical analysis. *Applied Economics*, 31: 65-76.

Bouoiyour, J. 2003. *The determining factors of foreign direct investment in Morocco*. Unpublished paper.

Campos, N. F., & Kinoshita, Y. 2003. Why does FDI go where it goes? New evidence from the transition economies. *Working Paper IMF*, WP/83/228.

Cheng, L., & Kwan, Y. 2000. What are the determinants of the location of foreign direct investment? The Chinese experience. *Journal of International Economics* 15: 379-400.

Dunning, J.H. 1988. *Explaining international production*. London: Harper Collins.

Dunning, J.H. 1993. Multinational enterprises & global economy. New York: Addisson-Wesley.

Dunning, J.H. 2001. The eclectic (OLI) paradigm of international production: Past, present & Future. *International Journal of Economics & Busieness*, 8(2): 173-90.

Dunning, J.H. 1988. The eclectic paradigm of international production: A restatement & some possible extensions. *Journal of International Business Studies*, 19(1): 1-31

Erdal, F., & Tatoglu, E. 2002. Locational determinants of foreign direct investment in an emerging market economy: Evidence from Turkey. *Multinational Business Review*, Spring.

Farrell, R., Gaston, N., & Jan-Egbert, S. 2001. *Determinants of Japan's foreign direct investment:* A panel study, 1984-95. No. 1 - 86408 - 481 - 5.

Ferris, S.P.G., Thompson, R., & Valsan, C. 1994. Foreign direct Investment in an emerging market economy. *Eastern European Economics*, July-August.

Glickman N.J., & Woodward, D.P. 1988. The location of foreign direct investment in the US: Patterns & determinants. *International Regional Science Review*, 11(2): 137-54.

Halicioglu, F. 2001. An econometric analysis of foreign direct investment flows into Turkey from the major global regions 1975-1999. *Paper presented at International Conference in Economics V*, Economic Research Centre, Middle East Technical University, Ankara.

Hill, S., & Munday, M. 1991. The determinants of inward investment: A Welsh analysis. *Applied Economics*, 23: 761-69.

Hill, S., & Munday, M. 1992. The UK regional distribution of foreign direct investment: analysis & determinants. *Regional Studies*, 26(6): 535-44.

Hill, S., & Munday, M. 1994. The regional distribution of foreign investment. NY: Macmillan.

Janicki, H. P., & Wunnava, P.V. 2004. Determinants of foreign direct investment: An empirical evidence from EU accession candidates. **Applied Economics**, 36: 505-509.

Kindleberger, C. P. 1970 *The international corporation: A symposium*. Cambridge, MA: MIT Press.

Kravis, I B., & Lipsey, R. 1982. Locations of overseas production & production for exports by US manufacturing firms. *Journal of International Economics*, 12: 201-23.

Markusen, J. R., & Maskus, K.E. 1999. Multinational firms: Reconciling theory and evidence. *Working Paper No. 7163, National Bureau of Economic Research*, Cambridge, MA

Markusen, J.R., & Venables, A.J. Theory of endowment, intra-industry and multinational trade. *NBER Working paper 5529*.

Morisset, P.1999. Foreign direct to Africa: Policies also matter. *Transnational Corporations*, 9(2):107-125

Motta, M. 1992. Multinational firms and the tariff-jumping argument. *European Economic Review*, 36: 1557-71

Mudanbi, R. 1995. The multinational investment locator decision: Some empirical evidence. *Managerial and Decision Economics*, 16: 249-57

Mundell, R. A. 1957. International trade & factor mobility. American Economic Review, 47: 321-35.

Nonnemberg, M. B., & Cardoso, M. J. 2002. *The determinants of foreign direct investment in developing countries*. Unpublished paper.

Noorbakhsh, F., Paloni, A., & Yousef, A. 2001. Human capital and FDI inflows to developing countries: New empirical evidence. *World Development*, 29(9): 1593-610

Ramirez, M. D. 2002. Foreign direct investment in Mexico during the 1990's: An empirical assessment. *Eastern Economic Journal*, 28(3): Summer.

Resmini, L. 2000. The determinants of foreign direct investment in CEECS: New evidence from electoral patterns. *Economics of Transition*, 8(3): 665-689.

Root, F. R., & Ahmed, A. 1979. Empirical determinants of manufacturing direct foreign investment in developing countries. *Economic Development & Cultural Change*, July: 751-67

Vernon, R. 1966. International investment and international trade in the product cycle. *Quarterly Journal of Economics*, 80: 190-207.

Veugelers, R. 1991. Locational determinants and ranking of host countries: An empirical assessment, *Kyklos*, 44: 363-82

Wheeler, D., & Mody, A.1992. International investment location decision: The case of US firms. *Journal of International Economics*, 33(½): 57-56.

Yang, J., Yih, Y., Groenewold, N., & Tcha, M. 2000. The determinants of foreign direct investment in Australia. *The Economic Record*, 76(232).

Zhao, H., & Zhu, G. 2002. Location factors and country-of-origin differences: An empirical analysis of FDI in China. *Multinational Business Review*, 8 (1): 60-73.

FDI, EXPORTS, AND ECONOMIC GROWTH: A CASE OF GCC COUNTRIES

Rizwan Tahir University Of Bahrain, Kingdom Of Bahrain Email: Dr Rizwantahir@Yahoo.Ca

ABSTRACT

This paper examines the Granger causality relations between GDP, Exports, and FDI among Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirates, the six developing economies of the GCC, using annual time series data from 1980 to 2002. After testing for time series properties, appropriate VAR and VECM models for each of the six economies were estimated to test Granger causality relations. The results reveal both short and long-run causality relations among FDI, GDP and Exports for each of the GCC economy except Oman. There is a support for causality running from Export to GDP, Export to FDI, FDI to GDP, FDI to Export, GDP to Exports and GDP to FDI. These results advocate the importance of FDI and openness in economic growth and development of each of the member economy of the GCC.

INTRODUCTION

The data signify that the world Foreign Direct Investment, FDI, flows have grown tremendously over the past few decades. Although, for the most part, these flows remains developed countries' affair but they also have become increasingly important for developing countries. This importance is reflected by the fact that FDI flows have become the largest component of capital inflow for developing countries.

Relationship between FDI and Economic growth has been investigated by a number of researchers, as can be seen from most recent surveys on the topic (Fan, 2002; Lim, 2001). It has been argued that FDI contribute positively to host country's economic growth through capital accumulation and technology transfer, suggesting *FDI-led growth (FDILG) hypothesis*. It is also been noted that Multinational corporations (MNC) tend to locate in more productive, fast growing countries or regions. Thus economic growth of a country can also attract FDI, suggesting *growth-led FDI (GLFDI) hypothesis*.

In an open economy, technology may be transferred through trade and thus may promote economic growth. *Export-led economic growth (ELG) hypothesis* is supported by the literature on "endogenous" growth theory which emphasizes that exports are likely to increase long-run growth by allowing a higher rate of technological innovation and dynamic learning from abroad (Lucas, 1988; Grossman and Helpman, 1991; and Edwards, 1992). ELG hypothesis has been extensively investigated, as can be seen from a recent survey on the topic (Giles and Williams, 2000). It has been noted that country's economic growth can also stimulate exports, suggesting *growth-led export (GLE) hypothesis*.

Most recently, Hsiao F. and Hsiao M. (2006) have examined, in addition to FDI-growth nexus and the Export-growth nexus, the third side of a triangular relation: The FDI-exports nexus. They argued that the relation between FDI and exports may be positive or negative, if there is one at all.

Following Hsiao F. and Hsiao M. (2006), the three kinds of nexus have been studied using method of Granger multivariate causality tests. The objective of the paper is to test causality relations between FDI, exports and economic growth (GDP) among six member countries of Gulf Cooperation Council (GCC): Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (UAE).

The paper is organized as follows: Section II provides an overview of FDI, exports and economic growth of GCC member countries. A brief review of empirical literature on FDI-growth and exportgrowth is presented in section III. Empirical analysis is offered in section IV and conclusion in section V.

FDI and Exports in GCC Countries: An Overview

The six member countries of the GCC – Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirates – have achieved, over the past three decades, an extraordinary economic progress through

open exchange and trade system, liberal capital flows and foreign labor. The GCC area has become an important center for regional economic growth.

While GCC economies shared a common characteristic of being dependent on oil in the past, they differ in their attempts to diversify their economies.. The diversification of the economy varies across GCC countries: manufacturing sector is growing more rapidly in Saudi Arabia, as trade and related activities in the UAE, while the banking and insurance sector by far the single most important sector in Bahrain. In Qatar, natural gas is emerging as the key sector, and in Oman non-oil growth is based on the development of natural gas resources and tourism (Fasano, U. & Iqbal, Z., 2003).

These economies are implementing policy reforms to accelerate non-oil growth and create employment opportunities while reducing vulnerability to oil price shocks. These reforms include liberalization of restrictions on foreign capital inflows so that the needed capital and associated technologies are available to support privatization and private sector development (Fasano and others, 2003).

As was noted in the introduction, FDI flows have become increasingly important for developing countries. In relation to GCC, its very low share of global FDI inflows (at an average of 1% in the 1990s against a share of world GDP of 2%) masks some noticeable differences among its member countries.

Table1
FDI in each GCC country as percentage of total FDI to GCC countries (1981 to 2005)

			(1701 to 20	(03)		
	BAHRAIN	KUWAIT	OMAN	QATAR	SAUDI	UNITED
					ARABIA	ARAB
						EMIRATES
MEAN	8.929315	0.763528	7.496753	3.114795	71.44421	8.251396
MAXIMUM	19.97187	2.057637	21.99243	8.883949	91.22437	38.39340
MINIMUM	0.670762	0.047593	4.258567	0.232926	35.52865	1.930795
STD. DEV.	7.233545	0.716070	3.361413	3.246862	18.04449	9.070772

Source: World Investment Report 2006

As Table 1 shows FDI is mainly concentrated in Saudi Arabia, United Arab Emirates and Oman. These countries received, on average, 72%, 38% and 22%, respectively of total FDI to GCC countries. The average share for Bahrain, Qatar and Kuwait are 19%, 8% and 2%, respectively. It is mostly undertaken in the oil sector (Oman), petrochemicals (Saudi Arabia) and manufacturing and trade (UAE).

FDI as percentage of GDP, remained stable for most of the GCC countries but were very erratic in case of Saudi Arabia, ranging from a minimum of 8 percent to a maximum of 324% during 1980 to 2002 (table 2). Bahrain witnessed a significant increase in this ratio, from 1.8% in 1980 to more than 70% in 2002. The average ratio (from 1980 to 2002) for Kuwait, Oman, Qatar, and UAE is 0.6%, 13%, 5%, and 3%, respectively.

All of the six GCC countries are ranked with high FDI potential, an index developed by UNCTAD which incorporates several factors in the calculation of the index (see table 3.1). In terms of FDI performance, calculated as a ratio of a country's share in global FDI inflows to its share in global GDP, all GCC countries are ranked low except Bahrain (see table 3). A comparison of performance and potential index for all six GCC countries for selected years is presented in table 3.3. For most of the years all GCC countries, with the exception of Bahrain, have performed below their potential. These economies, as noted earlier in the section, have already embarked on structural and policy reforms to realize their potential in coming years. Oman and UAE have already achieved high performance, relative to their potential, and were ranked as front-runners for the year 2004. Bahrain's FDI performance has always remained high relative to its FDI potential and was ranked as a front-runner for all years except for the year 2000.

Table 2 FDI and Exports as percentage of GDP (1980 to 2002)

	Bah	irain	Ки	wait	Or	nan	Qa	atar	Saudi	Arabia	United Ard	ab Emirates
	FDI/GDP	EXP/GDP	FDI/GDP	EXP/GDP								
1980	1.8451	142.60	0.1058	128.25	7.6319	52.072	1.0588	67.758	9.1909	79.212	1.3813	51.298
1981	1.7461	147.34	0.1250	120.41	7.1413	57.708	1.0005	62.139	8.1907	82.727	1.1891	50.608
1982	2.3893	111.28	0.1459	89.272	9.0580	50.977	1.1887	83.244	93.442	64.523	1.5912	47.627
1983	3.9335	86.658	0.1510	83.043	10.387	49.728	1.4098	74.525	161.06	44.500	1.9009	48.314
1984	7.1232	80.391	0.1175	84.106	11.115	41.952	1.1133	65.474	223.43	39.106	2.5344	46.437
1985	10.207	75.609	0.1527	79.355	11.556	45.254	1.3725	57.570	262.73	31.804	1.7804	51.026
1986	11.236	63.491	0.1017	47.577	16.304	35.526	1.6423	40.938	324.29	23.267	2.7331	112.70
1987	9.9789	65.192	0.0532	58.409	15.954	37.350	1.4692	36.612	306.77	27.338	2.6854	89.128
1988	15.172	60.271	0.1363	52.058	17.509	48.061	0.9835	34.512	292.03	26.156	3.4894	113.71
1989	18.756	64.633	0.1311	55.762	16.866	46.551	0.8922	38.571	260.03	30.660	3.1511	105.18
1990	12.848	92.669	0.2029	50.695	14.595	39.227	0.8528	44.738	209.16	42.139	2.2230	91.752
1991	25.762	40.966	0.3475	7.8036	16.161	43.412	1.5298	47.167	186.88	39.546	2.2907	123.27
1992	42.933	37.698	0.3703	24.530	15.492	43.813	1.8949	47.391	181.07	39.553	2.5920	113.53
1993	33.932	39.391	0.3626	37.076	16.565	42.462	3.0313	46.456	189.75	33.218	3.6590	120.87
1994	35.441	56.871	0.3495	34.970	16.482	41.946	4.7297	43.207	137.12	33.071	3.5810	114.63
1995	41.095	64.239	0.3453	43.102	15.633	43.214	5.4356	45.227	133.44	36.851	4.1354	108.50
1996	72.964	68.536	1.3999	45.840	14.516	47.293	8.6233	48.556	108.53	38.349	4.3146	98.001
1997	75.307	87.848	1.5185	49.164	14.413	47.283	10.617	48.713	104.10	37.330	4.4977	114.88
1998	80.219	86.985	2.0039	32.538	16.926	38.161	15.083	47.482	118.32	23.262	5.2800	139.46
1999	81.787	85.886	1.9658	39.911	15.424	45.157	13.395	50.194	107.92	29.987	2.8552	106.95
2000	74.093	96.882	1.6434	57.864	12.615	53.687	10.764	65.275	93.151	44.215	1.5050	90.712
2001	75.504	98.622	1.4608	49.799	12.590	53.541	12.441	61.260	94.297	40.919	3.2290	98.147
2002	73.437	93.977	1.4237	47.081	12.907	54.799	14.366	55.698	93.926	39.164	4.9773	89.751
Mean	35.118	80.350	0.6354	57.331	13.819	46.051	5.3974	52.891	160.82	40.300	2.9381	92.458
Max	81.787	147.34	2.0039	128.25	17.509	57.708	15.083	83.244	324.29	82.727	5.2800	139.46
Min	1.7461	37.698	0.0532	7.8036	7.1413	35.526	0.8528	34.512	8.1907	23.262	1.1891	46.437
St.dev.	30.223	28.301	0.6924	28.591	3.0678	5.9218	5.3944	12.280	87.861	15.504	1.1650	28.778

Table 3a FDI Performance¹ Index

			DI I CITOI III CI	100 1114021		
	Bahrain	Kuwait	Oman	Qatar	Saudi	UAE
89-91	5.490	0.021	1.512	NA	0.506	0.060
90-92	12.647	0.111	1.57	0.250	0.741	0.050
91-93	11.127	0.12	1.561	0.524	0.539	0.700
92-94	6.098	0.084	1.126	0.950	0.535	0.636
93-95	2.145	0.026	0.667	1.296	-0.042	0.723
94-96	13.423	0.376	0.373	1.286	-0.597	0.518
95-97	11.331	0.316	0.263	2.010	0.007	0.492
96-98	7.867	0.283	0.288	2.205	0.854	0.315
97-99	2.006	0.071	0.165	2.069	0.626	-0.138
98-00	1.390	0.046	0.097	1.040	0.102	-0.219
99-01	1.150	-0.017	0.072	0.530	-0.142	-0.047
00-02	0.910	-0.039	0.068	0.402	-0.148	0.238
01-03	1.576	-0.032	0.196	0.752	-0.033	0.558

Table 3b FDI Potential² Index

	Bahrain	Kuwait	Oman	Qatar	Saudi	UAE
89-91	0.264	0.161	0.203	0.293	0.267	0.264
90-92	0.283	0.219	0.211	0.351	0.315	0.308
91-93	0.286	0.232	0.209	0.353	0.316	0.304
92-94	0.287	0.259	0.016	0.357	0.313	0.314
93-95	0.305	0.282	0.22	0.357	0.320	0.346
94-96	0.289	0.283	0.217	0.350	0.311	0.356
95-97	0.286	0.282	0.218	0.353	0.309	0.360
96-98	0.293	0.290	0.22	0.371	0.311	0.374
97-99	0.287	0.286	0.215	0.379	0.303	0.379
98-00	0.292	0.306	0.22	0.396	0.309	0.374
99-01	0.302	0.299	0.226	0.407	0.309	0.392
00-02	0.304	0.305	0.221	0.433	0.298	0.388
01-03	0.305	0.264	0.216	0.438	0.294	0.373

Table 3c

Comparison of FDI Performance & FDI Potential Index

	88-90	93-95	99-01	00-02	01-03	02-04
Bahrain	FR^3	FR	FR	BP	FR	FR
Kuwait	BP^4	BP	BP	BP	BP	BP
Oman	FR	BP	BP	BP	FR	FR
Qatar	BP	FR	BP	BP	BP	BP
Saudi	BP	BP	BP	BP	BP	BP
UAE	BP	BP	BP	BP	BP	FR

Notes: 1. It is the ratio of a country's share in global FDI inflows to its share in global GDP. A value greater than one indicates that the country receives more FDI than its relative economic size, a value below one that it receives less (a negative value means that foreign investors disinvest in that period).

^{2.} The Inward FDI Potential Index captures several factors (apart from market size) expected to affect an economy's attractiveness to foreign investors. It is an average of the values (normalized to yield a score between zero, for the lowest scoring country, to one, for the highest) of 12 variables

^{3.} FR – Front-runner (high FDI performance & high FDI potential)

^{4.} BP – Below potential (low FDI performance & high FDI potential)

Exports significantly contribute to the economic growth of all GCC economies. Because of oil being the largest single export item for all GCC countries, these economies have seen volatile economic growth due to oil prices. The importance of exports is evident from its share in each economy's GDP. As table A1 shows, exports as percentage of GDP remained more than 50 percent, on average, for all GCC economies. United Arab Emirates and Bahrain are leading other GCC economies as this ratio is 92 percent and 80 percent, on average, respectively.

A Brief Review of Recent Empirical Literature

A survey of recent empirical literature shows that the causality relations vary with the period studied, the econometric method used, and the treatment of variable used (real or nominal). This section provides a brief review of studies investigating causal relation between FDI and GDP, Exports and GDP and Exports and FDI.

Because of the popularity of Export-led Growth (ELG) hypothesis, a large number of studies have been conducted to test the hypothesis. A recent survey of the empirical literature by Giles and Williams (2000), indicate that while studies applying a cross-section type methodologies support an association between exports and growth, time series evidence fails to support for the ELG hypothesis. The findings of another survey by Edwards (1993) are similar on the ELG hypothesis.

There are also mixed findings regarding causal relation between FDI and economic growth. Ericson and Irandoust (2001), for example, used multivariate VAR model for four OECD countries and didn't find any causal relation for Denmark and Finland but found a long-run unidirectional causal relation from FDI growth to GDP growth for Norway and a bi-directional causality for Sweden. Chakraborty and Basu (2002) examined the causal relation for India using cointegration and VECM technique and found unidirectional causality from real GDP to FDI. Bende-Nebende, Ford, Sen and Slater (2000) employed cointegration and VAR method and found evidence from the Asia-Pacific region that FDI positively affects output directly or indirectly (through spillover effects).

There are also studies which have examined causal relation between all three variables FDI, GDP and Exports. Dritsaki, Dritsaki and Adamopoulos (2004), for example, found a bi-directional causality between real GDP and real Exports, unidirectional causalities from FDI to real Exports, and FDI to real GDP, for Greece. Ahmad, Alam and Butt (2004) found unidirectional causalities from Exports to GDP and FDI to GDP for Pakistan. Finally, Hsiao and Hsiao (2006) argued that time series causality analysis for these three variables for individual country alone may not yield useful information for a general rule. They used pooled data for the eight Asian economies and found only unidirectional causality from FDI to GDP, FDI to Exports, and Exports to GDP.

RESULTS

This section explains the procedures to examine Granger causality relations between GDP, FDI and Exports for each of the six economies of GCC using their time series data. The data on inward FDI, and GDP, in current US\$ million, from 1980 to 2002 for all six GCC countries are obtained form the World Investment Report (2006). The data on total exports (current US\$ million), GDP deflator, and CPI for all six GCC countries are taken from World Development Indicators (WDI, 2005). The current values of FDI and GDP for each of the six economies are deflated by the GDP deflator of each country. The current values of exports are deflated by each country's CPI. We have transformed the values of all variables into logarithmic values, denoted by lower case letters, GDP, EX, and FDI.

Stationary properties of each series and cointegration test among all three time series have to be tested before selecting an appropriate model from the Vector Autoregression (VAR) and the Vector Error Correction model (VECM) for Granger causality test.

Tests for unit Root

We employed various specifications of Augmented Dickey-Fuller (ADF) unit root tests to examine the stationarity of each time series. The result of these test are reported in table 3. For each country, overall test results show that we cannot reject the null hypothesis that the log level series has a

unit root at the 10% or less level of significance. This suggests the non-stationarity of all level series. ADF unit root test were then applied

to first-difference series for each economy and results are presented in table 4. The results overall provide the evidence that all first-difference series are stationary at the 10% or less level of significance.

Test for Cointegration

Bahrain

Since all the level series, GDP, EX, and FDI, are non-stationary for Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirates, we also applied Johansen cointegration test to the level series for these six economies. we used Eviews which implements VAR-based cointegration tests using the methodology developed in Johansen (1991, 1995). In formulating the dynamic model for the test, the question of whether an

intercept and trend should enter the short- and/or long-run model is raised (Harris, 1995, p.95). We used all five deterministic trend models considered by Johansen (1995, pp. 80,84). The number of cointegrating relations from three of the five models, on the basis of trace statistics and the maximal eigenvalue statistics using critical values from Osterwald-Lenum (1992) at 5 percent level, are summarized in table 5.

Table 4
ADF Unit Root test

Bahrain						
	L	og Level Series	S	Lo	g First Differen	ісе
$Model \rightarrow$	1	2	3	1	2	3
Exp	1.014272	0.242811	-1.327595	-3.935069	-3.966704	-5.329247
Fdi	1.955972***	0.420446	-1.902559	-3.323352	-4.094870	-4.196816
Gdp	6.167962*	1.659192	-1.282497	-0.874134*	-4.005612	-4.664803
Kuwait						
	L	og Level Series	S	Lo	g First Differen	ice
$Model \rightarrow$	1	2	3	1	2	3
Exp	-2.46772**	-4.253817*	-3.48888***	-4.393077	-4.314639	-4.457331
Fdi	0.189936	-0.598812	-1.727394	-3.739638	-3.822479	-3.732564
Gdp	-0.171883	-1.585932	-3.200501	-4.332055	-4.260857	-4.109589
Oman						
	L	og Level Series	5	Lo	g First Differen	исе
$Model \rightarrow$	1	2	3	1	2	3
Exp	1.989289**	-0.115029	-2.308836	-5.601527	-4.415252	-4.279184
Fdi	0.888853	-1.993369	-1.575462	-4.269003	-4.775291	-5.210746
Gdp	3.107560*	-1.340697	-2.372737	-2.787557	-3.921780	-3.916310
Qatar						
	L	og Level Series	5	Lo	g First Differen	исе
$Model \rightarrow$	1	2	3	1	2	3
Exp	-0.316669	-1.081093	-1.085128	-4.139956	-1.106091*	-5.078263
Fdi	2.422063**	5.293070*	1.910250	1.311225*	0.272883*	-2.989343*
Gdp	0.601685	-0.013202	-0.757060	-0.531467*	-0.680679*	-5.623165
Saudi Arabia						
	L	og Level Series	5	Lo	g First Differen	nce
$Model \rightarrow$	1	2	3	1	2	3
Exp	-1.605043	-2.584228	-5.621537*	-3.983793	-3.808217	-3.951877*
Fdi	-0.072071	-3.37517**	-4.937226*	-4.003584	-3.825964	-3.884732*
Gdp	0.702141	-0.089990	-2.568938	-3.095675	-3.050257	-3.763531*
United Arab E	Emirate					
	I	og Level Series	5	Lo	g First Differen	ісе
$Model \rightarrow$	1	2	3	1	2	3
Exp	0.572430	-1.118155	-3.017860	-5.647763	-5.972635	-4.557055

Fdi	0.766887	-0.781206	-4.21496**	-4.066389	-4.254317	-4.015730
Gdp	1.651119***	0.667532	-1.622752	-3.372223	-3.545474*	-4.453460

Notes:

- 1. Model (1), (2), & (3) indicate the model statistic without either drift or trend, with drift, and with drift and trend, respectively.
- 2. The critical values were from McKinnon (1996)
- 3. *,**,*** reject null hypothesis at 1%, 5% & 10% respectively for log level series
- 4. *,**,*** can not reject null hypothesis at 1%, 5% & 10% respectively for log first difference series

TABLE 5
Johansen Cointegration Test Summary

	Num	ber of Cointeg	rating Relation	ıs in Level Seri	es: FDI, gdp ai	nd ex
		Trace test		Ma	x-eigenvalue to	est
	No	Intercept	Intercept	No	Intercept	Intercept
	Intercept	No Trend	Linear	Intercept	No Trend	Linear
	No Trend		Trend	No Trend		Trend
Bahrain	3	2	2	0	2	1
Kuwait	0	1	1	0	1	0
Oman	0	0	0	0	0	0
Qatar	2	2	2	2	2	2
Saudi	2	1	1	0	1	1
Arabia						
UAE	0	1	1	0	1	0

Note: Test equation includes two lags interval and reject the null hypothesis: Number of CE(s) = r(0,1,2, respectively) at the 5% level critical values from Osterwald-Lenum (1992)

There is a convincing evidence for only two economies Oman and Qatar in favor of zero and one cointegrating vector, respectively. There is a mix evidence on number of cointegrating vectors for Kuwait, United Arab Emirates, Bahrain and Saudi Arabia. The results do suggest two cointegrating vectors for Bahrain and one cointegrating vector each for Kuwait, Saudi Arabia and UAE.

Based on the above results from the unit root and cointegration tests and for the purpose of comparison among economies, we have chosen to use the first-difference series, dGDP, dFEDI and dEX in the estimation.

The VAR and VECM Granger Causality Tests

We considered VECM as appropriate model for all economies except for Oman. Each time series for all these five economies were non-stationary and found to be cointegrated. A VECM is a restricted VAR designed for use with nonstationary series that are known to be cointegrated. The VECM has cointegration relations built into the specification so that it restricts the long-run behavior of the endogenous variables to converge to their cointegrating relationships while allowing for short-run adjustment dynamics. The cointegrating term is known as the error correction term since the deviation from long-run equilibrium is corrected gradually through a series of partial short-run adjustments.

In specifying a VAR or VECM model, number of lags to be included can not be determined arbitrarily. Various criteria are available to choose proper lag length for the VAR model. We used five criteria, as discussed in Lutkepohl (1991, section 4.3) in deciding the lag length for five VECM models (for Bahrain, Kuwait, Qatar, Saudi Arabia and UAE) and one VAR model (for Oman). Although results indicated a lag length of 4 for all economies except Oman, we were able to specify VECM(3) for each of these five economies due to degrees of freedom problem. A VAR(2) model was used in case of Oman.

Table 6 presents the results of Granger causality tests from estimated VECM and VAR models of dGDP, dEX, and dFDI, for all six GCC economies. Estimated coefficients of error correction term (ECT) along with t statistics for VECM specifications are also reported in table 6. Figure 1 summarizes causality triangle relations among GDP, FDI & Exports for all six member economies of the GCC. With an ECT in the model, Granger non causality will imply both neither short nor long-term causality between variables (Engle and Granger, 1987). Taking this view, causality can be derived through: a) the χ^2 test of the joint significance of the lags of other variables (Wald test), and b) the significance of the lagged ECT (t-test).

For Saudi Arabia, we found short and long-run bidirectional causality between GDP and Exports and between FDI and GDP and unidirectional causality (short and long-run) from FDI to Exports. The results are somewhat similar for Qatar where there is an evidence of short and long-run bidirectional causality between GDP and Exports and unidirectional causality from FDI to GDP and Exports.

For Kuwait, we found short and long-run bidirectional causality between GDP and Exports and unidirectional causality (short and long-run) from FDI to GDP and Exports. There is a weak evidence of long-run causal relation from Export and GDP to FDI. For Bahrain, we found short and long-run unidirectional causality from GDP and Exports to FDI. There is also a weak evidence of short and long-run unidirectional causality from Exports to GDP.

For United Arab Emirates, we found short and long-run unidirectional causality from Export to GDP and some support (lower level of significance) for short and long-run unidirectional causality from Exports to FDI. Finally, surprisingly there is no evidence of any short or long run unidirectional or bidirectional causal relation for Oman.

Table 6 Granger Causality Tests

Bahrain							
VECM(3)	Source	of causation (Sho		E_{i}	rror corre	ection teri	n
	dgdp	dex	dfdi	EC	T1	EC	T2
Equation	$\chi^2(3)$	$\chi^{2}(3)$	$\chi^{2}(3)$	coeff.	t	coeff.	t
dgdp	-	5.943558 ^d	1.290116	0.53	1.19 ^d	0.09	0.69
dex	0.345725	-	1.377048	-0.95	-0.67	-0.78	-1.78
dfdi	19.55338a	6.643306°	-	2.01	3.67a	0.38	2.26 ^b
Kuwait							
VECM(3)	Source	e of causation (Sho	rt run)	Е	rror corr	ection ter	m
	dgdp	dex	dfdi	EC	CT1	EC	CT2
Equation	$\chi^{2}(3)$	$\chi^2(3)$	$\chi^{2}(3)$	coeff.	t	coeff.	t
dgdp	-	9.883912b	5.667988 ^d	-0.29	- 2.7 ^a	-	-
dex	74.55198a	-	24.92570a	-0.41	-8.0a	-	-
dfdi	0.625754	1.139745	-	0.004	1.38 ^c	-	-
Oman							
VAR(2)	Source	of causation (Sho		Error co	orrection		
	dgdp	dex	dfdi	EC	T1	EC	T2
Equation	$\chi^{2}(3)$	$\chi^2(3)$	$\chi^{2}(3)$	coeff.	t	coeff.	t
dgdp	-	0.536242	2.711328	-	-	-	-
dex	0.681558	-	1.382298	-	-	-	-
dfdi	1.217882	0.308390	-	-	-	-	-
Qatar							
VECM(3)	Source	e of causation (Sho	Error correction				
	dgdp	dex	dfdi	EC	ECT1 ECT2		T2
Equation	$\chi^{2}(3)$	$\chi^2(3)$	$\chi^{2}(3)$	coeff.	t	coeff.	t
dgdp	-	11.56475 ^a	35.23088a	2.63	4.36a	-2.72	-4.5a

dex	16.21752a	-	27.02422a	2.69	4.85a	-2.58	-4.6a
dfdi	1.637927	1.829600	-	0.075	0.55	-0.06	-0.49
Saudi Arabia							
VECM(3)	Source	e of causation (Sho	rt run)		Error co	orrection	
	dgdp	dex dfdi ECT1				EC	T2
Equation	$\chi^2(3)$	$\chi^{2}(3)$	$\chi^{2}(3)$	coeff.	t	coeff.	t
dgdp	-	8.062820 ^b	12.59928a	0.36	2.36^{b}	-	-
dex	14.21683a	-	21.37317a	0.93	4.96a	-	-
dfdi	4.392451 ^d	1.154660	-	-0.20	-3.1ª	-	-
United Arab Em	irates						
VECM(3)	Source	e of causation (Sho	rt run)		Error co	orrection	
	dgdp	dex	dfdi	EC	T1	EC	T2
Equation	$\chi^2(3)$	$\chi^{2}(3)$	$\chi^{2}(3)$	coeff.	t	coeff.	t
dgdp	-	8.508113 ^b	2.389464	-0.98	-3.4a	-	-
dex	0.363928	-	1.129574	0.40	0.43	-	-
dfdi	1.721541	5.137730°	-	-0.06	-1.3 ^d	-	-
Motog							

Notes:

- 1. The uppercases "a", "b", "c", "d" denote significance at the 1%, 5%, 10%, and 15%, level, respectively.
- 2. Figures in parenthesis are degrees of freedom

CONCLUSIONS

There are many theoretical and empirical studies on the bivariate causality between exports and economic growth, between FDI and economic growth and between trade (exports) and FDI. As these three variables are closely related, instead of analyzing two variables at a time, it is useful to inspect multivariate causality among all three of them. This paper examines the Granger causality relations between these three variable (GDP, Exports, and FDI) among Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirates, the six developing economies of the GCC.

Both exports and FDI significantly contributes in the economic development and growth of these GCC economies. Their openness is evident from their high export to GDP ratios, and the importance of FDI is reflected in their ranking as high potential economies for attracting inward FDI flows.

Our analysis for these GCC economies is based on the period from 1980 to 2002. After testing for time series properties, appropriate VAR and VECM models for each of the six economies were estimated to test Granger causality relations. With the exception of Oman, short and long-run causal relations, among FDI, GDP and Exports are found for each of the member economy of the GCC.

All of the GCC economies, with the exception of Oman, provide support for export-led growth (ELG) hypothesis as we found unidirectional causality running from exports to economic growth. There is also an evidence of bidirectional causality between exports and GDP for Kuwait, Qatar and Saudi Arabia.

We also found support for FDI-led growth hypothesis from the economies of Kuwait, Qatar, and Saudi Arabia. In case of Bahrain and Saudi Arabia, economic growth plays a role in attracting FDI flows. For Qatar, Kuwait, and Saudi Arabia unidirectional causality runs from FDI to exports but it runs from exports to FDI in case of Bahrain and United Arab Emirates. The overall findings of the paper endorse the importance of FDI and openness in economic growth and development of each of the member economy of the GCC.

REFERENCES

Ahmad, M. H., Shaista, A., & Mohammad S. B. 2004. *Foreign direct investment, exports and domestic output in Pakistan*. paper presented at the 19th Annual general Meeting, PIDE, Islamabad, Pakistan.

Bende-Nebende, Ford, J.L., Sen, S., & Slater J., 2000. *Long-run dynamics of FDI and its spillovers onto output: Evidence from the Asia-Pacific Economic Cooperation region*. Department of Economics Discussion paper 00-10, University of Birmingham.

Chakraborty, C., & Basu, P., 2002. Foreign direct investment and economic growth in India: A cointegration approach. *Applied Economics*, 34: 1061-1073.

Dickey, D.A., & Fuller, W.A. 1979. Distribution of the estimators for autoregressive time series with unit root. *Journal of the American Statistical Association*, 74 (366): 427-31.

Dritsaki, Melina, Chaido Dritsaki, & Antonios Adamopoulos 2004. A causal Relationship between trade, foreign direct investment, and economic growth for Greece. *American Journal of Applied Sciences*, 1(3): 230-235.

Edwards, S. 1992. Trade orientation, distortions and growth in developing countries. *Journal of development Economics*, 39: 31-57.

Edwards, S. 1992. Openness, trade liberalization, and growth in developing countries. *Journal of Economic Literature*, 31: 1358-1393.

Engle, R.E., & Granger, C.W.J. 1987. Cointegration and error-correction: Representation, estimation, and testing. *Econometrica*, 55 (2): 251-76.

Ericson, J., & Irandoust, M., 2001. On the causality between foreign direct investment and output: A comparative study. *The International Trade Journal*, Vol. 15 No. 1.

EViews. 2004. EViews5 User's Guide. QMS.

Fan, Emma Xiaoqin 2002. *Technological spillovers from foreign direct investment – A survey*. ERD Working Paper Series No. 33, Asian Development Bank.

Fasano, Ugo, & others, 2003. *Monetary union among member countries of the Gulf Cooperation Council*. Occasional Paper No. 221, IMF.

Giles, Judith A., & Cara L. Williams 2000. Export-led growth: A survey of the empirical literature and some non-causality results. Part I. *Journal of International Trade and Economic Development*, 9(3): 261-337.

Grossman, G., & Helpman, E. 1991. *Innovation and Growth in the World Economy*. Cambridge: MIT Press

Haris, R. 1995. Cointegration Analysis in Econometric Modeling. Prentice Hall.

Hsiao F., & Hsiao M. 2006. *FDI, Exports, and Growth in East and Southeast Asia – Evidence from Time series and Panel Data Causality Analysis*. Paper presented at 2006 International Conference on Korea and World Economy V, Korea University, Seoul Korea, July 7-8.

Johansen, S. 1991. Estimation and Hypothesis Testing of Cointegration Vectors in Gaussian Vector Autoregression Models. *Econometrica*, 59 (6): 1551-580.

Johansen, S. 1995, *Liklihood-Based Inference in Cointegrated Vector Autoregressive Models*. Oxford University Press.

Lim, Ewe-Ghee 2001. Determinants of, and the relation between, foreign direct investment and growth: A summary of the recent literature. Working Paper, WP/01/175, IMF.

Lucas, R. E. 1988. On the mechanics of economic envelopment. *Journal of Monetary Economics*, 22: 3-42.

Lukepohl, Helmut 1991. *Introduction to multiple time series analysis*. New York: Springer-Verlag. Osterwald-Lenum, M. 1992. A note with Quintiles of the Asymptotic Distribution of the maximum likelihood co-integration rank test statistics. *Oxford Bulletin of Economics and Statistics*, 54: 461-72. United Nations Conference on Trade and Development (UNCTAD) 2006 and various years. World Investment Report, New York and Geneva: United Nations

World Bank 2005. World Development Indicators 2005. Washington DC: World Bank

STOCK MARKET DEVELOPMENT AND ECONOMIC GROWTH

Khalifa H. Ghali Kuwait University, Kuwait E-mail: kghali@cba.edu.kw

ABSTRACT

Past empirical analysis of the relationship between financial development and economic growth in the US suggests that capital market development has no impact on long-run economic growth. However, analysis of the same data used previously reveals the existence of trends and breaks which past studies failed to take into account, hence, rendering their results questionable. Therefore, this paper uses recent advances in time series techniques and investigates the issue again within a VEC model that allows for the presence of trends and breaks in the data. In this framework, we test for long-run causality between stock market development and economic growth after controlling for banking development and stock market volatility. Using three alternative measures of stock market development, the findings of our empirical analysis provide strong evidence that capital market development has a long-run causal impact on output growth in the US.

INTRODUCTION

Recently, in light of the explosive growth experienced by global equity markets, this debate has focused on the particular contribution of stock market development to long-run economic growth. In this respect, a growing body of literature investigating this issue has emerged, but no consensus has been reached. On one hand, there are studies which suggest that stock market development promote economic growth. These include Atje and Jovanovich (1993), Obstfeld (1994), Greenwood and Smith (1996), Korajczyk (1996), Bencivenga, et. al. (1996), Levine and Zervos (1996, 1998). For example, Greenwood and Smith (1996) show that large stock markets lower the cost of mobilizing savings, facilitating investments in the most productive technologies. Obstfeld (1994) shows that international risk-sharing through internationally integrated stock markets improve resource allocation and can accelerate growth. Focusing on liquidity, Bencivenga, et. al. (1996) argue that stock market liquidity plays a key role in economic growth by allowing firms to permanently access to capital raised through equity issues. Liquidity is also supposed to increase investors' incentive to acquire information on firms and improve corporate governance (Holmstrom & Tirole, 1993). Within the new growth theory framework, Levine and Zervos (1998) examined this issue empirically and found a positive and significant correlation between stock market development and economic growth.

On the other hand, there are studies which questioned the role of stock markets in promoting economic growth. For example, Stigliz (1985) argues that developed stock markets quickly reveal information through price changes, creating a free rider problem and reducing investor incentives to spend resources to conduct costly search. Demirguch-Kunt and Levine (1996) have questioned the role of liquidity in promoting economic growth. They argue that increased liquidity can deter growth at least in three different ways. First, by increasing returns to investments, high stock market liquidity may reduce savings rates through income and substitution effects. Second, by reducing the uncertainty associated with investment, greater stock market liquidity may reduce savings rates due to the ambiguous effects of uncertainty on savings. Third, stock market liquidity encourages investor myopia, adversely affecting corporate governance and thereby reducing economic growth.

In light of this controversial debate and the conflicting results emerging from the empirical literature, this paper's aim is to empirically investigate the causal relationship between stock market development and long-run economic growth. As a case study, we focus on the case of the US stock market. The reason for this is that the US stock market is one of the most developed markets in the world. Moreover, past empirical research did not provide any clear evidence on whether or not the stock market

in the US contributed to promoting economic growth. In this respect, the only available time series analysis of US data by Arestis et. al. (2001) raised doubts about the ability of the US stock market to promote long-run economic growth. Their results suggest that the financial sector in the US is rather following the growth of real output generated elsewhere.

Using recent advances in time series techniques, analysis of the same data used by Arestis et. al. (2001) revealed the existence of trends and breaks in the US data which they failed to incorporate in their analysis, hence, rendering their results questionable. In particular, the existence of linear trends in the data requires special specification and treatment of the deterministic components of the model and the cointegration space which, if ignored, leads to incorrect inferences (Johansen, 1991, 1992, 1994). Moreover, Arestis et. al. failed to test for unit roots under the trend-break hypothesis, which resulted in the misspecification of the correct order of integration of the variables and the appropriate breaks in the data. Finally, Arestis et. al. (2001) estimated cointegrating vectors that include dummy variables as intercepts in the long-run relationships, a practice that is not allowed in cointegration analysis. As Johansen (1991, 1992, 1994) has clearly showed, dummy variables should be allowed only as part of the deterministic components of the model.

Therefore, this paper proposes to reinvestigate the issue after allowing for the existence of trends and breaks in the data. In this respect, the present analysis differs from that of Arestis et. al. (2001) in three important ways. First, we consider how different assumptions about the constant and linear terms in the autoregressive model affect the results of cointegration and Granger-causality for nonstationary variables. As shown by Johansen (1994), the misspecification of these terms has serious consequences on the results of cointegration. Therefore, before testing for Granger-causality, we use the Johansen (1994) testing procedure and identify the deterministic components that should be included in the model. It turns out that the US data contain a deterministic linear trend that is consistent with the inclusion of an intercept term in the long-run relationships, something that was ignored in previous analysis. Second, in contrast to the classical unit-root tests used by Arestis et. al. (2001), we herein test for unit roots under the possibility of structural breaks in the trend functions of the variables, and that by using the Perron (1997) testing procedure. It turns out that the US data contain many breaks that were not taken into account in previous analysis. In particular, the orders of integration of the variables are found to be different of those reported in Arestis et. al. (2001). Finally, our treatment of structural breaks in the data differs significantly from that adopted previously. In Arestis et. al., the treatment of breaks was made by including dummy variables in the long-run relationships. However, consistently with Johansen (1991, 1992, 1994), the present analysis includes dummy variables in the deterministic part of the model in order to account for structural breaks.

We test for the existence and direction of long-run causality between stock market development and economic growth in the US, after controlling for the effects of banking development and stock market volatility. In particular, we experiment with three alternative measures of stock market development; the ratio of stock market transactions to market valuation, the ratio of stock market transactions to GDP, and the ratio of stock market capitalization to GDP. For all three measures, the empirical results provide strong evidence that capital market development promotes long-run economic growth in the US.

The remaining of the paper is organized as follows. Section two presents the econometric methodology. Section three presents the empirical results and section four concludes with limitations.

RESEARCH METHODOLOGY

A Vector Error-Correction Model of Financial Development and Growth

To model the intertemporal interaction between real output (Y), banking sector development (B), stock market development (S) and stock market volatility (SMV), we represent their short-run dynamics by a vector autoregressive (VAR) model where all variables are allowed to be endogenous. Then the idea that some or all of the variables share common stochastic trends (i.e. cointegrated) can be tested and exploited to model their interaction within a vector error-correction (VEC) model, which captures both the short-run and the long-run dynamics of the variables.

Consider a VAR(k) model of the form

$$X_{t} = \Phi_{1} X_{t-1} + \Phi_{2} X_{t-2} + ... + \Phi_{k} X_{t-k} + \mu + \delta D_{t} + \eta_{t}, \quad t=1, ..., T,$$

$$\tag{1}$$

where X_t is a 4 x 1 vector containing Y, B, S, and SMV and D_t is a matrix containing deterministic variables such as trend and dummies. D_t can also include stochastic variables that are weakly exogenous and excluded from the cointegration space. Suppose for the time being that the variables in X_t are I(0) after applying the differencing filter once. If we exploit the idea that there may exist comovements of these variables and possibilities that they will trend together towards a long-run equilibrium state, then by the Granger representation theorem, we may posit the following testing relationships that constitute our vector error-correction (VEC) model

$$\Delta X_{t} = \Gamma_{1} \Delta X_{t-1} + \Gamma_{2} \Delta X_{t-2} + \ldots + \Gamma_{k-1} \Delta X_{t-k+1} + \Pi X_{t-1} + \mu + \delta D_{t} + \eta_{t},$$

$$t = 1, ..., T$$
(2)

where Δ is the first difference operator, Γ 's are estimable parameters, η_t is a vector of impulses which represent the unanticipated movements in X_t , with $\eta_t \sim niid(0, \Sigma)$, and Π is the long-run parameter matrix. With r cointegrating vectors ($1 \le r \le 3$), Π has rank r and can be decomposed as $\Pi = \alpha\beta'$, with α and β both 4 x r matrices. β are the parameters in the cointegrating relationships and α are the adjustment coefficients which measure the strength of the cointegrating vectors in the VEC model,

$$\Delta X_{t} = \Gamma_{1} \Delta X_{t-1} + \Gamma_{2} \Delta X_{t-2} + \ldots + \Gamma_{k-1} \Delta X_{t-k+1} + \alpha \beta' X_{t-1} + \mu + \delta D_{t} + \eta_{t} ,$$

$$t = 1, ..., T$$

$$(3)$$

Hence, the cointegration methodology illustrates well the conflict that exists between the equilibrium framework and the disequilibrium environment from which the data are collected. As formulated in the VEC model in (3), this conflict can be easily resolved by extending the equilibrium framework into one that accounts for disequilibrium by including the equilibrium error measured by ($\beta'X_t$ -1). Once the equilibrium conditions are imposed, the model is now describing how the system is adjusting towards its long-run equilibrium state. Since the variables are supposed to be cointegrated then, in the short-run, deviations from the long-run equilibrium will feed back on the changes in the dependent variables in order to force their movements towards the long-run equilibrium state. Thus, the adjustment coefficients α measure the proportion by which the long-run disequilibrium (or imbalance) in the dependent variables are corrected in each short-term period.

Therefore, following Toda and Phillips (1993, 1994), Hall and Milne (1994), and Giles and Mirza (2000), imposing a zero restriction on the adjustment coefficients in (3) can be interpreted as a test of long-run Granger noncausality. Johansen and Juselius (1992) term this test as a test of weak exogeneity. A variable is weakly exogenous if its adjustment coefficient is zero, implying that it is not adjusting to the long-run equilibrium relationships. This also means that the long-run movement of the variables in the cointegration space does not have any influence on its short-run behavior.

Johansen (1988) developed the estimation of the VEC model using a maximum likelihood procedure which tests the cointegrating rank r and estimates the parameters β and α . The recent literature has demonstrated that the Johansen cointegrating approach performs in general better than a range of other procedures for estimating the cointegrating vectors (Gozalo 1994; Hargreaves 1994; Toda 1995; Haug 1996, among others). For example, Gonzalo (1994) reports, from simulation experiments, that Johansen's estimator has superior finite sample performance compared to many other methods for estimating the parameters of the cointegrating vectors. Toda (1995) reports that, for samples containing at least one hundred data points, the asymptotic distributions of Johansen's statistics are good approximations to the exact distributions when the null hypothesis is true.

RESULTS

Data and Variables Definitions

In order to allow comparison of our results with those in previous studies dealing with the same issue, we use the same data and the same time period as in Arestis et. al. (2001). The data consists of quarterly series for the Unites States between 1972:2 and 1998:1 and contains real output, a measure of banking system development, three measures of stock market development, and a measure of stock market volatility. Real output is measured by the logarithm of real GDP (Y); banking system development

is measured by the logarithm of the ratio of domestic bank credit to nominal GDP (B). For stock market development, we use three measures. The logarithm of the stock market capitalization ratio (MC) defined as the ratio of stock market value to GDP; the logarithm of the stock market transactions to GDP ratio (TRY); and the logarithm of the ratio of stock market transactions to stock market valuation (TRMV). Stock market volatility (SMV) is measured by a moving eight quarter standard deviation based on the logarithmic first differences of the end-of-quarter stock market price index. The original data are from Datastream International. Data on stock market are end-of-quarter price indices and market values.

Test Results for Unit Roots

In this section we present the results of testing for the existence of unit roots in the series Y, B, MC, TRY, TRMV, and SMV. The unit root tests were performed on the natural logarithm of all variables, except for the stock market volatility. Since the form of the break is unknown, we followed the recommendation of Sen (2003) and used the mixed model IO2 in as the alternative. The choice of the appropriate break date (T_b) and order of the lag-truncation parameter (k) are determined endogenously following Perron (1997), with k-max = 12. In particular, the break-date T_b is selected as the value which minimizes the t-statistic for testing $\alpha = 1$.

Table 1
Test Results for Unit Roots

Series	k	T_b	$t_{\hat{ heta}}$	$t_{\hat{eta}}$	$t_{\hat{\gamma}}$	$t_{\hat{\delta}}$	\hat{lpha}	$t_{\hat{lpha}}$	5%	1%
Y	11	1983:1	-1.628	2.174	2.366	1.564	0.784	-3.850	-5.19	-5.86
В	11	1976:4	2.916	2.926	-2.916	-0.249	0.895	-3.816	-5.19	-5.86
SMV	8	1977:2	3.476	3.557	-3.544	-3.485	0.797	-2.861	-5.19	-5.86
MC	3	1982:1	-4.083	-2.601	4.208	0.116	0.855	-5.01	-5.19	-5.86
TRY	0	1978:2	-2.500	-1.173	2.897	0.585	0.652	-4.797	-5.19	-5.86
TRMV	0	1987:4	2.571	9.273	-5.311	1.251	0.164	-10.189	-5.19	-5.86

Note: Mixed-model regression: $y_t = \mu + \theta DU_t + \beta t + \gamma DT_t + \delta D(T_b) + \alpha y_{t-1} + \sum_{i=1}^k c_i \Delta y_{t-i} + e_t$. T_b is the break date, k

is the value of the lag-truncation parameter chosen according to the Perron (1997) procedure with k-max = 12.

The truncation lag parameter k is selected using a general-to-specific recursive procedure based on the t-statistic on the coefficient associated with the last lag in the estimated autoregression. That is, the procedure selects the value of k such that the coefficient on the last lag in an autoregression is significant, up to a maximum order k-max.

For each series, table 1 reports the truncation lag k, the estimated break date (T_b) , and the t-statistics. The last three columns report the unit root test statistics and critical values. The results of table 1 indicate that, except for TRMV, the unit root hypothesis cannot be rejected. Additional testing indicates that these variables are I(1) processes rather than I(2). For TRMV, the unit root hypothesis is rejected in favor of a trend stationary process.

Test Results for Cointegration and Long-run Causality

Using the information on the break dates estimated above, we include shift dummies in the deterministic part of VAR in order to take into account the effects of structural breaks on the parameter estimates and, hence, guarantee the stability of the system. Next, and before testing for cointegration, it is important to carefully determine the lag-length of the VAR model in (1). As the burgeoning literature attests, this is a very important issue because the results of the Johansen cointegration tests are very sensitive to the choice of the lag-length in finite samples. In addition, an overestimation or underestimation of the lag length may result in spurious causality or spurious absence of causality. Cheung and Lai (1993) have examined the robustness of the Johansen's cointegration test to the laglength specification. They reported that The Johansen test is biased towards finding cointegration more often than implied by the asymptotic theory. This bias increases with the dimension of the estimated system and the lag length. These findings accord with those of Gonzalo (1994) whose results emphasize the importance of accurate determination of the lag-length. In this application we used both the Final Prediction Error (FPE) criterion and the Schwartz (SC) criterion and selected k = 3 when either TRY or TRMV are used and k=5 when MC is used in VAR. Using this lag-lengths, we tested for up to the tenth order serial correlation and for normality in the residuals of the VAR equations. The results of these tests, which are not reported here, show that these lags left the residuals approximately identically normally distributed.

Finally, in order to use the appropriate specification of VAR, we select the appropriate deterministic components that should be included in VAR besides the dummy variables. We do this using the Johansen (1994) procedure described above. Using the trace statistic, the appropriate specification that we select is the one which allows for deterministic trends in the variables with an intercept in the cointegration space. This choice seems to be consistent with the results of the unit root tests conducted above, which clearly show the existence of trends in the data. Moreover, as shown below, the intercept tem turns out to be significant in the cointegration space irrespective of the measure we use for stock market development. Thus, depending on the measure used for stock market development, the specification of VAR that we retain is the one with three or five lags, dummy variables to account for structural change, deterministic trends in the level variables, and an intercept in the cointegration space. Using this specification, we now test for cointegration between the variables using different measures of the stock market development. Table 2 below reports the Johansen trace and λ_{max} statistics along with their 90% critical values. Table 3 reports the corresponding cointegrating vectors and the adjustment coefficients. As mentioned above, long-run Granger causality is tested based on the significance of the adjustment coefficients of the variables.

The first part of table 2 reports the results of testing for cointegration using TRMV as a measure of stock market development. In this test TRMV was treated as weakly exogenous because it is an I(0) variable. In this case, the results of cointegration indicate the existence of two cointegrating vectors. These cointegrating vectors and the adjustment coefficients of the variables are reported in table 3a below. From the first cointegrating vector, which is normalized on SMV, we can see that Y and TRMV are significant. In the second cointegrating vector, which is normalized on Y, we can see that TRMV and SMV are significant. In addition, from the α vectors, we can see that Y is adjusting to both vectors, B is adjusting to the first vector, and SMV is adjusting to both vectors. Therefore, in light of these results, we are now able to make the following conclusions about the flow of long-run causality between the variables: (i) there is a one way long-run causality running from stock market development to economic growth; (ii) there is a long-run causality running in both ways between stock market volatility and economic growth; (iii) there is a one way long-run causality running from economic growth to banking development; (iv) there is a long-run causality running in one way from stock market volatility to banking development; (v) there is a long-run causality running in one way from stock market development to banking development; and (vi) there is a one way long-run causality running from stock market development to stock market volatility.

The second part of table 2 reports the results of cointegration when *TRY* is used as a measure of stock market development. In this case there are also two cointegrating vectors. These vectors and the

adjustment coefficients of the variables are reported in table 3b. The first cointegrating vector is normalized on *SMV* and indicates that only *Y* and *TRY* are significant. The second cointegrating vector is normalized on *Y* and indicates that only *SMV* and *TRY* are significant. Thus, in this case too, *B* is not in the cointegration space. On the other hand, looking at the adjustment coefficients we can see that *Y* and *B* are adjusting to the second cointegrating vector, *SMV* is adjusting to the first one, while *TRY* is not adjusting to either vector. Thus, in this case too, stock market development seems to be weakly exogenous, while *Y*, *B*, and *SMV* are adjusting to the long-run equilibrium. In light of these results, the implications regarding the flow of long-run causality between the variables are the same as in (i) - (vi) above.

The last part of table 2 reports the results of cointegration between the variables when MC is used as a measure of stock market development. In this case, there are three cointegrating vectors. These vectors and the adjustment coefficients of the variables are reported in table 3c. The cointegrating vectors are normalized on B, Y, and SMV, respectively. In these vectors we can see that all variables enter significantly the cointegration space. Moreover, we can see that Y, B, and SMV are adjusting to two vectors, while MC is adjusting to all three vectors together. Thus, in this case, we can safely conclude that long-run causality is running in both ways between the four variables in the system. In particular, and in contrast with the first two cases, long-run causality here is running in both ways between economic growth and financial development, where the later is measured by either banking development or stock market development.

Table 2
Test Results for Cointegration

	Tro	асе				λ_m	ax		
H_0	H_1	Stat.	90%	-	H_0	H_1	Stat.	90%	λ
Variables in VAR: Y, B, SMV, TRMV (TRMV weakly exogenous)									
r = 0	$R \ge 1$	70.47	31.88		r = 0	r = 1	38.19	14.09	0.328
$r \le 1$	$R \ge 2$	32.28	17.79		$r \le 1$	r = 2	26.28	10.29	0.239
$r \le 2$	$R \ge 3$	6.00	7.50		$r \le 2$	r = 3	6.00	7.50	0.061
Variab	oles in VA	R: Y, B, SA	MV, TRY						
r = 0	$R \ge 1$	83.78	49.92		r = 0	r = 1	42.36	18.03	0.357
$r \le 1$	$R \ge 2$	41.43	31.88		$r \le 1$	r = 2	29.70	14.09	0.266
$r \le 2$	$R \ge 3$	11.73	17.79		$r \le 2$	r = 3	9.23	10.29	0.092
$r \le 3$	$R \ge 4$	2.49	7.50		$r \leq 3$	r = 4	2.49	7.50	0.026
Variables in VAR: Y, B, SMV, MC									
r = 0	$R \ge 1$	94.74	49.92		r = 0	r = 1	47.39	18.03	0.399
$r \le 1$	$R \ge 2$	47.35	31.88		$r \le 1$	r = 2	21.89	14.09	0.210
$r \le 2$	$R \ge 3$	25.46	17.79		$r \leq 2$	r = 3	18.60	10.29	0.181
$r \le 3$	$R \ge 4$	6.86	7.50		$r \le 3$	r = 4	6.86	7.50	0.071

Notes: variables are as defined in the text. The first part of the table tests for cointegration between Y, B, SMV and TRMV. Since TRMV was found stationary, it was treated as weakly exogenous. The VAR specification used to test for cointegration has three lags and includes shift dummies in the deterministic part to account for structural breaks. The second part of the table tests for cointegration between Y, B, SMV and TRY. The VAR specification used has three lags and includes shift dummies in the deterministic part to account for structural breaks. The last part of the table tests for cointegration between Y, B, SMV and MC. The VAR used has 5 lags and includes the same dummies in the deterministic part. All three models allow for linear deterministic trends in the data, intercepts in the cointegrating vectors.

Table 3a
Test Results for Long-run Causality (stock market development used: TRMV)

		8 - 4-11 - 444-541-17	(Stock market de vero principal de de l'arriva v)			
	Y	В	SMV	TRMV	Intercept	
The cointegra	ting vectors					
C_1	-0.039	-0.177	1	0.018	0.182	
	(-2.987)	(-1.401)		(2.115)	(2.273)	
C_2	1	0.514	3.227	-0.313	-7.115	
		(1.306)	(2.972)	(-22.703)	(-91.286)	
The α vectors						
α_1	0.101	0.133	-0.222			
	(2.131)	(2.238)	(-4.884)			
α_2	-0.035	-0.012	-0.037			
_	(-3.435)	(-0.947)	(-3.820)			

Table 3b
Test Results for Long-run Causality (stock market development used: TRY)

	Y	В	SMV	TRY	Intercept
The cointegrati	ng vectors				•
C_1	0.218	-0.049	1	-0.041	-1.757
	(3.656)	(-1.501)		(-3.705)	(-3.879)
C_2	1	0.586	-0.855	-0.210	-7.637
		(0.485)	(-3.654)	(-34.322)	(-194.024)
The α vectors					
α_1	-0.075	0.045	-0.386	0.670	
	(-1.279)	(0.591)	(-7.229)	(0.542)	
α_2	-0.049	-0.029	0.006	-0.091	
	(-4.069)	(-1.908)	(0.509)	(-0.364)	

Table 3c
Test Results for Long-run Causality (stock market development used: MC)

	Y B SMV MC Intercent							
	•	B	SMV	MC	Intercept			
The cointegr	rating vectors							
\mathbf{C}_1	-0.130	1	-4.315	0.055	1.581			
	(-2.665)		(-2.769)	(2.810)	(2.281)			
\mathbb{C}_2	1	1.266	-33.103	-0.742	-8.770			
		(2.664)	(-2.102)	(-15.827)	(-140.167)			
\mathbb{C}_3	0.400	-0.118	1	-0.137	-3.610			
	(2.102)	(-2.737)		(-2.722)	(-2.492)			
The α vector	rs							
α_1	-0.008	-0.061	0.060	0.340				
	(-0.450)	(-3.557)	(3.592)	(2.245)				
$lpha_2$	-0.005	0.003	0.001	-0.024				
	(-4.449)	(3.303)	(0.938)	(-2.727)				
α_3	-0.056	0.005	-0.090	0.468				
	(-2.000)	(0.168)	(-3.323)	(1.961)				

Notes: Figures in parentheses are the *t*-ratios.

CONCLUSIONS

This paper uses recent time series techniques to investigate the role of the US stock market in promoting economic growth and development. Past empirical attempts using time series techniques failed to find any causal link between the US stock market and economic growth due mainly to misspecification. Using the recently developed unit root tests, we were able to estimate the different structural breaks as well as the appropriate order of integration in the data. Moreover, using the Johansen (1994) sequential procedure, we were able to identify the correct specification of the deterministic components of the model. These findings were incorporated in a VEC model that we used to test for the existence and direction of long-run causality between stock market development and economic growth, after controlling for the effects of banking development and stock market volatility.

In particular, the evidence presented here lends strong support to the view that capital market development is an engine to output growth in the US. In addition, these results are robust to the measure of stock market development used. Thus, the evidence presented here closes a wide gap in the empirical literature and sheds light on the unambiguous role played by the US stock market in driving real economic activity.

REFEERENCES

Arestis, P., Demetriades, P.O., & Luintel, B. 2001. Financial development and economic growth: the role of stock markets. *Journal of Money, Credit and Banking*, 33: 16-41

Atje, R., & Jovanovic, B. 1993. Stock markets and development. *European Economic Review*, 37: 632-640.

Bencivenga, V.R., Smith, B., & Starr, R.M. 1996. Transaction costs and capital accumulation: an illustration. *The World Bank Economic Review*, 10: 241-65.

Cheung, Y.W., & Lai, K.S. 1993. Finite-sample sizes of Johansen's likelihood ratio tests for cointegration. *Oxford Bulletin of Economics and Statistics*, 55: 313-328.

Giles, J.A., & Mirza, S. 2000. *Some pretesting issues on testing for Granger noncausality*. Working Paper EWP9914, University of Victoria.

Gonzalo, J. 1994. Five alternative methods for estimating long-run equilibrium relationships. *Journal of Econometrics*, 60: 423-433.

Greenwood, J. & Smith, B. 1996. Financial markets in development, and the development of financial markets. *Journal of Economic Dynamics and Control*, 21: 145-181.

Hall, S.G, & Milne, A. 1994, The relevance of P-star analysis to UK monetary policy. *Economic Journal*, 104: 597-604.

Hargreaves, C. 1994. A review of methods of estimating cointegrating relationships, in nonstationary time series analysis and cointegration. Oxford University Press.

Haug, A.A. 1996. Tests of cointegration: a Monte Carlo comparison. *Journal of Econometrics*, 71: 89-115

Johansen, S. 1988. Statistical analysis of cointegrating vectors. *Journal of Economic Dynamics and Control*, 12: 231-254.

Johansen, S. 1991. Estimation and hypothesis testing of cointegration vectors in Gaussian vector autoregressive models. *Econometrica*, 59: 1551-1580.

Johansen, S. 1992. Testing weak exogeneity and the order of cointegration in UK money demand data. *Journal of Policy Modeling*, 14: 313-334.

Johansen, S. 1994. The role of the constant and linear terms in cointegration analysis of nonstationary variables. *Econometric Reviews*, 13: 205-229.

Johansen, S., & Juselius, K. 1992. Testing structural hypotheses in a multivariate cointegration analysis of the PPP and UIP for UK. *Journal of Econometrics*, 53(3): 211-244.

Korajczyk, R.A. 1996. A measure of stock market integration for developed and emerging markets. *The World Bank Economic Review*, 10(2): 267-289.

Levine, R. 1996. Financial development and economic growth: views and agenda. *Journal of Economic Literature*, 35: 688-726.

Levine, R., & Zervos, S. 1996. Stock market development and long-run growth. *The World Bank Economic Review*, 10(2): 323-339.

Levine, R. & Zervos, S. 1998. Stock markets, banks, and economic growth. *American Economic Review*, 88: 537-58.

Obsfeld, M. 1994. Risk-taking, global diversification, and growth. *American Economic Review*, 84: 1310-29.

Perron, P. 1997. Further evidence on breaking trend functions in macroeconomic variables. *Journal of Econometrics*, 80: 355-385.

Sen, A. 2003. On unit root tests when the alternative is a trend-break stationary process. *Journal of Business and Economic Statistics*, 21(1): 174-184.

Stiglitz, J.E. 1985. Credit markets and the control of capital. *Journal of Money, Credit and Banking*, 17(2): 133-152.

Toda, H. 1995. Finite sample performance of likelihood ratio tests for cointegration ranks in vector autoregressions. *Econometric Theory*, 11(5): 1015-1032.

Toda, H., & Phillips, P.C.B. 1993. Vector autoregressions and causality. *Econometrica*, 61(6): 1367-1393.

Toda, H., & Phillips, P.C.B.1994. Vector autoregression and causality: a theoretical overview and simulation study. *Econometric Reviews*, 13(2): 259-285.

THE IMPACT OF PAK-INDIA RELATIONSHIP NEWS ON STOCK MARKET RETURN-KSE 100 INDEX

Babar Zaheer Butt
Foundation University, Pakistan
Kashif Ur Rehman
Iqra University, Pakistan
Dr. Muhammad Ashfaq
Foundation University, Pakistan

Email: babarzb@gmail.com

ABSTRACT

For the past several years, a lot of major changes have taken place in the financial sector. The effect of fundamental macroeconomic and political news on stock market return has received considerable attention in both the financial press and research literature. This paper analyzes the impact of news on the stock market. The paper specifically studies the impact of Pakistan-India Relationship News on Karachi stock index. In this study the past six year data of Pakistan-India Relationship News and Karachi Stock Exchange-100 Index has been taken. The types of news that are selected for the study include the major summits, events resulting in tension between both the countries, visiting of delegations and talks on disputed issues. The data was analyzed using Post hoc Tuckey Test and regression analysis to find out relationship between the news and stock market index. The study had its fruitful results, concluding to clearly view that these events are directly affecting the performance of KSE and these events had a strong influence on the KSE-100 Index for the time period under study.

INTRODUCTION

In recent years, the effect of fundamental macroeconomic and political news on stock market return has received considerable attention in both the financial press and research literature. Many questions have been raised like what role do these news play in explaining the movement of stock prices, do the responses of stock returns to news vary depending on business and economic conditions etc. Finding answer to these questions has become important for both market practitioners and researchers. A number of papers in both economics and finance literature show that stock market returns are influenced to some extent by important economic and political news. The events happening around the world have major impact on the stock market index of most countries. News plays a significant role on the stock market, whether it has positive impact or has a negative impact; it raises or lowers the market return. Engle and Ng (1993) detected asymmetry in stock return volatility and they conclude that bad news (negative values of the unexpected returns) produces more volatility than good news (positive values of the unexpected returns) on the Japanese Stock Market.

Many research studies have been conducted by various researchers on different news and events and their impact on stock returns. There exists empirical evidence that the realized volatilities of financial asset prices are higher around scheduled information releases than during the periods when no significant information is released. Fleming and Remolona (1999) report that the historical volatility of the US treasury market is higher when scheduled macroeconomic reports are released. Similar evidence from the interest rate and foreign exchange rate markets is provided by Ederington and Lee (1993). Tzachi (2003) conducted a study to find the impact of political events on stock market of Israel. The study explored the relationship between the stock prices and the political news; the purpose of the paper was to learn how the Israel stock market reacts to changes in the Israel political environment and especially the events related to peace. The study done by Cespedes and Christopher (2003) sees the impact of the September 11th event immediately after the attacks; financial markets reacted around the world, spreading out uncertainty for

the near future. They examined the index levels the day before and after the attacks as well as the time that each market took in recovering pre 9-11 levels. All the stock markets in their sample registered a fall the trading day following the attacks; many of them took months in getting back to previous levels. The average days of recovery in their sample is 76 days, although the world index, which is mostly driven by U.S. equity, took 30 days. The quickest come back was 9 days corresponds to the Slovenian stock exchange index. On the other hand, the Shanghai Composite Index was not able to reach September 10th levels during the whole year after the attacks.

Considering the fact that during the last seven years Pakistan exhibits quite high rates of economic development and growth but quite unstable political situation, it would be very interesting to measure the influence of political information, especially the development of Pak-India relationships, on the Karachi Stock Exchange. The premier stock market of the country has made substantial progress both in terms of area of its operations and growth of listed companies in past few years and can now be well compared with some of the capital markets of the developed countries. The performance of the Karachi Stock market from the period 2000 to 2005 was also fairly remarkable not only at national level but also in comparison with global stock markets. This study revolves around the major events and news of Pak-India relationships and their impact on Karachi Stock Exchange. The paper examines the performance of KSE from the period January 2000 to July 2006 in the context of the Pak-India Relationship news. These news might include the major summits held, peace talks, disputed issues, border tension and other major events that might have affected the index.

LITERATURE REVIEW

In the contemporary global scenario, a large part of the responsibility of economic development has been shifted to corporate sector from the governmental agencies. The entire structure and growth of the corporate sector depends on the transparent and prudent financial system. An incorrect judgment regarding the financial patterns in corporate sector may be a cause of heavy distortion in the society by means of volatilities in the stock markets, employment opportunities, distribution of income, and demand-supply gap in the community markets. A stock exchange is a place to regulate and perform the activities of stock (equity) market. It is considered as a "barometer" of the economy, because of its immediate and visible reaction on the news and transactions of economic importance. Stock market portrays the health of an economy; the impact of government policies, the economic conditions, expected performance of large corporation, international events and many factors end up having an impact on stock market. Political risk is important to international investors because political events often have a dramatic effect on stock market performance.

A number of recent empirical studies have attempted to show the relationship between macroeconomic/political events and stock market performance by using an event study methodology. The impact of political risk on financial markets is not conclusive, however, since earlier studies by Cutler (1988) and Cutler, Poterba, and Summers (1989) found little evidence of political news having a significant impact on the U.S. market. Moreover, there is little empirical study on the impact of political risk on financial crisis in emerging markets. Campbell and Hentschell (1992) studied the volatility in stock market; they found that changes in volatility of any magnitude might have important effect on required stock returns and on the level of stock prices. Bekaert (1995), and Bekaert and Harvey (1997) focus on losses and test political risk with respect to stock market performance. They focused on political risk as an event that affects the volatility of an investment's overall profitability both negatively and positively. Fornari et al. (2002) studied the impact of news, expected and unexpected, on the Italian financial market between 1994 (when political elections were held under a new bi-partisan institutional setup) and 1996 (when the Italian lira re-entered the European exchange rate mechanism ERM). The influence of unscheduled and scheduled news is kept separate, since their effects on the market can be expected to be very different. They also found that the announcement of unscheduled news increases price variability.

Gupta and Goldar (2005) studied the Environmental –unfriendly news impact on stock market in India. They conducted an event study to examine the impact of environmental performance of large pulp and paper, automobile and chloral kali firms in India on their stock prices. Pastor and Veronesi (2005) studied the impact of technological revolution on stock market; they observed that during technological revolutions, stock prices of innovative firms tend to exhibit high volatility and bubble-like patterns, which are often attributed to investor irrationality. Technological revolutions tend to be accompanied by bubble-like patterns in the stock prices of firms that employ the new technology. After an initial surge, stock prices of innovative firms usually fall in the presence of high volatility. They found that Stock prices are affected not only by news about discount rates but also by news about cash flows.

Hayo and Kutan (2004) studied the impact of News, Oil prices, and Global market on Russian Financial Markets. Their Study examines financial market behavior in Russia in response to "news". They constructed a set of news events that might be of particular importance to investors in Russia and then test market reactions to such information arrival in both stock and bond markets. They further investigate the impact information arrival and oil price changes on the Russian stock and bond markets in a consistent econometric set-up. Tzachi (2003) conducted a study to find the impact of political events on stock market of Israel. They explored the relationship between the stock prices and the political news; the purpose of the paper was to learn how the Israel stock market reacts to changes in the Israel political environment and especially to events related to peace. The objective of this paper is to analyze the impact of Pak-India relationship news during study period on Karachi stock market returns.

RESEARCH METHODOLOGY

Different events of Pak-India relationships were picked for analyzing their impact on stock market performance. These events being taken as independents and KSE being taking impact of these events is dependent. Thus it will not be wrong to say that the study basically looks at an event and sees its relationship to the KSE index. This study is therefore a causal study. This study is also using correlation to support its cause and effect relationship as the data of independent variable as explained later in the sampling procedure is qualitative in nature. The events taken as independent variables were brought to the scene through different media. The media chosen for data gathering for this study is the print media. The nation wide circulated newspaper in Pakistan named Dawn has been selected for picking relevant news regarding the events under study for their impact on the Karachi stock market returns. The news was selected on the basis of their link with Pakistan-India relationship. The news included: any Indian delegation visiting Pakistan or any Pakistani delegation visiting India, the peace talks or summits held in the progress of peace in the region. A sudden event that effects the relation between both the countries was also selected as news of the study.

The data regarding daily closing index of Karachi Stock Exchange was collected from websites of Karachi Stock Exchange and Business Recorder. The daily closing index was gathered from 1st of January 2000 to 31st of July 2006. These observations do not include the days in the week when the stock market is closed or when it closed for other public holidays. The data gathered directed the study towards a scenario where both qualitative and quantitative data was available. Regression analysis is the first option that comes to mind when confronted with such a situation. The event study analysis methodology (As described by Boehmer, Mmusumeci, and Poulsen (1991), Mackinlay (1997) and Hayo and Kutan (2004)) was used with regression analysis to quantify the qualitative data gathered for independent variables. Statistical software SPSS was put to use to calculate the regression. In the end a summary of results of the findings is summarized in tables. This has been done for all events that are taken as independent variables in this study.

The typical event study analysis starts with an event definition and then moves on to define the selection criteria for including different firms listed on the stock market. A regression equation is then devised to find out the abnormal returns, which are basically the normal (estimated) minus the actual returns. The illustration of the three windows involved in event analysis is presented below:



Once the above criterion has been devised a statistical test (usually a version of t-test) is performed that tells a statistically significant abnormal return and thus indicates a response of events on returns. This methodology is optimally used when only one major event is under study. Since this study took into consideration multiple events therefore the sample of the population under study for one event overlapped the other events. So the estimated post-event window of preceding event will become the pre-event window of succeeding event. As discussed earlier this methodology came to the rescue when the problem of giving quantitative value to the qualitative variables was confronted. This methodology was used to work out the pre event, event and post event windows for all the independent variables chosen for study.

Table 1
Major Events of Pak-India Relationships

S/N	Event	Event Dates
1	Lahore-Amritsar Bus Service	21-25 Jan 2006
2	India-Pakistan-Iran Gas Pipeline Talks	15-23 Jan 2006
3	Pakistan-India Summit	16 April 2005
4	Border Talks between India and Pakistan	26 Feb 2005
5	The Baglihar Dam Issue	17 Jan 2005
6	Indian Troops Pull-Back Decision	25 Oct 2002
7	Recalling of Pakistani High Commissioner	19 May 2002

RESULTS AND DISCUSSION

After selecting number of Pakistan-India Relationship news during the period of January 2000 to July 2006, major events were taken as a sample for the analysis of the study. Seven important events were taken and then analyzed using event regression and Post Hoc Tuckey Test. The results of each event impact on KSE 100 Index are summarized in Table 2 (For Post Hoc Tuckey Test) and Table 3 (Regression analysis). It is evident from the results of Post hoc Tuckey Test summarized in Table 2 that all events has produced significant effect as P<.05 in all models. The all positive news like Lahore Amritsar Bus Service, India-Pakistan-Iran gas pipeline, Border talks, Discussion on Baglihar Dam and Indian decision of pulling back forces from borders have created a positive impact on stock market. It is clearly visible that values in event and post event eras are higher than pre event era (negative signs showing the higher values in event and post event eras). It means that these good news of Pak-India Summit and recalling of Pakistani High Commissioner from Delhi have negative impact on stock market return. As value of pre-event era is higher than event and post event era (positive sign of values in event and post event window showing that pre-event value is higher than event and post event) it means that stock market has declined due to these bad news of Pak-India relationships.

Table 2
Results of Post hoc Tuckey Test for Selected Events

_	_	(J)	Mean Diff (I-J)	Sig	95% Confidence Level	
Event	(I)				Lower Bound	Upper Bound
		Event	-566.24808	0.002	-936.6924	-195.8037
Lahore-Amritsar Bus Service	Pre- event	Post Event	-1043.3699	0.000	-1291.4528	-795.2870
India-Pakistan-Iran	Pre-	Event	-566.24808	0.002	-936.6924	-195.8037
Gas Pipeline Talks	event	Post Event	-1043.3699	0.000	-1291.4528	-795.2870
Pakistan India	Pre-	Event	1320.4801 7	.000	707.5248	1933.4356
Summit	event	Post Event	1289.3347 3	.000	876.4837	1702.1858
Border Talks between India and Pakistan	Pre-	Event	-1555.7238	.000	-2329.4195	-782.0281
	event	Post Event	-2648.6805	.000	-3187.8285	-2109.5324
The Baglihar Dam Issue	Pre-	Event	-325.32591	.012	-584.4148	-66.2370
	event	Post Event	-602.95158	.000	-779.0982	-426.8050
Indian Troops Pull- Back Decision	Pre-	Event	-151.21333	.000	-203.7609	-98.6657
	event	Post Event	-191.26333	.000	-247.8762	-134.6504
Recalling of	Pre-	Event	262.26963	.000	204.5345	320.0048
Pakistani High Commissioner	event	Post Event	91.78203	.000	72.6793	110.8347

The results of table 3 reveals that all news have significant impact on stock market returns, as p value in all the models is less than .05. It means that both good and bad news do have impact on stock market returns in positive or negative direction. The relationship between these events and stock market return is very obvious and strong as value of R-square in almost all of the events is greater than 0.5 (Ranges from 0.486 to 0.770) which means that these events counts for more than 50% variation in stock market returns. Stock market will gain or lose due to these positive or negative events of Pak-India relationships. The F-statistics clearly shows the intensity of fitness of the models. The value of F-statistics is very much higher than 2 in all seven event models.

Table 3
Regression Coefficients, Standard Errors, t-values [brackets], p-values, F-statistics in italics

Events	Constant	Pre-event	Post Event	R-Square	F-Statistic
	10258.920	-566.248	477.122	0.740	54.083
Lahore-Amritsar Bus	(141.406)	(151.895)	(165.127)		
Service	[72.549]	[-3.728]	[2.889]		
	0.000	0.001	0.006		0.000
	10221.467	-609.489	557.214	0.770	61.797
India-Pakistan-Iran	(124.695)	(146.218)	(143.985)		
Gas Pipeline Talks	[81.972]	[-4.168]	[3.870]		
	0.000	0.000	0.000		0.000
	7111.729	1320.480	31.145	0.486	32.146
Pakistan India	(226.001)	(255.815)	(257.680)		
Summit	[31.468]	[5.162]	[0.121]		
	0.000	0.000	0.904		.000
	8289.030	-1555.724	1092.957	0.717	76.166
Border Talks	(309.789)	(321.942)	(372.320)		
between India and Pakistan	[26.757]	[-4.832]	[2.936]		
	0.000	0.000	0.005		.000
The Baglihar Dam Issue	6774.875	-325.326	277.626	0.728	36.043
	(89.485)	(104.496)	(100.712)		
	[75.710]	[-3.113]	[2.757]		
	0.000	0.004	0.010		0.000
	2238.855	-151.213	40.050	0.731	44.81
Indian Troops Pull-	(17.170)	(21.415)	(25.755)		
Back Decision	[130.393]	[-7.061]	[1.555]		
	0.000	0.001	0.129		0.000
	1590.970	262.270	170.488	0.672	106.659
Recalling of	(23.634)	(24.282)	(24.333)		
Pakistani High Commissioner	[67.317]	[10.801]	[7.007]		
	0.000	0.000	0.000		.000

From above results it is very clear that both positive news like Lahore Amritsar Bus Service, India-Pakistan-Iran gas pipeline, Border talks, Discussion on Baglihar Dam and Indian decision of pulling back forces from borders and negative news like Pak-India Summit and recalling of Pakistani High Commissioner from Delhi have impact on stock market returns. All the models have produced significant results both in case of regression and post hoc tuckey test. In case of positive news stock market gained points where as in case of negative news it lost points that means either good or bad news of Pak-India relationships caused changes in stock market returns considerably in upward or downward direction. The results of our study are in line with previous studies that macroeconomic and political news impact stock market returns. Engle and Ng (1993) found that good and bad news produce volatility in Japanese stock market returns and Hayo and Kutan (2004) analyzed the impact of news, oil prices, and international financial market developments on daily returns on bond and stock markets. They found that Russian financial markets were sensitive to development in global markets, news and oil prices.

CONCLUSIONS AND RECOMMENDATIONS

This study is conducted to determine the impact of Pakistan-India Relationship news on KSE-100 index. In this research stock market is taken as a dependent variable and the news related to Pakistan-India relations is taken as independent variable. Major news that were directly related to Pakistan and India put to analyze the behavior of the stock market. After the analysis it was found visible that Karachi stock exchange was reacting significantly in accordance with the event on the date. If the news or the event was related to a peace or handshakes a clear increase and upward trend in the market was seems to be visible. Similar act was also found in the opposite type of news. If the news or events were related to some kind of tension or threat or any disputed issue, it would result in a downward trend in the market.

Thus from the study it can be stated that the sample selected had a very strong influence on the stock market index. In most of the cases the event index has increased from pre-event to post-event. So, this showed that Pakistan-India Relationship news have very strong impact on the Karachi stock exchange. Index moves up if both the countries having good relations and a downward trend is observed when there is a war-like or conflicting situation. Therefore, from above results it can be concluded that Pak-India relationship news have significant impact on Karachi Stock Exchange and results of this study are consistent with previous researches which describe that political and macroeconomic news have significant impact on stock market returns whether the news are good or bad.

In this paper the effect of Pak-India relationship news on Karachi Stock exchange was analyzed using past few years major events happened between two countries, the data was analyzed using Post Hoc Tukey Test and regression analysis. In future some other political or macroeconomic or social/cultural events can be taken to observe their effect on stock market. Moreover, some other statistical tools can be used to analyze the data.

Research Limitations

The data used for this study relates to a period of January 2000 to July 2006 containing news of events happened between India and Pakistan. As before 2000, it was more or less a constant tension between two countries. Moreover, several events occurred during the period under study but only few selected events were taken for analysis in terms of their importance.

REFERENCES

Bekaert, G. 1995. Market integration and investment barriers in emerging equity markets. *World Bank Economic Review*, 9(1): 75-107.

Bekaert, G. & Harvey, C. 1997. Emerging equity market volatility. *Journal of Financial Economics*. 43(1): 29-77.

Boehmer, E., Musumeci J., & Poulsen, A. B. 1991. Event-study methodology under conditions of event-induced variance. *Journal of Financial Economics*. 30: 253-273.

Campbell and Hentschell. 1992. No news is good news: An Asymmetric model of changing volatility in stock return. *Journal of Business Finance and Accounting*, 10-12.

Cutler, D. M., Poterba, J. M. & Summers, L. H. 1989. What moves stock prices? *Journal of Portfolio Management*. 15(3): 4-12.

Cespedes, J. L. & Christopher K. 2003. The effect of September 11th terrorist attacks on world stock markets. *Southern Illinois University working paper*.

Ederington, L. H. & Lee, J. H. 1993. How markets process information: News releases and volatility. *Journal of Finance*, 48: 1161–1191.

Engle. R. F. & Ng V. K. 1993. Measuring and testing the impact of news on volatility. *The Journal of Finance*. XLVIII(5): 1749-1778.

Fleming, M. J. & Remolona, E. M. 1999. Price formation and liquidity in the U.S. treasury market: The response to public information. *Journal of Finance*. 54: 1901–1915.

Fornari, F., Monicelli, C., Pericoli, M., & Tivegna, M. 2002. The Impact of news on the exchange rate of the lira and long-term interest rates. *Economic Modeling*. 19(4): 611-639.

Gupta, S. & Goldar, B. 2005. Do stock market Penalize environment-unfriendly behavior? Evidence from India. *Ecological Economics*. 52:81-95.

Hayo, B. & Kutan, M. A. 2004. The impact of news, oil prices, and global market developments on Russian financial Markets. *Journal of Finance*, 3-8.

MacKinlay, C. A. 1997. Event studies in economics and finance. *Journal of Economic Literature*, 34: 13-39.

Pastor, L. & Veronesi, P. 2005. Technological revolutions and stock Prices. *Journal of Business Finance and Accounting*. 1-4.

Tzachi, Z. 2003. Political events and the stock market: Evidence from Israel. *Journal of Business Finance and Accounting*. 244-245.

An Exploration Study of Impulse Buying: Western versus Eastern Culture

Clare Chua Peter Luk

Ryerson University, Canada Email: cchua@ryerson.ca

ABSTRACT

This is a comparative study that examines impulse buying behavior, which may be different from the cultural perspective, in two countries, Canada and China. It was found that impulse in-store buying is prevalent. Approximately fifty percent of all retail revenue can be attributed to impulse purchases because people would tend to spend on impulse buy as they would on planned purchases. The purpose of this research is to focus on whether the impulse buying behavior differs between the two countries. We found that Canadian consumers tend to be more impulsive buyers than Chinese consumers. This is in support of some studies that found that consumers in China are more careful in their spending compared to the consumers in the United States.

INTRODUCTION

Impulse buying is defined as purchasing typically without prior planning or as simply buying products that are not on the shopping list (Kacen and Lee 2002; Rook and Gardner 1993; Rook and Hoch 1985). Impulse buying can be induced by persuading retail customers to indulge and gratify a need with no predetermined plan to do so. This is often done by creating a positive store experience that selectively stresses self-service through prominent store displays, creative product-display, music, low prices, short product shelf-life, smaller packaging sizes, and ease of storage (Stern 1962; Sherman et al 1997; Iyer 1989; Sirgy et al 2000; Turley & Milliman 2000; Hodge 2004).

According to the 2005 Canada Statistics Survey, there is a significant increase of 8% over recent years in consumer spending. This increase has been more prevalent with younger households who spent an increasing proportion of their disposable income in retail stores at the sacrifice of immediate savings between 2000 and 2004. This supports the study of Nguyen et al (2003) who found that individualism, age, and income are significantly related to impulse buying behaviors of Vietnamese consumers. It was also substantiated that impulse buying makes up approximately 50 percent of all spending by consumers (Hodge 2004). Consequently, profits and revenues of a variety of retailers, ranging from clothing to food and beverages, increased in 2004. We can thus assert that Marketing to impulse buyers is indeed a vital part in a retail business.

China, the country which represents the East for the purpose of this research, undergoes a rapid growth in trade and offers, at the same time, great potential for investment opportunities that attract businesses around the world, especially transnational marketers (Lauffs and Tan, 2002). As an emerging economy with a steady rising income level (de Grandi, 2001), China provides an opportunity to study various behavioral aspects regarding the spending power of its increasingly sophisticated consumers. This development leads us to believe that consumers in China will opt for impulse buying as would their counterparts in the West. The purpose of this research is to investigate whether the impulse buying behavior differs in a Western country (i.e. Canada) and in an Eastern country (i.e. China). Given the differences in economic structure, business environments, and cultures, it is assumed that consumers in these two countries may differ significantly in their impulse buying behavior. Identifying these differences may shed light on the marketing tactics used in Western and Eastern countries.

The objective of this paper is to compare the impulse buying behavior in two countries which represent the West and the East respectively, i.e. Canada and China. More specifically, the research questions are:

- (1) Is there any difference in the impulse-buying behavior of consumers in Canada and that of consumers in China?
- (2) Is there any difference in the type of products/services bought impulsively in Canada and in China?
- (3) Does the amount spent on unplanned purchases differ in Canada and in China?

LITERATURE REVIEW

Consumer motivation in impulse buying has been comprehensively researched throughout the years (Baumeiser 2002; Beatty and Ferrell 1998; Cobb and Hoyer 1986; Eder 2002; Iyer 1989; Koci 2002; Miller 2002; Stern 1962). The need to identify the very factors which drive consumers to impulse buy has been the purpose of researchers. Specific factors, such as needs for novelty, social interaction, emotional needs, hedonic motives, and efforts to satisfy esteem and self-actualization needs, were found to be contributing significantly to the enhancement of impulse-buying behavior (Housman 2000: 406-407). In fact, the most cited reason for impulse buying was the need to interact with and garner approval from others (Housman 2000, p. 408). Taking all these factors into consideration led to the assumption that impulse buying can be viewed as a valued pastime rather than simply a means of acquiring goods (Housman 2000, p. 414).

Stern (1962), in his study of impulse purchasing in brick-and-mortar stores, identified the following factors as reasons for impulse buying: low prices, mass distribution, self-service, mass advertising, prominent store displays, low marginal need for an item, short product life, smaller sizes or lightweight, and ease of storage. Note that the one thing in common to all these factors is that they are all associated with the ease of making a purchase.

Surprisingly, impulse items are not always hedonic in nature. Even building-supply dealers have experienced success at encouraging impulse buying by displaying safety glasses, tape measures, carpenter pencils, and pencil sharpeners conveniently at the checkout counters. They also succeeded in increasing impulse purchases by strategically relocating power tools to high-traffic locations such as the contractor's desk area (Koci 2002). It is also worth noting that items bought on an impulse normally do not substitute other products the consumer planned to buy, and, as a result, are incremental purchases that would increase the total amount spent (Eder 2002; Iyer 1989). Motivation to impulse buy is continually researched. Philip J. Trocchia and Swinder Janda (2002, p. 198-200) identified the following impulsebuying motivations: lack of involvement in the product category, perceived lack of decision importance, and search fatigue. Three factors are usually considered as contributing to a decision to purchase impulsively: the dollar amount spent on the site, the mode of presentation of the offer, and the inclusion of a reason to purchase the item (Hodge 2004, p.4). Results also indicate that the likelihood of a consumer purchasing the impulse item increases with the total amount spent on other items. Further, Laroch et al (2003) showed that the kind of products bought impulsively would depend on consumer prior knowledge about the product, buying intentions before the actual shopping trip, exposure to stimuli and the product's emotional appeal. It is worth noting though that Nguyen et al (2003) found that personal-use products are the most common impulse purchase items.

Consumer selection of retail patronage mode and impulse buy has been investigated in a variety of contexts. These include: department stores (Cassill et al., 1994; Prasad 1975); discount stores (Prasad 1975; Schmidt et al 1994); mail and telephone order (Cox and Rich 1964; Korgaonkar and Bellenger 1983) and, more recently, electronic media (Comer et al 1998; Rowley 1996; Shamdasani and Ong 1995). The non-store patronage modes have been observed to be a continuing development within the retail industry (Darian 1987; Gillett 1976). As with catalogue shopping, convenience is the main reason for consumers to use the internet mode (APT Strategies 1998; Burke 1998; Georgia Institute of Technology 1999; Jarvenpaa and Todd 1997). And so impulse buy is closely related to ease and convenience of purchase.

There are many different types of shoppers who may use any or a combination of the aforementioned retail patronage mode. Shoppers can be categorized as: (1) Economic shoppers (Stone 1954) who have been most identified in the literature. Economic shoppers can be further described in a

variety of ways, such as the price-bargain-conscious (Stephenson and Willett 1969), the special (Moschis 1976), the low-price (Williams et al 1978), the economic-convenience (Bellenger and Korgaonkar 1980), the price (Lesser and Hughes 1986), and the value-for-money (Shim and Mahoney 1992); (2) Recreational shoppers (Stephenson and Willett 1969) who treat shopping as a leisure activity. They simply shop for the fun of it. A similar type of shoppers has also been labeled as the active (Lesser and Hughes 1986; Lumpkin 1985) or the involved (Westbrook and Black 1985). This group represents a sizeable proportion of consumers, a view supported by Gehrt and Carter (1992) in specific reference to catalogue shoppers; (3) Apathetic shoppers who are often referred to as inactive shoppers (Lesser and Hughes 1986). Although they have emerged in many typologies as the single largest segment of consumers, this kind of shoppers has been relatively under-studied (Brown and Reid 1997); (4) Convenience-oriented shoppers have been identified notably in a number of studies related to the orientations of catalogue users (Gehrt and Carter 1992). Note that convenience is a time-oriented construct and that there is evidence that convenience involves both space and effort dimensions (Gehrt et al 1996). Individuals may be motivated by either one of these dimensions or both, at the same time; (5) Ethical shoppers who are known to observe a great deal of store loyalty or brand loyalty, or both; and (6) Personalizing shoppers who are consumers who believe their shopping experience is a function of their relationships with the store personnel. As online purchasing is increasingly becoming a mundane activity, studies show that Internet shoppers can be categorized as any of the above (Gehrt and Carter 1992: Gillett 1970).

Research has showed that women are more impulsive buyers than men. There is a significant difference between men and women in regard of positive-buying emotion, mood management, overpowering urge to buy, and unplanned buying. Men and women were found to differ in terms of the frequency with which a variety of products were purchased impulsively. In a similar respect, we conjecture that consumers in the West and consumers in the East are different in respect to the tendency to impulse buy.

REESEARCH METHODOLOGY

Sample

A convenience sample of 186 undergraduate students was used in Canada and a convenience sample of 96 undergraduate first-year students was used in China.

Measures of Impulse Buy

Respondents were given a set of 14 questions which to their experiences as impulse buyers online and in-store. To tackle behavior of impulse buyers, the nine personality traits of impulsive buying from Rock and Fisher (1995) were adopted. These trait items were measured on a 5-point scale from 1 (strongly disagree) to 5 (strongly agree) as shown in Table 1. Item 9 ("I carefully plan most of my purchases") was recoded on the reversed scale in order to make it consistent with the other items. These nine items actually achieved a satisfactory level of reliability for the study conducted in Canada with Cronbach's $\alpha = 0.77$ (Kacen and Lee 2002). The study in China measured a satisfactory level of reliability with Cronbach's $\alpha = 0.87$. To find what types of products consumers buy impulsively, subjects were asked to note which items they bought on an impulse in-store and online from a given list. To find out how much they spent on impulse purchases, respondents were asked to note the amount spent on impulse purchases both online and in-store.

RESULTS

Table 1 shows the mean values for each trait of impulsive buying for both countries. We could consider the mean for each of the impulsive measurements (listed in Table 1) above the midpoint (2.5) on the scale (1 to 5) as indicating to a strong impulse shopper. Respondents in Canada rated above average in seven of the nine items indicating strong impulsive behavior. However, respondents in China rated above average in only four of the nine items indicating weak impulse behavior. Consumers in Canada make more impulse purchases than consumers in China (p<0.000).

Table 1
The Nine Items Measuring Personality Trait of Impulsive Buyers

		Canada	China
Measurement of Impulsive Buyer			
		Mean response	Mean response
1	I often buy products and/or services spontaneously.	3.01	2.56
2	"Just do It" describes the way I buy products and/or services.	2.77	2.34
3	I often buy products and/or services without thinking.	2.38	2.20
4	"I see it, I buy it" describes me.	2.54	2.27
5	"Buy now, think about it later" describes me.	2.38	2.19
6	Sometimes I feel like buying products and/or services on the spur-of-the-moment.	3.32	2.78
7	I buy products and/or services according to how I feel at the moment.	3.31	2.62
8	I carefully plan most of my purchases.	2.67	2.15
9	Sometimes I am a bit reckless about what I buy.	3.14	2.67
	Reliability Cronbach's α	0.77	0.87

Table 2 depicts the distribution of products that consumers bought on a-spur-of-the-moment in Canada and China. When the two factors were analyzed, i.e. country and type of product, it was found that the products bought on impulse by consumers in Canada are different from those bought on impulse by consumers in China ($\chi^2 = 48.746$, df = 27, p-value<0.003).

Table 2
Distribution of products: unplanned purchases in-store and online for Canada and China

Type of Product	Canada (%)	China (%)
Books and Magazines	48.1	10.3
Computing	14.6	1.1
Clothing	75.7	26.0
Flowers	20.5	1.1
Home Electronics	21.6	5.7
Music Recording	23.2	9.6
Videos and DVD	41.6	3.9
Services	8.1	2.8
Tickets	28.1	3.2
Travel	16.2	0.7

Table 3 displays the distribution of the amount spent on unplanned in-store purchases for Canada and China. The expenditures distributions for in-store unplanned purchases for both Canada and China are not significantly different ($\chi^2 = 2.672$, df = 4, p<0.614).

Table 3
Amount spent on unplanned in-store purchases and online purchases

	Car	nada	China		
Amount Spent	In-Store (%)	Online (%)	In-Store (%)	Online (%)	
Less than \$25	24.7	22.5	19.4	19.0	
\$26 - \$50	28.0	26.8	37.4	33.3	
\$51 - \$100	25.8	25.4	26.9	28.6	
\$101 - \$250	17.2	12.7	12.9	7.1	
\$251 - \$500	4.3	12.7	3.2	11.9	

CONCLUSIONS

Consumers in Canada are more impulsive shoppers compared to consumers in China. This may be attributed to possible differences in perspectives over a product's emotional appeal, consumer's exposure to stimuli, or a consumer's prior knowledge about the product (Laroch et al 2003). This difference may also be attributed to the possible notion that consumers in China may not see purchasing as a valued pastime (Housman 2000). Another possible reason may be differences in any of Stern's identified factors of impulse buy: low prices of products, mass distribution, self-service, mass advertising, prominent store displays, low marginal need for an item, short product life, smaller sizes, and ease of storage (1962). Koci's identification of product location in high-traffic areas as a factor may also be different in China as opposed to in Canada.

The types of products that consumers in Canada buy impulsively are significantly different from those bought by consumers in China. Consumers in China do not tend to impulsively purchase books and magazines, computing, clothing, flowers, home electronics, music recording, videos and DVD, services, tickets, and travel as their Canadian counterparts do. Would cultural differences attribute for this difference or would the lack of Stern's (1962), Housman's (2000), and Koci's (2002) identified factors in retail stores in China attribute for the difference?

The amount spent on unplanned purchases is approximately the same for Canada and China. This finding indicates that the phenomenon of impulse buy is a shared experience in both the East and the West and that retail marketing in China would benefit by taking initiatives that will induce impulse purchasing and thus bring to higher revenues.

These results seem to suggest that consumer impulsive buying can be quite different in the two countries which represent the West and the East. It seems that consumers in China are more deliberate and careful compared to consumers in Canada. Consumers in Canada opt for impulse purchases more often than consumers in China do. This goes in line with Li et al (2004) who found that Chinese shoppers are cautious about spending and less likely to make impulse purchases during their shopping trip. Managerial applications of these findings suggest that in order to increase revenue in retailing, impulse purchasing needs to be more comprehensively exercised in China. To do so, retailers in China market will need to use more persuasive marketing tactics to induce more impulsive buying. More research is definitely needed to control for other variables such as income and age in order to understand the impulse-buying behavior in China. Since consumer lifestyles could stimulate a different buying behavior, it would be beneficial and most efficient for retailers to understand the relation between impulse buying and lifestyle by exploring impulse buying in the context of lifestyle differences. Understanding shopping behaviors relevant to retail settings is useful in making the increased revenues possible.

Acknowledgements: We wish to acknowledge our students and research assistants for assisting in the survey and data collection. We are grateful for their generosity in participating in our surveys.

REFERENCES

Aspillaga, M. 1996, Perceptual foundations in the design of visual displays. *Computers in Human Behavior*, 12(4): 587-600.

APT Strategies 1998. *APT Strategies Newsletter* July 1998, available at: http://www.aptstrategies.com.au/

Baumeister, R.F. 2002. Yielding to temptation: Self-control failure, impulsive purchasing, and consumer behavior. *Journal of Consumer Research*, 28(4): 670-676.

Beatty, S.E., & Ferrell, M.E. 1998. Impulse buying: modeling its precursors, *Journal of Retailing*, 74(2): 169-191.

Bellenger, D.N., & Korgaonkar, P.K. 1980. Profiling the recreation shopper. *Journal of Retailing*, 56(3): 77-92.

Bellenger, D.N., Robertson, D.H., & Hirschman, E.C. 1978. Impulse buying varies by product. *Journal of Advertising Research*, 18: 15-18.

Brown, S., & Reid, R. 1997. Shoppers on the verge of a nervous breakdown. In S. Brown, S. and D. Turley (Ed.), *Consumer research: Postcards from the edge*. London: Routledge.

Burke, R.R. 1998. Real shopping in a virtual store. In S.P. Bradley and R.L. Nolan. (Ed.), *Sense and respond: Capturing the value in the network Era*. Boston: Harvard Business School.

Burnett, M.S., & Lunsford, D.A., 1994. Conceptualizing guilt in the consumer decision-making process. *Journal of Consumer Marketing*, 11(3): 33-43.

Buying Behavior, *Journal of Consumer Psychology*, 12(92): 163-176.

Canada. Statistics Canada. E-commerce: Household Shopping on the Internet. Sep. 2004. Available at http://www.statcan.ca/Daily/English/040923/d040923a.htm (Accessed 13 Feb 2007).

Canada. Statistics Canada. Financial statistics for enterprises. Aug. 2004. Available at http://www.statcan.ca/Daily/English/040826/d040826a.htm (Accessed 13 Feb 2007).

Canada. Statistics Canada. Household spending and debt. March. 2005. Available at http://www.statcan.ca/Daily/English/050322/d050322c.htm (Accessed 13 Feb 2007).

Canada. Statistics Canada. Retail trade since the turn of the millennium. Oct. 2005. Available at < http://www.statcan.ca/Daily/English/051017/d051017a.htm (Accessed 13 Feb 2007).

Cassill, N.L., Williamson, N., McEnally, M., & and Thomas, J. 1994. Department store cross-shoppers. *Journal of Applied Business Research*, 10(4): 88-96.

Cobb, C. J., & Hoyer, W. D. 1986. Planned versus impulse purchase behavior. *Journal of Retailing*, 62(4): 384-409.

Cobb, C.J., & Hoyer, W.D. 1986. Planned versus impulse purchase behavior. *Journal of Retailing*, 62(4): 384-409.

Comer, J.M., Mehta, R., & Holmes, T.L. 1998, Information technology: retail users versus non-users. *Journal of Interactive Marketing*, 12(2): 49-62.

Cox, D.F., & Rich, S.U. 1964. Perceived risk and consumer decision-making: The case of telephone shopping. *Journal of Marketing Research*, 1: 32-9.

Darian, J.C. 1987. In-home shopping: are there consumer segments? *Journal of Retailing*, 63(3): 163-86.

Donthus, N., & Garcia, A. 1999. The internet shopper. Journal of Advertising Research, 39(3): 52-58.

Eder, R. 2002. Pharmacy check stand is prime spot to encourage impulse purchases. *Drug Store News*, 24(15): 27.

Ellison, J., Earl, L., & Ogg, S. 2001. Internet shopping in Canada: Statistics Canada.

Gehrt, K.C., & Carter, K. 1992. An exploratory assessment of catalog shopping orientations: The existence of convenience and recreational segments. *Journal of Direct Marketing*, 6: 29-39.

Gehrt, K.C., Yale, L.J., & Lawson, D.A. 1996. The convenience of catalog shopping: is there more to it than time? *Journal of Direct Marketing*, 10(4): 19-28.

Georgia Institute of Technology 1999. GVU's 10th WWW User Survey, available at: http://www.gvu.gatech.edu/user-surveys/survey-1998-10

Gillett, P.L. 1970. A profile of urban in-home shoppers. *Journal of Marketing*, 34(3): 40-45.

Gillett, P.L. 1976. In-home shoppers: an overview. *Journal of Marketing*, 40(4): 81-88.

Hausman, A. 2000. A multi-method investigation of consumer motivations in impulse buying behavior. *Journal of Consumer Marketing*, 17(5) pp. 403-419.

Hodge, R. 2004. *Factors influencing impulse buying during an online purchase transaction*. MA thesis, University of Waterloo.

Iyer, E.S. 1989. Unplanned purchasing: Knowledge of shopping environment and time pressure. *Journal of Retailing*, 65(1): 40-57.

James, M. The state of e-commerce: Online shopping trends. ECommerce-Guide.com. Aug. 2005. Available at < http://www.ecommerceguide.com/news/trends/article.php/3524581 (Accessed 13 Feb 2007).

Jarvenpaa, S.L., & Todd, P.A. 1997. Is there a future for retailing on the Internet? In

R.A. Peterson (Ed.), *Electronic Marketing and the Consumer*. Thousand Oaks, CA: Sage.

Kacen, J. J., & Lee, J.A. 2002. The Influence of Culture on Consumer Impulsive.

Koci, R. 2002. You make me feel like shopping!: Impulse buying isn't just for bored DIYers. *Hardware*, *Merchandising*, *Building Supply Dealer*, 114(4).

Kollat, D.T. & Willet, R.P. 1967. Customer impulse purchasing behavior. *Journal of Marketing Research*, 4: 21-31

Korgaonkar, P.K. & Bellenger, D. 1983. Nonstore retailers and consumer characteristics. *Akron Business and Economic Review*, 14, (4): 29-34

Korgaonkar, P.K. & Wolin, L.D. 1999. A multivariate analysis of Web usage. *Journal of Advertising Research*, 39, 2: 53-68.

Rook, D.W., & Fisher, R.J. 1995. Trait and normative aspects of impulsive buying behavior. *Journal of Consumer Research*, 22, (3): 305-313

Rowley, J. 1996. Retailing and shopping on the Internet. *International Journal of Retail and Distribution Management*, 24, (3): 26-37

Schmidt, R.A., Segal, R. & Cartwright, C. 1994. Two-stop shopping or polarization: whither UK grocery shopping? *International Journal of Retail and Distribution Management*, 22: 12-19.

Shamdasani, P.N. & Ong, G.Y. 1995. An exploratory study of in-home shoppers in a concentrated retail market. *Journal of Retailing and Consumer Services*, 2, pp. 15-23

Sherman, E., Mathur, A., & Smith, R.B. 1997. Store Environment and Consumer Purchase Behavior: Mediating role of consumer emotions", *Psychology and Marketing*, 14, (4), pp. 361-378

Shim, S. & Mahoney, M.Y. 1992. The elderly mail-order catalog user of fashion products: a profile of the heavy purchaser", *Journal of Direct Marketing*, 6: 49-58.

Stern, H. 1962. The significance of impulse buying today. Journal of Marketing, 26, (2): 59-62

Stone, G.P. 1954. City and urban identification: observations on the social psychology of city life. *American Journal of Sociology*, 60: 36-45

Trocchia, P.J., & Janda, S. 2002. An investigation of product purchase and subsequent non-consumption. *Journal of Consumer Marketing*, 19, (3): 188-204

Turley, L.W., & Milliman, R.E. 2000. Atmosphere effects on shopping behavior: A review of experimental evidence", *Journal of Business Research*, 49, (2): 193-207

Westbrook, R.A., & Black, W.C. 1985. A motivation-based shopper typology. *Journal of Retailing*, 61: 78-103.

CONTROL AND PERFORMANCE IN INTERNATIONAL CHANNELS: THE KUWAITI AUTO-MARKET

Ahmed A. Ahmed Mona Al Ghais University of Kuwait, Kuwait

INTRODUCTION

To Quinn et al (2000), control is a serious issue in international franchising but not enough attention has been given to it. Further, Zhang et al (2003) argue that the distribution channel is the most important element of the marketing mix in developing and maintaining a competitive advantage, for while price and product could be imitated in international markets, a more enduring source of advantage may stem from mutually beneficial, trust-based relationships with the local distributors. Similarly, Cavusgil et al (2004), maintain that the manufacturers' ability to manage inter-firm relationships is a major determinant of export success as distance (both cultural and geographic) is supposed to increase opportunistic behavior by independent importers abroad.

Though international channel management had received scant attention in the past, it has lately received considerable attention. Most of it though was directed towards channels of MNC's from one into other developed countries. In this study we focus on an important industry competing in an emerging foreign market. The motor vehicle industry is an important industry that is becoming increasingly competitive world-wide. Kuwait, while a small country, yet it is a very important automobile market. It not only boasts one of the highest per capita incomes in the world (28000\$US equivalent in 2006), but it has the second highest per capita population of automobiles in the Middle East at 0.27 (ESCWA, 2005). This justifies our choice of market and industry, as almost all manufacturers are represented in the Kuwaiti market.

In this study we are interested in the manufacturer's control over his respective dealer in terms of the type of control and its extent, and how these relate to the performance of the dealer in the Kuwaiti market.

We will specifically address the following questions:

- 1. What is the extent of control the manufacturer practices over the dealer?
- 2. What type of control as between process and outcome-based, do most auto manufacturer employ in the Kuwaiti market.
- 3. How does the extent of control vary with the type of control employed?
- 4. How does the extent of control vary with performance of the dealer?
- 5. How does the control type the manufacturer employs vary with performance of the dealer.

LITERATURE REVIEW AND HYPOTHESES

Extent of control

The automobile industry is a highly oligopolistic industry with intensive rivalry world-wide. Huge investments are required and a large volume of sales is needed to enjoy economies of scale. This and the intense rivalry dictate that dealers generate appropriate sales volumes. Manufacturers are thus anxious to see that dealers deliver and would therefore try to control or influence the behavior of the dealers to that effect. It is generally presumed that the manufacturer has far more power over the retailer in view of the large relative size of the producer compared to the dealer and the contractual relation that provide the former with a strong legal power. This is presumably the situation in the American automobile industry where the manufacturer has substantial control over their respective dealers. The growth of "mega dealers" in the automobile market over the past decade though, have made them resist the passive role of simply conforming to a marketing strategy provided solely by the manufacturer and unhappy with the auto dealer traditional role (Rosenbloom, 2004).

Internationally, control over the dealer is supposed to be particularly difficult given the geographical and the cultural distance (Quinn et al, 2000). Karunaratna et al (1997) pointed that the use of foreign channel intermediary lacks control and hence may lead to opportunistic behavior defined as self-seeking interest with guile (Williamson, 1975).

On the one hand, there is the market expertise power of the dealer in that he is more knowledgeable about his own environment which should give him control in designing the marketing strategy. On the other hand, there is the manufacturer expertise of the product and technical expertise in marketing that tilts the control to his side. Aulakh et al (2000) have argued that control is especially important in diverse environments and that insufficient or inadequate control over its foreign agents limits an MNC's ability to position itself. From the above we can hypothesize that:

H1: Kuwaiti automobile dealers operate with a substantial degree of independence from their respective manufacturer

Mode of governance

Two basic modes of governance are emerging from the literature. As early as 1987, Anderson and Oliver (1987) identified them as Behavior-based and Outcome-based systems. In Outcome-based systems there is little monitoring, little direction and straight forward objective measures of results. The Behavior-based model, by contrast, involves direction, managerial involvement and subjective and complex methods (1987). Oliver and Anderson (1994), later operational- zed the two systems in the case of sales-force management. Geneturk and Aulakh used a similar dichotomy; Process vs. Output controls, to test their effectiveness in foreign markets (1995). Aulkakh et al (2000) would add a third control mechanism; social control. Hiede similarly identified three mechanisms; transactional, relational and clan control (1994). A number of other authors identified similar mechanisms with differences in semantics (Karunaratna (1997), Bello et al (1997), Brown et al (2000), Zhang et al (2003), Veludo et al (2004).

The automobile industry being competitive and the Gulf countries market being an important market with a substantial per capita income, it is difficult to imagine the manufacturers watching idly, by leaving it for the dealers to sink or swim on their own. And as Hiede (1994) has argued that there is a shift towards non-market forms of governance. Velude et al argue that competitiveness depends on the firm's ability to form and develop appropriate exchange relationships and that "partnering" is important to MNC's. We therefore expect the manufacturer to be highly involved in the operations of his respective dealers. We thus hypothesize that:

H2: Automobile manufactures are likely to follow a process mechanism of governance in their dealings with their respective Kuwaiti dealers as seen from the dealer's perspective.

Extent and mode of control

The process or behavior mode of governance aims at reducing opportunism of the dealer. Its purpose is to make sure that dealer follows the "right" policies and conforms to the strategies designed by the manufacturer. Brown et al (2000) examined the relationships between the mode of governance and opportunism and found that among the three forms of governance (ownership, investment in transaction-specific assets and relationship modes), relationship (process) control was the only form that reduced opportunism. Similarly, Auklah et al (2000) found process control to have a strong positive relation with compliance.

Zhang, Cavusgil and Rooth (2003) have also credited relational norms with the alignment of the interests of both and with the reduction of opportunistic behavior. We take it that the larger the involvement of the manufacturer in the dealers decision, the less the opportunism. We thus hypothesize that:

H3: The Manufacturer use of process control is associated with substantial compliance by the dealer.

Extent of control, mode of governance and performance

Tamer Cavusgil et al (2004) pointed out that the manufacturer ability to manage inter-firm relationship was a major determinant of exporter's success. Aulakh and Geneturk (2000), who pointed

that control affects performance, found a strong support for the hypotheses that process control is positively associated with performance. Heide (1992) too found support for a positive relationship between relational norms and performance. Oliver and Anderson (1994) though, obtained mixed results as far as the relationship between the mode of governance (Process vs. Output) and performance in case of sales people in a domestic situation. Bello and Gilliard (1997) found support for a relationship between outcome-based mechanism and performance but not between process control and performance. Genturk and Aulakh (1995) found that process and output control by themselves are not critical predictors of performance but with attractiveness and process control they found an alignment with performance in the export market. Leonidou et al (2002) found that exporters with harmonious relationship based on trust and commitments with their dealers, were the more successful ones. From the above we hypothesize that:

- H4: The higher the use of process control by the manufacturer over their dealers, the more successful is the dealer likely to be.
- H5. The more control the manufacturer practices over the dealer, the more successful is the dealer likely to be.

RESEARCH METHODOLOGY

The population of the study was all the registered new passenger automobiles dealers who are agents of foreign manufacturers in Kuwait. All new car dealers actually deal directly with the foreign manufacturers and are mostly exclusive dealers in Kuwaiti. Those who represent more than one manufacturer make as many observations in the study. The Teledymag Directory (2005) lists some forty such dealers but some of them handle trucks and other heavy duty equipments. So they were not included . As a matter of fact we depended on the list provided by the Association of New Car Dealers affiliated with the Kuwait Chamber of Commerce which lists some twenty four members. We adopted the Association list counting on the Association's help. All 24 dealers were approached with supporting letters from the University. Follow-up calls were made and some sixteen useful questionnaires were filled, a substantial percentage of the population, about 67%.

A rather lengthy questionnaire was provided to be filled by the general manager or an assistant general manager familiar with the manufacturer relationship. The questionnaire, including a few demographics (sales, date of establishment), had 51 questions overall. Communication mode and frequency, advertising, training, product line, margins, relative share and a long list of questions dealing with the extent of the relationship strategy, control etc... More details will be given when discussing the specific constructs. Most of the questions were derived from the literature and from relevant previous studies cited above or to be cited below. The questionnaire was in both Arabic and English and was initially developed by the authors but three other colleagues, two of whom are fairly senior and well published, reviewed them. Below we discuss the various constructs and how they were developed

Explicit control (compliance)

Here we are specifically thinking of the decisions of the dealer in running his business and the extent of the manufacturer influence on those decisions. The kind of decisions we mean are things like the order size, the frequency of ordering, the sales goal, the retail price, local advertising, the training of personnel, the size of sales staff, the show room design, etc.... We have listed seventeen such decision areas and asked the dealer to indicate the extent of influence the manufacturer has in each decision by choosing one of five possible cases to indicate the extent of the manufacturer influence (from none all way to very large influence) over his company's decisions in each of these. One point was granted to "no influence and five points to" very large influence". A summated index was thus constructed ranging from 17 to 85; the low end indicates very little explicit control and the higher one indicating large explicit control.

Process (behavior) based versus outcome-based control mechanisms

This was based on a series of questions. First, mode and frequency of communication: Four questions were asked each with five elements to choose one from: (1) Most frequently used mode, 5

points for phone, 4 for e-mail, 3 for fax, 2 for couriers and 1 for regular mail. (2) Frequency of contacts: from more than once a week (5 points), all the way to once-a-year (1 point). (3) Frequency of visits by manufacturer rep, 5 points for monthly visits all the way to one point for once every few years. (4) Visits by the dealer representative are also rated similarly. The sum of all four gives a total for communication. The larger the sum, the more process oriented. Second, for advertising and training costs, two questions were listed on who bears the cost in each case with 5 points given if the manufacturer bears all the costs, all the way to one point if the dealer bears all, with three possibilities in between. This is supposed to reflect the manufacturer involvement with the dealer. The higher the involvement thus, the more process based is the mechanism considered. The lower it is, the more outcome based it is.

- a. Dealer appraisal: here the dealer was asked on the number of factors the manufacturer considers in evaluating the dealer with 5 points given if the answer is (a large number), 4 if it is a few factors, 3 if a limited number of factors are used, 2 if only two factors and 1 for one factor. This is again supposed to reflect the mechanism; the lower the score, the more outcome-based is the mechanism characterized to be.
- b. Other involvement indicators: Here a series of statements were presented and the respondents asked to indicate the extent of his agreement/ disagreement on a Likert -type five-points scale from" Fully-Agree" to "Don't Agree at All" with 5 points for full agreement and one point for: "Not at all" The Statement included, the manufacturer is always asking us for information, the manufacturer always requests detailed information, we usually receive clear directives from the manufacturer, the manufacturer is eager to know our opinion on what the customer wants, the manufacturer instructs us to conduct surreys of the domestic consumer needs, we usually pass government specifications to the manufacturer, and the manufacturer is lenient in his financial dealings with us.

Three additional statements are added to reflect the outcome-based. Hence one point was given to Full-Agreement and 5 points to "Not-Agree at All". These included, the manufacturer is only interested in tangible results (sales, profits), the manufacturer does not care what we do as long as we get results, and all the manufacturer cares for is the volume of sales.

A summated index was thus constructed on the basis of the above 17 questions each awarded points from one to five and hence the total ranges from 17 to 85 with the larger score indicating a clear process-based and the lower end indicating a clear outcome-based approach.

Performance

We have two measures of performance. A relatively objective one is concerned with the number of cars sold. Here we are taking a two (three) years average (2002-2004). The other measure is subjective based on four Likert type questions. The first question asks the dealer to rate their profit margin relative to comparable companies as either very high considerably high, similar, a little less or substantially less than competitors' with 5 points for very high and one for low with values in between. A second question asks the dealer to characterize their sales growth in the last few years as either: gratifying, satisfactory, average, rather unsatisfactory, or not satisfactory at all. The third question is about the performance of their market share in the last few years: exceeded expectations, very good, good enough, small, and very small. The fourth question relates to how their principal feels towards their performance and whether they think the manufacturer is: very satisfied, satisfied, cannot tell, not satisfied or not satisfied at all. A summated index of the score in each of the four is constructed varying from 4 to 20, the higher the number, the better the performance.

The validity and reliability of the data will first be tested using Cronbach's Alpha (refer to Table 1). Thereafter measurers of central tendency will be calculated and t-tests Conducted to indicate patterns, if any. Demographic analysis will also be carried to see if there are any patterns in terms of age of the relationship, exclusivity of the dealership etc.. Thereafter Pearson's correlations will be calculated to test the hypotheses, in addition to the t-tests above.

RESULTS AND DISCUSSIONS

As mentioned above our population was all the new passenger automobile dealers in Kuwait representing foreign manufacturers. The auto industry is highly oligoplistic where- ever found and it is found in a few industrial countries. Almost all auto makers have representatives in Kuwait.

Table 1
Reliability and Descriptive Statistics

Construct	Number of	Alpha	Mean	Standard
	items	Value		value
1. Mode of control (process vs.	17	0.604	65.7	5.43
outcome)				
2. Extent of control	17	0.779	61.1	9.63
3. Performance (subjective)	4	0.685	14.7	2.493
4. Performance (sales)	(2-3 yrs	-	4587	5325
	average)			

The values of alpha are substantial (all above 0.6 and one above 0.8). This gives confidence in their reliability and hence we can infer from them. As far as the mean values we notice that they are substantial. We look at them separately below

Extent of control (compliance)

This was based on 17 items and is again supposed to range from 17 (minimum or no control) to 85 (maximum control) Its mean value should thus be 51, (85-17+17). Given an observed mean value of 61.1 from the sample, it is substantially above the theoretical mean value with a t-value of 10.28 and is thus significant at the 1% level. This does not support our null hypothesis (H1), that Kuwaiti dealers operate with a substantial degree of independence from their manufactures. This result is somewhat surprising given that an earlier and similar study dose about Saudi Arabia found auto dealers to operate with a substantial degree of independence from the manufacturer. In the case of Saudi Arabia, the explanation was that the Saudi dealers were actually the leading businessmen in the country (Al Mutawoa & Ahmed, 1997) This is less true of Kuwait. Further in Kuwait we also found that only two dealers in the sample had agencies of additional products other than automobiles. This makes the majority more dependent on the auto business and thereby compliant to the manufacturer's wishes

Mode of governance

This is made of 17 items and is also supposed to range in value from 17 to 85, where the low end (17) represents pure outcome based mode and 85 the ultimate process type. The mean value should be: (85-17+17)=51. Given an observed value of 65.7, it is substantially above the mean is statistically significant at 0.01 supporting the hypothesis that the actual mean greater than the theoretical one. This supports our second hypotheses that foreign manufacturers are very much involved in the operations of their dealers and are apt to use a process- control mode of governance

Mode of governance and compliance

In hypothesis 3 we positive association between the mode of governance and the extent of control hypothesizing that the postulated a use of process control is associated with a large extent of control. Pearson correlations were calculated to test this and other presumed association. The calculated correlations appear in Table 2 below.

Table 2
Pearson Correlations

Variable	Extent of	Control	Performance	Performan-
	Control	process	(subjective)	ce(sales)
1. Extent of control	1.0			
2. Control Process	-0.152	1.0		
3. Performance: Subjective	0.043	0.403*	1.0	
Measure				
4. Performance: Sales	-0.639**	.129	0.306	1.00

^{**} Sig at 5%

No such relationship is thus revealed from the data analysis, only a week and a negative relationship was found. This runs counter to expectations. It is possible that the involvement is so overwhelming or that they work so closely that the dealer feels he is making his own decisions, i.e. that he is not under the influence, and feels that his input is substantial being contacted so often

Breaking the sample into two groups: those scoring high in the process-based mechanism (above the median) as group I and those below as group II, we find that their means go together: Group I has a higher mean than group II and testing for the equality of means shows a highly significant level at (0.01). Hence there is some association and we cannot completely reject the hypothesis.

Process control and performance

As for as process control and objective performance, no significant or substantial association was isolated between the two measures. Nonetheless, a somewhat substantial though rather week (0.403 at around 10% significance level) surfaced between the mode of control and the subjective measure of performance. It is possible that the involvement and the frequent interaction with the manufacture makes the dealer feel that the manufacturer is satisfied with him since they have been checking everything with them. They must feel that things could not be better given that everything has been done with the approval and participation of the manufacturer.

Control and performance

While no substantial correlation was detected between the extent of control and the subjective measure of performance, a substantial and significant, though negative correlation was revealed between control and the objective measure of performance. This is counter to the hypothesis but is in line with a similar and an earlier finding for Saudi Arabia (Ahmed & Al-Mutawaa, 1999). It does appear that to succeed in the Gulf market a foreign maker has to defer to his domestic dealer. It should be observed though that average sales were highly skewed where the standard deviation is larger than the mean and the range three times the mean. This suggests that the market is dominated by a few mega-dealers who resist conforming to the manufactures strategy as suggested by Rosenbloom above (2004). In addition to that there are many other dealers with modest sales whose respective manufacturers must be involved in their dealers operations trying to crack the Kuwaiti market. That must be the reason behind the high level of control extent and the tendency towards following a process control mode.

CONCLUSIONS

This was a study of the relationship between foreign automobile manufactures and their respective dealers in an emerging market, an area falling in what is described as relationship marketing. This latter phenomenon is becoming increasingly important for success in marketing especially in durable big-tickets products like automobiles. The study approached the whole population of dealers in Kuwait and obtained a good response rate. The study found that local dealers work under strong influence of the

^{*} Sig at 10%

manufacturer in their operational decisions and that manufactures are very much involved with them which we interpreted it to mean that they, the vehicles makers follow a process -mode of governance. We found a week relation between the use of that mode and success of the dealer (and thereby of the manufacturer) when viewed in subjective measures. Objective measures of performance were not found to be associated with the process mode of control, but negatively associated with the extent of the manufacturer influence. This last result is similar to the finding of a similar study done for Saudi Arabia. This leads us to conclude that success in Gulf auto markets requires that the manufacturer defer to the dealer in many decision, but that does not mean that the manufacturer need not get involved. A major limitation of the study is the small sample size even though it makes a good proportion of the total population. But with the industry being oligopolistic and the Kuwaiti market relatively small, that is inevitable.

REFERENCES

Ahmed, A. A & Ml-Mutawa A.A. 1997. Performance and related channel phenomena in international markets: The Saudi car market. *Journal of International Marketing and Marketing Research*, 122(1): 3-18.

Al-Mutawa, A.A. & Ahmed, A.A. 1966. Control, conflict and satisfaction in international channels: Autos in a Middle Eastern market. *Journal of Marketing Channels*, 5(3/4): 49-69.

Anderson E. & Oliver, R.L. 1987. Perspective on Behavior-Based versus Outcome-Based Sales Force Control Systems. *Journal of Marketing*, 51: 76-88.

Aulakh, P.S., Kotable M. & Sahay, A. 1996. Trust and performance in cross-border marketing partnership: A behavioral approach. *Journal of International Business Studies*, 27(5): 1005-1032.

Bello, C.D. & Gilliard, D. I. 1997. The effect of output-control, process-control and flexibility on export channel performance. *Journal of Marketing*, 61(1): 22-38.

Brown, J.R., Dev, C.S. & Dong-Jun Lee. 2000. Managing marketing channel opportunism: The efficiency of alternative governance mechanisms. *Journal of Marketing*, 64(2): 51-65.

Cavusgil, T.S., Deligonul, S. & Zhang, C. 2004. Curbing foreign distributor opportunism: An examination of trust, contracts and the legal environment in international channel relationships. *Journal of International Marketing*, 12 (2): 7-27.

Escowa. 2005. Statistical abstracts of the Escowa region. New York: The United Nations

Genturk, E. & Aulakh, P.S. 1995. The use of process and output controls in foreign markets. *The Journal of International Business Studies*, 26 (4): 755-786.

Heide, J.B. 1994. Inter-organizational governance in marketing channels. *Journal of Marketing*, 58(1): 71-85.

Karunaratna, A.R. & Johnson, L.W. 1997. Initiating and Maintaining Export Channel Intermediary Relationship. *Journal of International Marketing*, 5(2): 11-32.

Leonidou, L.C., Katsikeas, C.S. & Hadjimarcou, J. 2002. Building Successful Export Business Relationship: A Behavioral Perspective. *Journal of International Marketing*, 10(3): 96-115.

Lee, L. & Ng. P. 2002. Dynamics of export Channel Relationship in high velocity environment. *Industrial Marketing Management*, 31: 505-514.

Oliver, R.L. & Anderson, E. 1994. An empirical test of the consequences of behavior and outcome-based sales control systems. *Journal of Marketing*, 58(4): 53-67.

Quinn, B., & Doherty A-M. 2000. Power and control in international retail franchising: Evidence from theory, and practice. *International Marketing Review*, 17(4/5): 354-372.

Rosenbloom, B. Marketing Channels: A Management View. Ohio: South-western Pub. Co.

Skarmeas, D., Katsikeas, C.S. & Schlegelmilch, B. S. 2002. Drivers of commitment and its impact on performance in cross-cultural buyer-seller relationships: The importers perspective. *The Journal of International Business Studies*, 33(4): 757-783.

Teledymag Kuwait. 2006. *Commercial Directory* 2005-2006. Kuwait National Advertising & Publishing Co.

Trimeche, M.B. 2002. Export problems and stimuli associated with performance in the Arab market context: Insights from the Japanese managerial perceptions. *Journal of Transnational Management Development*, 8 (1/2): 53-81.

Veludo, M.L., Macbeth, D.K. & Purchase, S. 2004. Partnering and relationship within an international network context. *International Marketing Review*, 21 (2): 142-157.

Williamson, O.E. 1975. *Markets and hierarchies: Analysis and antitrust implications*. New York: Free Press.

Zhang, C., Cavusgil, S.T. & Rooth, A.S. 2003. Manufacturer governance of foreign distributor relationship: Do relational norms enhance competitiveness in the export market? *Journal of International Business Studies*, 34(6): 550-566.

Bridging Culture and Consumer Value: Toward an Integrative Framework Authors Information

Hamid Yeganeh

Winona State University, Minnesota, USA
Email: hygganeh@winona.edu
Pascale Marcotte

Université du Québec, Canada

Email: pascale_marcotte@uqtr.ca
Laurent Bourdeau

Laval University, Quebec, Canada Email: laurent.bourdeau@mng.ulaval.ca

ABSTRACT

Globalization of business offers a compelling reason for understanding the effects of culture on consumer behaviour. This paper aims to provide a theory-driven conceptual framework by incorporating both 'culture' and 'consumer value'. First, the concepts of 'cultural value' and 'consumer value' are untangled and then, by relying on a means-end perspective the possible relationships between them are theorized. At the end, implications of culture for consumer value are discussed and suggestions for future empirical research are presented.

INTRODUCTION

In an increasing global marketplace firms may look at consumer value as a key to their long-term success. It has been suggested that because of intense international competition and over-capacity manufacturing, consumer value will become the "next source of competitive advantage" in 21st century (Woodruff, 1997). A market-oriented company can promote consumer value, instead of promoting products/services (Van der Haar, Kemp, & Omta, 2001). Consumer value is a pivotal notion which may be related to both consumer behaviour and marketing strategy (Woodruff 1997; Woodruff & Gardial 1996). Consumer value has been widely employed in different fields such as product choice, purchase intention, repeat purchase, customer satisfaction and customer service (Bourdeau et al. 2002; Zeithaml, 1988; Dodds & Monroe, 1985; Nilson, 1992). It may be linked directly to customer loyalty, perceived quality, customer satisfaction, and perceived risk (Lam, Shankar, Erramilli, & Murthy, 2004). Review of marketing literature reveals that despite the growing interest in consumer value, the concept and its implications have been studied in vacuum and without considering cultural settings of international markets. Globalization involves flows of commodities, capital, technology, ideas, and people across national boundaries (Castells 1998; Held et al. 1999). Globalization, however, does not lead to cultural convergence. "As rapidly as forces from various metropolises are brought into new societies, they tend to become indigenized in one way or another" (Appadurai, 1996). The contemporary world is characterized by an intense, continuous, comprehensive interplay between the indigenous and the imported cultures (Hannerz, 1996). It is widely recognized that even the most 'global' brands, such as McDonald's or Coca-Cola, have different cultural connotations and are consumed quite differently in different places. In this global but culturally-heterogeneous world, marketing managers and researchers need to comprehend the implications of culture for consumer value. The perceptual nature of consumer value makes it prone to cultural context and it is plausible to suppose that the value that consumers attach to the same product or service may differ cross-nationally (Overby, Gardial, & Woodruff, 2004). Some studies provided evidence of the influence of culture for consumer behaviour and value (Overby, Woodruff and Gardial, 2005; Overby, Gardial, & Woodruff, 2004, Botschen & Hemetsberger 1998; Ter Hofstede et al. 1999; Valette-Florence 1998). However, the lack of strong conceptual frameworks and operational difficulties associated with cross-cultural research hinder the development of theory-based empirical work in this area (Douglas and Craig, 2006). The existing conceptualizations are not firmly grounded in theory and/or do not offer a comprehensive, clear-cut and operational understanding of cultural effects on consumer

value (Overby et al., 2005; Douglas et al., 1994). By recognizing the exiting gap, this paper aims to offer a theory-driven conceptual framework which incorporates both culture and consumer value. This article extends previous attempts (Overby, Woodruff & Gardial, 2005) and provides an operational model which can be applied empirically across borders.

The paper has been organized in three major pats. First, the notions of 'cultural value' and 'consumer value' are conceptualized and then, by relying on a means-end perspective the possible relationships between them are theorized. At the end, implications of culture for consumer value are discussed and suggestions for future research are provided.

LITERATURE REVIEW

Culture and Cultural Values

It is through culture that societies maintain regularity and order. Culture can be considered the accumulation of shared meanings, rituals, norms, and traditions which distinguishes members of one society from another (Soloman, 1996; Hofstede, 1980). For Hofstede human nature is what all human beings have in common and the personality of an individual is her unique personal set of mental programs. Therefore, culture as a collective programming of mind is placed between human nature and personality. Krober and Kluckhohn (1952) suggested a very comprehensive definition as following: "culture consists of patterns, explicit and implicit of and for behaviour acquired and transmitted by symbols, constituting the distinctive achievements of human groups, including their embodiment in artefacts; the essential core of culture consists of traditional ideas and especially their attached values...".

Generally, it is assumed that culture held by members of a society affects individual/collective behaviour through values. Hofstede (1997) viewed values as the building blocks of culture and what he has been able to measure as its manifestation. Cultural values consist of beliefs about desirable end-states and modes of conduct that guide evaluations and choices. Values are defined as desirable trans-situational goals, varying in importance, that serve as guiding principles in the life of a person or social entity (Schwartz, 1994). Cultural values can be related to beliefs and attitudes but they are not neutral and cold ideas (Schwartz, 1994). Cultural values may change over time, but they remain sensibly stable (Schwartz, 1992). Cultural values have both direction and intensity (Kluckhohn & Strodtbeck, 1961; Hofstede, 1980). That is if we hold a value, it implies that there is some relevance (intensity) attached to this value, and with this respect we consider some good or bad outcomes (direction). People from different cultures hold different values with varying degrees of intensity and direction and therefore behave differently.

Cultural Value Typology

Since culture is a fuzzy notion, a practical and popular approach among researchers is to identify several of its major characteristics and analyze them across borders. Cross-cultural literature provides us with different models based on a few orientations/dimensions along which cultural values can be studied (Kluckhohn & Strodtbeck, 1961; Hall, 1976; Hofstede, 1980; Hampden-Turner & Trompenaars, 1993). A comprehensive framework has been developed more recently by Schwartz (1992, 1994). For Schwartz cultural values are seen as continuous notions which can overlap each other and are organized in structures almost consistent across borders. According to Schwartz, a value type is a group of values that can conceptually be combined into one meaningful description. Schwartz (1994) distinguished clearly between individual and cultural levels. According to Schwartz (1994) personal value priorities are both a product of shared culture and personal experience and members of different cultural groups are socialised to adopt shared social values. The average priorities attributed to different values by societal members reflect the central thrust of their shared enculturalisation. Hence the average priorities point to the underlying, common cultural values (Schwartz, 1999: 26). At the level of national culture, analysis of data collected from 63 countries resulted in 45 common values which could be grouped into seven major value-types. Schwartz and his colleagues (1992, 1994) labelled these value types as: Conservatism, Intellectual Autonomy, Affective Autonomy, Hierarchy, Egalitarianism, Mastery and Harmony. Table-1 presents seven value-types and their description.

Table 1
Schwartz Value Types and their description

Value Type	Description
1-Conservatism	The person is viewed as embedded in group, finding meaning in life largely through social relationships. Cultural emphasis is put on maintenance of the status quo, propriety, and restraint of actions or inclinations that might disrupt the solidarity or the traditional order. This value type is characterized by social order, respect for tradition, family security and wisdom.
2-Intellectual Autonomy	The person is an autonomous and finds meaning in his/her own uniqueness, seeking to express his/her internal attributes (preferences, traits, feelings) and is encouraged to do so. Intellectual Autonomy has a cultural emphasis on the desirability of individuals independently pursuing their own ideas and intellectual directions. Important features are curiosity, broadmindedness and creativity.
3-Affective Autonomy	Affective Autonomy promotes and protects the individual's independent pursuit of own affectively positive experience. Affective Autonomy value type is characterized by seeking pleasure, exciting life and varied life.
4-Hierarchy	A hierarchical, differential allocation of fixed roles and of resources is the legitimate, desirable way to regulate interdependencies. People are socialized to comply with the obligations and rules. Cultural emphasis on the legitimacy of an unequal distribution of power, roles and resources, authority and wealth.
5-Egalitarianism	Individuals are portrayed as moral equals, who share basic interests and who are socialized to transcend selfish interests, cooperate voluntarily with others, and show concern for everyone's welfare. Egalitarianism corresponds to features such as equality, social justice, freedom, responsibility, and honesty.
6-Mastery	Groups and individuals should master, control, and change the social and natural environment through assertive action. Cultural emphasis is put on getting ahead through active self-assertion, ambition, success, daring and competence.
7-Harmony	The world is accepted as it is. Groups and individuals should fit harmoniously into the natural and social world, avoiding change and self-assertion to modify them. This value type attaches importance to unity with nature, protecting the environment and a world of beauty.

Source: Schwartz (1992)

Schwartz argued that people may differ substantially in the importance they attribute to values that comprise the seven categories, but the same structure of motivational oppositions and compatibilities apparently organizes their values. This integrated motivational structure of relations among values makes it possible to study how whole systems of values relate to other variables.

Consumer Value

Kotler's (1996) views marketing a social and managerial process where groups and individuals obtain what they desire by creating, offering and exchanging value with others in terms of products/services. In that sense, the fundamental basis for the marketing activity is consumer value. Review of marketing literature shows that early conceptualizations of consumer value relied purely on an economic perspective. For instance, Thaler (1985) argued that consumers' value perceptions are the result of a comparison between various price structures, including advertised selling price, advertised reference price and internal reference price. In later versions, scholars pointed out the complexity of consumer value and called for more holistic conceptualizations (Bolton & Drew, 1991). Subsequently, Woo (1992) identified four meanings of value for material consumption. According to Woo (1992) first, value means what is of true worth to people in the broad context of the well-being and survival of individuals. Second, it means what a society collectively sees as important. Third, it refers to what the individual holds to be

worthwhile to possess, to strive or exchange for. Finally, value refers to the amount of utility that consumers see as residing in a particular object and that they aim to maximize out of a particular act of buying or consuming. In the same vein, Zeithaml (1988) defined consumer value as "the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given". Building on this definition, Zeithaml (1988) identified four meanings: value is low price, value is whatever one wants in a product, value is the quality that the consumer receives for the price paid, and value is what the consumer gets (quality) for what she gives (price). Some scholars put consumer value and the process of its formation in the minds of consumers (Bolton & Drew 1991; Grewal, Monroe, and Krishnan 1998). By incorporating both subjective and objective sides, Holbrook (1999, 1994) defined consumer value as a relativistic preference characterizing a consumer's experience of interacting with some object (good/service). This conceptualization implies a holistic approach that applies to the whole experience of consumption process. More precisely, Holbrook (1999) distinguished four main features of consumer value as: interactivity, relativity, preferentiality, and experientiality. Interactivity implies that consumer value is related to object (product/service) on one hand, and subject (consumer) on the other (Frondizi 1971, Woodruff & Gardial, 1996; Holbrook, 1999). While objectivity of consumer value is related to its qualities, the subjectivity implies importance of consumer's interpretations. In explaining relativity, Holbrook (1999) suggests that consumer value is comparative (involving preferences among objects), personal (varying across people) and situational (specific to context). Preferentiality of consumer value is concerned with the degree of like/dislike attached to purchase process. This is one of the most important characteristics of consumer value which provides motivation for making decisions (Holbrook, 1999). Finally, the fourth feature of consumer value entails that consumer value does not reside in the product/service or its tangible or intangible qualities, but rather in the consumption experience (Holbrook & Hirschman, 1982; Woodruff & Gardial, 1996).

Consumer Value Typology

Considering multidimensionality of consumer value, it is useful to break down this notion into a few pieces and look at them from different angles. Review of literature provides us with typologies which hinge on various perspectives. Classical approaches in value classification are based on the acquisition versus transaction value difference (Monroe, 1973; Monroe & Chapman, 1987) and the hedonic versus utilitarian value dichotomy (Holbrook & Hirschman, 1982; Holbrook & Corfman, 1985). According to Sheth et al. (1991) consumer values can be divided into functional, social, emotional, epistemic and conditional value types. This typology suggests that values explain the benefits consumers are seeking with the purchase of a product/service.

A comprehensive typology of consumer value has been proposed by Holbrook (1994; 1999). According to Holbrook's experiential perspective, it is suggested that consumers purchase products/services based on benefits which are related to three major dimensions: self-oriented vs. otheroriented, active vs. reactive, and extrinsic vs. intrinsic. Extrinsic value pertains that consumption is motivated by functionality, utility and instrumentality and serves as a means to accomplishing some further purposes (Holbrook, 1999). By contrast, intrinsic value occurs when consumption is regarded as an end in itself and for its own sake (Holbrook, 1999). Consumption is labelled self-oriented when consumer prizes some aspect of consumption selfishly or prudently for his/her own sake (Holbrook, 1999). Quite the opposite, other-oriented consumption value looks beyond the self to someone or something else, where consumption is valued for their sake and for the effect it has on them (Holbrook, 1999). Consumption is considered active when it entails a physical or mental manipulation of some object for example driving a car or solving a crossword puzzle (Holbrook, 1999). Reactive consumption is a reversed situation when some objects act upon consumer. In other words, in reactive consumption, the subject responds to object by acts such as apprehending, appreciating and admiring (Holbrook, 1999). By combining these three dichotomies, Holbrook (1999) developed an eight-celled typology of consumer value labelled as: efficiency, excellence (quality), play, aesthetics, esteem, status, ethics and spirituality. He argued that each value type is logically product of three principal dimensions.

Linking Culture to Consumer Value

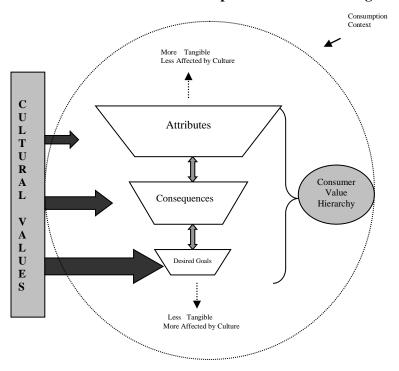
While there is a great deal of ambiguity around 'value' in marketing literature, it is possible to unravel 'cultural value' and 'consumer value' by conceptualizing them as different but narrowly interrelated notions. Cultural values are social constructs shared by human beings living in a society and they tend to form a consistent and integrated whole (Herskovit, 1941). Cultural values are not instinctive and innate but they are inculcated and therefore, they are transmitted from one generation to other. Cultural values correspond to universal and relatively constant beliefs which refer to the desirable goals people strive to attain. In that sense, cultural values are central to an individual's cognitive system and shape who he/she is. They guide and affect beliefs, selection or evaluation of actions, policies, people, and events but they transcend specific situations (Schwartz, 1994). While consumer values share some characteristics with cultural values, they are more limited in scope and they are defined in a particular consumption context (Holbrook, 1999). They are interactive and therefore they are more susceptible to change and transformation. To some extent, consumer values may determine individual/group behaviour; however they seem rather as outcomes of individuals' cognitive and affective systems and they shape consumption behaviour.

Consumption is an activity situated within the social environment, entailing interaction with other people. As an important component of social environment, culture may affect the needs consumers satisfy through the acquisition and use of goods and services (Roth, 1995). Cultural values shape ideas about how to consume, what to consume, what consumption of certain goods and services means, and more particularly about what is perceived as value for consumers. Therefore, while 'consumer value' is defined essentially with respect to product/service, the value attached to consumption is likely to be dependent on cultural values. That is to say that within a particular consumption context, consumer value may mean different things to different people (Jacob 1993). A useful approach to theorize the effects of culture on consumer value is to rely on means-end perspective (Overby, Gardial, & Woodruff, 2004; Gardial et al. 1994; Gutman 1982; Pieters, Baumgartner, & Allen 1995; Ter Hofstede et al. 1999; Ter Hofstede et al. 1998; Zeithaml 1988). Means-end theory incorporates both desired and received consumer values at three levels: attributes, consequences, and desired end-states. Attributes are straight product/service features which might be concrete or abstract (Olson and Reynolds, 1983). Consequences are benefits or sacrifices resulting from consumption of a product/service in a use situational context. Finally, desired end-states comprise the most abstract features which are related to consumers' goals. Figure-1 presents a model relating 'cultural values' to 'consumer values'. According to this representation it is understood that while cultural and consumer values are in interaction, the causal relationship tends to be from culture to consumer values. Based on a means-end perspective, it is possible to suggest that cultural values as motivational factors affect consumer values at all three levels of attributes, consequences, and desired goals. Since cultural values are abstract notions, it would be plausible to argue that they are more likely to affect less tangible levels of consumer value such as desired-goals.

The above discussion can be formulated in three propositions:

- P1. Cultural values and consumer values represent distinct but interrelated notions when the flow of causal relationship tends to be from cultural values to consumer values.
- P2. In a particular consumption context, culture affects all three levels of consumer value: attributes, consequences and desired goals.
- P3. In a particular consumption context, the extent of cultural effects may increase from product/service attributes to consequences and desired goals.

Figure 1
A Means-end Conceptual Model for Linking Culture to Consumer Value



Integrating Cultural and Consumer 'Values'

Figure-1 offers a general outlook of possible association between culture and consumer value, however, it does not present an explicit and practical model which can be applied in empirical research. For transforming this model to an operational framework, it would be useful to rely on typologies of culture and consumer value in order to establish specific relationships. Schwartz' cultural typology offers various advantages for conceptualizing culture in international marketing research (Steenkamp et al. 1999). By contrast to other cultural typologies such as Hofstede (1980, 2001) and Hampden-Turner and Trompenaars (1993) Schwartz' model has not been derived from work-related attitudes in organizations and therefore it can be of significant relevance in the area of consumer behaviour. Furthermore, Schwartz' value types reflect culture at national level; they have been validated empirically in more than 60 western and non-western countries, and collected data are available for further empirical investigation (Roccas et al. 2002). With respect to consumer value, Holbrook's (1999) classification seems a convenient approach which has been used frequently in marketing research. While there are some blurring borders between Holbrook's notions, they seem relatively straightforward and exhaustive.

As discussed earlier, two major notions in consumer values are extrinsic and intrinsic dimensions (Holbrook, 1999). All extrinsic values are concerned with consumption that brings about some other desired end (Abbott, 1955). In other words, extrinsic value is the ability of a thing to produce something else, as defined by the utility concept (Lamont, 1955). Bond (1983) suggested that, in some technical sense, utility is an effective means to some desired end. Extrinsic values can thus be thought of as something being practical and functional. According to Holbrook's axiology (1999) extrinsic values may fall into four categories: 'Efficiency', 'Excellence', 'Status' and 'Esteem'.

Based on this description and keeping in mind that consumer values are affected by societal culture in which they are entrenched, it is possible to relate extrinsic consumer values to social orientations such as 'Conservatism', 'Hierarchy' and 'Mastery'. Schwartz (1992, 1994) described 'Conservatism' cultural value type with characteristics like embeddedness in group, wisdom, maintenance of the status quo, respect for tradition, social order, family security, propriety, and restraint of actions or

inclinations that might disrupt the solidarity and traditional order. In that sense, 'Conservatism' corresponds to consumer value dominated by utility, functionality and quality. Therefore, it is reasonable to suggest that within a particular consumption context, cultural conservatism matches extrinsic consumer values which emphasize utility, effectiveness, quality, status and esteem.

Another Schwartz' cultural value labelled 'Hierarchy' entails unequal distribution of power, resources, and wealth in a society. Associated with hierarchy is sense of class culture and status consciousness. Furthermore, hierarchical cultural orientation leads to compliance with the obligations in the society. Thus, it is argued that people in hierarchical cultures may cherish extrinsic consumer values such as 'Status', 'Esteem' and 'Excellence'. 'Hierarchy' cultural value may be associated with conspicuous or prestige-seeking consumption which is the ostentatious use of goods to signal status to other members of society. In other words, consumers seek status by adjusting the consumption in a manner that affects those whom they wish to influence (Holbrook, 1999).

People may have different attitudes toward nature and environment in which they are living. The third cultural type or 'Mastery' implies that people should master, control, and change the social and natural environment through assertive action. A society marked by this cultural orientation puts emphasis on assertiveness, ambition, success, daring and competence. Considering other-oriented characteristics of 'Mastery', it is plausible to suggest that societies marked by this cultural orientation are more likely to embrace extrinsic consumption values which bring about desired goals.

By contrast, intrinsic values are distinguished from extrinsic values by some experience that is appreciated for its own sake and apart from any consequences that may arise (Holbrook, 1994). In other words, intrinsic value is a pure pleasure that is an end in itself. Therefore, intrinsic consumption is nonutilitarian. Holbrook (1999) distinguished four categories of intrinsic consumer values: 'Play', 'Aesthetics', 'Ethics' and 'Spirituality'. It is possible to recognize some association between intrinsic consumer values and some cultural orientations like 'Intellectual Autonomy', 'Affective Autonomy', 'Egalitarianism' and 'Harmony'. 'Intellectual Autonomy' as described by Schwartz (1992) implies autonomy, curiosity, broadmindedness and creativity. In other words, those in societies dominated by 'Intellectual Autonomy' seek actively to express and fulfill their intellectual preferences and feelings. Similarly, 'Affective Autonomy' is related to social behaviour based on pursuit of pleasure, excitement and varied life. Intellectual/affective autonomy may lead to non-utilitarian consumer behaviour in which shoppers look for fun, pleasure and beauty in their consumption experience. Therefore, it seems realistic to suggest that in a particular consumption context, societies characterized by 'Intellectual' and 'Affective' autonomies are more likely to stress intrinsic consumer values such as 'Play' (Fun), 'Aesthetics', 'Ethics' and 'Spirituality'. As a matter of fact, 'Play' is the consumption experience that consists in intrinsic pursuit of fantasies, feelings and fun rather than pure task completion (Hirschman and Holbrook, 1982).

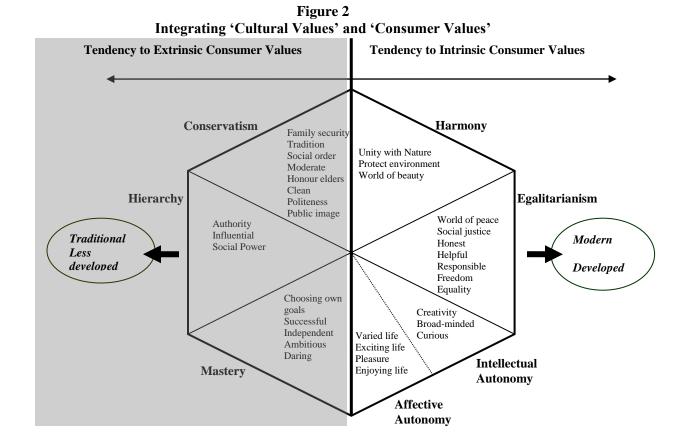
Schwartz (1992) maintains that 'Egalitarianism' cultural value corresponds to features such as equality, social justice, freedom, responsibility, and honesty. People in egalitarian cultures cooperate voluntarily with others, and show concern for everyone's welfare. Therefore, they are more likely to embrace intrinsic consumer values especially 'Ethics' and 'Spirituality'. According to Holbrook (1999) Ethics value type includes virtue, justice, and morality. As of spirituality, it entails an intrinsically motivated acceptance, adoption, appreciation or adoration of an 'Other' which may constitute some Divine Power or mystical Entity (Holbrook, 1999).

Finally, 'Harmony' cultural orientation involves accepting the world as it is (Schwartz, 1992). In societies marked by this cultural value, people should fit harmoniously into the natural and social world and avoid change and self-assertion. 'Harmony' attaches importance to unity with nature, environment protection and a world of beauty and peace. Therefore, it is suggested that within a particular consumption context, cultures marked by 'Harmony' are more likely to hold on intrinsic consumer values such as 'Aesthetics', 'Ethics' and 'Spirituality'.

Figure-2 depicts and summarizes possible relationships between seven cultural value types and consumer values. As shown in Figure-2, three cultural value types labelled 'Conservatism', 'Hierarchy' and 'Mastery' belong to traditional societies which are associated with 'Extrinsic' consumer values.

Traditional cultural values revolve around collectivism, solidarity, family, face, honour, authority, and public reputation and serve as survival mechanisms in poor societies (Veenhoven, 1999). These cultural values are associated with utilitarian and anti-hedonic consumption (Tse, 1996). Utilitarian consumers may enter a shopping centre with the clear objective of purchasing particular products and look for functional product benefits (Engel, Blackwell, & Minard, 1993).

By contrast, modern cultural value types described as 'Intellectual/Affective Autonomy', 'Egalitarianism' and 'Harmony' are connected to 'Intrinsic' and non-utilitarian consumer values such as 'Play', 'Aesthetics', 'Ethics' and 'Spirituality'. Generally, people in modern and economically developed societies are wealthier and they see consumption as a principal part of their life (Cheng & Schweitzer, 1996). As a result, in these societies consumption is accepted as a leisure activity with its own intrinsic value which might have not a utilitarian goal. This group of consumers is more influenced by situational factors such as the physical and social surroundings than real buying needs (Rushkoff, 1999). For instance, some non-utilitarian shoppers may enter malls with mainly hedonic and aesthetic motives such as watching, hearing, smelling, and touching various products which provide sensual satisfaction (Underhill, 1999). In line with this view, Li et al. (2004) found significant differences between Chinese (traditional culture) and US (modern culture) mall shoppers' behaviours. Their studies showed that while Chinese consumers' shopping is primarily driven by utilitarian needs, US shoppers are motivated by diverse situational and sensual concerns.



CONCLUSIONS

In an increasing global but multicultural marketplace, it is essential to understand the implications of culture for consumer value. This article was an attempt to examine and conceptualize the effects of culture on consumer values by proposing an integrative framework. While there is much ambiguity

around the notion of 'value', through this paper we untangled 'cultural value' and 'consumer value' as distinct but narrowly interrelated concepts. We maintained that cultural values correspond to universal, trans-situational and relatively constant beliefs that serve as guiding principles in the life of a person or social entity. By contrast, consumer values are situational notions which are conceived in a particular consumption context (Holbrook, 1999). Since consumption is an activity situated within the social environment, it is necessarily affected by societal culture. Therefore, while 'consumer value' is defined essentially with respect to using a product/service, the value attached to consumption depends on societal culture. That is to say that even within a particular consumption context, consumption may mean different things across cultures (Aaker & Maheswaran, 1997; Bagozzi, Dholakia, & Jacob 1993). By relying on a means-end theory we suggested that cultural values as motivational factors affect consumer values at all three levels of 'attributes', 'consequences', and 'desired goals'. Furthermore, we suggested that in a consumer value hierarchy, the extent of cultural effects may increase from product/service attributes to consequences and desired goals. In other words, less tangible features of consumption such as desired goals are supposed to be more affected by cultural values (See Figure-1). Subsequently, building on Schwartz' cultural typology (1992) we established specific relations between culture on one hand and consumer values on the other. This resulted in an integrative framework as depicted in Figure-2.

We stress the importance of remembering that consumer values should not be considered as mutually exclusive. They should be viewed rather as coexisting notions with blurring borders among them. A single consumer may take on several of value types, each in a varying degree to purchase a product/service. However, in every consumption experience it is possible to distinguish some consumer values which are dominant and guide purchase behaviour. The associations depicted in Figure-2 correspond to these dominant 'consumer values' which motivate consumption. Another important precaution in interpreting the framework (Figure-2) is to view consumer values as contingent properties that reside simultaneously in subject (consumer) and object (product/service consumption). While the subject (consumer) is affected mainly by culture, the object (product/service consumption) may depend on many contextual factors such as price, category of product/service, physical environment, etc. This implies that for studying cultural effects on consumer values, the consumption context (product/service, environment, price etc) should be held constant.

While our framework is essentially theoretical, its fundamental contribution resides in providing a clear-cut and testable agenda for conceptualizing the effects of culture on consumer values. As any other integrative framework, some relations may not hold under certain conditions, however, this model provides a platform for further empirical research and debate. It is important to mention that both cultural value types and consumer values are etic concepts. The etic approach involves developing an understanding of a construct by comparing it across cultures using predetermined characteristics. Despite the fact that the etic approach permits a better comparison across borders, it may sacrifice conceptual equivalency and precision of the research (Berry, 1990). Considering soundness of Schwartz' cultural typology (1992), future research may investigate 'consumer values' variations across borders and validate theoretical relations as proposed in the framework. Also, it would be appealing to understand which cultural values types are more significant in shaping consumer values. We maintain that such knowledge will be useful not only in extending theory, but also in crafting efficient marketing strategies in an increasing global but multicultural marketplace.

Acknowledgements: The authors would like to thank Social Sciences and Humanities Research Council of Canada (SSHRC) for financial support.

REFERENCES

Aaker, J., & Maheswaran, D. 1997. The effect of cultural orientation on persuasion. *Journal of Consumer Research*, 24 (3): 315–28.

Abbott, L. 1955. *Quality and Competition: An Essay in Economic Theory*. New York, NY: Columbia University Press.

Appadurai, A. 1996. *Modernity at large: Cultural dimensions of globalization*. University of Minnesota Press, Minneapolis.

Bagozzi, R., & Yi, Y. 1989. The degree of intention formation as a moderator of the attitude-behaviour relationship. *Social Psychology Quarter*. 52 (1).

Berry, J.W. 1990. Imposed etics, emics and derived emics: Their conceptual and operational status in cross-cultural psychology. In T.N. Headland & M. Harris (Eds.), *Emics and Etics: The Insider/OutsiderDebate*, 84-89. Newbury Park, CA: Sage.

Bolton, Ruth N., & Drew, James H. 1991. A multistage model of customers' assessments of service quality and value, *Journal of Consumer Research*, 17 (March): 375-384.

Botschen, G., & Hemetsberger, A. 1998. Diagnosing means-end structures to determine the degree of potential marketing program standardization. *Journal of Business Research*, 42 (2): 151-159.

Bourdeau, L., Chebat, J.C., & Couturier, C. 2002. Internet consumer value of university students: E-mail-vs.-web users. *Journal of Retailing and Consumer Services*, 9 (2): 61-69.

Castells, M. 1998. End of Millennium. Oxford: Blackwell.

Cheng, H., & Schweitzer, J.C. 1996. Cultural values reflected in Chinese and U.S. television commercials. *Journal of Advertising Research*, (May/June), 27-45.

Dodds, W. B., & Monroe, K. B. 1985. The Effect of Brand and Price Information on Subjective Product Evaluations. In E. Hirschman and M. Holbrook (Eds.), *Advances in Consumer Research*: 12, 85-90.

Douglas, S.P., & Craig, C.S. 2006. On improving the conceptual foundations of international marketing research. *Journal of International Marketing*, 14(1): 1-22.

Douglas, S.P., Morrin, M.A., & Craig, C.S., 1994. Cross-national consumer research traditions. In Laurent, G., Lilien, G., & Bras, B. (Eds), *Research Traditions in Marketing*, Kluwer, Boston, MA.

Engel, J.F., Blackwell, R.D., & Miniard, P.W. 1993. *Consumer Behaviour*. Fort Worth, TX: The Dryden Press.

Frondizi, R. 1971. What is Value? (2nd Ed). Illinois: Open Court Publishing Company.

Gardial, S.F., Clemons, D.S., Woodruff, R.B., Schumann, D.W., & Burns, M. J. 1994. Comparing consumers recall of pre-purchase and post-purchase product evaluation

Experiences. Journal of Consumer Research, 20 (March): 548-60.

Grewal, D., Monroe, K.B., & Krishnan, R. 1998. The effects of price-comparison advertising on buyers: Perceptions of acquisition value, transaction value, and behavioural intentions. *Journal of Marketing*, 62 (2): 46-59.

Gutman, J., 1982. A means-end chain model based on consumer categorization processes. *Journal of Marketing*, 46 (Spring): 60-72.

Hall, E. T. 1976. Beyond culture. Garden City, NY: Anchor Press.

Hampden-Turner, C.M., & Trompenaars, F. 1993. *The Seven Cultures of Capitalism: Value Systems for Creating Wealth in the United States, Britain, Japan, Germany, France, Sweden and the Netherlands*. New York, NY: Doubleday.

Hannerz, U. (1996). *Trans-national connections*. London:Routledge.

Held, D., McGrew, A., Goldblatt, D., & Perraton, J. 1999. *Global Transformations*. Cambridge & Palo Alto: Polity Press & Stanford University Press.

Herskovits M. Economics and anthropology: A rejoinder. *Journal of Political Economy*. 49(2), 1941, 524-531.

Hirschman, E.C., & Holbrook, M.B., 1982. Hedonic consumption: Emerging concepts, methods and propositions. *Journal of Marketing*, Vol. 46, No. 3, 92-101.

Hofstede, G. 1997. Cultures and Organizations: Software of the Mind. New York, NY: McGraw-Hill.

Hofstede, G. 1980. *Culture's Consequences: International Differences in Work-Related Value*. Newbury Park, CA: Sage.

Holbrook, M. B. 1999. Consumer Value: A Framework for Analysis and Research. London: Routledge.

- Holbrook, M. B. 1994. The Nature of Customer Value: An Axiology of Services in the Consumption Experience. In R. T. Rust & R. L. Oliver (Eds.), *Service Quality: New Directions in Theory and Practice*: 21-71. Thousand Oaks, CA: Sage.
- Holbrook, M. B., & Corfman, K. P. 1985. Quality and Value in the Consumption Experience: Phaedrus Rides Again. In J. Jacoby & J. C. Olson (Eds.), *Perceived quality: How consumers view stores and merchandise*: 31-57. Lexington, MA: D.C. Health and Company.
- Holbrook, M. B., & Hirschman, E. C. 1982. The experiential aspects of consumption: consumer fantasies, feelings, and fun. *Journal Consumer Research*, 9(September), 132-144.
- Jacob, R. 1993. Beyond quality and value. Fortune, Autumn-Winter, 8-11.
- Kluckhohn, F. & Strodtbeck, F. 1961. Variations in Value Orientations. Evanston, IL: Row, Peterson.
- Kotler, P., 1996. *Marketing Management: Analysis, Planning, Implementation and Control*, 9th Edition. Englewood Cliffs, NJ: Prentice Hall.
- Krober, A.L., & Kluckholn, C. 1952. *Culture: A critical review of concepts and definitions*. Papers of the Peabody Museum of American Archaeology and Ethnology, Vol. 47, 1-223. Cambridge, MA: Harvard University.
- Lam, S.Y., Shankar, V., & Erramilli, M.K. 2004. Customer value, satisfaction, loyalty, and switching costs: An illustration from a business-to-business service context. *Journal of the Academy of Marketing Science*, Vol. 32, No. 3, 293-311.
- Li, F., Zhou, N., Zhuang, G., & Kranendonk, C. 2004. Interlinear or inscription: A comparative study of Chinese and American mall shoppers behaviour. *Journal of Consumer Marketing*, Vol. 21, Number 1 2004, 51-61.
- Monroe, K. B. 1973. Buyers' Subjective perceptions of price. *Journal of Marketing Research*, 10 (February) 70-80.
- Monroe, K. B., & Chapman, J. D. 1987. Framing effects on buyers' subjective product evaluations. In M. Wallendorf & P. Anderson (Eds.), *Advances in consumer research*: 14, 193-197). Provo, UT: Association for Consumer Research.
- Nilson, T. H. 1992. *Value-added Marketing: Marketing Management for Superior Results*. Berkshire, UK: McGraw-Hill.
- Olson, J.C. & Reynolds, T. 1983. Understanding consumers' cognitive structures: Implications for advertising strategy. *Advertising and Consumer Psychology*, L. Percy and A. Woodside (Ed). Lexington, MA: Lexington Books.
- Overby, J.W., Woodruff, R.B., & Gardial, S.F. 2005. The influence of culture upon consumers' desired value perceptions: A research Agenda. *Marketing Theory*, Vol. 5, No. 2, 139-163.
- Overby, J.W., Gardial, S.F. & Woodruff, R.B. 2004. French versus American consumers' attachment of value to a product in a common consumption context: A cross-national comparison. *Journal of the Academy of Marketing Science*, Vol. 32, No. 4, 437-460.
- Pieters, R., Baumgartner, H., & Allen, D. 1995. A means-end chain approach to consumer goal structures. *International Journal of Research in Marketing*, 12 (3): 227-244.
- Roccas, S., Sagiv, L., Schwartz, S. H., & Knafo, A. 2002. The big five personality factors and personal values. *Personality and Social Psychology Bulletin*, 28, 789–801.
- Roth, M.S. 1995. The effects of culture and socioeconomics on the performance of global brand image strategies. *Journal of Marketing Research*, 32 (May): 163-175.
- Rushkoff, D. 1999. Coercion: Why We Listen to What 'They' Say". New York: Riverhead
- Schwartz, S. H. 1994. Are there universal aspects of the structure and contents of human values? *Journal of Social Issues*, 50(4): 19–45.
- Schwartz, S.H. 1992. Universals in the Content and Structure of Values: Theoretical Advances and Empirical Tests in 20 Countries. In M. Zanna (Ed.), *Advances in Experimental Social Psychology*, 25, 1–65. Orlando, FL: Academic Press.
- Sheth, J. N., Newman, B. I., & Gross, B. L. 1991. *Consumption Values and Market Choices: Theory and Applications*. Cincinnati, OH: Southwestern Publishing.

Soloman, M. 1996. *Consumer Behavior*, 3rd Ed. Upper River Saddle, NJ: Prentice Hall.

Steenkamp, J.-B.E.M., ter Hofstede, F., & Wedel, M. 1999. A cross-national investigation into the individual and national cultural antecedents of consumer innovativeness. *Journal of Marketing*, 63 (April): 55–69.

Ter Hofstede, F., Steenkamp, J.-B.E.M., & Wedel, M. 1999. International market segmentation based on consumer-product relations. *Journal of Marketing Research*, 36(1): 1–17.

Ter Hofstede, F., Audenaert, A., Steenkamp, J.B., & Wedel, M. 1998. An investigation into the association pattern technique as a quantitative approach to measuring means-end chains. *International Journal of Research in Marketing*, 15 (1): 37-50.

Thaler, R. 1985. Mental Accounting and Consumer Choice. Marketing Science, 4(summer): 199-214

Tse, D.K. 1996. Understanding Chinese people as consumers: Past findings and future propositions. In Bond, M.H. (Eds.), *Handbook of Chinese Psychology*: 352-63. Hong Kong: Oxford University Press.

Underhill, P. 1999. Why We Buy: The Science of Shopping. New York, NY: Simon & Schuster.

Valette-Florence, P. 1998. A causal analysis of means-end hierarchies in a cross-cultural context: Methodological refinements. *Journal of Business Research*, 42(2): 161–166.

Van der Haar, J., Kemp, R., & Omta, O. 2001. Creating value that cannot be copied. *Industrial Marketing Management*, No. 30, 627-636.

Veenhoven, R. 1999. Quality-of-life in individualistic society: A comparison of 43 nations in the early 1990s. *Social Indicators Research*, 48: 157–186.

Woo, H. K. H. 1992. *Cognition, Value, and Price: A General Theory of Value*. Ann Arbor, MI: University of Michigan Press.

Woodruff, R. B. 1997. Customer value: The next source for competitive edge. *Journal of the Academy of Marketing Science*, 25(2): 139-153.

Woodruff, R. B., & Gardial, S. F. 1996. *Know Your Customer: New Approaches to Understanding Customer Value and Satisfaction*. Cambridge, MA: Blackwell Publishers.

Zeithaml, V. A. 1988. Consumer perceptions of price, quality and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52(July): 2-22.

STRATEGIC TECHNOLOGY MANAGEMENT ISSUES ACROSS CULTURALLY DIVERSE COUNTRIES

Arif Sikander

Murdoch Business School, Murdoch University, Murdoch, Western Australia Email: A.Sikander@murdoch.edu.au

ABSTRCAT

Strategic technology management (STM) approach, which places technology in a strategic context, emerged in the late eighties in response to failure of more traditional techniques for exploiting technology. STM in this study included aspects of both technology strategy (content) and technology management (process). Many studies in strategic management research have investigated the relationship between technology strategy, technology management and firm performance, but largely from a western viewpoint. This study addresses this gap in the literature and focuses on a newly developing country outside the western block. It examines a high tech sub-sector in the manufacturing sector during a 10 year study period which recorded tremendous growth in the economy of the country.

INTRODUCTION

Rapid advances in technologies have created uncertainties in the industrial environment as competitive advantages tend to drift from one firm to another. Each organisation is trying to position itself to gain a strategic advantage. To gain this competitive advantage in the midst of changing technologies, the firms need to evaluate their technological policies and integrate it with the business strategy. Poor technological choices by management may severely affect firm performance (Zahra, 1996a, 1996b). The failure of the traditional techniques for exploiting technology like R&D has emphasised the need to address technology at a strategic level (Drejer, 1996). Almost invariably, all studies on Strategic Technology Management share common features, they generally employ different industry perspectives, research methodologies and study dimensions, which makes it difficult to make comparison among them (Herman, 1998). Very few of these studies focus on both the content and process aspect of strategy. Like the business strategy formulation and implementation, it is useful to analyse technology strategy formulation and implementation with a business focus. Zahra (1993) has indicated that there is a paucity of empirical studies on the process by which content of technology policy is defined and its linkage with business strategies. Since then few studies were done to analyse the technology strategy types in high tech sector of the Western Countries. This study attempts to address this issue and focus on the identification of some strategic technology management issues and their effect on business strategies. It includes the content as well as process aspects of technology and analyses firms in a technology intensive industry in a geographically and culturally different environment.

The two components of STM: "Technology Strategy" (TS) and "Technology Management" (TM) in this study have been operationlized by strategy and management variables. Data were gathered from the Senior Executives of the relevant firms through a survey questionnaire. Statistical tools were used to perform Factor and Regression analysis on the variables representing various dimensions. The resulting technology strategy and management factors were then analysed using SPSS software to determine their relation with firm performance, firm type, firm size and R&D.

This research will contribute empirical support to the field of strategic management research by developing more comprehensive technology strategies, relevant to a culturally different environment. A modified model will be evolved and it will be argued whether the National Technology Policy which provided the impetus for the economic growth and structural transformation of the manufacturing sector, influenced the strategy formulation and implementation at the firm level or not.

The technologies are changing at a very rapid rate. In order to gain a competitive advantage in this dynamics, the firms need to evaluate their technological policies and integrate it with the business

strategy. Poor technological choices by management may severely affect firm performance (Zahra 1996a, 1996b). The failure of the traditional techniques for exploiting technology like R&D has emphasised the need to address technology at a strategic level (Drejer, 1996). Technology strategies are being viewed today as the key drivers of business strategies, especially for technology intensive firms. Technology strategy considerations in the development of business level strategies, however, should not drive a company to have a technological strategic orientation (Ansoff, 1986).

Technology offers operational efficiencies and potential competitive advantages that can result in cost containment and lead to increased revenues. Identifying which processes, products, resources and technologies are right for a business can be challenging and, for some, overwhelming. The key to effective technology and business integration is aligning the technology resources with the business needs and service levels. This includes matching technologies, skill sets, resources, and IT priorities to business operations, processes, and priorities (RSA Corp, 2007).

Clarke, Ford and Saren (1989) used the term technology management to refer to organizational issues and processes involved in developing and implementing a strategic approach to technology. Through this approach, technology management issues can be operationalized and integrated into normal management activities of the firm. Strategic Technology Management (STM) did not emerge as a distinct area of managerial and academic interests until late 1980s. The key managers may initiate efforts to gain access to newer technologies, but the question is whether the approach they adopt is strategic or a series of ad hoc decisions (Quinn, 1988). STM is synonymous to Technology Policy in the context of this study and defined as developing technology strategies and then evolving methods to implement and manage them.

Linstone (1984) highlights that the technological, organizational and personal perspectives are frequently used by scientists to analyze complex phenomenon. The technological perspective is of interest in this study. Strategic Management of Technology encompasses both the dimensions of Technology Strategy (TS) and Technology Management (TM). This study analyses these dimensions by carrying out an in depth literature review and extracting the relevant citations from previous studies.

This research will contribute to the strategic technology management literature by utilizing the dimensions of previous studies in evolving a set of dimensions relevant to a culturally different environment. This could serve as a useful instrument while making a comparative analysis of application of STM in culturally diverse economies and should add considerably to the existing knowledge in this field.

The results from this research could facilitate the localization of technology management strategies in countries outside the western block. The strategies, though applied by a variety of firms but mostly unknown to them in the context they have been evolved based on this research, could help understand the contribution of such strategies to superior economic performance for countries operating under similar conditions. The results could be utilized to develop a strategic management approach (model) to identify the strategies employed by the firms and those recommended by the National Technology Plans.

From a business perspective, there is a great potential to apply the research findings in any manufacturing sub-sector for which certain moderating variables specific to the local environment need to be accounted for.

LITERATURE REVIEW

Nature of Strategies

Development strategies for industrialization can be broadly divided into import substitution and export orientation, strategies not mutually exclusive (Chen et al, 1997). Import substitution aims at replacing the imported products by those produced by newly developed industries for consumption in the domestic market. Export orientation is a strategy in which newly developed industries produce for overseas markets. Import substitution can further be divided into a first stage import substitution during which non-durable consumer goods are produced (ISUB1), and a second stage for the production of consumer durables intermediate goods and capital goods (ISUB2). Import substitution is achieved by

policies which are designed to protect the infant industries and discriminate against exports. Such measures include overvalued exchange rates, import controls, high tariffs etc. These force import prices of inputs above the world level, which the exporters have to face. Export orientation can also be divided into a first stage of exporting manufactures that are more labor intensive (EOR1) and a second stage of exporting products that are more capital and technology intensive (EOR2) (Chen et al, 1997).

The Asian NIEs (Newly Industrialized Economies) did not go through ISUB2. Thus industrial policies of NIEs differ both in nature and in approach. These can be divided into two categories, namely mission-oriented (M-O) and diffusion-oriented (D-O) (Chen et al, 1997). M-O economies have three characteristics: 1) there must be centralization of decision-making 2) the government has a mission to pursue at one point in time and 3) the research focuses on a small number of priority industries. Singapore, Korea and Taiwan and to some extent Malaysia fall in the category of M-O economies. The D-O industrialization seeks to provide a natural industrial structure for facilitating the diffusion of production and technology (Chen et al, 1997). Hong Kong economy falls in this category. The M-O strategy is an integrated approach to industrial development. South Korea's industrial development policy during the past several decades is its integrated approach to industrial development. Trade policy, human-resource development policy, and technology policy were well coordinated and complementary to industrial policy. An integrated policy approach to industrial development appears still to be relevant today for developing countries (Kim, 2005).

East and South East Asian Regional Perspective

East and South East Asian economies achieved high growth rates between the period 1965 and 1990. The World Bank 1993 report highlights eight Asian countries as high performers – Japan, the first tier four industrializing economies (NICs) of South Korea, Taiwan, Singapore and Hong Kong, and the three second tier NICs of Malaysia, Thailand and Indonesia. These have been regarded as miracle economies by the World Bank. The report concludes "The high growth has been by getting the basics right and largely due to superior accumulation of physical and human capital" (World Report, 1993). The manufacturing sector growth in the SE Asian countries have been impressive and contributed to their GDP increase. However "these figures do not tell us much about the actual nature and process of industrialization which requires a close scrutiny of the manufacturing sector"(Jomo et al, 1997). This study in part addresses this issue.

Within the Asian context, *industrial policy instruments* have been employed extensively in Northeast Asia compared to Southeast Asia. In the southeast, arbitrary state interventions have taken place by the politicians to suit the interest of politically influential business people and for interethnic considerations. These interventions have to some extent also masked some important technology plans (Jomo et al, 1997). The objective of this study is to uncover this mask, select a sub-sector in the manufacturing sector, analyze its performance in terms of technology strategies (management and implementation) employed, compare with similar strategies in the West and develop an archetype of technology strategies.

Jomo (1997) has stated that the rapid growth of East Asian NICs has brought our attention to the role of cultural factors in industrialization. In the Northeast Asian NIC's there has been a national consensus behind accelerated industrialization due to the relative homogeneity of cultures in those countries. This is evident from the fact that there have been no major ethnic troubles in these countries compared to East Asian countries of Malaysia and Indonesia where the societies are more ethically divided. Some writers argue that in the Southeast Asian countries politically dominant indigenous ethnic elites have emphasized interethnic redistribution at the expense of other priorities. Consequently, alternate policy agendas more conducive to late industrialization efforts have been thwarted. But there is no denial of the fact that cultural practices (social relation, cooperation etc) in East Asia have been crucial for the development of business networks which do not rely on the state and have contributed towards capital accumulation (Jomo et al, 1997). The technology strategies leading to success of the manufacturing sector in the West is well researched and documented, however the culture had an important impact in their evolution and implementation. The industrial policy instruments too in the West have been responsible

for this success. So in the East, despite state interventions and selective policies (e.g. heavy industrialization in Malaysia in mid-1980s), the remarkable progress must have been influenced by similar strategies applied in a different cultural context or evolution of new strategies pertinent to the local culture. This study attempts to address this issue by evolving a set of strategies which was developed and applied in one sub-sector of one of these countries and comparing it with those applied in the West, the difference if any, would reveal the influence of cultural and local factors.

The Strategic Content in Technology Management

Technology is recognized as potentially the single most important source of competitive advantage. Not all applications of technology management are, however, strategic (Messina, 1989). Technology leadership therefore does not automatically yield competitive advantage. The strategic content of technology should then ensure that it is sustainable for a long time and produces visible effects to the customers. A useful technology strategy must address the critical technologies vital for the attainment of strategic business objectives and the ways to achieve this domination.

Japanese firms have long emphasized technology management. In Japanese firms "need-oriented" ideas that flow from the marketplace are more important than "seed-oriented" ideas generated by research staffs (Earl, 1992). It is believed that adherence to strategic plans promotes firm sales growth rate (Cowin, 1998).

Industrial development is a process of acquiring technological capabilities in the course of continuous technical change. Kim (1998) has proposed two frameworks—technology trajectory framework and technology strategy framework which can be used to analyze technology policies and strategies in developing countries (Kim, 1998). Representation of technology strategies numerically is of concern to many authors. The problem of judgment in constructing such models for policy analysis severely limits the interpretation of outputs from such models (Watson, 1999). This presents an opportunity for further research in this area.

Gap and the Opportunity

These efforts by many researchers have been the guiding factor in undertaking this study to investigate the technology policies in electronics manufacturing sub-sector of a selected country in SE Asia. The objective is to identify the technology strategy "types" adopted by the firms which contributed to their success. Identification of such strategies would be a useful contribution to the field of strategic management application in a high-tech sector of the economy. The link between the strategy types and performance of the electronics manufacturing sub-sector would provide a useful to determine the effect on economic development of the target country. Extension of this research to include testing the appropriateness of these strategy types (model) in another manufacturing sub-sector could provide the national planners and researchers with an extremely useful tool for comparative analysis of the growth process in the entire manufacturing sector.

Some work to explore strategies in the hi-tech industries in USA was done lately (Wilbon, 1999) but the study utilized published data from firms "prospectus". This study addresses the above limitations that exist in literature and in similar studies by developing strategies from variables tapped by a survey questionnaire.

HYPOTHESES

The testable hypotheses for this study aligned to the objectives are given below:

Hypothesis 1: The technology strategies employed by the E&E firms were influenced by the National Technology Policy.

Hypothesis 2: The technology management processes employed by the E&E firms were influenced by the National Technology Policy.

Hypothesis 3: The performance of E&E sector was dependent on the technology strategies employed.

Hypothesis 4: The performance of E&E sector was dependent on the technology management processes employed.

Hypothesis 5: The technology strategies employed by E&E sector had a significant relationship with the type of firm.

Hypothesis 6: The technology strategies employed by E&E sector had a significant relationship with the size of firm.

Hypothesis 7: The technology strategies employed by E&E sector had a significant relationship with the R&D focus of the firm.

Hypothesis 8: The technology management processes employed by E&E sector had a significant relationship with the type of firm.

Hypothesis 9: The technology management processes employed by E&E sector had a significant relationship with the size of firm.

Hypothesis 10: The technology management processes employed by E&E sector had a significant relationship with the R&D focus of the firm.

RESEARCH METHODOLOGY

The data for this study was obtained through a survey questionnaire. The questionnaire was developed in line with the objectives of the research and to maximize information extraction from the respondents (Kinnear, 1991). The dimensions and variables for the questionnaire were selected from amongst those cited in the literature. The survey questionnaire was developed and tested in a small pilot study to assess the clarity of the questionnaire items.

Five types of data were gathered for the study:

Individual's Profile Data

Organization/Business Data

Competitive Environment Data

Technology (Strategy and Management) Data

Management Issues

Advantage has been taken of prior research results to select the dimension variables. The data was gathered on five strategy and five management dimensions as suggested by Herman (1998). Individual profile and Organizational data was used to check for response bias and content validity. Competitive environment data was gathered to get an indicative idea about the markets in which these firms operate. Technology data provided the existence or else wise of technology policies and the level of knowledge about technology of the respondents. Comments were asked for any specific management issues faced, these comments were then used to develop appropriate variables. The survey questionnaire was pre-tested in a pilot study to assess the clarity of its direction and the questionnaire items. The pilot study included face-to-face interviews with CEOs of selected electrical/electronics companies. Based on the Pilot Study and CEOs responses, the questionnaire was revised to develop the final format.

The results were entered into the SPSS software. Although the sample size was quite small to evaluate the analysis methodology, it provided a good base. It was revealed that the questionnaire needed some modifications, especially in the section which asked for financial figures as the CEOs feared that companies not listed on the stock exchange would be reluctant to provide this figure. Thus the questionnaire was validated through this pilot study and helped to refine the main survey.

The Technology Strategy dimensions included the elements of: Technology Posture, Technology Level, Product Development Intensity, Technology Timing, Manufacturing and Process Technology, whereas Technology Management Dimension employed: Technology Awareness, Technology Acquisition, Technology and Product Planning, R&D Organization and Management and R&D Investment. Each of these elements was represented by items. A Likert scale was utilized to tap the items of interest to the respondents.

The background variables will be analyzed after the data is entered in SPSS. The data from the main survey instrument would also be utilized to perform multiple regression analysis to observe the influence of the items on the elements and dimensions. It will also be used to predict the differences in responses to selected dependent and independent variables and predict the magnitude of elements and responses of the different firms. Factor analysis will be used to transform the variables into a new set of

linear combinations called the principal components. The proposed conceptual model based on lit review would then be statistically tested using the PCA. A new model would be subsequently developed after naming the new factors at the item level. The new factors which define the dimensions will be discussed in detail. STM which is the combination of all the 32 variables will be discussed in relation to the background variables and the two new dimensions of TM and TS defined by the evolved factors. The new dimensions of TM and TS will also be used to determine the relationship with firm size, firm type, R&D efforts and firm performance. Hypotheses will also be generated to test the above relationships.

CONCLUSIONS

STM studies to evolve the strategy types have particularly focused on developed countries. No studies to date have been found which explored the nature of technology strategies applied by the firms in the manufacturing sector of developing countries and whether they were influenced by the National Technology Strategies. To be more precise many mutli-national countries are operating in these countries and it would be worthwhile to note if the strategies they apply are similar to those in their parent countries or have been adapted to the local environment, which is culturally different.

Through a detailed examination of the previous studies and ongoing research on STM, the authors have utilized the instruments developed in the west and applied it to the local environment in a culturally diverse country. The questionnaire was piloted in order to improve its validity and before being administered in the final survey. The revised questionnaire was developed and needs to be analyzed to evolve the strategy types and a new model. A modified model will be evolved and it will be argued whether the National Technology Policy which provided the impetus for the economic growth and structural transformation of the manufacturing sector, influenced the strategy formulation and implementation at the firm level or not. It will also be argued if there was a different in the strategies with respect to firm size, firm type. A final goal is to explore the performance of the firms were affected by the strategies or not.

To keep this study within the objectives set down, boundaries were placed around the problem. In determining the various factors on technology management, some exogenous (moderating) variables like culture, financial structure, training philosophy, human resource etc. (Jantan & Srinivas, 1999) are omitted. The study is limited to electronics and electrical sub sector. The study uses the variables from prior research, which were evolved for manufacturing firms in a different environment both culturally and technology wise. There are also limitations as a result of measures used as well as the data analysis techniques employed.

REFREENCES

Ansoff, H.I. 1987. Strategic management of technology. *Journal of Business Strategy*, 7(3): 28-29.

Bowie, A. 1988. *Industrial Aspirations in a divided society: Malaysian Heavy Industries, 1980-1988*, Paper for Association for Asian Studies Annual Meeting, San Francisco, 25-27 March 1988.

Chen, T.J. et al 1997. *Taiwan's SME Direct Investment in SE Asia*. Chung Hua Institute for Economic Research, Taipei.

Clarke, K., Ford, D., Saren, M. 1989. Company technology strategy. *R&D and Management*, 19: 215-229.

Cowin, J., Dennis, S. 1998. Adherence to plans, risk taking and environment as predictors of firm growth. *Journal of High Technology Management Research*, 9(2): 207-237.

Drejer, A. 1996. Frameworks for the management of technology: towards a contingent approach. *Technology Assessment and Strategic Management*. 8: 1,9-20.

Earl, A. 1992. Japanese firms emphasize Technology Management. *Chemical and Engineering News*, 70: 46-48.

Herman, S. 1998. Technology Strategies in the US Electronics industry. *Dissertation Abstract International*, (UMI No. 9834862). Doctoral Dissertation, Portland State University, 1998.

Jantan, M., & Srinivasaraghavan, K. 1999. IT Deployment and competitive advantage of organizations in Penang.

Jesudason, J.V. 1995. *Ethnicity and the economy: The state, Chinese business, and multinational in Malaysia*. Singapore: Oxford University Press.

Jomo, K.S. et al 1997. South East Asia Miracle Misunderstood. Colorado: West view Press.

Kim, L. 1998. Technology policies and strategies for developing countries. *Technology Analysis and Strategic Management*, 10(3): 311-323.

Linstone, H. 1984. Multiple perspectives for decision-making. New York: Elsevier Science.

Messina, A. 1989. Technology Management for the 1990's. *Journal of Manufacturing Engineering*, *June*.

Quinn, J. 1988. Strategies for change in the Strategy Process. New Jersey: Prentice Hall.

RSA Corp 2007. http://www.rsacorp.com/business_needs_definition.html (Accessed on March 7, 2007).

World Bank 1993. *The East Asian Miracle: Economic Growth and Public Policy*. New York: Oxford University Press.

Wilbon, A.D. 1999. Influence of technology strategy on IPO and long-term survival of firms. *Dissertation Abstract International*, (UMI No. 9935423). Doctoral Dissertation, George Washington University, 1999.

Yoshihara, K. 1995. *The Nation and Economic Growth: The Philippines and Thailand*. Kuala Lumpur: Oxford University Press.

Zahra, S. A. 1996. Technology strategy and new venture performance: A study of corporate sponsored and independent biotechnology ventures. *Journal of Business Venturing*, 11(4): 289-321.

Zahra, S. A. (1996B). Technology Strategy and financial performance: examining the moderating role of the firm's competitive environment. *Journal of Business Venturing*, 11(3): 189-219.

MANAGING ACROSS CULTURES: HOW EFFECTIVE IS DELELGATION AMONG GREEK MANAGERS

Therese Joiner Steve Balkis

Email: t.joiner@latrobe.edu.au

ABSTRACT

Globalization of business has led to a keen awareness of the influence of differences in national cultural values on the effectiveness of different management practices and processes in organizations. One important managerial practice that may not be universally effective across cultures is delegation. Certainly, delegation is an important aspect of organization design. The Western management literature (primarily North American and British) is resplendent with references that support the benefits of delegation and the drawbacks of not delegating. In countries where managers hold different cultural values to Western managers, it is likely that preferences for the *extent* of decision making delegation will also differ. Using a sample of Greek managers this study empirically examines the extent of decision making delegation in Greek organizations and its impact on Greek managers' performance and dimensions of job-related stress. Implications of the results are addressed with respect to Greek manager's development and training in the delegation process, as well as effective organizational design, within the context of an increasingly globalized world.

INTRODUCTION

As the move toward globalization of business continues, an increasing number of enterprises are recognizing the benefits of establishing their business operations in overseas countries and markets. Concomitantly, many managers no longer work within domestic boundaries; rather they work in the global marketplace. For example, The World Investment Report (2004) shows that there are, at least, 61,000 transnational corporations with over 900,000 affiliates. These affiliates account for one-tenth of the world GDP and one third of world's exports, and their shares are increasing. The 100 largest transnational corporations account for 12% of assets, 13% of employment and 14% of sales by all foreign affiliates (World Investment Report, 2004).

Foreign direct investment and international joint ventures, as well as the movement of labor across borders, has led to a keen awareness of the influence of differences in national cultural values on the effectiveness of different management practices and processes in organizations. There is certainly ample evidence to support the view that cultural values influence the way managers behave, and cultural differences evoke subtle yet powerfully different managerial behaviors and management styles (Michael, 1997; Hempel, 2001; Hong and Engestrom, 2004). An important question in this context is: to what extent can management practices and processes successfully 'travel' across borders? A number of studies have examined the influence of managers' cultural values on the effectiveness of organizational processes and structures (e.g., Goodwin and Sethapokin, 1996; Newman and Noellen, 1996; Michael, 1997; Dobbin and Boychuk, 1999; Wang and Clegg, 2002; Pellegrini and Scandura, 2006). Few studies, however, have examined the effectiveness of the delegation process across cultures. Indeed, as noted by Pellegrini and Scandura (2006), there is a paucity of research that examines how cultural issues might affect leadership practices, such as delegation.

Within the Western (primarily North American and British) theoretical and empirical literature, delegation is widely recognized as an essential element of effective management. Four main benefits of delegation can be identified from the literature: (1) delegation satisfies subordinate managers' need for achievement and autonomy, thereby providing a stimulus for motivation and more entrepreneurial behavior (Mintzberg, 1979); (2) delegation reduces work overload of upper managers (Yukl and Fu,

1999) (3) delegation provides a training ground for the more complex strategic decisions that subordinate managers are likely to encounter in senior managerial positions (Yukl and Fu, 1999); and (4) delegation places decisions at levels where there may be greater expertise about particular issues than possessed by the supervisor, providing additional information processing benefits to the organization which may result in more efficient and better quality decisions (Galbraith, 1973; Ito and Person, 1986). Thus, the Western organization behavior and organization theory literatures have long acknowledged the positive relationship between delegation and job related outcomes, such as subordinate performance, job satisfaction and lowered stress (e.g., Argyris, 1964; Hall and Savery, 1986; Leanna, 1986, Argwal, 1993; Schriesheim, Neider and Scandura, 1998; Yukl and Fu, 1999; Johnstone, 2000).

In a climate of increasing globalization and the concomitant heightened awareness of differences in cultural values across societal groups (Hofstede1980), it is likely that preference for the *extent* of decision making delegation within organizations differs across societal groups. This study examines the extent of decision making delegation in Greek organizations and its impact on Greek managers' performance and job-related stress. We argue that an organization characterized by high levels of managerial decision making delegation is inconsistent with Greek managers' cultural values, and thus, managers working in such an environment are likely to experience increased stress from the job and are likely to under perform. Given the possible benefits of delegation, as argued by the Anglo-American researchers, a culture sensitive training and development program for Greek managers and their subordinates may provide beneficial results in terms of work-related outcomes.

CONCEPTUALIZATION OF DELEGATION

Delegation is a process that involves assigning important tasks to subordinates, giving subordinates responsibility for decisions formally made by the manager, and increasing the amount of work-related discretion allowed to subordinates, including the authority to make decisions without seeking prior approval from the manger (Yukl and Fu, 1999). The process of delegation is not an isolated organizational process; rather it forms part of, and is usually consistent with, the overall organization structure. The organization structure defines how tasks are to be allocated, who reports to whom, and the formal coordinating and communication mechanisms (Hall, 1996). The organization theory literature isolates a number of dimensions of organization structure. Three key dimensions of organization structure that have implications for the *extent* of decision making delegation are formalization, decentralization, and participation in decision making (Daft, 2001; Hall, 1996).

Formalization refers to the degree to which decisions and working relationships are governed by formal rules, standard procedures and policies (Daft, 2001). Formalization involves organizational control over the individual by specifying how tasks should be undertaken and by setting constraints on employee behavior (Argyris, 1964). High formalization effectively reduces the decision making discretion of the individual (Ginzberg, 1980) and therefore is associated with low delegation of decision making authority.

Decentralization (or centralization) refers to the locus of decision making authority and control within the organization (Van de Ven and Ferry, 1980). A decentralized organization usually implies that major sources of decision making authority have been passed to subordinate managers (Van de Ven and Ferry, 1980). Clearly, by definition, decentralization involves the delegation of decision making authority while centralization involves very limited decision-making delegation.

Participation in this study is limited to one of the key areas of participatory decision making, budgetary participation. Budgetary participation refers to the practice of allowing superior and subordinate managers to jointly decide on budget-related matters, such as setting budget targets, revising budget targets and deciding on the extent to which budget targets will form the basis for performance evaluation (Mia, 1984). Budgetary participation, then, affords managers a degree of decision making discretion and responsibility beyond that offered by formalization but less than that offered by full decision making delegation as in organizational decentralization.

Given the foregoing, the extent of decision making delegation within an organization can be viewed on a continuum where at one extreme, low levels of decision making delegation is characterized

by an organization structure that relies heavily on formalization, is centralized, and offers limited scope for budgetary participation by subordinate managers. At the other extreme of the delegation continuum, high levels of decision making delegation is characterized by an organization that does not rely heavily on formalization, is decentralized, and encourages participation in budgetary decisions. The conceptualization of delegation on a continuum is consistent with previous theoretical development of the delegation process (Leanna, 1986). Indeed Leana (1986) suggests that "on a continuum depicting manager-subordinate decision making authority, delegation is the direct opposite of autocratic decision making, and participation is the midpoint between autocratic and delegative arrangements"(p.755). That participation in decision making represents a midpoint in the delegation continuum is important for the development of hypothesis three in the next section.

Greek Societal Values and Preferences for the Extent of Delegation

The study of work-related values and associated management practices undertaken by Hofstede (1980) remains the most complete empirical research of its type (Calori et al., 1994) and (despite obvious limitations) has been the dominant research paradigm in cross-cultural studies for some time (De Cieri and Dowling, 1995). It is therefore used as the main basis for theory development. According to Hofstede's (1980) cultural model Greece is classified as large power distance, strong uncertainty avoidance, and collectivistic. It should be noted that the cultural dimensions for Greece are quite different from the cultural dimensions of most Anglo-American countries where most of the original research originated. Anglo countries (e.g., United States, England, Australia, Canada) are generally low power distance, weak uncertainty avoidance and individualistic.

Power distance refers to the extent to which members of a society accept and expect that power will be distributed unequally (Hofstede, 1980). Organizations in large power distance cultures are characterized by the acceptance of human inequality and individuals show deep respect for authority that results in a paternalistic work relationship between superior and subordinate. Involvement in the decision making process is not sought by subordinates nor encouraged by superiors (Ali et al., 1992; Child 1981).

Uncertainty avoidance refers to the extent to which members of a society feel threatened by uncertainty or unknown situations (Hofstede, 1980). Organizations in strong uncertainty avoidance cultures are characterized by: a strong need for rules and regulations; greater structuring of organizational activities; employee preference for clear unambiguous instruction from management, less risk-taking; intolerance toward deviant ideas and behaviors and; less individual initiative and responsibility in the workplace (Hofstede, 1980).

The Individualism-Collectivism dimension refers to the extent to which identity is based on the self versus the collectivity. Individualism refers to a loosely knit social framework in which people are supposed to look after their own interests and those of the immediate family. Independence from the collective is encouraged and status is derived from individual accomplishments. Collectivism refers to a tightly knit social framework where individuals are integrated into strong, cohesive groups, such as, organizations, religions, and the extended family or communities (Triandis, 1995; Trompenaars, 1994). Individuals are protected by the group and are expected to act in the group's best interest (Hofstede, 1980).

Organization structures that limit the extent of decision making delegation of subordinates seem congruent with the large power distance societal values of Greek managers. Indeed, it is likely that encouraging Greek managers to increase their individual involvement in decision-making may generate confusion and anxiety, leading to lower levels of performance and higher job stress levels. Such managers tend to prefer and respect a more non-consultative, decisive approach from their superior (Papalexandris & Chalikias, 2002). In other words, the boss should behave as the boss. At the same time, upper management inculcated with the values of a large power distance culture, are likely to be reluctant to give up decision-making authority (perceived to be rightly bestowed upon them) to promote a relationship of greater equality in decision-making (Myloni et al., 2004; Makridakis et al., 1997; Veiga & Yanouzas, 1991).

Similarly, limited decision making delegation seems consistent with Greek managers' strong uncertainty avoidance values. Fear of making decisions is a characteristic of strong uncertainty avoidance cultures (Hofstede, 1991). Fear of making decisions or fear of responsibility among Greek subordinate managers has been documented in the literature (Bartholomew, 1995; Bourantas et al., 1990; Cummings and Schmidt, 1972). By way of illustration, in his attempt to restructure Olympic Airways (the Greek carrier) with a decentralization program, the ex-CEO Rigas Doganis (an American-Greek) counted resistance, noting that "there is a wonderful Greek word: *efthynofovia*. It means 'fear of making decisions'. Many senior and middle managers are terrified of making decisions" (Bartholomew, 1995, p.15). Subordinate managers of such cultures would most likely prefer to defer to the certainty of rules, procedures and leader directives, rather than make key decisions themselves and accept responsibility for the decision consequences. Organization decision making structures that emphasize the hierarchy and focus on prescribed (already decided) procedures are likely to be preferred, contributing to lower stress levels and higher performance for Greek managers.

Based on the foregoing, implementing organization structures that limit decision making delegation to Greek subordinate managers (i.e., high formalization and low decentralization) are likely to be associated with lower job stress and higher managerial performance. Alternatively decision making structures that promote decision-making delegation to Greek subordinate managers (i.e., low formalization and high decentralization) are likely to be associated with higher job stress and lower managerial performance. These arguments form the basis of the following hypotheses:

H1: Low levels of decision making delegation characterized by high formalization and low decentralization will be positively associated with Greek managers' performance.

H2: Low levels of decision making delegation characterized by high formalization and low decentralization will be negatively associated with Greek managers' job-related stress.

Consistent with the theory of Leana (1986) described in the previous section, the three variables, formalization, budget participation and decentralization form a continuum of decision making delegation from low to high, where budget participation represents the midpoint. Given this midpoint position, it is more difficult to predict budgetary participations effect on Greek managers' job-related outcomes. The budget participation/job outcomes relationship is even more difficult to predict because the Greek cultural values of collectivism and uncertainty avoidance are consistent with effective budget participation, whereas the power distance cultural value is inconsistent with effective budget participation. To expand on this point, in collectivist cultures there is a fundamental belief in, and preference for, group decision making (Hofstede, 1980) and thus budget participation is likely to be preferred by collectivist Greek managers. Additionally, research has shown that the budget participation process can provide a forum whereby managers can obtain additional task information, reducing task uncertainties and ambiguities (Mia, 1989). Again, high uncertainty avoidance Greek managers are likely to favorably respond to budget participation for its uncertainty reducing effect. On the other hand, accepted and expected power differentials between Greek superior and subordinate managers seem inconsistent with budget participation.

From another perspective, budget participation could be viewed as a precursor to more intense decision making delegation that may be expected of subordinate Greek managers in progressive, globalized firms. Greek subordinate managers may therefore feel more confident and less stressed when the delegation of decision making authority is within a participatory framework. All decision making responsibility does not rest on the subordinate managers' shoulders but is shared with the superior manager. Given that two of the three cultural value dimensions support the effectiveness of budget participation, and given the likely preference for shared responsibility for decision making responsibility, we propose the following hypothesis:

H3: Delegation of decision making in the form of budget participation will be positively associated with Greek managers' performance and negatively associated with job-related stress.

It is important to highlight that the hypotheses specified above are consistent with a divergence (or culture-sensitive) view of management practices (De Cieri and Dowling, 1995; Khilji, 2003) vis a vis a convergent view. While a convergent view assumes universally appropriate management practices (where usually Western models of management are deemed the universal), a divergent view questions universality on the basis of differences in institutional frameworks and cultural values among societies (De Cieri and Dowling, 1995). As argued by Li et al. (2001) and Khilji (2003), societal culture is a potent force in organizations, influencing managerial decision making, leadership styles and HRM practices. Thus, in the context of this study, we argue from a divergence posture that the effectiveness of decision making delegation for Greek managers is influenced by their societal values.

RESEARCH METHOD

Data were gathered by questionnaires completed by middle managers working in manufacturing organizations in Athens, Greece. The questionnaire was firstly written in English and subsequently translated into Greek following the procedure advocated by Hulin and Mayer (1986). The questionnaire was piloted on English speaking Greek managers and Greek academics working in Australia.

Sample Size and Data Collection

Contact was made with a Greek academic working in an Australian university who coordinated the data collection in Athens. The companies contacted employed between 100 and 200 employees in an attempt to control for size. All organizations were headed by a Greek CEO to reduce the potential dilution of Greek cultural values within the organization. The convenience sample reflects a predominance of companies from the consumer products and textile industries. Of 100 questionnaires distributed, 78 useable responses were returned. All respondents were male middle managers and the average age was 44 years.

Measurement of Variables

The Mahoney et al.'s (1963) nine-item instrument was used to measure managerial performance. The fifteen-item index developed by Kahn et al. (1964) was used to assess manager's job-related stress. Both these measures are based on seminal works and have been used extensively in the management and accounting literature across a number of different countries. Decentralization was measured using an instrument developed by Burns and Stalker (1961). The instrument requires respondents to rate their actual authority in making the following kinds of decisions: developing new products or services; hiring and firing managerial personnel; selection of large investments; budget allocations and; pricing decisions. A seven-point Likert-type scale was employed to elicit responses that range from (1) no delegation to (7) complete delegation. The formalization variable was measured using a five-item instrument aimed at capturing the extent to which rules, policies and procedures are formalized and followed within the work group based on the instrument developed by Van de Ven and Ferry (1980). Budgetary participation was measured using a six-item instrument developed by Milani (1975). The Appendix provides a list of items for each measure.

The cultural variables, power distance, uncertainty avoidance and collectivism were re-measured using Hofstede's (1980) value-survey module. The re-measurement of the cultural dimensions was considered important because Hofstede obtained the index scores 30 years ago. The power distance score obtained was 56, the index score for uncertainty avoidance was 74, and the individualism score was 41, confirming that Greece is a moderately high power distance, strong uncertainty avoidance and collectivistic culture.

The descriptive statistics, Cronbach (1951) alpha reliability measures and a correlation matrix for all relevant variables is presented in Table I.

Table 1

Descriptive statistics and correlation matrix

Variable	Mean	S.D.	Alpha	1	2	3	4
1. Budget participation	28.44	8.62	0.91				
2. Decentralization	17.29	5.90	0.75	0.32**			
3. Formalization	15.87	4.39	0.85	-0.03	-0.12		
4. Job-related stress	40.15	8.47	0.82	-0.19	0.23*	25*	
5. Managerial performance	52.21	8.76	0.85	0.46**	0.14	0.33**	-0.23*

^{*} correlation is significant at the 0.05 level

RESULTS

To test the association between dependent (managerial performance and job-related stress) and independent variables (extent of delegation [formalization, budgetary participation and decentralized decision making] as specified in the hypotheses, regression analysis was used. Tests on the adequacy of the regression models indicate that the assumptions of the models were satisfied by the data. Table 2 shows the results for testing the decision making delegation variables on managerial performance. As reported in Table 2, coefficient b_1 is positive and significant (p<0.01), however b_3 is not significant. These results provide partial support for H1 such that an increase in formalisation increases managerial performance (consistent with H1); however, an increase in decentralization was not related to Greek managerial performance. Table III shows the results for testing the decision making delegation variables on job-related stress. As reported in that table, coefficient b_1 is negative and significant (p<0.05) and b_3 is positive and significant (p<.05). These results provide support for H2 such that, for Greek managers, an increase in formalization is associated with reduced job stress while an increase in decentralization is associated with increased job stress. Referring to Tables 2 and 3, H3 is also supported (coefficient b_2 in Table 3 is positive and significant [p<0.01] and coefficient b_2 in Table 4 negative and significant [p<0.05]). Thus, for Greek managers, budgetary participation has a favourable impact on performance and job-related stress.

Table 2
Results for testing the effect of formalization, budget participation and decentralization on managerial performance

Variable	Coefficient	Value	Std error	t	p
Intercept	a_0	22.19	6.00	3.71	0.00
Formalization	b_1	0.86	0.25	3.53	0.00
Budget participation	b_2	0.57	0.13	4.34	0.00
Decentralization	b_3	0.07	0.19	0.39	0.70

 $R^2=0.3\overline{2}$; F=11.20; p<0.00

^{**} correlation is significant at the 0.01 level

Table 3
Results for testing the effect of formalization, budget participation and decentralization on jobrelated stress

Variable	Coefficient	Value	Std error	t	p
Intercept	a_0	47.57	5.04	9.43	0.00
Formalization	b_1	- 0.44	0.21	-2.14	0.03
Budget participation	b_2	-0.27	0.11	-2.45	0.02
Decentralization	b_3	0.42	0.16	2.58	0.01

 $R^2=0.18$; F=5.15; p<0.00

DISCUSSION

The results of this research show that for this sample of Greek managers the decision making delegation variables, formalization and budget participation, were associated with lowered job stress whereas decentralized decision making (the highest level of delegation) was associated with increased job stress. To further explore what components of stress are triggered with increased delegation, a factor analysis of the Kahn et al.'s (1964) stress instrument was undertaken and the emergent factors correlated with the delegation variable decentralization (not shown here). This exploratory analysis revealed that increased decentralization was more specifically associated with stress from feelings of work overload and role ambiguity. It appears that the delegation of decision making authority to high power distance/strong uncertainty avoidance. Greek managers create confusion and anxiety over their work roles. In decentralized Greek organizations there may be insufficient direction from upper management about the changed roles and expectations of the subordinate manager. Furthermore, the increased burden of increased delegated authority and responsibility is perceived as creating more work for the manager, and thus a source of stress. These findings appear to be consistent with other Greek empirical research (e.g., Myloni et al., 2004; Makridakis et al., 1997).

Turning to managerial performance, the delegation variables, formalization and budget participation were positively associated with Greek managers' performance (as predicted) however; decentralization (the highest form of delegated decision making studied) was not associated with performance. Work rules and procedures (formalization) provide clear guidelines to Greek managers about how to undertake and complete tasks. Delegation is limited which is consistent with the Greek cultural values of high power distance/strong uncertainty avoidance. Similar to the job stress-budgetary participation relationship, allowing Greek managers to participate in budget related matters possibility provides a group forum whereby managers can discuss job related matters. The group nature of the decision making (related to the collectivism) and the opportunity to clarify work related matters (related to uncertainty avoidance) might be responsible for the associated increase in performance.

In summary, with respect to job stress, higher levels of decision making delegation for this sample of Greek middle managers, is contra-indicated. Decision making structures that limited delegated authority and responsibility (formalization and budget participation) was associated with lowered job stress while increased delegated authority and responsibility (decentralization) was associated with increased job stress. With respect to performance, limited delegated authority (formalization and budget participation) was associated with higher levels of performance whereas decentralization, the highest form of delegated authority studied was not associated with performance. Thus, consistent with a divergence posture (De Cieri and Dowling, 1995), the benefits of delegating decision authority and responsibility, as espoused in the Western (primarily Anglo-American) literature, may not be transferable to other cultures, such as Greece. Organization change and development consultants are only too acutely aware that it is not possible to effectively apply a management theory that was developed in one country to another country. However, globalization has lead to foreign direct investment and joint ventures with Greek organizations such that Greek managers are likely to come into contact with Anglo-American management processes and practices. Clearly any organizational change strategy that focuses on the

increased delegation of decision making authority and responsibility would benefit from a culture sensitive training program for both superior and subordinate managers. On the basis of the research results, such a training program should specifically address the stress brought about by decentralized decision making – feelings of being overworked and having less time for family life, and feelings related to unclear work roles.

A number of limitations may have influenced the results of the study. Data were drawn from only large manufacturing organizations located in Athens. The results may only be generalizable to that population. Further studies could, for example, examine regional areas outside of Athens, smaller organizations or service organizations. The results of this study can only be generalized to male middle managers. Females and front-line managers/employees may have different preferences for the extent of decision making delegation that may impact on their experienced stress and/or performance. Self-report performance measures used in this study have been criticized (Venktraman & Ramamujam, 1987). The usual caveats applicable to cross-sectional survey methods must be taken into account. A number of limitations have been raised with respect to Hofstede's cultural model (Mead, 1994; Harrison and McKinnon, 1996). In particular, Hofstede's broad quantitative national cultural dimensions cannot adequately capture the depth and diversity of societal culture. Qualitative research in the field is sorely needed.

REFERENCES

Ali, M., Khaleque, A. & Hossain, M.1992. Participative management in a developing country. *Journal of Managerial Psychology*, 99(7): 11-16.

Argwal, S.1993. Influence of formalization on role stress, organizational commitment, and work alienation of salespersons. *Journal of International Business Studies*, 20(4): 715-739.

Argyris, C. 1964. *Integrating the Individual and the Organization*. New York: Wiley and Sons.

Bartholomew, R. 1995. New take-off for Olympic. *The Athenian*, October, --14-16.

Bourantas, D., Anagnostelis, J., Mantes, Y. & Asterios, G. 1990. Culture gap in Greek management, *Organization Studies*, 261-83.

Burns, T. and Stalker, G.1961, *The Management of Innovation*. London: Travistock.

Calori, R., Lubatkin, M. & Very, P. 1994, Control mechanisms in cross-border acquisitions, *Organization Studies*, 15(3): 361-381.

Child, J.1981. Culture, contingency and capitalism in the cross-national study of organizations. In L. Cummings & B. Staw (Eds), *Research in Organizational Behavior*: 303-356. Greenwich, CT: JAI Press.

Cohen, J. 1968. Multiple regression as a general data-analytic system. *Psychological Bulletin*, 426-443.

Cronbach, L. 1951. Coefficient Alpha and internal structure of tests. *Psychometrika*, September, 297-334. Cummings, L. L.&Schmidt, S. M.1972. Managerial attitude of Greeks: The roles of culture and industrialization, *Administrative Science Quarterly*, 265-76.

Daft, R. 2001. Organization Theory and Design. Ohio: South-Western Publishing.

De Cieri, H. & Dowling, P. 1995. Cross-cultural issues in organizational behavior, *Journal of Organizational Behavior* (1986-1998), 127-150.

Dobbin, F. & Boychuk, T. 1999. National employment systems and job autonomy: why job autonomy is high in the Nordic countries and low in the United States, Canada, and Australia, *Organizations Studies*, 257-291.

Fulop, L. & Linstead, S. 1999. Management: A Critical Text. Melbourne: Macmillan

Galbraith, J. 1973. *Designing Complex Organizations*. Reading, Mass: Addison Wesley.

Ginzberg, M. 1980. An organizational contingencies view of accounting and information systems implementation, *Accounting, Organizations and Society*, 369-382.

Goodwin, D. & Sethapokin, S. 1996. The impact of cultural influences on the relationship between budgetary participation, role stress, and job satisfaction, *Asian Review of Accounting*, 2(4): 51-70.

Hall, K. & Savery, L. K. 1986. Tight rein, more stress, Harvard Business Review, 64(1): 160-64.

- Hall, R. H. 1996. *Organizations: Structures, Processes and Outcomes*, New Jersey: Prentice-Hall International.
- Harrison, G., & McKinnon, J. 1996. Cross-cultural Research in Management Control Systems Design: A Review of the Current State. Paper presented at the *Accounting, Organizations and Society Conference on Comparative Management Accounting*, University of Sienna, November.
- Hofstede, G. 1980. *Culture's Consequences: International Differences in Work-Related Values*. Beverley Hills, CA: Sage.
- Hofstede, G. 1991. Cultures and Organizations: Software of the Mind. London: McGraw-Hill.
- Hofstede, G. 1993. Cultural constraints in management theories. *Academy of Management Executive*, 7(1): 81-94.
- Hong, J. & Engestrom, Y. 2004. Changing principles of communication between Chinese managers and workers: Confucian authority chains and guanxi as social networking. *Management Communication Quarterly*, 17(4), 552-586.
- Hulin, C. L., & Mayer, L. J. 1986. Psychometric equivalence of a translation of the Job Description Index into Hebrew. *Journal of Applied Psychology*: 83-94.
- Ito, J. & Peterson, R. 1986. Effects of task difficulty and interunit interdependence on information processing systems. *Academy of Management Journal*, 29(1):139-149.
- Johnston, M. 2000. Delegation and organizational structure in small business: Influences of manager's attachment patterns. *Group and Organization Management*, 25(1): 4-21.
- Kahn, R., Wolfe, D., Quinn, R., & Snoek, J.1964. *Organizational Stress: Studies in Role Conflict and Ambiguity*. New York: Wiley.
- Kaplan, R. and Atkinson, A. 1989. Advanced Management Accounting. New Jersey: Prentice-Hall.
- Khilji, S. 2003). To adapt or not to adapt: Exploring the role of national culture in HRM- A study of Pakistan. *International Journal of Cross Cultural Management*, 3(1):109-132.
- Leana, C. 1986. Predictors and consequences and delegation. *Academy of Management Journal*, 29(4): 754-774.
- Li, J., Lam, K., & Qian, G. 2001. Does culture affect behavior and performance of firms? The case of joint ventures in China. *Journal of International Business Studies*, 32(1): 115-31.
- Mahoney, T., Jerdee, T., & Carrol, S.1963. *Development of Managerial Performance: a Research Approach*. Cincinnati: South Western Publishing.
- Makridakis, S., Caloghirou, Y., Papagiannakis, L., & Trivellas, P. 1997. The dualism of Greek firms and management: Present state and future implications. *European Journal of Management*: 381-402.
- Mia, L. 1984. *Budgetary Participation and Performance*, Unpublished doctorial dissertation, University of Queensland.
- Mia, L., 1989. The impact of participation in budgeting and job difficulty on managerial performance and work motivation: a research note. *Accounting, Organizations and Society*: 347-357.
- Michael, J. 1997. A conceptual framework for aligning managerial behaviors with cultural work. *International Journal of Commerce and Management*, 7(3): 81-101.
- Milani, K. R. 1975. The relationship of participation in budget-setting to industrial supervisor performance and attitudes: A field study. *The Accounting Review*: 274-284.
- Miller, G. A. 1967. Professionals in bureaucracy, alienation among industrial scientists and engineers. *American Sociological Review*, 3(2): 755-68.
- Miller, S. J., Hickson, D. J. & Wilson, D. C. 1996. Decision making in organizations. In Clegg, S. R., Hardy, C. & Nord, W. R., *Handbook of Organizational Studies*, London: Sage.
- Mintzberg, H.1979. The Structure of Organizations. New Jersey: Prentice-Hall.
- Mullins, L. J. 1993. *Management and Organizational Behavior*. London: Pitman Publishing.
- Myloni, B., Harzing, A. & Mirza, H. 2004. Human resource management in Greece. *International Journal of Cross-Cultural Management*, 4(1): 59-76.
- Newman, K. & Nollen, S. 1996. Culture and congruence: the fit between management practices and national culture. *Journal of International Business Studies*: 753-779.

Papalexandris, N. & Chalikias, J.2002. Changes in training, performance management and communication issues among Greek firms in the 1990s: Intercountry and intracountry comparisons. *Journal of European Industrial Training*, 26(7): 342-352.

Pellegrini, E. & Scandura, T. 2006. Leader-member exchange (LMX), paternalism, and delegation in the Turkish business culture: an empirical investigation. *Journal of International Business Studies* 37: 264-279.

Schriesheim, C., Neider, L., & Scandura, T. 1998. "Delegation and leader-member exchange: Main effects, moderators, and measurement issues", *Academy of Management Journal*, 41(3): 298-318.

Triandis, H. 1995. Individualism and collectivism. Boulder, CO: Westview.

Trompenaars, F. 1994. *Riding the Waves of Culture: Understanding Diversity in Global Business*. New York: McGraw-Hill.

Van de Ven, A. & Ferry, D. 1980. *Measuring and Assessing Organizations*. New York: Wiley.

Venktraman, N. & Ramanujam, V. 1987. Measurement of business and economic performance: an examination of method convergence. *Journal of Management*: 109-122.

Wang, K. & Clegg, S. 2002. Trust and decision making: are managers different in the people's republic of China and in Australia? *Cross cultural Management*, 9(1): 30-44.

World Investment Report 2004. The Shift towards Services. United Nations. New York and Geneva.

Yukl, G. 1994. *Leadership in Organizations*. Englewood Cliffs, NJ: Princeton Hall.

Yukl, G. & Fu, P. 1999. Determinant of delegation and consultation by mangers. *Journal of Organizational Behavior*, 20(2)2: 219-232.

APPENDIX

Measurement Scales

Managerial Performance

- 1. Planning: Determining goals, policies and courses of action; work scheduling, budgeting, setting up procedures, programming. (Anchors: Below average performance; Above average performance)
- 2. Investigating: Collecting and preparing information for records, reports and accounts; measuring output; inventorying, job analysis.
- 3. Coordinating: Exchanging information with people in other organizational units in order to relate and adjust programs; advising other departments, liaison with other managers.
- 4. Evaluating: Assessment and appraisal of proposals, or of reported or observed performance; employee appraisals, judging output records, judging financial reports; product inspection.
- 5. Supervising: Directing, leading and developing your subordinates; counseling, training and explaining work tasks/rules to subordinates; assigning work tasks to subordinates, handling complaints.
- 6. Staffing: Maintaining the work force of your unit; recruiting, interviewing and selecting new employees; placing, promoting and transferring employees.
- 7. Negotiating: Purchasing, selling or contracting for goods or services, contracting suppliers, dealing with sales representatives; collective bargaining
- 8. Representing: attending conventions, consultation with other firms, business meetings, public speeches, community drives; advancing the general interests of your organization.
- 9. Overall performance

Job-related Stress

All of us occasionally feel bothered by certain kinds of things in our work. Below is a list of things that sometimes bother people. Please circle the number which best reflects your response.

How frequently do you feel bothered by,

- 1. Feeling that you have too little authority to carry out the responsibilities assigned to you
- 2. Being unclear on just what the scope and responsibilities of your job are
- 3. Not knowing what the opportunities for advancement or promotion exist for you
- 4. Feeling that you have too heavy a work load to satisfy the conflicting demands of various people over you
- 5. Feeling that you are not fully qualified to handle your job
- 6. Not knowing what your superior thinks of you, how he (she) evaluates your performance
- 7. The fact that you can't get information needed to carry out your job
- 8. Having to decide things that effect the lives of individuals, people that you know
- 9. Feeling that you may not be liked and accepted by the people that you work with
- 10. Feeling unable to influence your immediate superior's decisions and actions that affect you
- 11. Not knowing just what the people you work with expect of you
- 12. Thinking that the amount of work you have to do may interfere with how well it gets done
- 13. Feeling that you have to do things on the job that are against your better judgment
- 14. Feeling that your job tends to interfere with your family life.

Formalization

- 1. How many standard operating procedures or practices exist for doing the major tasks in you unit?
- 2. How precisely do these standard operating procedures or practices specify how the major tasks are to be done?
- 3. To what extent do people in your unit actually follow the standard operating procedures or practices?
- 4. What percentage of the unit's work is covered by standard operating procedures?

Decentralization

To what extent has authority been delegated to the appropriate subordinate manager for each of the following classes of decisions? (Please rate *actual* rather than stated authority) Anchors: No delegation (decision taken by superior without consulting subordinate manager); Complete delegation (decision taken by subordinate manager without consulting superior)

- 1. Development of new products or services
- 2. The hiring and firing of managerial staff
- 3. selection of large investments
- 4. Budget allocations
- 5. Pricing decisions

Budgetary Participation

- 1. Which category best describes your activity when the budget is being set? (Anchors: All of the budget, None of the budget).
- 2. Which category best describes the reasoning provided by your superior when budget revisions are made? (Anchors: Very sound/logical; Very arbitrary/illogical).
- 3. How often do you state your requests, opinions and/or suggestions about the budget to your superior within being asked? (Anchors: Very frequently; Never).
- 4. How much influence do you feel you have on the final budget? (Anchors: Much influence; Little influence).
- 5. How do you view your contribution to the budget? (Anchors: Very important; Unimportant)
- 6. How often does your superior seek your request, opinions and/or suggestions when the budget is being set? (Anchors: Very frequently; Never).

PARADIGM OF NATIONAL RESPONSIVENESS & NATIONAL CULTURAL VALUES IN INTERNATIONAL BUSINESS OPERATION: CHALLENGES FOR MNCS IN SOUTH ASIAN EMERGING MARKETS

Md. Bakhtiar Rana Southeast University, Bangladesh Email:mbrana2002@yahoo.co.uk

Abstract

As MNCs become more transnational, their strategies must address the cultural similarities and differences in their varied markets. The firm is working to improve its effectiveness in dealing with governments, unions, and employees, as well as to understand the cultural differences in customer preferences. Most MNCs have a cultural strategic predisposition toward doing things in a particular way. This paper, in the first phase, develops a relationship model of strategic predispositions and strategies used in international management in the light of national-cultural values; though there are many ways of examining cultural differences and their impact on international management. Nature of emerging markets is unlike the developed countries. MNCs are facing incredible challenges, and threats while operating in emerging markets. Despite the shrinking world where borders become meaningless and tremendous growth was seen in international investment and trade, a move towards nationalism and ethnic pride still exists with resulting support for economic protectionism around the world. In the second phase, a relationship model between national responsiveness and national cultural values with regard to sustainability, and international challenges has, therefore, been developed with a view to determine the antecedents. This study has finally attempted to place empirical evidence upon the theoretical framework, and nine case studies in the context of India, Pakistan and Bangladesh that suggests nationalistic value, religious value, value for national economic interest, and value for ecological balance are the antecedents of national cultural values in emerging markets causing national responsiveness vis-à-vis challenges for MNCs in international business operation.

INTRODUCTON

In the age of anxiety, no Multinational Corporation (MNC) knows what kind of threat would come up, and how they would encounter them in order to sustain in global business operation. Gaining competitive advantage either in resource, production, and location or in management and strategy is, therefore, the only way for the long run sustainability in international business operation. There has been a profound change in the international business environment in recent years. The relationship between multinationals and governments is becoming increasingly complex, particularly in emerging markets. The developments in the political environment during the last few years have led to a situation in the global economy, its context and its rules which has put the various stakeholders under the clouds of anxiety. Managing the interdependence between multinationals, governments and society has thus become a formidable challenge.

In a seeming paradox, despite the shrinking world where borders become meaningless and tremendous growth was seen in international investment and trade, a move towards nationalism and ethnic pride still exists with resulting support for economic protectionism around the world. In fact, some of the major supporters and advocates of the protectionism come from the United States, the EC countries and Japan (Hodgetts, 1994). "Today strategies of national responsiveness are required. The global market has been replaced by Triad (Asia-Europe-American: regions) or regional blocks where upon they respond to local customer tastes rather than global ones" (Rugman, 2001). Therefore, the antecedents of national cultural values and national responsiveness are necessary to study in order to find out the ways to sustain in the challenging global environment.

The fundamental question in the field of strategic management is how firms achieve and sustain competitive advantage (Rumelt, 1994). The question is to be confronted here by analyzing the relationship between strategic predispositions and strategies to manage MNCs across cultures that can help MNCs (Multinational Corporations) to choose the best alternatives in managing challenges and opportunities derived from national responsiveness and national cultural values in emerging markets like South Asia.

Multinational corporations rely heavily on open international markets to generate sales and profits. Most MNCs believe that the international marketplace will continue to grow (Hodgetts 1994). However, globalization that results continuous liberalization and privatization around the world will eventually bring more potential for MNCs in international business. Emerging markets, known as potential markets composed of 45 nations with a total GDP of US\$3.5 trillion (1991) and population of about 2.6 billion (1992) is in excess of 2/3 of the world's total population and are becoming the most attractive places for the MNCs in the age of globalization (Emerging Market Directory, 2004). Emerging economies have assumed an increasing important role in the global economy, and are predicted to compose more than half of global economic output by mid-century. Partly in response to this growth, MNCs are directing increasing attention to those markets. Foreign direct investment (FDI) flows into developing countries-one measure of increased integration and business activity between developed and emerging economies- grew from \$23.7 billion in 1990 to 204.8 billion in 2001, a nine fold increase, helping to contribute to growth in the stock of FDI in developing countries from 5% to 20.5% of GDP over the same period (UNCTAD, 2003).

Most of the developing countries, known as emerging markets, preserve high sentiment regarding their values; culture, religion, nationality and socio-economic interests that often cause threats to MNCs, once these are perceived disregarded by the operation of MNCs. The results of high sentiment due to violation of national cultural values can be devastating; often it tarnishes the image and credibility of MNCs, which eventually cause decline of market share, or create a strong negative sentiment about the company as well as products in the market that consequently overthrow the MNCs from the market. Similarly, strong negative sentiment of the people against the product or company operation often restricts the movement of foreign direct investments, or creates sentiment that results imposition of high tariff, or negative attitude of the Government for not rationalizing tariff on certain goods or investments in order to protect national economic interests in a greater sense. Therefore, understanding national responsiveness and national cultural values in the context of emerging markets will benefit MNCs to rationalize the appropriate strategies in order to achieve sustainable competitive advantage in globalization.

The study will focus on analyzing, and designing a model of relationship between national responsiveness and the national cultural values that leads to strategic pre-dispositions towards sustainability of MNCs in international business operation, and to determine the antecedents of national cultural values, and their degree of intensity that pose challenges for MNCs in international business operation with special emphasis on South Asian Emerging Markets.

LITERATURE REVIEW

Most MNCs have a cultural strategic predisposition toward doing things in a particular way. This orientation or predisposition helps to determine the specific steps the MNC will follow. Four distinct predispositions have been identified: ethnocentric, polycentric, regiocentric, and geocentric; of which regioncentric approach is widely used especially in case of emerging markets due to have different sociocultural phenomena. Despite the need for and tendency of MNCs to address regional differentiation issues, many MNCs are committed to a globalization imperative, which is a belief that one worldwide approach to doing business is the key to both efficiency and effectiveness. One study, involving extensive examination of 115 medium and large MNCs and 103 affiliated subsidiaries in the United States, Canada, France, Germany, Japan, and the United Kingdom, found an overwhelming preponderance to use the same strategies abroad as at home (Allen, 1991)

However, despite these tendencies to use home strategies, effective MNCs are continuing their efforts to address local needs. A number of factors are helping to facilitate this need to develop unique strategies for different cultures, including diversity of worldwide industry standards, a continual demand by local customers for different products, the importance of being an insider, the difficulty of managing global organizations, and the need to allow subsidiaries to use their own abilities and talents and not be restrained by headquarters. By responding to the cultural needs of local operations and customers, MNCs find that regional strategies can be used in capturing and maintaining worldwide market niches (Hodgetts, 2006).

At this point, there is a requirement to have an analysis on the justification of strategic predisposition of MNCs in the context of emerging markets, as they extensively vary from the developed markets situation. However, as Hodgetts et al. suggest that the MNCs continue to address the above five points to develop unique strategies for different cultures, which basically cover the international marketing aspects: consumer's tastes, aesthetics, choice, language, attitude, and the issues of decision making and control management in the firm. The entry threats in FDI, threats from national and religious issues, and Governmental issues, which might turn to an internal barrier due to have improper understanding and knowledge of different cultures, have not been discussed in the above suggestions. So, this study has attempted to logically analyze the requirement of appropriate strategic predisposition for MNCs in the context of emerging markets, and to develop a holistic model of MNC's sustainability in the emerging market situation that covers all dimensions of challenges and threats derived from national-cultural perspectives in international business. All most literatures and books discuss every challenge and opportunity of international business that MNCs encounter today separately in various dimensions, but now a holistic discussion within a specific model is required in order to address them within the framework of strategic matrix.

The rational of studying South Asian Emerging markets: India, Pakistan and Bangladesh, is that it covers 1/3 of the world's population with a substantial growing economy becoming the second biggest potential emerging market after China. And it shares almost a common socio-cultural background as a whole.

REESEARCH METHOLDOGY

As this study is exploratory, in-depth case examinations were considered to be the best way to enable development hypotheses, and refinement of conceptual linkages which might be then subject to empirical testing (Harris, 1998). Indicative in-depth case study research provides ``a means of generalizing about processes managers get involved in" (Watson, 1994:7), where generalization comes from the theoretical developments enabled by the study (Yin, 1994). The paper has drawn a relationship model between strategic pre-disposition/management orientation, and the strategies for managing across culture that makes a conceptual understanding of national responsiveness and national cultural values in international business operation. Further, a model of relationship between national responsiveness and national cultural values has been developed on the basis of literature review, which indicates the hypothetical antecedents of national cultural values that cause challenges for MNCs.

Secondary data and information have been collected from the books, academic and professional journals and Internet sources. The following cases have been considered in order to draw the hypothetical model of antecedents of national cultural values:

- 1) PepsiCo in India
- 2) Aromatic Cosmetics Ltd. in Bangladesh
- 3) Mecca Cola in Pakistan
- 4) Anti-American Sentiment Provoked Nationalistic-Sentiment in Pakistan
- 5) Stevedoring Services America (SSA) in Bangladesh
- 6) McDonald's in India
- 7) Enron Scandal in India
- 8) Hindustan Lever Faces Pressure in India
- 9) Fulbari Coal Incident-2006 in Bangladesh- Asia Energy Ltd.

While selecting the cases various natures of antecedents of national cultural values, and the degree of impact of the cases on the market mechanism were taken into consideration. Of nine cases, four are from India, two are from Pakistan, and the rest three are from Bangladesh. In order to prove the hypothetical model of antecedents an online questionnaire survey was conducted among the lower and mid-level executives of local and multinational companies in the sample countries. Lower and mid level executives working in MNCs and local firms are closely keeping in touch with the ultimate consumers, as a result, come to know about the response of them against their products and managerial strategies enacted.

To test the hypothesized antecedents of national cultural values, and to rate their degree of intensity from country to country basis, a structured non-disguised questionnaire having close-ended questions has been constructed for the empirical study. Respondents, through the online survey, were asked to rate the degree of each antecedent based on (0, 1, 2, 3) scale provided in the questionnaire.

A sample of 110 respondents of which 50 Indian, 30 Pakistani, and 30 Bangladeshi mid and lowerlevel executives of different multi-national and local firms in the respective countries doing Executive-MBA in different Scottish Universities have been surveyed through e-mail. The sample was drawn purposively. The addresses of the respondents were collected from the students association of the Scottish Universities, and notably, all the executives who have at lease two years working experience in management position in their respective countries have been chosen as sample. Proportion of response for every antecedent of national-cultural-values posing challenges in international business operation has been converted into weighted mean. The weighted mean enables us to calculate an average that takes into account the importance of each value to the overall total. It distinguishes between distinct values and individual observations in a data set, since several observations can have the same value. If values occur with different frequencies, the arithmetic mean of the values (as opposed to the arithmetic mean of the observation) may not be an accurate measure of central tendency. In such cases, we need to use the weighted mean of the values (Levin, 2000). Finally, an index of national-cultural-values is developed on the basis of multiplication of weighted mean of the proportion of respondents who acknowledged that the antecedents are in operation (every antecedent), and the arithmetic mean of the degree of every antecedent.

The Relationship between Strategic pre-dispositions and Strategies for Managing across Cultures

As MNCs become more transnational, their strategies must address the cultural similarities and differences in their varied markets (Clarke, 1998). At the same time the firm is working to improve its effectiveness in dealing with governments, unions, and employees, as well as to understand the cultural differences in customer preferences in Europe, Asia and the Americas (Hodgetts, 2006). Most MNCs have a cultural strategic predisposition toward doing things in a particular way. The orientation or predisposition helps to determine the specific steps the MNC will follow. Hodgetts et al. (2006) suggest four distinct predispositions: ethnocentric, polycentric, regiocentric, and geocentric.

A company with an *ethnocentric predisposition* allows the values and interests of the parent company to guide strategic decisions. This orientation must ensure global integration in its operations, and the product development is determined primarily by the needs of home country customers but a little alteration is made upon the requirements of the environment of host country markets. It always repatriates the profits to the home country. This kind of management predisposition may be applicable to those markets belong to a certain similar socio-cultural and economical block e.g. E.U or GEC (Golf Economic Council). This orientation uses the top-down governance in its operation. Firms with a *polycentric predisposition* make strategic decisions tailored to suit the cultures of the countries where the MNC operates. It focuses on the national responsiveness, and the product development is made on the basis of local needs of the customers and requirements of the environments. It retains the profits in host country, and reinvests it for further expansion. This kind of orientation uses the bottom-up style of governance through out its operation. A *regiocentric predisposition* leads a firm to try to blend its own interests with those of its subsidiaries on a regional basis. This style of orientation uses mutually negotiated decision

making process between region and its subsidiaries. It focuses on regional integration and national responsiveness, and a standardized product development within the region, but not across the regions. Profit is redistributed within region. A company with *geocentric predisposition* tries to integrate a global systems approach to decision making. This style of orientation uses a mutually negotiated decision making at all levels of the corporation. It focuses on the global integration and national integration strategy. Global standard product with local variation is the key to success, and the profit of the firm is redistributed globally (Chakravarthy, 1985).

A fundamental tension in international strategic management is the question of when to pursue global or regional (Local) strategies. This is commonly referred to as the globalization vs. national responsiveness conflict. As used here, *global integration* is the production and distribution of products and services of a homogeneous type and quality on a world wide basis. To a growing extent, the customers of MNCs have homogenized tastes, and this has helped to spread international consumerism. For example, throughout North America, the EU and the Japan, there has been growing acceptance of standardized yet increasingly personally customized goods such as automobile and computers. This goal of efficient economic performance through a globalization and mass customization strategy, however has left MNCs open to the charge that they are overlooking the need to address national responsiveness through Internet and Internet technology (Bartlett, 2002). *National responsiveness* is the need to understand the different customer tastes in segmented regional markets and respond to different national standards and regulations imposed by autonomous governments and agencies. National responsiveness also relates to the need to adopt tools and techniques for managing the local workforce. Sometimes what works well in one country does not work in another (Bartlett, 2002).

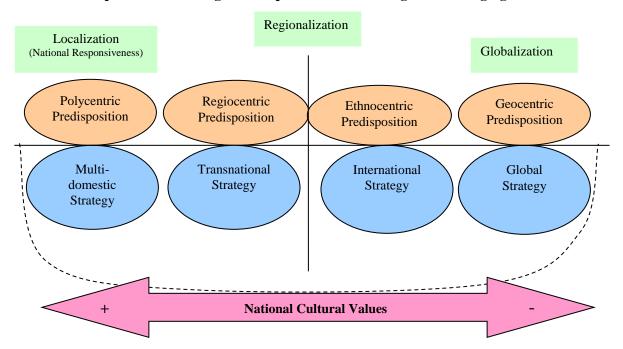
According to Bartlett et al. (1998) the issue of global integration and national responsiveness is further analyzed conceptually via a two dimensionally matrix (Fig. 1).

Table 1 National Responsiveness

Low High High Globalization Strategy Mixed (Transnational Strategy) Globalization Mixed (International National (Integration) Responsiveness Strategy) (Multi-domestic Strategy) Low

In the above matrix, global strategy refers to integrated strategy for all markets across the world based primarily on price competition vis-à-vis cost reduction. However, in case of multi-domestic strategy niche companies adapt products to satisfy the high demands of differentiation and ignore economies of scale because integration is not important. The mixed approach is often as international strategy. This situation can lead to lower needs for centralized quality control and centralized strategic decision making, while simultaneously eliminating requirements to adapt activities to individual countries. There is strong need for integration in production along with higher requirements for regional differentiation in marketing. MNCs trying to simultaneously achieve those objectives often refer to them as transnational strategy. The problem for many MNCs, however, is the cultural challenges associated with "localizing" a global focus (Hodgetts 2006). The appropriateness of each strategy depends on pressures for cost reduction and local responsiveness in each country served. Firms that pursue an international strategy have valuable core competencies that host-country competitors do not possess and face minimal pressures for local responsiveness and cost reductions. International firms such as Wal-Mart and Microsoft have been successful in using an international strategy. Organizations pursuing a multidomestic strategy should do so when there is high pressure for local responsiveness and low pressures for cost reductions. Changing offering on a localized level increases a firm's overall cost structure but increases the likelihood that its products and services will be responsive to local needs and therefore be successful (Hill, 2004). A global strategy is a low-cost strategy. Firms that experience high cost pressures should use a global strategy in an attempt to benefit from scale economies in production, distribution, and marketing. By offering a standardized product world-wide, firms can leverage their experience and use aggressive pricing scheme. This strategy makes most sense where there is high cost pressures and low demand for localized product offerings. A transnational strategy should be pursued when there are high cost pressures and high demands for local responsiveness. However, a transnational strategy is very difficult to pursue effectively. Pressures for cost reduction and local responsiveness put contradictory demands on a company because localized product offerings increased cost. Organizations that can find appropriate synergies in global corporate functions can leverage a transnational strategy effectively (Hill, 2004). Recent analysis of the strategies of MNCs confirms these basic approaches. The globalizationnational responsiveness model, which was initially developed from nine in-depth case studies, has been corroborated in large scale empirical settings. Moreover, it appears as if there are positive performance effects from tailoring the strategy to particular industry and country characteristics (Harzing, 2000). Therefore, from this above literature review, a model of relationship between strategic predispositions and strategies for managing across cultures, not in view point of cost-reduction and national responsiveness only, but the decision making and workforce management also, can be drawn with a view to study the influence of national cultural values.

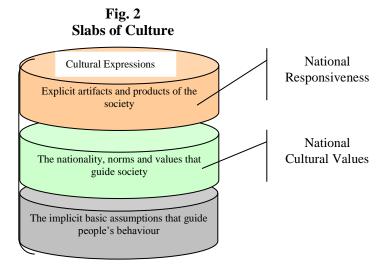
Fig.1
Relationship Model of Strategic Predispositions and Strategies of Managing across Cultures



Culture is acquired knowledge that people use to interpret experience and generate social behavior (Darlington, 1996). This knowledge forms values, creates attitudes, and influences behavior (Hodgetts, 2006). Different cultures exist in the world, an understanding of the impact of culture on behavior is critical to the study of international management (Bonvillian, 1994). If international managers do not know something about the cultures of the countries they deal with, the results can be disastrous(Hodgetts, 2006). There are many ways of examining cultural differences and their impact on international management. Culture can affect technology transfer, managerial attitudes, managerial ideology, and even business-government relations. Perhaps most important, culture affects how people think and behave (Hodgetts, 2006). These cultural differences influence the way that international management should be conducted. There is no universally satisfactory definition of the domain of a

culture. Cultures consist of people with shared attitudes, values, and beliefs; people simultaneously belong to national, ethnic, professional, and organizational cultures. At the same time, individual and group attitudes, values, and beliefs evolve (Daniels, 2001). They provide a workable definition of a culture for international business because basic similarities among people are both a cause and an effect of national boundaries. The laws governing business operations also apply primarily along national lines. Within the bounds of a nation are people who share essential attributes, such as values, language, and race. There is a feeling of "we" where as foreigners are "they". National identity is perpetuated through rites and symbols of a country-flag, parades, rallies, and a common perception of the history through the preservation of national sites, documents, monuments, and museums. These shared attributes do not mean that everyone in a country is alike. Nor do they suggest that each country is unique in all respects. In fact, nations usually include various subcultures, ethnic groups, races, and classes. However, the nation legitimizes itself by being the mediator of different interests (Foster, 1991). Failure to serve adequately in this mediating role may cause the nation to dissolve. Nevertheless, each nation possesses certain human, demographic, and behavioral characteristics that constitute its national identity and that may affect company's methods of conducting business effectively in that country (Daniels, 2001). A major dimension of the culture is values. Values are basic convictions that people have regarding what is right and wrong, good and bad, important and unimportant (Hodgetts, 2006); dirty versus clean, ugly versus beautiful, unnatural versus natural, abnormal versus normal, paradoxical versus logical and irrational versus rational (Triandis, 1982). These values are learned from the culture in which the individual is reared, and they help to direct the person's behavior. Differences in cultural values often result in varying management practices (Hodgetts, 2006).

Based on the model of culture given by Hodgetts et. al. (2006), an advanced model of culture is developed below so that the national responsiveness and national cultural values are classified, and become easy to study:



Conceptual Framework

International arena, companies, whether they know it or not, have two basic views about cultural practices that contradict their values. On the one hand, *relativism* affirms that ethical truths depend on the group holding them, making intervention unethical. Adherence to other cultures itself a Western cultural phenomenon that goes back at least as far as St. Ambrose's fourth-century advice: "When in Rome, do as the Romans do". On the other hand, *normativism* holds that there are universal standards of behavior (based on their own values) that all cultures should follow, making nonintervention unethical. Neither international companies nor their employees are expected always to adhere to a host society's norms. Exposure to certain practices may be traumatic to foreigners (Lewis, 1988). Other behavioral differences may violate a manager's own ethical code to a lesser degree. For example, using gifts and flattery to gain business advantages may seem unethical to some people. But in many countries, particularly in Asia,

failure to bring a small gift may not only be a breach of etiquette but also an indication of lack of interest in doing business. The difference arises because most Westerners express gratitude verbally, and most Asians, particularly Chinese, express appreciation tangibly, such as with gifts (Monte, 1989). Giving gifts to government officials may be particularly perplexing to Westerners. In many places such gifts and payments are customary in obtaining governmental services or contracts. Although this practice may be condemned officially; it is embedded in local custom that it has nearly the prescribed enforcement of common law (Stockton, 1986). Another thorny ethical question concerns international business practices that do not clash with foreign values directly but that nevertheless may undermine the host country's long-term cultural identity. Consider the use of a company's home-country language or cultural artifacts and the introduction of products and work methods that cause changes in social relationships. Host countries have sometimes reacted negatively to such use. For example, Finns have criticized MNEs for introducing non-Finnish architecture (Lammi, 1992) French fined Body shop for using English in its French stores (Jack, 1997). The society for applied Anthropology, which advises government and nongovernment agencies on instituting change in different cultures, has adopted a code of ethics to protect foreign cultures with which such agencies interact. The code considers whether a project or planned changes actually will benefit the target population. Because the definition of what constitutes a benefit depends on cultural value systems, implementing this code is a challenge. Further, there may be balances to consider, such as trade off between economic gains for target population and ending a way of life that gives that population great satisfaction. We often hear of spiritual poverty in the midst of plenty" meaning aesthetic, philosophical, and human dimensions suffer in favor of economic prosperity (Schafer, 1994). Further, the concept of "quality of life" varies substantially among cultures (Kuyken, 1994). The result is that an international company may be criticized as being socially irresponsible if it ignores the total spectrum of human needs for each place in which it operates. Contact across cultures is becoming more widespread than ever. This should lead to a leveling of cultures, which, on the surface, is occurring. People around the world wear similar clothes and listen to the same recording stars. However, below the surface people continue to hold fast their national differences. In other words, although some tangible have become universal, how people cooperate, attempt to solve problems, and are motivated have tended to remain the same. Religious differences are as strong as ever. Religion is a strong shaper of values. In countries where rival religions vie for political control, the resulting strife can cause so much unrest that business is disrupted through property damage, difficulty in getting supplies, and the inability to reach customers (Daniels, 2001). Language differences continue to bolster separate ethnic identities. These differences fragment the globe into regions and stymie global standardization of products and operating methods (Daniel 2001). One factor that inhibits the leveling of cultures is nationalism. Without perceived cultural differences, people would not see themselves so apart from other nationalities; thus cultural identities are used to mobilize national identity and separateness. This is done by regulating and encouraging the so-called national culture. International companies, therefore, are likely to continue to face diverse cultures in different parts of the world and for different parts of their operations (Daniel, 2001) At the same time, there is evidence of more powerful subcultures within some countries because of immigration, the global rise in religious fundamentalism, and the growing belief among ethnic groups that they should be independent from dominant groups. All these factors might lead to future problems in defining culture along national lines. One recent study has reported that national loyalty has crucial affect on consumer's evaluation of Airline serving in Lebanon. A study proved that there is a significant relationship between patriotism and selecting MEA (Middle-East Airline) as airline of preference. The Lebanese with higher patriotism have selected MEA as first preference and those with lower patriotismalthough showed patriotic feelings- have selected Emirates as first preference. Furthermore, those selecting MEA as first preference or as second preference showed higher degree of patriotism than those selecting Emirates as first preference. This comes in line with Bruning's (1997) findings that those with high national loyalty are more likely to choose a national carrier regardless of the availability of foreign competitors. It also investigated whether patriotism was a driver behind the rating of the level of MEA high quality and good prices. It has also discovered that patriotism had no relation with the good price rating, but had a significant relation with the high quality rating. Accordingly, national loyalty was a key

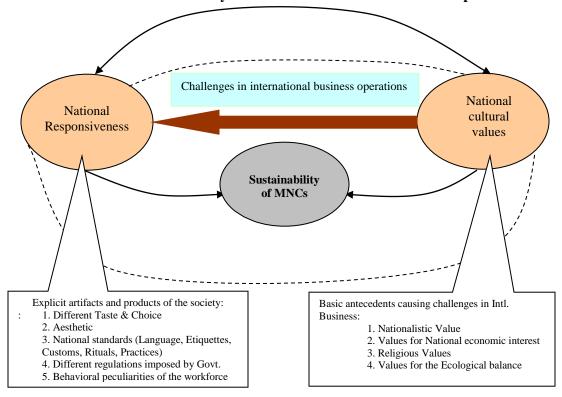
factor in affecting the Lebanese consumers' perceptions when selecting the airline of preference, and when rating the quality but not the price. However, selecting Emirates as of top preference, matching that of MEA for the first choice of preference, proved that national loyalty is not the only driver. Having a closer look on the respondents' profiles, we have discovered that the majority of the respondents showed patriotic feelings. However, contrary to the literature, the patriotism was not related to variations in age, education, gender, current position, current work experience, having or not a second nationality nor living or not outside Lebanon. In the study conducted on the Canadian people, Bruning (1997) found that females were more patriotic than males, people who rarely travel are more patriotic, the lower the income was, the more patriotic, patriotism was low among professionals when compared to those figures among the unemployed. We conclude that patriotism for the Lebanese is built-in and gained from other factors possibly culture. So, this proposition is likely to be applicable in emerging market-situation where most of the peoples' income level is relatively low.

An interesting potential scenario is that cultural competition- the promotion of ideas, attitudes, norms, and values- among nations will become increasingly important as nations try to harness their distinctive human resource capabilities as a means of outperforming other countries economically (Moller, 1991; Tomkins, 1996). In recent years, globalization has accelerated, creating both opportunities and challenges to global business. As the pace of global integration quickens, so have the cries against globalization and the emergence of new concerns over mounting global pressures (Friedman, 1999). These pressures can be seen in protests at the meetings of the WTO, International Monetary Fund (IMF), and other global bodies, and in the growing calls by developing countries to make the global trading system more responsive to their economic and social needs. Nongovernmental organizations (NGOs) have become more active expressing concerns about the potential short-comings of economic globalization (Doh, 2003). Critics of globalization point to the high number of jobs moving abroad increasingly characterized by the *offshoring* of business services jobs to lower-wage countries. They also point to growing trade deficits and slow wage growth as example of how globalization is damaging the economy. Moreover, critics argue that when production moves to countries to take advantages of lower labor costs or less regulated environments, this creates a "race to the bottom" in which companies and countries place downward pressure on wages and working conditions (Singer, 2002). Proponents respond that job losses are a natural consequence of economic and technological change, and that offshore outsourcing actually improves the competitiveness of American companies and increases the size of the overall economic pie (Bhagwati, 2004). Globalization has raised particular concerns over environmental and social impacts. According to anti-globalization activists, if corporations are free to locate anywhere in the world, the world's poorest countries will relax, or simply eliminate, environmental standards and social services in order to attract first-world investment and the jobs and wealth that come with it. Proponents of globalization contend that even within the developing world, it is protectionist policies, not trade and investment liberalization, that result in environmental and social damage. They believe globalization will force higher-polluting countries such as China and Russia into an integrated global community that takes responsible measures to protect environment (Hodgetts, 2006). Governmentimposed legal measures are not only the only barriers to otherwise competitive goods. Consumer desires may also dictate limitations (Daniel, 2001). Therefore, by responding to the cultural needs in local operations and customer's sentiment, MNCs are finding that regional strategies can be used effectively in capturing and maintaining world wide market niches (Peter, 1991).

From the literature review and the slabs of culture, it has been clear that the national responsiveness is the responsiveness of the people towards cultural expressions (Explicit artifacts and products of the society) lying on national cultural values that reflect on consumer behavior, workforce management, and social and political decision making of the organizations and government. The literature review further indicates that in the international business, the national-cultural-values might turn to be challenging in the form of national responsiveness because of the four antecedents: nationalistic sentiment, sentiment for national economic interest, religious sentiment and ecological sentiment. The following model will project the relationship between national responsiveness and national cultural values. The antecedents of national cultural values will further be justified by the empirical study followed by nine case studies. The efficient

management of the challenges emerged from the national cultural values will ensure sustainability of the MNCs in international business operation.

Fig. 3
Model of Relationship between National Responsiveness and National Cultural Values in Relation to Sustainability of MNCs in International Business Operation



RESULTS

Reflections from the case studies

The case studies give a wide understanding of natures of national-cultural-values. A summary has been presented here in the Table 2.

Table 2 Summary of Case Studies

	Antecedents of national cultural values posing challenges in Intl. Business O					
Case (s)	Nationalistic	Value for National	Religious	Value for		
	Value	economic interest	Value	Ecological balance		
Case-1 (I)	X	X				
Case-2 (B)			X			
Case-3 (P)			X			
Case-4 (P)	X		X			
Case-5 (B)	X	X				
Case-6 (I)			X			
Case-7 (I)		X				
Case-8 (I)		X		X		
Case-9 (B)		X		X		

(Note: I = India; P= Pakistan; B= Bangladesh)

In the Case-1, "PepsiCo in India", it is evident that nationalism or nationalistic sentiment of Indian people blocked the access of PepsiCo, and restricted its investment in order to protect its local company Parle Export as consequence of national economic interest. Nationalism, a combined force, emerges from the strong feeling of pride for own culture, nationality, society, national sovereignty, or it could arise from the consequence of long repression by other nation. On the other hand, value for national economic interest means a sense of economic interest of the people in terms of financial, social and infrastructure development of the country. According to the Govt. proposal, when PepsiCo negotiated a joint venture arrangement with two Indian companies such as TATA Industries, India's most powerful private company, and the government-owned company Punjab Agro Industries, the restriction was removed on the point that the public interest would be better served in the venture.

PepsiCo and its partners proposed that the new company reside in the politically volatile state of Panjab, where they enlisted the support of Sikh (a religious group) leaders who lobbied publicly on their behalf. They claimed that providing jobs and help to Punjabi farmers might subdue Sikh terrorism. The partners estimated that the investment would create 25000 jobs in the Punjab, and another 25000 elsewhere. They argued further that new technology and know-how would prevent some of the wastage of Punjabi fruits, which they estimated at 30 percent. The local political and religious groups on behalf of the PepsiCo, somehow it was managed, made all these arguments in favor of India's economic interest. Subsequently PepsiCo agreed to place a new logo, **Lehar** (means "Tide"- in Hindi), above the Pepsi insignia. Sikh group also lobbied publicly against trade sanctions against India, and the U.S government backed down. India's Minister of Food processing Industries also announced tax breaks for food processors (Chakravarty 1989; Kaye 1988; Weisman 1988; Spaeth 1989; A Passage to India" 1989).

Due to have long struggle of more than 100 years against British regime, Indian people was sentimentally antagonistic against foreign investments and products (until the wind of globalization hits India in 1990) and, therefore, strong nationalism emerged, which restricted PepsiCo's movement in India. But, on the other hand, whenever PepsiCo made collaboration with Shikh-religious party of Punjab and made people aware of the benefits from the PepsiCo's operation, in terms of economic development, job creation and societal development, they again got permission to entry. It is noteworthy to mention that changing name into *Lehar-Pepsi* worked very well to reduce the negative sentiment against PepsiCo as well as created a nationalistic image in favor of PepsiCo.

However, Case-6 "McDonald's in India" was caused of inadequate understanding of religious sentiment, both Hindu and Muslim, which resulted the damage of goodwill, and negative sentiment against McDonalds from the Hindu and Muslim religious point of view. It was alleged that they used the same oil to fry beef and pork as well as potato chips. Therefore, Hindu and Muslim community both went against McDonald's on the ground that knowing the fact company humiliated their religious faith and deceived the consumers. The big community of vegetarian people of India also supported this allegation. The fact is that beef is forbidden for Hindus and pork is taboo for the Muslims. As a result, McDonald's had to change their cooking methods as well as menu too.

After being criticized and accused by the people they have newly segmented their production, and claimed that 'we cook the food separately for the vegetarians'. Therefore, they had to change the name of fast foods for vegetarian people as 'SOUDH SHAKAHARI' Burger, which means hundred percent vegetarian. Even they say that they don't mix eggs with the mayonnaise to be used by vegetarians. This is how they are trying to reduce the negative sentiment against their products and to regain the credibility of the consumers. They have also made their own supply chain and claimed that they have created a lot of job opportunities and small businesses for the local people of India throughout their supply chain system. This is how they want to make a nationalistic sentiment in the minds of the Indians ("McDonald's outlets in India do not use beef or pork" 2004).

On the other hand, Case-7 "Enron scandal" and Case-8 "Hindustan Lever" in India gave some different clues about national cultural values. In Enron scandal, it is apparent that sentiment for national economic interest mounted since Enron decided to import natural gas from its own subsidiary abroad despite an abundant cheap resource of coal in India. This decision hits the national sentiment because the consumers realized that they were obliged to buy electricity at higher price since they had the

capacity to produce cheap electricity by using coal, their own resource. Moreover, because of poor standard of corporate governance caused by lack of transparency in accounting system, Enron was charged of corruption, which resulted immense nationalistic sentiment and protest against Enron in order to protect their national economic interest. (Enron Scandal at- a- glance, 2002; Enron Scandal Spreads to India, 2002).

Case 8- "Hindustan Lever" is a very successful MNC working for more than a century in India; therefore, having a vast knowledge about culture, society, religion and nature of national cultural values in India it always set up the appropriate strategies that comply with the market nature. It did not face any big trouble from the nationalistic point of view. However, wind of globalization reacted negatively to almost all developing countries of the world with the concept that MNCs are going to exploit them, and India was not apart from that. Different social, ecological and labor organizations have been actively scanning the operations of MNCs to make sure that they are restoring the interest of India at large.

Since Hindustan Lever laid off a number of workers and a Thermometer plant blasted, which left a number of death tolls; Green Peace and other organizations turned this a big issue and created negative sentiment against Hindustan Lever that could have been threatening in future if they were not managed properly. On the other hand, Hindustan Lever's name, it's product's name (Like 'Wheel', the symbol used in the national flag has been used as the brand name of laundry soap; 'Kissan Annapurna': means the farmers are the Goddess of Food, used as the brand name of salt) and it's activities like 'Project Shakti' (A social network developed through out the country with a view to create employment for women and youth of rural areas in order to sell the Lever's product) hint that it has been continuously taking appropriate measures to check the negative national cultural values. So, hence two issues can be responsible for negative sentiment against Hindustan Lever such as – national economic interest (Labor union and social organization's movement in micro form, which eventually became public issue in the country and made a negative sentiment), and sentiment for ecological balance due to thermometer plant blast (Hindustan Lever workers seek Govt. help, 2004; Prosecute HLL for Forest Crimes, 2004; Hindustan Lever Fact Sheet, 2004).

In Pakistan nature of national cultural values is very clear from the Case-3 "Mecca Cola" and Case-4 "Anti-American Sentiment". In both cases national cultural values were caused by religious faith and love for the brotherhood Palestinian people. As it announces that the Mecca-Cola Beverage, France, gives 20% of its net profits to charities, 10% will go to Palestinian charities which are strictly humanitarian, and which gives priority to child welfare and skill education. The remaining 10% will be given, as far as Europe is concerned, to associations who work towards peace in the world, and who support the Palestinian people in their legitimate struggle for independence. Rita Clifton, chairman of London-based Inter-Brand, a global branding consultancy firm, said Mecca Cola stands out as a competing product against a dominant global brand because it represents the first viable alternative based on a political and cultural identity. "Usually, when there have been calling for boycotts of American brands, there were no substitutes that people could opt for instead. Mecca Cola represents that alternative," said Clifton (Mecca Cola-web site 2004; Bhatnagar 2003; Mecca-Cola launched in Pakistan"2003; Free-public Web Site for Mecca Cola, 2004).

In Case-4, it is revealed that an anti-American sentiment was created after the U.S attack in Afghanistan and Iraq. Most of the MNCs including KFC, Igloo, Unilever and YFP had to adopt the metoo approach with the slogan 'Be Pakistani-Buy Pakistani' and the use of Green color on the packet of every product; Green is the color of national flag of Pakistan (Ahsan 2004). Therefore, it can be noted that not only the religious issues but also the sympathy for another nation in the name of religion can create strong negative sentiment against the MNCs or can stimulate nationalistic sentiment of the people in favor of any product like Mecca-Cola.

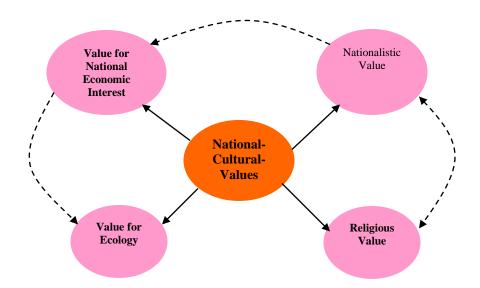
Case-2 "Aromatic Cosmetic" and Case-5 "Stevedoring Services America (SSA) in Bangladesh" made it clear that religious sentiment resulted high amount of negative sentiment against the soap that was made from animal fat. Aromatic Cosmetics Ltd. alleged the Unilever, Bangladesh, for humiliating the religious belief of Muslim people by using animal fat in producing soap (which was basically from Pork's fat). This case is similar to McDonalds in India, but, on the contrary, at the same

time Aromatic Cosmetics Ltd. cashed the opportunity from the situation through its strategic approach by using vegetable fat in producing soap. Case-5, SSA looks like the case- Hindustan Lever, where Unilever was alleged by labor union and social organizations for laying off its workers irrationally, but the degree of intensity of the sentiment for national economic interest against SSA in Bangladesh was higher than Unilever in India. Finally, looking into the strong negative sentiment of the people as well as the labor union's movement (Dock workers), the Bangladesh High Court had ruled Government approval for the construction of a private container terminal at Chittagong, by SSA, an American firm. The main issue behind the movement was anti-American sentiment of the people, and a fear of lay-off dock workers from the existing Govt. port. The trade union claimed that hundreds and thousands of semi-skilled workers of the existing port would be laid off if the private port was built, as they did not have modern logistical support as was supposed to be built by SSA. However, the nature of this kind of nationalistic sentiment was not emerged due to protect the national economic interest only, but also to serve the interest of a group of unskilled workers having political motive (Financial Times, 2002). However, it can be termed as national economic interest, which resulted strong national cultural values.

Case-9, Fulbari Coal Incident-2006 in Bangladesh- Asia Energy Ltd, at least eight people were killed and over 50 others wounded as paramilitary Bangladesh Rifle (BDR) and police opened fire to quell demonstrations against a foreign company's coal-mining plant at Fulbari in northern Dinajpur district of Bangladesh. UK-based Asia Energy Company signed the agreement with the Bangladesh-Govt. to extract coal by open-pit method. Due to the open-pit method of coal extraction a lot of people had to evacuate, that the company did not rehabilitate them properly. Moreover, open-pit method of coal extraction damaged around 20 km of land round the mine, as the extracted low land of the mine, which is full of water, damaged the fertility of cropland during flood. As a result local people, Green lobby & "Gono Sanghati Andolon (Mass Solidarity Movement)" organized the demonstration agreement with Asia Energy ltd, and asked Govt. to stop there function, which finally turned to a bloody incident. The protesters demanded cancellation of the open-pit mining system at the Fulbari coal mine. However, it came to newspaper, after the incident happened, that Asia Energy Ltd. had signed the agreement with Bangladeshi Govt. in terms of a very nominal royalty that the country's interest was not adequately restored, rather the then ruling party signed the contract against some personal benefit This news sparked every where into the country, and a "national civil society for protecting natural resources" has been formed in order to protect the national economic interest at a greater extent (People's daily online, 2006).

Therefore, based on the nine case studies followed by the analysis of literature review, the following hypothetical conceptual model is drawn, which indicates the antecedents of national-cultural-values in South Asian Emerging Markets (SAEMs).

Figure 4
Antecedents of National-Cultural-Values Posing Challenges for MNCs in Intl. Business Operation:
Conceptual Model



From the above hypothetical conceptual model based on nine case studies and literature review, four antecedents of national cultural values such as nationalistic values, religious values, values for national economic interest and values for ecological balance have been determined that pose challenges for MNCs in international business in South Asian Emerging Markets (SAEMs). As a result, the following questions arise that are to be answered through the empirical study in order to prove the hypothetical model (Fig. 4). Questions to be answered from the empirical study are as follows:

- 1) Do the four antecedents, such as nationalistic values, values for national economic interest, religious values and values for ecological balance in the form of national-cultural-values, really exist in the South Asian Emerging Markets (SAEM)?
- 2) What is the degree of intensity of each antecedent of national cultural values in each country-market?
- 3) What is the index of national-cultural-values in each country market?
- 4) What is the overall index of national cultural values in SAEMs?

Results from the Empirical Study

As our goal is to determine the index of the degree of antecedents of national cultural values posing challenges for MNCs on country-to-country basis, therefore, the weighted mean will be relatively effective representative in the index-equation.

(Weighted Mean)
$$\mathbf{W}_i = \frac{w_i}{\sum_{i=1}^4 w_i}$$
, Weighted Mean for factor i

Notation:

i = the factor (antecedent) number (i = 1, 2, 3, 4)

n = Total number of responses (102)

 w_i = proportion of respondents who acknowledged the antecedents are in operation.

Table 3
Weighted Average of Responses that acknowledges the following four Antecedents of National
Cultural Values pose Challenges for MNCs in SAEMs

Cultural values pose Chanenges for WINCS in SAEWIS						
Antecedents	w = proportion of	respondents				
of national cultural values	who acknowledged that the		W= Weighted Mean			
	antecedents are in	n operation	-			
	(%)					
Nationalistic Value	82.35%	\mathbf{w}_1	0.229			
			\mathbf{W}_1			
Value for National Economic	88.23%	\mathbf{w}_2	0.245			
Interest			\mathbf{W}_2			
Religious Value	94.11%	W3	0.262			
			\mathbf{W}_3			
Value for Ecological Balance	94.11%	W4	0.262			
_			W_4			
	$\sum_{i=1}^4 w_i = 3$	58.8				

Table 4

Degree of influence of the following antecedents on challenges for MNCs in International Business

Operation by Country (Based on 0-1-2-3 scale)

	d ₁	d_2	d ₃	d_4
Country	Nationalistic Value	Value for National Economic Interest	Religious Value	Value for Ecological Balance
India (48)	2.0	1.5	2.62	1.12
Pakistan (18)	2.0	1.0	3.0	1.33
Bangladesh (36)	0.83	0.83	1.66	1.16
South Asian region (102)	1.61	1.11	2.42	1.20

Hence: i =the antecedent number

j = the number of responses (1, 2, 3, -----n)

n = Total number of respondents (102)

(For country wise **n**, see the figures in the parenthesis in first column in table: 4)

X= response variables (given on scale 0, 1, 2, 3)

Degree of the antecedent-
$$\mathbf{d_i} = \frac{1}{n} \sum_{j=1}^{n} X_{ij}$$

(Notation of the scale: Very High=3, High= 2; Low =1; Does not Exist =0)

Index of National Cultural Values (N.C.V) in SAEMs

Based on the above text, we can make the equation of index for National Cultural Values in the following way:

Index of National Cultural Values (N.C.V) = $W_1d_1 + W_2d_2 + W_3d_3 + W_4d_4$

So,

India: $Index \ of \ N.C.V. = (0.229 \times 2 + 0.245 \times 1.5 + 0.262 \times 2.62 + 0.262 \times 1.12) = 1.80$

Pakistan: Index of N.C.V = $(0.229 \times 2 + 0.245 \times 1 + 0.262 \times 3 + 0.262 \times 1.33)$ = 1.83

Bangladesh: $Index\ of\ N.C.V = (0.229 \times 0.83 + 0.245 \times 0.83 + 0.262 \times 1.66 + 0.262 \times 1.16) = 1.13$

SAEMs: Index of N.C.V = $(0.229 \times 1.61 + 0.245 \times 1.11 + 0.262 \times 2.42 + 0.262 \times 1.20)$ = 1.58

DISCUSSION

In the survey, out of 110, 102 respondents have responded which shows 92% successful response and 8% non-response. Out of 102 respondents 47% was Indian, 18% was Pakistani and 35% was Bangladeshi. Survey reports that average working experience of the respondents from the three countries is 3.31 years, either in mid or junior level management in local or multinational companies of the respected countries. Study, however, reveals (Table 3) that 82.35% respondents reported nationalistic value exists in their markets that causes challenges for MNCs in international business operation; 88.23% responded for the values for national economic interest, 94.11% responded for the religious value, and 94.11% responded for ecological value. Therefore, study proves the existence of hypothesized four antecedents causing challenges for the MNCs in the form of national responsiveness in South Asian Emerging Markets.

Study also reports (Table 4) that religious value has the highest degree of influence in all three countries. Bangladesh has relatively lower degree of influence 1.66, whereas India and Pakistan have 2.62 and 3 degree of influence respectively, which indicate its tremendous priority in those emerging markets. Therefore, any decision in management and operation that is not consistent to the religious matter might cause tremendous negative sentiment against the company, which will eventually lead massive loss of market share in these three markets.

Study also reveals that nationalistic value or nationalism has relatively higher degree of influence 2.0 both in India and Pakistan compared to that of Bangladesh 0.83. So, it can be learned that religious value in all three countries and nationalistic value in India and Pakistan have much stronger influence on national responsiveness compared to other factors. Therefore, religious and cultural phenomena have to be seriously taken into consideration in management decision in order to make a credible impression of the company, that it is sensitive and respectful to the religious and nationalistic value of the land.

Further, value for national economic interest in India and Pakistan is 1.5 and 1 respectively, which are not ignorable as it is relatively lower in Bangladesh 0.83 (Low level=1). Less than 1 can be ignorable in short run, but more than 1 is definitely a matter of concern as it is the case in India, 1.5. Therefore, in case of India, MNCs in their operation will make it clear that they are ultimately working for the prosperity and betterment of the economy, society and country at large. However, nonetheless, it can not be said that the lower degree of sentiment for national economic interest will never mount the tension against the company since it is clearly evident that the venture of MNC is going to exploit the economy only, which does not bring any benefit for the economic prosperity of the country. Similarly, ecological sentiment in India, Pakistan and Bangladesh is 1.12, 1.33 and 1.16 respectively, which shows a clear indication of the factor being given priority to those markets. Therefore, this aspect has to be

sensitively taken into consideration in strategic decision making while operating in these countries. Based on the study the most crucial factors in South Asian Emerging Markets, on priority of degree basis, are religious and nationalistic value/nationalism in the first level. Ecological value and value for national economic interest have been prioritized in the second level.

CONCLUSIONS

This study attempted to place empirical evidence upon the theoretical framework that suggests nationalistic value, religious value, value for national economic interest and ecological balance are the antecedents causing national responsiveness in the form of national cultural values in emerging markets. In this global business environment MNCs are eager to achieve sustainable competitive advantage by different means (such as value chain; vertical/ horizontal integration; reformation of production/organizational structure; merger/acquisition etc.) for the long-run profitability of the firm in order to enjoy economies of scale.

Sustainable competitive strategy, however, is a vague term that can be of any kind of strategies, which bring long-term sustainability for the company's operation, and profit maximization in the competitive environment. Therefore, consideration of antecedents of national cultural values that cause national responsiveness vis-a-vis challenges for MNCs in the emerging markets, where most of the MNCs tend to move for production or marketing or both, has been undoubtedly a strategic intent for the long run sustainability. This option can be viewed from two dimensions, **one** is the international corporate management; where selections of managers, decisions for motivation, coordination, power sharing, controlling so forth are made; **two** is the market, where investment and marketing take place. It may be argued that the investment in capital market is not affected by the national responsiveness, but the investment in physical infrastructure and production are of course affected by the influence of national responsiveness, and national cultural values at large.

Mistakes in understanding magnitude of national responsiveness and national cultural values in corporate management practice or market operation might result huge financial loss and long-term failure in competition. National cultural values as well as national responsiveness, as external forces, can cause failure for MNCs in case of wrong strategic implication, but however, it can also be a tool for sustainable competitive advantage in the emerging markets as long as it is considered with due weight in strategic decision making.

Corporations are under increasing pressure to contribute to the societies and communities in which they operate, and to adopt more socially responsible business practices in their range of operations. Pressure for greater attention to corporate social responsibilities (CSR) has emanated from a range stakeholders including civil society and from non-governmental organizations (NGOs). These groups have argued MNCs to be more responsive to the range of social needs in developing countries, including addressing concerns about working conditions in factories or service centers and attending to the environmental impacts of their activities (Economist, 2002). The emergence of organized civil society and NGOs has dramatically altered the business environment globally, and the role of MNCs within it. Although social movements have been part of the political and economic landscape for centuries, the emergence of NGO activism in the United States during modern era can be traced to mid-1984, when a range of NGOs, including church and community groups, human rights organizations, and other antiapartheid activists, built strong networks and pressed US cities and states to divest their public pension funds of companies doing business in South Africa. This kind of effort, combined with domestic unrest, international governmental pressures, and capital flight posed a direct, sustained, and ultimately successful challenge to the white minority rule, resulting in the collapse-of- apartheid (Hodgetts, 2006). Today, MNCs are very actively trying both to respond to pressures and challenges resulted from the antecedents of national cultural values to be more socially responsible and to develop proactive strategies to demonstrate their commitment to social and environmental progress around the world, especially developing countries (Collins, 2003). Hewlett-Packard has initiated a series of "i-communities" in economically deprived areas such as the town of Kuppam in the state of Andhra Pradesh, India. These communities use public/private/NGO partnerships to enhance economic development through technology.

HP is able to use the projects to build markets, test products, and expand global marketing knowledge (Dunn, 2003).

Some other instances might ease the understanding of the strategies to manage the challenges emerged from antecedents of national cultural values. Since the world community and ILO alleged NIKE for using child labor in Pakistan, surprisingly there were no protests against NIKE in Pakistan; rather people of Pakistan appreciated the venture of NIKE. The reason was that high level of poverty, earning less than US\$ 1 per day for typical laborer, encourages the job creation by MNCs. A columnist 'Stephen Chapman' from Libertarian newspaper argues "But why is it unconscionable for a poor country to allow child labor? Is it a revelation- or a crime- that some parents willingly send their children off to work in a factory to survive? Is it a cruel for NIKE to give them chance?" (TED case studies). So, providing opportunities for financial gain and creating jobs can be attributed as part of strategy being used in emerging markets. Similarly, Quadir (2003), in an interview with Harvard Business Review on the success of MNCs and the involvement of people in the development of country, said "Corporations can engage the citizens of poor countries in commerce. First, don't just sell: Open factories in poor countries and create jobs". He also emphasized on the use of local resources, even to buy office furniture and accessories from the local suppliers.

Nobel Prize winner economist Stiglitz, J. (2002) said that "The critics of globalization accuse Western countries of hypocrisy, and the critics are right. The Western countries have pushed poor countries to eliminate trade barriers, but kept up their own barriers, preventing developing countries from exporting their agricultural products and so depriving them of desperately needed export income". Therefore, strong negative sentiment against globalization as well as MNCs, who often violate the rules of game, is not unlikely in the emerging markets.

The results and implications that are drawn from this study are subject to limitations associated mainly with the small number of sample size, and the lack of in depth MNC-Case study. Considering the time and financial constraints, as it was a Master's thesis in the International Business Program, it was not possible to survey the executives from the respective local and multi-national companies, which have been discussed in this study in connection with the national-cultural-values, instead the management executives from any local firms and MNCs in the respective three countries doing EMBA in UK. However, the result would have been more valid, if at least one MNC among the nine case studies discussed herein working in all the three countries could be studied in depth. In that case, the MNC's policy implications and strategic applications could have been used as the supporting data to validate the results found from the empirical study. The study of relationship between the result of executive-survey, and in-depth MNC- (Policy and strategy implication in relation to national-cultural-values) study in all the three countries would highly strengthen the degree of validity and reliability of the study. As it has been already mentioned that this is an extract of Master's thesis the scope of consulting previous research papers and monographs was limited compared to a large scale research work.

REFERENCES

Allen J. M., David A. R., and Kendal, R. 1991. Globalisation Versus Rationalisation: which way for the Multinational? *Organisational Dynamics*, Winter: 17-28.

Aaker, D. A. 2001. Strategic market management. John Willey & Sons. Inc: 14.

Annual Report of Aromatic Cosmetics Ltd. Bangladesh, 1998. The TV advertisements of aromatic soap in Bangladesh and Ganga beauty soap in India have been taken into consideration.

A Passage to India. 1989. Panoroma.

Ahsan, S. 2004. Branding on Pakistan. Available at:

http://www.chowk.com/show_article.cgi?aid=00003099&channel=market%20street&s..., (Accessed on 02.07.04).

Bhatnagar, P. 2003. Mecca Cola: Potshot at Coke? The 'political' cola is cashing in on anti-American sentiment in the Middle East and Europe. Available on CNN Money.com

Bartlett, C. A & Ghoshal, S. 2002. *Managing across borders: The transnational solution*. Cambridge, MA: Harvard Business School Press.

Bonvillian, G. & Nowlin, W.A. 1994. Cultural awareness: An essential element of doing business abroad. *Business Horizons*, November-December: 44-55.

Burning, E. R. 1997. Country of origin, national loyalty and product choice: The case of international air travel. *International Marketing Review*, 14(1): 59-74.

Bhagwati, J. 2004. In defense of globalization. New York: Oxford University Press.

Graham, E. 2000. Fighting the wrong enemy: Anti-global activists and multinational

Enterprises. Washington, DC: Institute of International Economics.

Chakravarty, S. N. 1989. How Pepsi broke into India. Forbes, November 27.

Chakravarthy, B. S, & Perlmutter, H.V. 1985. Strategic planning for a global business. *Columbia Journal of World Business*, Summer: 5-6

Collins, C. 2003. Above and beyond: A surprising number of companies are finding it makes business sense to go beyond government regulations. *Christian Science Monitor*, November 3: 14.

Daniel, J. D & Radebugh L.H. 2001. *International business: Environment and operations*, Ninth Edition. Prentice Hall.

Darlington, G. 1996. Culture- A theoretical review. In Hodgetts, R. M, Luthans, F, Doh, J. P. (Eds.), *International management: Culture, strategy, and behavior*: 33-35. McGraw-Hill.

Doh, J. P & Teegen, H. 2003. *Globalization and NGOs: Transforming business, government, and society*. Westport, CT: Praeger

Dunn, D. & Yamashita, K. 2003. Micro-capitalism and mega corporation. *Harvard Business Review*, August: 46-54.

Enron Scandal at- a- glance. 2002. *BBC News*, 22nd August. Available at: http://news.bbc.co.uk/1/hi/business/1780075.stm (Accessed on 05.04.2004).

Enron Scandal Spreads to India. 2002. *CBS NEWS*. 12th April. Available at: http://www.cbsnews.com/stories/2002/04/11/60minutes/main505913.html (Accessed on 04.07.04).

Economist. 2002. Non-governmental organizations and business: Living with the enemy. August 9: 49-50

Foster, R. J. 1991. Making national cultures in national ecumene. *Annual Review of Anthropology*, 20: 235-260.

Friedman, T. 1999. *The Lexus and the olive tree: Understanding globalization*. New York: Farrar, Strauss & Giroux.

Gill, J & Johnson, P. 2002. Research methods for managers. London: Sage.

Hodgetts, R.M. & Luthans, F. 1994. *International management: Culture, strategy, behavior*. NY: McGraw Hill.

Hill, C. 2004. Global business today. New York: McGraw-Hill.

Harzing, A.W. 2000. An Empirical analysis and extension of the Bartlett and Ghoshal typology of multinational companies. *Journal of International Business Studies*, First Quarter: 101-120;

Johnson, J.H (Jr). 1995. An empirical analysis of the integration-responsiveness framework: U.S. construction equipment industry firms in global competition. *Journal of International Business Studies* 26(3): 621-636.

Harris, S. & Ghauri, P. 2000. Strategy formulation by business leaders- Exploring the influence of national values. *European Journal of Marketing*, 34(1/2):198.

Hindustan lever workers seek govt. help. 2004. *Business Standard*, March 3. Available at http://www.business-stndard.com/today/story.asp?Menu=23&story=15926 (Accessed 4.06.2004).

Jack, A. 1997. French prepare to repel English advance. *Financial Times*, January 7.

Kuyken, W. Orley, J. Hudelso, P. & Sartorius, N. 1994. Quality of life assessment across cultures. *International Journal of Metal Health*, 239(2): 5-27.

Kaye, L. 1988. Pepping up the Panjab. Far Eastern Economic Review, Oct. 27: 77-78.

Levin, R. I & Rubin, D. S. 2000. Statistics for management, seventh edition. Prentice Hall.

Lewis, B. 1988. Western culture must go. Wall Street Journal, May 2: 18.

Lammi, P. 1992. My vision of business in Europe, in business ethics in a new Europe. In

Mohoney, E. & Vallance, E. (Eds.), Dordrecht, the Netherands: Kluwer Academic, 1992: 11-12.

Moller, J.O. 1991. The competitiveness of US industry: A view from the outside. *Business Horizon*, Nov-Dec.: 27-34.

Tomkins, R. 1996. U.S top poll on cultural exports. *Financial Times*, Dec. 4.

Mecca-Cola launched in Pakistan. 2003. *PakTribune*, November 04. Available at http://www.paktribune.com/news/index.php?id=43944 (Accessed on 5.07.2004).

McDonald's outlets in India do not use beef or pork. 2004. Yahoo News, March 08.

Monte, B. 1989. Chinese etiquette and ethics in business. Lincoln, IL:NTC.

Peter, T. 1991. American management- A model for the world? Developing Managers for Eastern and Central Europe, *International Executive Development Center and European Foundation for Management Development*, Apr, 21, pp.6-14.

Quadir, I. 2003. Bottom-up Economics. Harvard Business Review, 81 (8): 18-20.

Rugman, A. M. 2001. Do firms compete globally or regionally? Aavailable at:

http: www.uicc.edu/courses/non-current/lir490blecture/globalisation (Accessed on 10.11.2003).

Rumelt, R. P, Schendel, D & Teece, D. 1994. *Fundamental issues in management*. Cambridge, MA: Harvard Business School Press.

Stiglitz, J. 2002. Globalization and its discontents. Penguin Books.

Stockton, W. 1986. Bribes are called a way of life in Mexico. New York Times, October 25: 3.

Schafer, D. P. 1994. Cultures and economics. Futures, 26(8): 830-845.

Singer, P. 2002. One world: The ethics of globalization. New Haven: Yale University Press.

Soros, G. 2002. *George Soros on globalization*. New York: Public Affairs Books.

Stiglitz, J. 2002. *Globalization and its discontents*. New York: Norton.

Spaeth, A. 1989. India beckons-and frustrates. Wall Street Journal, September 22: 23-25.

Triandis, H. C. 1983. Dimensions of cultural variation as parameters of organizational theories.

Organisational Dynamics, Winter: 143-144.

UNCTAD. 2003. United Nations Conference on Trade and Development, World Investment Report.

Watson, T. J. 1994. *In Search of management: Culture, chaos and control in managerial work*. London: Routledge.

Weisman, S. R. 1988. Pepsi sets Off a Cola war in India. New York Times, March 21: 28.

Yin, R. K. 1994. Case Study research: Design and methods. Thousand Oaks, CA: Sage.

GENERATIONAL VALUES: A CROSS-CULTURAL EMPIRICAL TEST

Shaista E. Khilji (The George Washington University, USA)
Sanklap Chaturvedi (NUS, Singapore)
Regina A. Greenwood (Kettering University, MI, USA)
Jaime A. Ruiz-Gutierrez (University of Los Andes, Colombia)
Miguel R. Olivas-Luján (Clarion U of Pennsylvania, USA)
Dora M Luk (City University of Hong Kong)
Sergio Madero (Tec de Monterrey, Mexico)
Terrell G. Manyak (Nova Southeastern University, USA)
Bahaudin Mujtaba (Nova Southeastern University, USA)
Edward F. Murphy, Jr. (Embry Riddle Aeronautical University, USA)
Neusa Maria Bastos F. Santos (Pontifícia Universidade Católica de São Paulo, Brazil)
Arnel Onesimo O. Uy (De La Salle University, Philippines)
Silvia Inés Monserrat Lluna (National University of Central Tandil, Argentina)
Mark Woodhull (Schreiner University, USA)
Email: sekhilji@gwu.edu

ABSTRCAT

Few studies have explored cross-cultural generational differences in values, and even fewer have done so with working adult populations in more than three nations. In this study, generational values among 3,087 working adults in the United States, United Kingdom, Iceland, Japan, Korea, Philippines and Colombia were investigated using the Rokeach Value Survey. In addition, the results were compared to the results of Rokeach's 1973 work, which proposed that value structures generally follow fourteen generational patterns. The hypotheses were supported for cross-cultural (within) differences for 26 of 36 values and cross-cultural generational (across) differences for 23 of 36 values. There were many more similarities across the generations as compared to the national cultures. This study is unique in identifying similar values across cross-cultural generations in Western, Eastern, South American and European cultures and in comparing generational value structures to earlier research.

INTRODUCTION

The research literature is replete with studies exploring cross-cultural similarities and differences in national cultures, but few studies have explored cross-cultural generational differences in values, particularly with working adult populations. As the world becomes a global marketplace generational studies of adult populations are needed in order to provide more meaningful and accurate information to enable better understanding of employee motivation and consumer target markets (DeMooij, 1998). Indepth generational analyses are needed because, as DeMooij's (1998, 2004) research points out, many managers are still trying to motivate employees through the use of money and benefits and marketers continue to develop marketing and advertising campaigns that are focused on values at the national level instead of focusing on the generational level of analysis. As DeMooij (1998: 3) further notes, ". . . markets are people, not products. There may be global products, but there are no global people. There may be global brands but there are no global motivations for buying those brands."

Managers and marketers must go below the national level of analysis to explore generational differences in values because of their impact on attitudes and behavior, and, consequently, on employee satisfaction and behavior. Research has shown that one of the most important indicators of attitudes and behavior is value structures, because values are the underlying structures that affect attitudes and subsequent behavior (DeMooij, 1998; Kahle, 1984; Murphy and Anderson, 2003; Reynolds and Olson, 2001; Rokeach, 1979). Values are the most important construct to explore in cross-cultural and

generational studies because as De Mooij (2004) points out, "values are at the root of consumer behavior, so understanding culture's influence is necessary for those who want to succeed in the global marketplace. Culture is pervasive in all aspects of consumption and consumer behavior and should be integrated into all elements of consumer behavior theory" (2).

LITERATURE REVIEW

There is a large body of literature exploring cross-cultural differences in values, attitudes and behaviors, but few studies have specifically focused on generational similarities and differences. In the late 1960s and early 1970s cross-cultural researchers like Adler, Allport, Feather, Inglehart, Rokeach, Schwartz, and Triandis, just to name a few, investigated cross-cultural differences in values, attitudes and behaviors using a variety of research instruments. In the 1980s, Hofstede (1980, 1984) used the Personal Values Questionnaire to explore values worldwide in the 1980s. Hofstede's research results indicated that most countries or nations could be evaluated based on four cultural dimensions: power distance, uncertainty avoidance, individualism or collectivism and masculinity or femininity. In the late 1980s a new time dimension was added to Hofstede's framework. In the 1990s and 2000s Ingelhart and his associates have been using the World Values Survey to explore values world-wide; Triandis and his associates have been exploring values world-wide using the Hofstede Personal Values Questionnaire; Schwartz has been using his Value Survey Module to explore values in different nations, and in China and Taiwan, Bond and his associates have been using the Chinese Value Survey to explore the value of Chinese. Throughout this same time-frame Rokeach, Feather and other researchers have been using the Rokeach Value Survey, which is the instrument used in our research study, to explore values in different nations throughout the world.

In terms of generational research, Feather's (1986, 1988) research studies covering Australia, New Zealand, and Papua New Guinea indicated significant cross-cultural generational differences in values. Using the Rokeach Value Survey (RVS), Feather pointed out that regardless of culture, the teenage generation ranked *true friendship* much higher in importance than parents did. On the other hand, *family security* increased in importance for each succeeding generation, particularly for parents. Their findings suggest that teenagers, regardless of culture, value much higher *true friendship* because they are going through a period of rapid physical and psychological changes. Parents, in turn, value *family security* much higher in importance than single people and the importance increases as adults age and move from one generation to the other, because of increased responsibility for rearing and caring for their children.

Bond's (1994, 1996) studies using the RVS and the Chinese Value Survey (CVS) revealed that age and generational differences existed in the value structures of respondents from Hong Kong, Singapore and China. Bond's studies suggested that each generation was impacted by significant cultural events that led to value differences. More recently, Imamoglu and Ayguen (1999) and Ayguen and Imamoglu's (2002) longitudinal studies suggested that Turkish students' individualistic values increased in importance across the generations from the 1970s to the 1990s. Ralston et al.'s (1999) studies of the different generations in China indicated, "The generation in which one grew up appears to be crucial to understanding the values" (421). Chang, Wong and Koh's (2003) study hinted that Singaporean parents differed significantly from their children as parents' valued the tradition factor while their children valued the modern factor. Eskin's (2003) study illustrated that older students in Sweden and Turkey were more assertive than younger students and Yu and Miller's (2003) study of generational differences in Taiwan indicated that Baby Boomers were generally collectivist while Generation X respondents were becoming more individualistic in their value structures.

Finally, Murphy, Gordon and Anderson (2004) explored age and generation differences in values between the US and Japan, finding that cross-cultural and age differences existed between the two nations, but the generations were more similar than different. The literature clearly indicates a research gap exists in generational research as few studies have explored generational similarities and differences in more than three nations at one time and led to the following problem statement and research methodology that will be used in our study.

Based on the literature review, few studies have explored generational similarities and differences in more than three nations at one time, few studies have used working adult populations in the generational studies, and even fewer have used the RVS to explore generational differences in values. This study narrows the research gaps by exploring whether the generational similarities and differences in values between respondents from Colombia, Iceland, Japan, Korea, United States, United Kingdom and the Philippines. This problem statement led to the development of the following research hypotheses and methodology.

RESEARCH METHODOLOGY

Survey instrument

Seven major instruments are generally used in value research: the Rokeach Value Survey (Rokeach, 1983), Chinese Value Survey (Bond, 1994), Schwartz Value Survey (Schwartz and Bilsky, 1987, 1990), Allport Vernon Lindzey Study of Values (Allport, Vernon and Lindzey, 1960), England's Personal Values Questionnaire (England, 1974), Hofstede's Value Survey Module (1980), and Kahle's Value Survey (Kahle, 1984).

We elected to use the Rokeach Value Survey, because in our opinion, it is much simpler and easier to use, it is easier to translate, it has shown its reliability and validity in cross-cultural research, it is much easier to statistically analyze, and many experts feel that "the Rokeach Value Survey is the best value system measuring device available" (Sikula, 1973:16). Moreover, others feel that whatever current value survey is chosen, "their theoretical arguments are based mainly on Rokeach's (1973, 1986) considerations of human nature, motivation, and personality" (Grunert and Scherhorn, 1990: 98). Still others feel that the survey "has become the neo-orthodox instrument of value research" (Becker and Connor, 1982: 21). Finally, the RVS has been validated in cross-cultural research worldwide with populations ranging from 11 to 70 years of age and is one of the easiest instruments to analyze statistically (Feather, 1984; Rokeach, 1973, 1979; Murphy et al., 2006).

The RVS is divided into 18 terminal values, which Rokeach (1973: 5) labeled "end-state of existence" values, and Murphy and Anderson (2003) explained were "the most important goals each respondent sought in their lives" (118). Rokeach (1973: 5) labeled the 18 instrumental values as "modes of conduct" values, what Murphy and Anderson (2003: 118) explained as "behavioral techniques or methods respondents would use to obtain their terminal value goals."

Instructions to those taking the survey are standard. Each individual is asked to order the values "in order of importance to you, as guiding principles in your life" (Obot, 1988: 367). Rokeach (1973, 1979) reported test-retest reliability for each of the 18 terminal values considered separately, from seven weeks to eighteen months later, ranged from a low of .51 for *a sense of accomplishment* to a high of .88 for *salvation*. Comparable test-retest reliability scores for instrumental values ranged from .45 for *responsible* to .70 for *ambitious*. Employing a 14-16 month test interval, median reliability was .69 for terminal values and .61 for instrumental values.

A native speaker in each nation studied translated the RVS into the local language and another native speaker translated the instrument back to English, making an independent confirmation of the translation. As a clarification, the English version was left in place beside the translated version (Adler, 1983).

Research population

The research population consisted of working adults living in major cities in the United States (US), United Kingdom (UK), Iceland, Japan, Korea, Philippines and Colombia. The researchers chose working adults as the research populations; they have been relatively unexplored in the research literature. The surveys were administered in major cities and industrial centers in each nation from 2002 to 2005.

This study was part of a larger study, begun in 1993, that explores cross-cultural values worldwide. The US population consisted of a database that is composed of a combination of random and convenience samples of 10,000 properly completed instruments from teenagers and working adults throughout the US.

A total of 1,050 instruments were randomly drawn from the adult component of that database. Of the other cross-cultural databases, 495 were from the UK, 412 from Iceland, 667 from Japan, 260 from Korea, 128 from Colombia and 200 from the Philippines. The total population sample was 3,212.

In the UK, a convenience sample of 1,500 working adults and 500 working adult MBA students were surveyed in London and in several other cities, with 990 properly completed instruments returned; 495 or 50 percent were randomly drawn from that database. In Iceland, from the convenience sample of 1,800 working adults, 824 properly completed instruments were returned; 412 or fifty percent were randomly selected from that database.

The researchers surveyed three separate Japanese populations: 134 Japanese Airlines pilots attending a two-year pilot training program at a US Flight Crew Training Center; a stratified random sample of an international population of 70 Japanese adults attending an aviation industry conference in The Netherlands; and a convenience sample of 1,500 working adults in Tokyo, Japan. From the database of 1,334 properly completed instruments a random sample of 667 Japanese or approximately 50 percent of the database was selected for use in this study.

The Korean population consisted of working adults in Seoul, Korea. Of the original 1,000 surveys sent out, a total of 564 properly completed instruments were returned for a 56 percent return rate. A random sample of 260 or 50 percent of that sample was selected from this database. As part of a larger study exploring entrepreneurship in Colombia (Gutierrez-Ruiz, 2005), the researchers conducted a random sample of 500 employees of three national companies in Bogotá and Cartagena, Colombia. The 500 employees were sent surveys, with 128 returning properly completed instruments, and all 128 selected for use in this study. Bogotá and Cartagena were selected as they represent two of the three largest regions in Colombia. In the Philippines a census sample of 500 small business and non-business owners were surveyed during business training courses in 2005, with 200 returning properly completed instruments, and all 200 were used in this study. The total sample size was 3,212 working adult respondents.

RESULTS

Researchers using the RVS have a choice of statistical analysis techniques for evaluating their hypotheses. Since the RVS provides rankings or non-normative data, researchers normally evaluate the hypotheses for statistical significance using non-parametric statistical analysis techniques like the Chisquare median test, Kruskal-Wallis Analysis of Variance (ANOVA) test, Mann-Whitney U test, and/or Spearman's Rank Order Correlation Analysis test.

Feather (1984) developed another statistical analysis technique for the RVS that allows researchers to explore the data with parametric analysis techniques. Feather's (1984) z-transformation process converts the RVS rank-ordered data to normative data and allows researchers to use normal statistical analysis techniques. The researchers used Feather's z-transformation process and then analyzed the data for statistical significance using (ANOVA) followed by Multivariate ANOVA (MANOVA) and Multivariate Analysis of Covariance (MANCOVA). As comparisons, the researchers analyzed the data with the non-parametric techniques Chi-square median test, Kruskal-Wallis Analysis of Variance (ANOVA) test, and Mann-Whitney U test; they found no differences that would impact the hypothesis test results. The researchers will put untransformed means and rankings in the tables to make it easier for readers to comprehend the results.

The research results showed cross-cultural generational similarities and differences (Refer to authors for Tables) for the top five most important terminal values and instrumental values across all generations. The top five most important terminal values or most important goals across the generations were *health* and *family security*. *Health* was in the top five of importance (most important values) for all generations. This suggests that *health* might be a universal value across adult generations. *Family security* was in the top five of importance for all generations except for the US 18 to 29 year olds. This is an interesting and unexplained finding for the US because previous research on US value structures, for all adult age groups, found *family security* to be one of the top five important values in the US. For all nations surveyed, except the US, *responsible* and *honest* were among the top five values of importance across the generations.

This is an interesting and unexplained finding for the US because previous research on US value structures has confirmed that both *family security* and *responsible* have always been in the top five instrumental values of adults in the US (Murphy, Gordon and Anderson, 2003; Murphy, Greenwood, and Lawn-Neiborer, 2004). Do these differences come from normal value changes that take place across the generations? We used Rokeach (1973) fourteen generational patterns to answer this question.

Generational pattern one encompassed a sense of accomplishment, wisdom and responsible, which Rokeach (1973, 1979) suggested "seemed to concern self-realization" (73). Our present study illustrates that the Japanese, Korean and Philippines generations followed this general pattern proposed by Rokeach, but the US, UK, Iceland, and Colombian generations did not follow this generalized pattern for all three values and instead, followed a pattern of the values becoming more important with age.

Generational pattern two encompassed the values *imaginative, intellectual, logical* and *inner harmony*, which Rokeach's research suggested were of middle importance in adolescence, became slightly more important around age 18, dropped in importance around age 20, and stayed unimportant for each succeeding generation. Our study denotes that this generational pattern was generally followed by each cross-cultural generation, with slight change from the generation of 18 to 29 year olds to the generation of 30 and 39 years of age, and then the values become of less important at 40+ years of age.

Generational pattern three was for *a world of beauty, true friendship*, and *polite*, which Rokeach suggested followed a pattern of relative importance in adolescence and then moved on to become relatively unimportant at age 15 and beyond (Rokeach, 1973). In our study, this pattern applied to all cross-cultural generation groups except for the 30 to 39 year old Colombians who ranked it as important. *True friendship* started out important for the all cultures in the 18 to 29 year old generation groups except for the US. It became slightly more important for all cultures in the 30 to 39 year old group except for the Colombians, for whom it became unimportant. For the 40+ year old groups it slightly decreased in importance for all groups except for the Colombians, for whom it became more important.

Generational pattern four encompassed *obedience*, which Rokeach suggested started out as relatively important in adolescence, moved to unimportance at age 18, and became slightly more important as time went by with a ranking of thirteen in importance at age 30 and beyond (Rokeach, 1973). For our study, the US followed this pattern with *obedience* moderately important for the 18 to 29 year olds and then becoming unimportant at 30 years of age and beyond. Respondents from the Philippines generally followed a similar pattern with the 18 to 29 and 30 to 39 year olds ranking *obedience* as moderately important and then it became unimportant at 40+ years of age. This pattern was not followed for the remaining nations as it was unimportant for all UK, Colombian, Japanese and Korean generations.

Generational pattern five encompassed *an exciting life* and *pleasure*, which Rokeach suggested were two hedonistic values that started out moderately important in adolescence, became unimportant at age 20 and remained so for all generations (Rokeach, 1973). Our research suggests that this pattern was generally followed for the US, UK, and Icelandic samples for the value *an exciting life*, beginning as important and becoming less important through the generations. For the Colombians, *an exciting life* was unimportant for all the generations; for the Japanese it was unimportant for the 18 to 29 year olds, moved to 9 in importance for the 30 to 39 year olds and then became unimportant once again for the 40+ year olds. For the respondents from the Philippines, an exciting life was unimportant for the 18 to 39 year olds and then became slightly important for the 40+ year olds. For the value *pleasure*, our research implies that it followed Rokeach's pattern for the US and Philippines only, as it was unimportant for all US and Philippine generations. It did not follow this pattern for the Japanese, Icelandic's, Colombians, UK and Korean respondents, as it was important for all the generations. Most significant was for the 40+ year old respondents from Korea and Iceland who ranked *pleasure* in their top five values of importance.

Generational pattern six included *self-respect*, *ambitious* and *broadminded*, which Rokeach told us were self-realization values. The values are relatively unimportant for 11 year olds, increased in importance through late adolescence and the college years, and then leveled off and continued to remain important (Rokeach, 1973). Our research study notes that this pattern was generally followed for all generations for the values *self-respect* and *broadminded*. All were ranked as important across the generations and nations. On the other hand, the pattern was followed for the value *ambitious* only for the

US, Colombia and Philippines. In the UK and Korea, *ambitious* started out as important for the 18 to 29 year olds, became unimportant for the 30 to 39 year olds, and then became important for the 40+ year olds. For Iceland, *ambitious* was important for the 18 to 29 year olds, became most important for the 30 to 39 year olds, and then became unimportant for the 40+ year olds. Finally, *ambitious* was unimportant for all Japanese generations.

Generational patterns seven encompassed the value *loving*. Rokeach suggested that the *loving* value followed a pattern of relative importance in adolescence, and slowly became less and less important until it was ranked as unimportant by respondents over the age of 70. Our study was similar to Murphy, Gordon and Anderson's (2004) for the US, UK, Iceland, Japan, Korea and the Philippines, with all generations ranking it as important, and it remained important or became more important over time. Colombia, on the other hand, ranked *loving* as unimportant and it increased in unimportance over time.

Generational patterns eight encompassed the value *mature love*. Rokeach suggested it followed a pattern of relative importance in adolescence, and slowly became less and less important until respondents over the age of 70 ranked it unimportant. This study was similar to Murphy, Gordon and Anderson's (2004) finding that the value was important and stayed important over time, for the US, UK, Iceland, Japan, Korea, and Colombia, but not for the Philippines. The Philippines generations ranked it as unimportant for the 18 to 29 year olds, slightly important for the 30 to 39 year olds, and it once again became unimportant for the 40+ year olds.

Generational pattern nine encompassed a world at peace, family security and capable, which Rokeach suggested showed a sharp decrease in importance in late adolescence and during the college years, had an equally sharp increase in importance in later years, and leveled off in importance after age 40. In our study, a world at peace did not follow this pattern across the cultures and generations. For the UK, Iceland, and Philippines, a world at peace was slightly important for the 18 to 29 year olds, became less important or unimportant for the 30 to 39 year olds, and then became important or more important for the 40+ year olds. For the US, a world at peace was important for the 18 to 29 years olds and then became unimportant. For the Colombians it was slightly important for the 18 to 29 year olds, became much more important for the 30 to 39 year olds and then became unimportant for the 40+ year olds. For the Koreans it was unimportant across the generations. For family security, the US respondents followed this pattern because the 18 to 29 year olds ranked it as an important, then it moved to number one in importance at 30 and remained the most important value. For all other generations it was in the top five of importance and remained there across the generations. Capable did not follow this generational pattern as it was ranked important across the generations for the US, Iceland and Colombia. For respondents from the UK it was important, became less important, and then moved to one of the top five values of importance for the 40+ year olds. For the Japanese it was slightly important for the 18 to 29 year olds, moved to unimportant for the 30 to 39 year olds and then became slightly important again. Similarly, the Koreans and Filipinos ranked it as slightly important for the 18 to 29 year olds, it moved to unimportant for the 30 to 39 year olds, and then it became one of the top five values of importance for the Korean 40+ year olds, and simply important for the Filipino 40+ year olds.

Generational pattern ten encompassed a comfortable life, clean, forgiving and helpful, which Rokeach suggested were considered socioeconomic indicators of a society. These values generally started out around eight in importance for 10 year olds, decreased in importance to around ten for 17 year olds, and slowly increased to around eight in importance for the 40 year olds. Our study had mixed results. The data demonstrate that this pattern did exist for the value a comfortable life for the US, UK, Colombians, Japanese, Koreans, and respondents from the Philippines. The pattern did not exist for the Icelandic respondents because a comfortable life was important for the 18 to 29 year olds, unimportant for the 30 to 39 year olds and then became important for the 40+ year olds. Generational pattern ten for the value clean, which means having enough money to live, was not followed by the three most Western industrialized countries, the US, UK and Iceland with all three nations ranking clean unimportant. This seems to reveal that the Western industrialized countries felt their monetary needs were satisfied. On the other hand, the Colombians ranked clean as important for the 18 to 29 year olds, and then it became one of their top five values of importance. The Japanese and Koreans 18 to 29 year olds ranked clean as

unimportant, but it became important for the 30-39 and 40+ year olds, indicating the older generations were concerned with having adequate funds. Finally, the respondents from the Philippines ranked *clean* as important for the 18 to 39 year olds, and then it became unimportant for the 40+ year olds, denoting that the younger Filipinos felt they needed more money to live, while the 40+ year olds did not. Generational pattern ten for the value *forgiving* was only followed by the Philippines. The US and Icelandic respondents ranked forgiving as important for 18 to 29 year olds, it became unimportant for 30 to 39, and then it became important for 40+ year olds. In contrast, the UK and Korean respondents ranked it as unimportant for 18 to 29 year olds, and then it became important for 30+ year olds. For the Colombians it was important and for the Filipinos it was unimportant, across the generations. Finally, the Japanese 18 to 29 year olds ranked forgiving as unimportant for the 18 to 39 year olds, and then it became unimportant for the 40+ year olds.

None of the cross-cultural generations followed this pattern for generational pattern ten *helpful*. It was important for all UK and Japanese generations. *Helpful* was only important for the US 30 to 39 year olds, Icelandic 18 to 29 year olds, Colombian 40+ year olds, Korean 18 to 29 and 30 to 39 year olds, and Filipino 18 to 29 year olds.

Generational pattern eleven encompassed *equality* and *independent*, which Rokeach suggested increased in importance throughout adolescence, decreased in importance in the college years, became more important in the 30s, decreased in importance for the 40 year olds, and then became more important for the 50 year olds and beyond. The present study suggests that this pattern was not followed for any of the generations. For example, *equality* was unimportant for the US 18 to 29 and 30 to 39 year olds and then became important for the 40+ year olds. On the other hand, equality was unimportant for the Colombian generations, for the UK and Iceland 18 to 29 year olds, and for the Japanese 30 to 39 year olds. *Equality* was important for the Korean and Philippines respondents across all three generations.

Murphy, Gordon and Anderson's (2004) study between the Japanese and US suggested that the value *independent*, a highly individualistic value, was one of the top five values of importance for the United States 18 to 25 year olds, and become eighth in importance for the 40+ year olds. On the other hand, *independent* was unimportant for all Japanese generations except for the 31 to 39 year olds who ranked it as important at eleven. This specified that although individualism is a Western value of importance: it had been adopted into the collectivist culture by the Japanese 31 to 39 year olds. In our study, *independent* followed this pattern for Iceland and Colombia, with the value important and then decreasing slightly in importance at 40 year of age. *Independent* was unimportant for the US 18 to 29, Korean 18 to 29 and 30 to 39 year olds and Filipino 18 to 29 year olds. The value *independent* was one of the top five values of importance for the US 30 to 39 and 40+ year olds, Icelandic 30 to 39 year olds, Colombian 18 to 29 and 30 to 39 year olds, and Japanese 40+ year olds.

Generational pattern twelve was for *salvation*, which Rokeach suggested was unimportant for adolescents and college students and then increased in importance for 30 year olds and beyond. In our study, *salvation* followed this pattern for the US generations, as it was unimportant for the 18 to 29 year olds and became important for the 30 to 39 year olds, and stayed slightly important for the 40+ year olds. It also followed this pattern for the Koreans as it was unimportant for the 18 to 29 year olds, moved to importance for the 30 to 39 year olds, and remained important for the 40+ year olds. An interesting finding was that *salvation* was most important for all three generations of the Philippines. *Salvation* was unimportant for all three generations from Japan, UK, Iceland, and Colombia.

Generational pattern thirteen was for *national security* which Rokeach stated was ranked unimportant for the younger generations in the 1970s and then slowly increased in importance for each generation until it was in the top five values of importance for the individuals 70 years of age and older. None of the generations followed this pattern in our study. *National security* was unimportant for all three generations of Japanese, Korean, Filipino, and Icelandic respondents. *National security* was important for all three generations of US and Colombian respondents; it was only important for the UK 40+ year olds. The researchers suspect that the importance place on national security has increased since the September 11, 2001 terrorist attack, explaining the change in this value structure for US respondents (Murphy, Gordon and Mullen, 2004).

Generational pattern fourteen encompassed freedom, happiness/health, social recognition, courageous, honest and self-controlled. Rokeach's research showed that the values honest and freedom were in the top seven of importance for all generations in the 1970s. In our study, this pattern was followed for the value freedom for the US, Iceland, and Japan and for the UK 30 to 39 and 40+ year olds; Korean 18 to 29 and 30 to 39 year olds, and Philippines 18 to 29 year olds. This pattern was also followed for health (all generations except for the 18 to 29 year old Colombian generation); honest (all generations except for U.S 18 to 29 year olds). This pattern was not followed for the value social recognition, because only the US 18 to 29 year olds ranked social recognition as important; for the remaining nations and generations it was unimportant. This pattern was followed for the value courage for the Japanese and Koreans, whose generations ranked it in the top seven of importance. Courage was only in the top seven of importance for the UK 30 to 39 year olds, Colombian 18 to 29 and 40+ year olds. Finally, for the value self-controlled this pattern was only followed for the Korean generations. It was not followed by the remaining generations and cultures because it was only most important for the US 18 to 29, Icelandic 30 to 39, Japanese 18 to 29 and 30 to 39, and Philippines 18 to 29 and 40+ year olds.

DICUSSION AND CONCLUSIONS

Our research results showed that among the seven nations, there were more cross-cultural generational similarities than cross-cultural differences in values. For example, for cross-cultural similarities, 4 values (family security, health, honest and responsible) were ranked in the top five of most important values across all cultures; 8 values (a comfortable life, a sense of accomplishment, freedom, true friendship, wisdom, broadminded, capable and self-controlled) were ranked from six to eight in importance, or were simply important across the cultures, for a grand total of 12 values that were ranked most important or important across the cultures. This compares well to 40+ year olds, who had 16 values that were ranked in common; 13 values were ranked similarly for the 18 to 29 year olds and 12 values that were ranked similarly for the 30 to 39 year olds. The 40+ year olds possessed 4 values that were ranked one through five (most important) across the cultures (family security, health, honest and responsible), 9 values that were ranked six through thirteen (important) across the cultures (a comfortable life, a sense of accomplishment, inner harmony, self-respect, wisdom, broadminded, capable, and independent), and 3 values that were ranked fourteen to eighteen or unimportant across the cultures (a world of beauty, social recognition, and obedient), for a total of 16 values that were ranked similarly across the cultures. This is an important finding and one of the first in the literature to identify values that are similarly ranked across cross-cultural generations in Western, Eastern, South American and European cultures.

These research results are important for practitioners, managers and marketers to understand because the results showed the importance of studying values below the cross-cultural level of analysis, down to the generational level of analysis. For instance, if an advertising or marketing manager only used the cross-cultural results for the Japanese as a group, they might develop an advertising campaign for the Japanese culture as a whole with an emphasis on the value a sense of accomplishment (making a lasting contribution in life), which was one of the top five values of importance for the Japanese as a culture. The marketing campaign aimed at young adults might fail because, although the value a sense of accomplishment was a most important value for the Japanese as a cross-cultural group, our research study of generational differences indicates that it was only a most important value for the 18 to 29 and 40+ year olds. Similarly, a comfortable life was one of the top five values of importance for the Colombians, but when brought to the generational level, it was only most important for the 18 to 29 and 40+ year olds. For Koreans, inner harmony was one of the top five values of importance for their culture, but it was only a top five values of importance for the 18 to 29 and 30 to 39 year olds. For the US, self-respect was in the top five values of importance, but was only in the top five for the 30 to 39 and 40+ year olds. Self-respect was ranked in the top five of importance for respondents from Iceland, yet it was ranked only as important for all three generations. Respondents from the Philippines ranked *self-respect* as one of their top five values of importance, but it was only most important for the 18 to 29 and 30 to 39 year olds.

The same holds true for values that were ranked as important for one culture or another, but in actuality were ranked most important by only one of the generations from that country. For example, *a comfortable life* (having prosperity) was only ranked important at the cross-cultural level of analysis for respondents from the Philippines, Korea, Japan, and UK, yet at the cross-cultural generational level of analysis it was one of the top five values of importance for the 18 to 29 year olds from each culture.

These findings are important for practitioners, managers and marketers because they enable marketing managers to target the value similarities and generational similarities in each culture in order to minutely target markets down to the cross-cultural generational level of analysis, producing economy in advertising costs. For instance, Rose (1997) stated, "if similar segments of consumers can be identified, economies of scales in advertising production can be realized" (397). The results of this research study showed that advertisers could target their marketing campaigns using the values *health* and *family security* (for all cultures and generations but the US 18 to 29 year olds); *honesty* (all cultures and generations except the 18 to 29 US and Colombians), and *responsibility* (for all cultures and generations except for US 18 to 29 year olds), because these values were in the top five of importance across at least one of the generations.

In order to compare generations to cultures, we highlighted all values that were important and/or most important or not important across each generation or culture. A total of thirteen were equally valued (ranked most important as one through five, ranked important as six to thirteen, or ranked unimportant as fourteen to eighteen) across the cultures (terminal values: a comfortable life, a sense of accomplishment, family security, freedom, health, true friendship, wisdom; instrumental values: broadminded, capable, honest, obedient, responsible and self-controlled) and between thirteen and fourteen across the generations. We then compared these results for all cultures and generations, highlighting those that matched both cultures and generations. When comparing all three generations to the cultures, we found that the same values that were most important, important or unimportant across the cultures were also most important, important or unimportant for at least one generation. In addition, the terminal values a world of beauty, inner harmony, mature love, self-respect, and social recognition and instrumental values capable, independent and intellectual were important, most important or unimportant for at least one generation, but were not equally important across the cultures. Eight more values were equally important for at least one generation that were not when explored for national culture alone.

This illustrates how important it is to go beneath culture to explore the generations. A total of eight more values were identified as important between the generations that were not identified as equally important based on culture alone. These results are important for practitioners and managers to understand. For example, many managers believe they can motivate their employees through pay raises and benefits. When we explored this concept across the generations using the values *a comfortable life*, which equates to money and benefits as compared to *family security*, which means taking care of their families and loved one, we found that a comfortable life was less important than family security across all the generational categories except for the US 18 to 29 year olds. This demonstrates that money is a more significant motivator for US 18 to 29 year olds, while taking care of their families is more important for all the other generation groups. In order to motivate these employees managers could offer time off, not more money or benefits. If managers do not understand these value similarities and differences they could be using ineffective incentive systems.

When we explored the data for other differences, we found that *equality*, or being treated equally on the job was not important for the Japanese, Korean and Philippines 18 to 29 year olds; not important for the US, Japanese, and Colombian 30 to 39 year olds, and US, UK, and Korean 40+ year olds, showing that practitioners and managers must understand generational difference in order to provide respondents with the required amount of focused treatment they need on the job. Another interesting finding was that the value *mature love*, which means sexual and spiritual intimacy, was important for all generation groups except for the 18 to 29 and 40+ year olds from the Philippines. Another important finding was that *an exciting life* or having a stimulating and active life was important for all generational groups except for the Japanese, Colombian and Philippines 18 to 29 year olds, Colombian and Philippines' 30 to 39 year olds, and UK, Icelandic, Japanese and Colombian 40+ year olds. This points out that advertisements that

show excitement would not influence these groups, while they would influence the groups that found excitement important. These results highlight the importance of exploring the values and most important goals across the generations and cultures.

Further, researchers must use working adults instead of college students as their research populations because our research study confirms that working adults have different value structures than college students and those differences could significantly impact the motivation of employees and marketing campaigns. Finally, practitioners and researchers must understand that they can reach beneath the attitude and behavioral levels to explore the basic underlying assumptions or root causes of attitudes and behaviors--value structures.

Recommendations for Further Research and Limitations

The research results strongly suggest that societal values have changed since Rokeach's research found generational patterns in the 1970s. As previously discussed, the study only found partial support for the generational patterns he listed. Further research needs to explore the new generational patterns that exist in the United States and in other nations. This study suggests that when values are explored across the generations, more similarities exist than when exploring cross-cultural values alone.

Much larger studies in each nation need to verify the results found in this study. Generational research needs to take place in other nations as well in order to identify the values that are important for all generations worldwide. Longitudinal studies should also be conducted cross-culturally, and with a larger variety of populations. Most of the populations we used were from larger cities. Do these same value structures apply from individuals raised in smaller towns? Only further research will confirm the findings in our study.

Studies are needed to explore value, attitude and leadership style similarities and differences between employees, managers, marketers, and senior managers in all of these nations. Researchers need to explore the impact of socialization by exploring value similarities and differences between respondents born in one nation, but living in another nation. For example, the value structures of Colombians born in the US, but raised in Colombia, could be compared to Colombians born in Colombia and raised in the US. What about Japanese born in Japan, but raised in the US, and Japanese sojourners living in the US? This research could be conducted for each nation in question in order to explore the impact of socialization. Studies of gender roles and cross-cultural studies of entrepreneurs in each country are also needed.

Murphy, Mullen and Anderson (2004) reported that the values of working adults in the US changed immediately after the terrorist attack on the World Trade Center in New York City. Did the value structures of others change after the terrorist attack? Further research needs to explore whether the same values changed for all segments of the US population, and for other nations throughout the world. For instance, in France, Muslim teenagers went on a one-week rampage, burning and looting and demanding equal treatment from the French government. Was this behavior as result of 9/11 and other terrorist incidents around the world?

In addition, many of the research studies reviewed in this literature review did not report standardized results that could be used by future researchers. Meglino's (1998) review of the value research literature informed the research community that this was a problem in the 1990s. The problem still continues today, as many researchers using the RVS do not report the terminal and instrumental value means, rankings, and top and bottom five values of importance that would allow researchers to make comparisons to their studies in order to add more meaning to their research results.

REFERENCES

Adler, N. 1983. A typology of management studies involving culture. *Journal of International Business Studies*, 14: 29-47.

Allport, G. W., Vernon, P. E., & Lindzey, G. 1960. *Study of values* (3rd ed.). Boston: Boston University Press.

Ayguen, A. K., & Imamoglu, E. O. 2002. Value domains of Turkish adults and university students. *Journal of Social Psychology*, 142(3): 333-351.

Becker, B. W., & Connor, P. E. 1982. The influence of personal values on attitude and store choice behavior. In B. J. Walker, et al. (Eds.), *Educators' proceedings*: 21-24. Chicago: American Marketing Association.

Bond, M. H. 1994. Finding universal dimensions of individual variation in multicultural studies of values: The Rokeach and Chinese value surveys. In B. Apuka (Ed.), *New research on moral development: Moral development a compendium*: 385-391. NY: Garland Publishing.

Bond, M. H. 1996. Chinese values. In M. Bond (Ed.), *The handbook of Chinese psychology*: 208-226. New York, NY: Oxford University Press.

Chang, C. M. 1997. A three generation assessment of strengths and needs of African

-American, Caucasian, Hispanic and Chinese grand-parents. *Dissertation abstracts -International*, *Section-A: Humanities and Social Sciences*, 57(7-A): 2862.

Connor, P., Becker, R., Kakuyama, T., & Moore, L. 1993. A cross-national comparative study of managerial values: United States, Canada and Japan. In S. B.Prasad and R. B. Peterson, *Advances in international comparative management*, Volume 8. Greenwich, CT: Jai Press, Inc.

DeMooij, M. 1998. *Global marketing and advertising: Understanding cultural paradoxes*. Thousand Oaks, CA: Sage Publications.

DeMooij, M. 2004. Consumer behavior and culture: Consequences for global marketing and advertising. Thousand Oaks, CA: Sage Publications.

England, G. W. 1974. *The manager and the man*. University of Minnesota Press.

Eskin, M. 2003. Self-reported assertiveness in Swedish and Turkish adolescents: A

cross-cultural comparison. Scandinavian Journal of Psychology, 44(1): 7-12.

Feather, N. T. 1984. Protestant ethic, conservatism and values. *Journal of Personality and Social Psychology*, 46(5): 1132-1141.

Feather, N. T. 1988. Value systems across cultures: Australia and China. *International Journal of Psychology*, 21(6): 697-715.

Grunert, S. C. & Scherhorn, G. 1990. Consumer values in West Germany: Underlying dimensions and cross-cultural comparison with North America. *Journal of Business Research*, 20: 97-107.

Hofstede, G. 1980. *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage Publications.

Hofstede, G., & Bond, M. 1984. Hofstede's culture dimensions: An independent validation using Rokeach's Value Survey. *Journal of Cross-cultural Psychology*, 15(4): 417-433.

Imamoglu, E. O., & Ayguen, Z. K. 1999. Value preferences from the 1970s to 1990s: Cohort, generation and gender differences at a Turkish university. *Turk-Psikoloji-Dergisi*, 14(44): 1-22.

Kahle, L. R. 1984. Attitudes and social adaptation: A person-situation interaction approach. *International Series in Experimental Social Psychology*, Volume 8, Pergamon Press.

Kluckhohn, C. 1951. The study of values. In D. N. Barrett (Ed.), *Values in transition*: 17-45. Notre Dame, IN: University of Notre Dame Press.

Kluckhohn, C. M. 1962. Values and value-orientations in the theory of action. In T. Parsons and E. A. Shils (Eds.), *Toward a general theory of action*: 388-433. NY: Harper and Row.

Lee, K. 1991. The problem of appropriateness of the Rokeach Value Survey in Korea. **International Journal** of **Psychology**, 26(3): 299-310.

Meglino, B. M. 1998. Individual values in organizations: Concepts, controversies and research. *Journal of Management*, May-June 1998. Available at http://www.findarticles.com (Accessed December 22, 2002).

Murphy, E. F., Jr., & Anderson, T. (2003). A longitudinal study exploring value changes during the cultural assimilation of Japanese student pilot sojourners in the United States. *International Journal of Value-Based Management*, 16(2): 111-129.

Murphy, E. F. Jr., Gordon, J. D., & Anderson, T. 2004. An examination of cross-cultural age or generation-based value differences between the United States and Japanese. *Journal of Applied Management and Entrepreneurship*, 9(1): 21-48. Nova SE University.

Murphy, E., Gordon, J., & Mullen, A. 2004. A preliminary study exploring the value changes taking place in the US since the September 11, 2001terrorist attack on the World Trade Center in

New York. Journal of Business Ethics, 50 (1): 81-96.

Obot, I. S. 1988. Value systems and cross-cultural contact: The effect of perceived similarity and stability on social evaluations. *International Journal of Intercultural Relations*, 12: 363-379.

Ralston, R. A., Egri, C. P., Stewart, S., Terpstra, R. H. & Yu, K. (1999). Doing business in the 21st century with the new generation of Chinese managers: A study of generational shifts in work values in China. *Journal of International Business Studies*, 30(2): 515-433.

Reynolds, T., & Olson, J. 2001. *Understanding consumer decision making: The means-end approach to marketing and advertising strategy*. Mahwah, NJ: Lawrence Erlbaum Assocs.

Rokeach, M. 1973. The nature of human values. New York: Free Press.

Rokeach, M. 1979. *Understanding human values: Individual and societal*. New York: Free Press.

Rokeach, M. 1983. Rokeach value survey: Form G. Palo Alto, CA: Consulting Psychologists Press.

Rose, G. M. 1997. Cross-cultural values research: Implications for international advertising. In

Ruiz-Gutierrez, J. (2005). Change and organizational demography: The case of 30 Colombian companies. *Paper presented at the annual meeting of the Academy of Management, Honolulu*.

Schwartz, S. H., & Bilsky, W. 1987. Toward a universal psychological structure of human values. *Journal of Personality and Social Psychology*, 53: 550-562.

Schwartz, S. H., & Bilsky, W. 1990. Toward a theory of the universal content and structure of values: Extensions and cross-cultural replications. *Journal of Personality and Social Psychology*, 58: 878-891.

Sikula, A. F. 1973. The values and value systems of governmental executives. *Public Personnel Management*, January-February: 16-22.

Yu, H. C. & Miller, P. 2003. The generation gap and cultural influence: A Taiwan empirical investigation. *Cross-Cultural Management*, 10(3): 23-41.

Weinberg, S. J. 1986. Decision making style of Japanese and American managers. *Asian American Psychological Association Journal*: 62-64.

Williams, R. M., Jr. 1979. Change and stability in values and value systems: A sociological perspective. In M. Rokeach (Ed.), *Understanding human values: Individual and societal*. New York: Free Press.

MICRO AND MACRO LEVEL STRATEGIC REPOSITIONING FOR SOUTHEAST ASIAN FIRMS IN AN ERA OF INTRA-REGIONAL ECONOMIC TRANSFORMATION

Charles A. Rarick

Andreas School of Business, Barry University, USA Email: crarick@mail.barry.edu

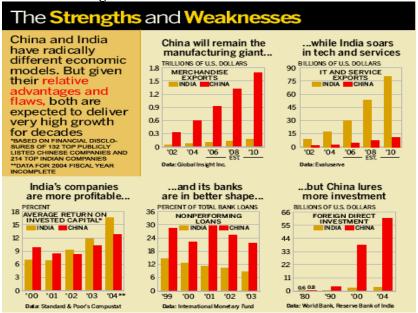
ABSTRACT

India and China have experienced astonishing economic growth in recent years. Their continued accession into world-class competitor status has been seen as a threat to the economies of Southeast Asia. This paper explores that emerging threat and offers advice to firms operating within Southeast Asia, and their governments, on how to compete effectively with these emerging economic superpowers. Recommended strategies are based in part on the application of Porter's national competitive advantage theory.

INTRODUCTION

In recent years a lot of attention has been directed towards the emerging economies of the world. In particular, special mention has been made of the so-called "BRIC" countries, referring to Brazil, Russia, India, and China. In reality it now appears that India and China are by far the major players in this club of emerging countries. India and China are poised to change the economic landscape of the 21st Century and will significantly alter the economic dynamics of Southeast Asian nations. While China and India each have certain advantages and disadvantages (Figure 1), their combined strength is perceived as a challenge to firms operating within Southeast Asia. It appears that China will continue to dominate in manufacturing capacity, and India will excel in information technology and services (Lall & Albaladejo, 2004; Saran & Guo, 2005). With China taking labor intensive manufacturing, and India capturing the upper-end of the value chain, and both attracting increasing levels of foreign direct investment (FDI), Southeast Asian countries fear that they may be left behind in global development. In addition, on the political front, Southeast Asian countries have seen less interest from the United States, as U.S. foreign policy has shifted in a post-September 11th environment (Francis, 2006). This decreasing interest of the world's largest economy represents in the minds of some as an additional threat facing Southeast Asia. While such concerns are legitimate, a better approach to this challenge is to view the changing economic conditions as not only a threat, but also as an opportunity. As Kenichi Ohmae (2002), noted Japanese strategist tells us: "China is a threat, a customer, and an opportunity." The same logic applies to India as well. The new strategic focus should be on questions such as how do we position our businesses to sell, buy, and produce in these two emerging economies, and how do we differentiate ourselves strategically to capitalize on their economic growth. India and China, the emerging giants of the global economy, will force ASEAN firms and their governments to reposition themselves in order to remain competitive.

Figure 1
Strengths and Weaknesses of India and China



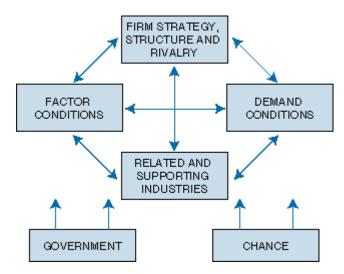
Source: Business Week. India and China: The Challenges, 2005.

National Advantage

Investors typically possess three motives for investing in other countries: seeking markets, seeking efficiency, or seeking resources (Dunning, 2002). A recent article in *Business Week* magazine (2005) pointed out the importance of the third element in this motive triad when it stated that "natural resources are driving the global economy as never before." China's growing demand for resources has the potential to offer Southeast Asian countries a number of opportunities in the resource seeking aspect of foreign direct investment. In particular, ASEAN countries offer opportunities in mining, energy, agriculture, and aquatic resources. In addition, the ASEAN member states offer to potential investors counties rich in human resources. It is this resource that ultimately offers the greatest potential for economic growth in Southeast Asia.

Using the national competitive advantage theory of Michael Porter (1990), ASEAN firms can improve their competitiveness by repositioning themselves strategically by seeking to differentiate themselves from low-cost producers. In addition, they must integrate their manufacturing processes and upgrading their human resource base. The four year study by Porter and his associates into the competitive advantage of a nation determined that the competitiveness of individual firms within a country determine the country's overall competitive advantage. A country's ability to stay competitive in a dynamic global environment is determined by the ability of its domestic firms to innovate and change. Micro-level strategic choices are the greatest determinants of a nation's competitive position and economic well-being. At the same time, public policy (and chance) plays a role as well in facilitating this competitive process. According to Porter's model (Figure 2), there are four determinants of national competitive advantage: Firm strategy, structure and rivalry; demand conditions; factor conditions; related and supporting industries.

Figure 2
The Diamond Model of National Advantage



Source: The Competitive Advantage of Nations, 1990

The competitiveness of domestic firms is determined by the effectiveness of how those firms are structured and managed. The ability of a nation to be competitive is greatly influenced by the strategic abilities of the individual firms operating within that nation. Strong domestic rivalry also produces strong international competitors. Strong domestic demand increases the ability of local firms to develop their markets, and having demanding customers at home also produces firms that can compete internationally. While natural resources may help a country in terms of economic development, they are not sufficient for long-term prosperity. The development of "homegrown" or human resources is far more important. Being competitive as a nation requires the development of industry clusters, or supplier clusters that supplement the abilities of firms operating within those clusters.

Cluster Development

In the "old economy," international trade mainly consisted of the simple one-way exchanges of completed goods. Entire products were completed in one country and sold to another. In the new economy of the 21st Century, international trade is more about integrated production chains and regional production networks. For example, computer monitors are assembled in Vietnam, after the cathode tube is manufactured in Singapore, and the wiring and electrical components are produced in Malaysia. The world economy is moving past the centralized production scheme in which goods are centrally manufactured and distributed, and moving towards a production scheme based on regional specialization. This new model of manufacturing is based on the theory that the comparative advantage of one country can be complemented by the comparative advantages of other countries. In the past, we tended to view comparative advantage from the standpoint of finished products. Today we can see the concept of comparative advantage applied to the vertical integrated production network of one company. The old model of centralized production is giving way to regional production networks. Firms operating within ASEAN need to specialize their production capabilities and develop inter-country networks in order to compete effectively with the low-cost generic manufacturers operating in China and India. The old model of the past (Quadrant 2 of Figure 3), where a country produces an entire product for export to another country is giving way to regional production or regional specialization (Quadrants 1 & 3 of Figure 3). No country can be the best at everything. Natural resources and abilities, and other competitive advantages force a degree of specialization for all countries.

Figure 3
Production Integration

Country A

Country D

Country C

Country D

Country D

Country D

Regional Specialization

Source: The Geography of the World Economy (Know & Agnew)

Firms operating within ASEAN need to focus their competitive abilities and develop greater regional production capabilities with firms in other member states in order to remain competitive. Cluster development can cut across national borders. As economic integration becomes a greater force in the global economy, political borders are becoming less relevant (Dunning 2002). The ability to be part of a global supply chain, irregardless of national identity is more important than ever for Southeast Asian firms.

Strategic Choices

The competitive position of countries operating in this global supply chain network are determined by their efficiency and cost structures, their quality of production, their ability to be flexible, and the perception of their dependability and innovative character. In addition, the economic policies of host countries can be an advantage or disadvantage to companies seeking to integrate into these production networks. Southeast Asian firms must continue to build their productive capabilities, focusing on quality, efficiency, and flexibility.

On the micro-level, the choice of appropriate strategic choice is important. With essentially three strategy choices (Porter, 1980): cost leadership; focus; and differentiation, the choice of strategy may appear simple. Each strategic choice requires essential characteristics and skills, and the correct choice for any given cluster or firm operating within the cluster may not be easily determined. *Cost leadership* requires an organizational culture that focuses on efficiency and cost consciousness. Economies of scale can also be helpful, and maybe even essential in succeeding with this strategic choice. A strategy of differentiation requires a strong emphasis on marketing and branding activities, and often requires high levels of customer service and quality. The focus strategic option requires limitations in the choice of product/market and a very strong orientation to the needs of these select markets. With the economic emergence of India and China with their low labor costs, many businesses in Southeast Asia may want to consider a strategic choice that doesn't involve competing on the basis of price. Attempts to match the "China price" will drive down wage rates and may in the end be futile. Selective differentiation may be the best option for many of these firms.

As Friedman (2005) tells us, the playing field is becoming more level, or flat, and "you don't want to be selling vanilla in a flat world." While natural resources can be part of the solution to the rise of China and India, ASEAN member states should also position themselves to be attractive for efficiency seeking foreign direct investment. As we have seen in Vietnam, size isn't a limiting factor. Although the

country is relatively small, it has managed to attract impressive amounts of foreign investment due to its efficiency orientation and doi moi economic reforms. The combined power of the ten member ASEAN states can increase their strategic position and capitalize on the comparative advantages and economic efficiencies of each country. More economic integration and faster implementation of planned integration is recommended. Creative thinking and innovation are needed to compete in a flat world. The challenges facing the nations of Southeast Asia are significant. The essential questions are how to cope with India and China's size and growth, and how to benefit from globalization and regional integration. Macroeconomic policies that encourage economic freedom, economic integration, and free trade are needed. The targeting of industries with high domestic value added outputs, and the selection of niches to avoid direct competition are preferred for firms operating within ASEAN.

Role of Government

Compared to the European Union, ASEAN/AFTA has less trade liberalization and more trade exemptions, less financial integration, less macroeconomic policy coordination, and less will for political unification (Lim, 2006). An economic union isn't necessarily proposed for all regions of the world, however, economic integration in which fragmented markets remain fragmented isn't very beneficial. A recent McKinsey & Company study (Schwarz & Villinger, 2004) concluded that ASEAN was still operating as a collection of fragmented markets and denying itself the benefits of operating as one large market. The study remarked that "ASEAN has the intrinsic to be competitive on a global scale." Because of market size, natural resources, a skilled and educated labor force, and market growth, ASEAN could be a much more significant force in the global economy. The report concluded that ASEAN suffers from the following problems: alignment of external trade barriers; cross-border investment restrictions; lack of regional collaboration and assistance; and too many non-tariff trade barriers. The Center for Strategic and International Studies (CSIS) also concluded that AFTA was not as efficient as it could be due to implementation issues (Soesastro, 2005). The organization found that "Although a large percentage of intra-ASEAN trade is eligible for low or zero tariffs, only a small percentage utilizes the lower tariff AFTA preferential rules." Due to a lack of private sector awareness and a lack of clarity concerning rules of origin, problems with customs procedure, and other non-tariff barriers, the benefits of free trade are not being maximized within ASEAN.

CONCLUSIONS

China and India are emerging as the major players in the economy of Asia, and beyond. Many in Southeast Asia worry that this economic growth will come at their expense. This isn't necessarily the case. In a 2005 Asian Development Bank study it was found that China's new ability to attract FDI had a positive effect on the flow of foreign investment into Southeast Asia. One reason for this spill-over effect is the concept of a "China plus One" strategy in which investors seek to invest in China and other countries in the region in order to reduce political risk. Many Southeast Asian countries can be the beneficiaries of this risk diversification strategy. Rather than viewing the emergence of China and India as threats, firms operating in Southeast Asia should seek to capitalize on their economic emergence. Doing so will require a different strategic orientation and a facilitating role for government. Porter's advice for ASEAN member states would be: improving education at all levels, including managerial and entrepreneurial education; capitalizing on the natural and human resources of the country; emphasizing quality manufacturing; and building important cluster industries. Macro-level policies that promote economic freedom, yet at the same time encourage economic development in key clusters are also essential.

The concept of comparative advantage is just as relevant today as it was when proposed by David Ricardo almost two hundred years ago. Greater economic integration allows for greater benefits from comparative advantage. Each country within ASEAN has certain skills and resources. The comparative advantages of one country are complemented by the comparative advantages of other countries. This process realizes it full benefit when barriers to trade are removed and economic freedom is allowed. Now, more than ever, ASEAN must respond to the Bangkok Declaration of "mutual interests and common

problems among countries in Southeast Asia." The solution to the economic challenges facing member countries is to view these challenges as an opportunity; an opportunity to change their strategic position. The solution lies in an economically liberated and globally connected ASEAN. A region in which individual firms work collectively to capitalize on their own individual competitive advantages by cooperating with one another and differentiating themselves from India and China.

REFERENCES

Business Week. 2005. China and India: The challenges, August 22.

Dunning, J. 2002. *Theories and paradigms of international business activity: The selected readings of John H. Dunning*. Cheltenham: Edward Elgar Publishing.

Francis, N. 2006. For an East Asian Union. *Harvard International Review*, 28 (3): 76-77.

Friedman, T. 2005. *The world is flat: A brief history of the twenty-first century*. New York: Farrar, Straus, and Giroux.

Knox. P. and J. Agnew. 1998. *The history of the world economy*. London: Arnold.

Lall, S. and M. Albaladejo. 2004. China's competitive performance: A threat to East Asian manufactured exports? *World Development*, (32): 1441-1466.

Lim, R. 2006. Creating a Globally Connected ASEAN Community. *Finance and Development*, 43 (2). Ohmae, K. 2002. *Asian Political News*, April 8.

Porter, M. 1980. Competitive strategy. New York: The Free Press.

Porter, M. 1990. *The competitive advantage of nations*. New York: The Free Press.

Saran, A. and C. Guo. 2005. Competing in the global marketplace: The case of India and China. *Business Horizons*, (48), 135-142.

Schwarz, A., and R. Villinger. 2004. Integrating Southeast Asia's Economies. *The McKinsey Quarterly*. (1).

Soesastro, H. 2005. Accelerating ASEAN Economic Integration: Moving Beyond AFTA. *CSIS Working Paper Series*, March.

A NETWORK-BASED CONCEPTUAL FRAMEWORK FOR VALUE ADDED MANAGEMENT FOR IMPLEMENTING A MULTI-LOCAL HYBRID COMPETITIVE STRATEGY

Herwig Winkler Bernd Kaluza

Alpen-Adria-Universität Klagenfurt, Austria E-Mail: herwig.winkler@uni-klu.ac.at

ABSTRACT

Today for many companies it becomes more and more important to globalize their business activities to stay competitive. Therefore, we suggest pursuing a multi-local hybrid competitive strategy. A multi-local hybrid competitive strategy combines global standardization and regional differentiation of business activities and products. This leads to an outstanding competition position and enables relatively to competitors lower costs and higher revenues. For realizing a multi-local hybrid competitive strategy an effective and efficient value added management is mandatory. We propose to develop a special network-based value added management in the form of an international value chain network. Based on identified problems of a literature review the concept of an international value chain network is presented to realize a multi-local hybrid strategy.

INTRODUCTION

In the mid-1980s, based on Michael Porters' generic competitive strategies, specific strategies for internationalizing business activities were discussed and elaborated (Meffert, 1989; Perlmutter & Heenan, 1986; Porter, 1985, 1989). In the center of interest stood the question of whether companies should try to standardize goods and processes or to pursue a stronger regional differentiation in order to be successful. These two traditional strategic viewpoints are less seasonable in today's business. Companies should combine global standardization and regional differentiation in order to achieve good results. In this case, when companies try to realize low costs and a high differentiation simultaneously, they pursue hybrid competitive strategies. If this is conducted by way of the strategic dislocation of business activities, we then speak about a 'multi-local hybrid competitive strategy' (MLS).

Realization of hybrid competitive strategies is a big challenge for value added management. For the successful implementation of hybrid competitive strategies we recommend realizing value added management by configuring and coordinating special networks that are based on a specific value chain. The strategic integration of relevant partners into a network along the value chain enables the coordination of strategic targets, relevant resources, and all core activities. We call such networks that are built on a value chain basis, and that consist of different partners in foreign countries, 'international value chain networks' (IVCN). By a concentration of the partners on core competencies and a smooth collaboration in all business functions such as R&D, procurement, production, distribution, as well as in planning and controlling, it is then possible to realize low production and transaction costs, as well as a high differentiation of the output.

In our contribution, we develop a network-based conceptual framework for value added management for implementing an MLS. Moreover, we firstly provide a short literature review of value added management and describe the general assumptions of MLS. Next, the concept of international value chain networks (IVCN) for implementing MLS is presented. Therefore, we analyze the structures and attributes of IVCN as well as the coherency of value added management for realizing MLS. The next portion of our contribution deals with the configuration of selective value added potentials in IVCN for the implementation of MLS. It is here that we especially demonstrate the development of structural and technological potentials in order to simultaneously achieve low costs and a high differentiation. Last but not least, it is essential to determine the planning and steering processes in IVCN to co-ordinate value added activities.

LITERATURE REVIEW

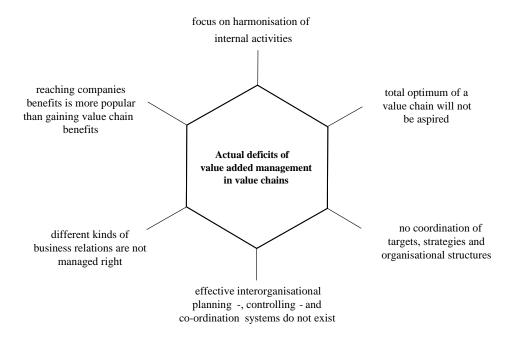
Value Added Management and Value Chain Management

The subject of value added management can be defined as the strategic and operative planning, controlling, and co-ordinating of all the relevant value added activities (Tan, 2001: 39). To realize an effective value added management it is essential to integrate important suppliers and customers of the value chain into the value added activities. (Chopra & Meindl, 2003). All the important value added processes have to be planned and realized in common by all of the companies and must be directly deduced from the end customers' requirements. Therefore, an improvement in customer orientation can be achieved as well as the alignment of demand with supply, reduction of stocks along the value chain, and furthermore, a flexible and appropriate production (Anderson & Lee, 2005). The single enterprise is no longer the center of considerations, because an integrated viewpoint of the entire value chain is applied (Christopher, 1998, Christopher & Towill, 2001).

The basic targets of value added management consist in the effective design and efficient optimization of the entire value chain. For this purpose, strategic and long-term co-operation and/or networks between the companies involved in the value added processes must be established. (Ricardo & Bardio, 2000) All of the enterprises involved must concentrate on their core competencies, and have to incorporate them in a co-operative manner with the value chain network participants. For this purpose, every single enterprise must be willing to open its boundaries to its partners. Furthermore, the co-operation is not automatically based on long-term contracts; however, trusting agreements are rather important (Christopher & Lee, 2001; Cooper et al., 1997). In order to achieve common competitive advantages, a high level of integration of the partners is imperative. The actions of integration involve, for example, the product design process, stock management, co-operative design of packages, integration of common logistics service providers, synchronization of transports, as well as design of interorganizational planning and controlling systems. (Handfield & Nichols, 1999; Tan et al., 1999)

Many deficits in science and business practice can actually be highlighted in the field of strategic and operative value added management. Today, value added management is mostly carried out by way of tuning particular processes and by the semi-integration of information and logistics systems. A comprising strategic design of an entire value chain with the intention to reach a total optimum is unsought. Important shortfalls of value added management are highlighted in figure 1.

Figure 1
Important Shortfalls of Value Chain Management in Value Chains



Due to the required strategic design and operative optimization of many business processes across functions and organizational borders, the limitation of the optimization field, the indispensable common strategic orientation of the members of the value chain, and the necessary high level of integration, we propose to create a particular value added network organization to realize value added management. (Doran, 2004) Following Lambert and Cooper, we recommend constructing a network of "value chain companies". (Lambert & Cooper, 2000) A network of value chain companies comprising partners in different countries is an international value chain network (IVCN) (Brook, 1978).

General assumptions of pursuing a multi-local hybrid competitive strategy: Out from the strong growth of international trade in the 1970s and 1980s, an intensive discussion in the scientific community was initiated regarding the useful prospective internationalization strategies of companies. The discussion dealt with two contrary positions – global standardization or regional differentiation (Porter & Millar, 1985; Levitt, 1983; Bartlett, 1983). Global standardization was seen as a meaningful approach if world markets become increasingly homogenously. Companies that are acting in international industries could realize economies of scale and synergy effects with standardized marketing concepts. That enables advantages in the cost and price situation (Buzzell, 1968). On the other hand, it was stated that economic success could be realized especially by a regional differentiated product mix. This was reasonable if global markets were to become more fragmented and segmented.

Today, we know that it is possible and useful to combine both of the extreme positions and to gain global and local advantages. By doing so, it is possible to simultaneously realize low costs and a high regional differentiation. Companies gain global advantages by integrating their business functions and processes as well as by standardizing the used goods and services. Local advantages are realized by regional differentiation. Therefore, companies often build regional variants of their product mix and offer special services (Welge & Boettauer, 1991).

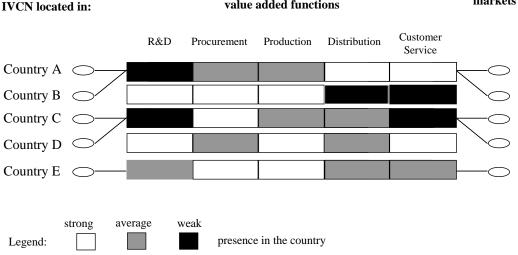
The successful combination of global standardization and regional differentiation is only manageable by a dislocated production of goods and services. Standardization is carried out in those lands where production factors are cheap and/or the production sites have high productivity. Regional differentiation is useful in those areas where the products are finally sold (Meffert, 1989: 445; Bartlett & Ghoshal, 1989). That is the reason why we call that strategy the 'multi-local hybrid competitive strategy'. What is essential for the successful implementation of an MLS is the precondition that global standardization allows for an additional regional differentiation, in which the regional differentiation does not raise costs too strongly (Daniels et al., 1985: 223; Daniels et al., 1984: 292). That is the special challenge for the implementation of an MLS. Companies must find suitable ways for the effective and efficient configuring and co-ordinating of their value added activities worldwide (Chandler, 1962: 1). Figure 2 shows a basic overview of how companies could design a networked value added management in order to attain globalization and rationalization advantages.

To master the expected difficult conditions for the implementation of an MLS it is important to provide effective structures and processes for value added management (Kogut, 1984, 1985). By using modern information and communication technologies, implementing special logistics and transport systems, as well as using new forms of co-operation between companies in different countries, it is possible to simultaneously attain cost and differentiation advantages. Therefore, an effective value added management is necessary to elaborate suitable measures for sourcing, producing, and distributing goods worldwide (Doz et al., 1981, 1986; Engelhoff, 1984). For example, it is essential to decide where production sites should be located, which activities should be accomplished by suppliers and other partners, the appropriate forms for co-ordination, as well as linking business activities such as planning and controlling within and outside the company. These decisions affect the costs situation, achievable time for providing goods and services, flexibility, and service level (Davis, 1979). Companies are increasingly trying to realize a hybrid competitive strategy that intensifies the competition situation enormously.

Figure 2
Dislocated value added functions for the implementation of an MLS regional VCN located in:

value added functions

markets



The Concept of International Value Chain Networks For Implementing A Multi-Local Hybrid Competitive Strategy

An international value chain network is a heterogeneous system that results from the systematic combination of selected enterprises that participate in a value chain. An IVCN is characterized by a selected circle of value chain members, a collective identity, an internal role differentiation and power division, the delegation of responsibility, its limited permanence, the possibility to transpose members, and a rational procedure for the realization of common targets executed by all of the participating companies. The IVCN is a virtual organization because every embedded member remains independent while participating in the network (Winkler, 2005; Harvey & Richey, 2001). A distinctiveness of the IVCN is that the members participate at a high level of communication and arrange common strategic and operative measurements to improve performance in logistics, production, and customer services. Consequently, the IVCN can act as if it were one independent enterprise (Frohlich & Westbrook, 2001). This new organizational point of view opens a wide range of possibilities to accomplish the aspired goals of an MLS. The structure of an IVCN is shown in figure 3.

For the implementation of an IVCN, a certain life cycle must be considered. It is here that we differ between the stage of design, performance, development, and termination. Furthermore, regarding management tasks, we have to distinguish between strategic and operative tasks. (Chopra & Meindl, 2003). In the design stage, exemplary important strategic tasks are the selection of the appropriate partner enterprises, evolution of a common target system, as well as evolution of a common value added strategy. Constructing an IVCN normally commences with the initiative of an original equipment manufacturer (OEM) or another international acting corporation. In doing so, it is essential for the OEM to find eligible partners that fit into the scope of the strategic concept for an IVCN. (Lambert et al., 1996) These partners must have complementary competence profiles along with the ability and intent to co-operate intensively with other companies (Levy & Grewal, 2000; Ellram & Cooper, 1990). Selected managers of the OEM, and the partner companies, form a steering committee of the IVCN. This committee assigns the management team for the IVCN. The management team develops a common target system for the evolution and administration of the IVCN. According to the targets, special value added measures should be elaborated. It is necessary to analyze at first as to which competition factors could be used in order to generate competitive advantages. For that purpose the potentials to achieve competition advantages such as information and communication technologies (ICT), Research & Development, production technologies, logistics systems, and human potential all have to be considered. In order for crucial competitive factors in a branch to be realized, these potentials can be used to attain e.g. low costs, high flexibility, a great service level, as well as short cycle times and high product quality (Christopher & Towill, 2000; Cooper & Slagmulder 1999).

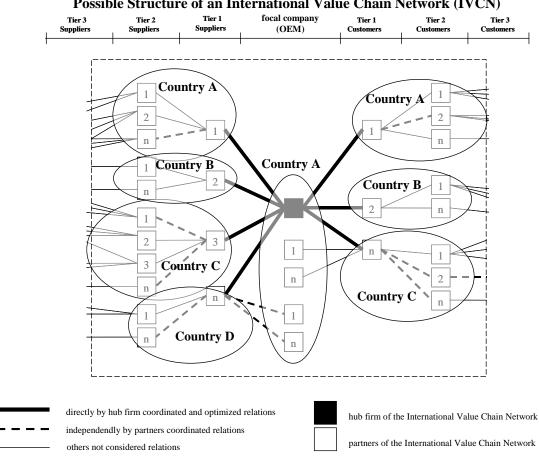


Figure 3
Possible Structure of an International Value Chain Network (IVCN)

The analysis of the success and competition factors and the strengths and weaknesses of potential partners is vital for the configuration of the IVCN. In order to determine the targets and strategies, we have to differentiate between the "IVCN level" and the level of the "individual actors". Target conflicts exist rather often between these two levels. The management team of the IVCN has to resolve these target conflicts (Simchi-Levi et al., 2000; Cooper & Ellram).

In the performance stage, mostly operative tasks are carried out. These are, e.g. the planning, controlling, and co-ordination of the value added processes and the service activities along the entire value chain. For the purpose of achieving the common targets, specific inter-organizational planning, controlling, and co-ordination systems are required. In this context, we propose to resort to advanced planning systems (APS), which enable the planning and controlling of production and logistics processes. The emphasis of the advanced planning systems is the optimization of cycle times, stocks, and capacities. (Tracey et al., 2005)

Due to the constantly alternating conditions of competition and/or changing interests of the partners in the IVCN, special adaptations are occasionally necessary. This phase is called the developing stage, which cannot be separated from the performance stage because the processes in the IVCN continue working. Changes in the structures and resource bases must be managed in order to avoid negative influences on performance. Some business relations in the IVCN will be terminated while others will be

established. In the case of the termination of individual relations, dissolution processes must be undertaken. (Winkler, 2005: 40)

Selective value added potentials in IVCNs for the implementation of a MLS: For the realization of an MLS, and to attain the necessary high value added performance, the IVCN has to be used to build up specific potentials for value added management. In this contribution we would like to especially analyze the structural and technological potentials.

A major influence on costs in IVCN is caused by value chain complexity (Wilding, 1998). Complexity in the value chain can be reduced, because the specific design of this virtual organization enables a broad modularization of customer orders. (Doran, 2003) Thus, the orders can be produced in alternative sequences and routings in the network of partners. We call that attribute of the IVCN the liberality of orders. This means that selected partners in different countries can independently handle specific parts of a customer's order, in which they are fully responsible for each order's fulfilment (Lau & Yam, 2005).

Based on their core competencies they independently coordinate all of the value added processes. Firstly, they configure their supply network on demand by matching the characteristic requirements (capacity, technology etc.) of a specific order to their suppliers' performance profiles. This task can be executed very quickly because the IVCN partners resort to a pool of pre-selected suppliers worldwide that they have strategically compiled in advance. Therefore, with their extensive knowledge regarding the capabilities of their potential suppliers, they can select the best suppliers for each order with rather little effort. In the next step, the suppliers with the best matching performance profiles are activated in order to participate in the value added process for the specific order. From this point onward, the supply-demand-relationship is established and the technological flexibility potentials inherent in the IVCN enable expeditious co-operation between the partners. (Ndubisi et al., 2005)

A rather important enabler for this configuration of the IVCN is a high degree of intrinsic logistics flexibility. To ensure this logistics flexibility and to realize all of the possible potentials for optimizing the logistics costs, we propose to integrate fourth party logistics providers (4PL) as partners. (Nissen & Bothe, 2002) These logistics specialists have the capability to centrally co-ordinate and harmonies all of the logistics processes in the IVCN on demand. (Bertke, 2002) The main tasks undertaken by the fourth party logistics providers are inventory management, tracking and tracing services, planning/organization of transports, as well as the planning and optimization of routings for the different orders within the IVCN. (Baumgarten et al., 2002).

The manufacturing resources in the IVCN have to provide a high level of versatility to ensure a high degree of differentiation. (Lau, 1999) Therefore, different customer orders should be produced on several manufacturing systems, not only in a single company, but also by other partners. Therefore, the capacity utilization within the IVCN can be harmonized, which means the partners can enlarge their capacity by resorting to a partner's free capacity or providing their own free capacity to partners. This positively contributes to the economic performance of each partner in the IVCN. (Chang, 2005).

The management of the IVCN has to support the versatility of certain production and logistics resources. The partners must decide whether to use flexible manufacturing systems or special devices for order processing. It is appropriate to use both in a balanced manner. Those partners who are responsible for standard components with fewer variants should mainly use special devices to keep costs low. Additionally, they should partly invest in flexible systems to have a capacity buffer. Other partners that produce different variants must have more flexible production systems. These partners generally use flexible manufacturing systems (Stockton & Bateman, 1995). From an economic perspective it is very useful to co-operate with some partners that hold the needed resources temporally (Kara & Kayis, 2004).

With a high degree of versatility of the used resources it is possible to build a pooling and sharing system in the IVCN. Therefore, it is necessary to define the standardized interfaces to enable a quick and easy connexion to the logistics and information systems of the partners. Free capacities of the implemented resources at the partners can be offered at an internal electronic marketplace. This makes it very simple to decide where the alternative manufacturing possibilities exist.

IVCNs information systems are important prerequisites for the realization of structural, technological, or human value added potentials (Fischer, 2005). With their ability to quickly and cost effectively process varying amounts and quality of data, and to provide a high level of visibility, the information systems support, for example, the integration of new partners or the liberality of orders in the IVCN. The information systems of the IVCN have the following characteristics: ability to share information between all of the partners in the value added processes, ability to pass information along in the network, and the ability to synchronies the partners' information systems. (Lummus et al., 2003).

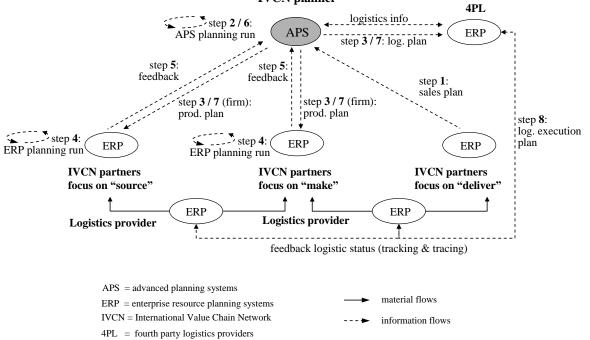
To assure these characteristics of the information systems, they must be planned strategically in the design stage of the IVCN. This means that the interfaces of the systems must be kept as flexible as is possible to enable the exchange of data from different systems and via different technologies. This presents an inherent high degree of preparation for the uncomplicated docking of a partners' information system to the systems of the other partners without creating rigid structures. (Helo & Szekely, 2005) The exchange of all business data via the Internet and communication with modern open standard protocols such as XML offer high potentials to fulfill these requirements. What is important in this context is that not all of the partners need all of the information. Providing inexpedient information at the nodes in the network would lead to higher complexity, increased probability of failures, and thus, undermine the value added performance of the IVCN. IT-service providers should be integrated as permanent partners in the IVCN. These companies have the competencies to effectively manage all of the information systems. Their integration will assist in realizing the synergy effects for all of the partners and control the costs for IT systems, because frictions and asynchronous improvements can be avoided by a centrally managed IT (Larson, 1998).

Planning and Steering Activities in IVCNs to Co-Ordinate the Realization of Mls

The planning procedure in the IVCN is executed as follows. The partners of the IVCN, who have direct access to the markets, plan the quantities of their sales in the different markets. Subsequently, these quantities are forwarded to a central planner of the IVCN, who then aggregates the required quantities. In the next step, the IVCN planner calculates the production quantities for material, modules, and systems for each partner. In different scenarios the planner splits the required production quantities between the partners and checks their free capacities, inventories, and already dispatched orders in their production systems. The output of this process is an optimal preliminary production plan for the customer order. Derived from this production plan, the logistic activities in the IVCN are planned and an efficient concept to deliver the right items at the right time to the right node in the IVCN is worked out in co-operation with the data provided by the fourth party logistics provider. An optimal preliminary logistics plan is thereby added to the preliminary production plan.

Thereafter, these plans are forwarded as what-if scenarios to the IVCN partners' enterprise resource planning systems. The partners subsequently check the feasibility of the plans within their system. At this point of the planning process we distinguish two different cases for each involved partner: Either the what-if scenario is feasible, or the realization of the plans is impossible. For the first case, the partner releases the plan, for the second case, the release is blocked, meaning that the central IVCN planner automatically receives detailed information about the problem and the partners' system status. Considering this information, the production and logistics plan is either released as a whole or is revised. In the case of a revision of the plans, additional partners with free capacities can be included in the order fulfilment processes, or the production schedule itself can be adapted. Time lags in this feedback process are avoided by clear rules, which define the allowable reaction time for each partner to report a release/no release back to the IVCN planner. This process is shown in figure 4.

 $\begin{array}{c} Figure~4\\ Planning~Processes~and~Resources~in~the~IVCN~to~Realize~an~MLS \end{array}$



The contribution of the planning and scheduling processes in the IVCN to the aspired value added in turn results from the described simultaneous planning approach. Based on the information available in the advanced planning systems, bottlenecks or restrictions to the production and logistics plans can be widely anticipated and delays in the order fulfilment are thereby avoided. Another point that supports value added performance is that the planning and simulation of alternative scenarios for the entire value chain network enables optimal reactions to unplanned changes. This is especially the case regarding the integration of additional partners with a high degree of preparation for the fulfilment of a specific contribution to flexible reactions. Additionally, reaction strategies to dissolve capacity restrictions, delays or other disturbances of the manufacturing processes are defined in the creation phase of the IVCN. In resorting back to these strategies, the IVCN planner can quickly align the supply network, on and with, low costs. (Robinson, 1993).

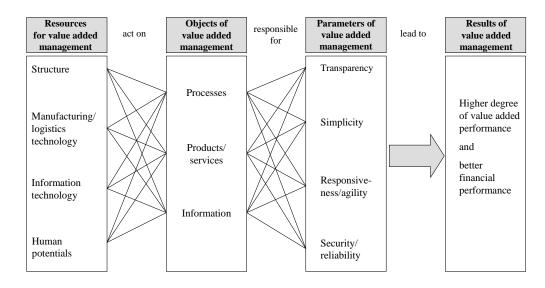
CONCLUSIONS

Pursuing a multi-local hybrid competitive strategy (MLS) is a remarkable way to improve competitiveness and increase the profitability of business. In our contribution, we highlighted the importance of network-based value added management for implementing an MLS. We presented the concept of international value chain networks (IVCN) as an innovative form to realize an MLS. By configuring and operating IVCN it is possible to combine global standardization and local differentiation. With this purpose, it is possible to simultaneously achieve low production and transaction costs, as well as a high differentiation.

From a practical sight we recommend to realize MLS especially by existing big corporations that act in different countries worldwide. For those companies it is easy to design the existing business relations to suppliers and customers to configure an IVCN. On the other hand also small and medium companies that plan to expand to foreign markets are candidates for implementing an IVCN and MLS. These companies must find suitable strategic partners for sourcing, producing and distributing goods and services. They have the advantage that structures can be built "in the open countryside" because there are no restrictions for a new collaboration.

For the practical implementation of an effective and efficient value added management in IVCNs it necessary to configure the relevant value added potentials. With managed value added potentials and resources at the integrated partners, it is possible to improve the existing value added performance and gain the necessary standardization and differentiation. We defined the structural potentials, potentials in manufacturing/logistics technologies, and potentials in information technologies as relevant value added potentials in IVCNs to implement an MLS. Furthermore, the method of co-ordinating the value added activities in IVCNs is critical for the successful implementation of an MLS. Here we recommend using especially internet technologies because they are cheap to have and nearly every region in the world has already fast internet. The target oriented management of these potentials and activities leads to an extraordinary advancement of value added management. Figure 5 depicts this rather well.

Figure 5
Resources, Objects and Parameters of Value Added Performance



REFERENCES

Anderson, D., & Lee, H. 2005. Synchronized supply chains. *The new frontier*. Available at: www.ascet.com/ascet/wp/wpAnderson.html (Accessed Oct 29, 2005).

Bartlett, C. A. 1983. MNC: Get off the Reorganization Merry-Go-Round. *Harvard Business Review*, 61(3): 138-146.

Bartlett, C. A., & Ghoshal, S. 1989. Managing across borders - The transnational solution. Boston.

Baumgarten, H. et al. 2002. Logistik Dienstleister – Quo vadis? – Stellenwert der Fourth Logistics provider (4 PL). *Logistik Management*, 4(1): 27-40.

Bretzke, W.R. 2002. SCM Collaboration und 4PL's: Bemerkungen über die Grenzen eines Paradigmas. *Logistik Management*, 4(1): 41-44.

Brooke, M.Z., & Remmers, L.H. 1978. *The strategy of multinational enterprise-Organization and finance*, 4th Ed., London.

Buzzell, R. D. 1968. Can you standardize multinational marketing. *Harvard Business Review*, 46(11): 102-113.

Chandler, A.D. 1962. Strategy and Structure. *The history of the industrial enterprise*. Cambridge/London.

Chopra, S., & Meindl, P. 2003. Supply Chain Management. *Strategy, planning, and operations*. Upper Saddle River, NJ.

Christopher, M. 1998. Logistics and Supply Chain Management. *Strategies for reducing cost and improving service*, 2nd Ed., Edinburgh.

Christopher, M., & Hau, L. L. 2001. Supply Chain Confidence. The key to effective Supply Chains through improved visibility and reliability.

Christopher, M., & Towill, D.R. 2000. Supply chain migration from lean and functional to agile and customized. *Supply Chain Management: An International Journal*, 5 (4): 206-213.

Christopher, M., & Towill, D. 2001. An integrated model for the design of agile supply chains. *International Journal of Physical Distribution & Logistics Management*, 31(4): 235-246.

Cooper, M.C., & Ellram, L.M. 1993. Characteristics of Supply Chain Management and the Implications for Purchasing and Logistics Strategy. *The International Journal of Logistics Management*, 4(2): 13-22. Cooper, R., & Slagmulder, R. 1999. *Supply Chain Development for the Lean Enterprise*. Portland.

Cooper, M., Lambert, D.M. & Pagh, J.D. 1997. Supply Chain Management. More than a new name for logistics. *The International Journal of Logistics Management*, 8(1): 1-14.

Davis, S.M., 1979. Basic Structures of Multinational Corporations. In S.M. Davis (Ed.), *Managing and organizing multinational corporations*: 193-211, New York.

Daniels, J.O. et al. 1984. Strategy and structure of U.S. Multinationals: An exploratory study. *Academy of Management Journal*, 27(6): 292-307.

Daniels, J.O. et al. 1985. Organizing for dual strategies of product diversity and international expansion. *Strategic Management Journal*, 6(6): 223-237.

Doran, D. 2003. Supply Chain implications of modularization. *International Journal of Operations & Production Management*, 23(3): 316-326.

Doran, D. 2004. Rethinking the supply chain: an automotive perspective. *Supply Chain Management: An international Journal*, 9(1): 102-109.

Doz, Y.L. et al. 1981. Global Competitive Pressures and Host Country Demands. *California Management Review*, 23(2): 63-73.

Doz, Y.L. 1986. Strategic management in multinational companies, Oxford.

Duclos, L.K., Vokura, R. J. & Lummus, R. R. 2003. A conceptual model of supply chain flexibility. *Industrial Management and Data Systems*, 106(6): 446-456.

Ellram, L.M., & Cooper M. C. 1990. Supply Chain Management, Partnerships and the Shipper-Third Party Relationship. *The International Journal of Logistics Management*, 1(2): 1-10.

Engelhoff, W.G. 1984. Strategy and Structure in Multinational Corporations. An information processing approach. *Administrative Science Quarterly*, 27(4): 425-458.

Fischer, J. 2005. Flexibilität in betriebswirtschaftlichen Informations- und Kommunikationstechnologien. In Kaluza, B., Blecker, Th., (Eds.), *Erfolgsfaktor Flexibilität. Strategien und Konzepte für wandlungsfähige Unternehmen*: 323-341, Berlin.

Frohlich, M.T., & Westbrook, R. 2001. Arcs of integration: an international study of supply chain strategies. *Journal of Operations Management*, 19(2): 185-200.

Handfield, R.B., & Nichols, E.L. 1999. Introduction to supply chain management. New Jersey.

Harvey, M.G., & Richey, R.G. 2001. Global Supply Chain Management - The selection of globally competent managers. *Journal of International Management*, 7(2): 105-128.

Helo, P., & Szekely, B. 2005. Logistics information systems. An analysis of software solutions for supply chain co-ordination. *Industrial Management & Data Systems*, 105(1): 5-18.

Kara, S. & Kayis, B., 2004. Manufacturing flexibility and variability: an overview. *Journal of Manufacturing Technology Management*, 115(6): 466-478.

Kogut, B. 1985. Designing Global Strategies: Comparative and Competitive Value Added Chains. *Sloan Management Review*, 27(2): 15-28.

Kogut, B. 1989. International Sequential Advantages and Network Flexibility. In C.A. Bartlett, et al. (Ed.), *Managing the global firm*: 47-69, London/New York.

Lambert, D.M., & Cooper, M.C. 2000. Issues in supply chain management. *International Marketing Management*, 29(1): 65-83.

Lambert, D.M., Emmelhainz, M.A. & Gardner, J.T. 1996. Developing and Implementing Supply Chain Partnerships. *The International Journal of Logistics Management*, 7(2): 1-17.

Larson, K.D. 1998. The role of service level agreements in IT service delivery. *Information Management & Computer Security*, 6(3): 128-132.

Lau, R.S.M. 1999. Critical factors for achieving manufacturing flexibility. *International Journal of Operations & Production Management*, 19(3): 328-341.

Lau, R.S.M., & Yam, R.C.M. 2005. A case study of product modularization on supply chain design and coordination in Hong Kong and China. *Journal of Manufacturing Technology Management*, 16(4): 432-446.

Levitt, T. 1983. The Globalization of Markets. *Harvard Business Review*, 61(5): 92-102.

Levy, M., & Grewal, D. 2000. Supply Chain Management in a Networked Economy. *Journal of Retailing*, 76(4): 415-429.

Lummus, R., Duclos, L.K. & Vokurka, R.J. 2003. Supply Chain Flexibility: Building a New Model. *Global Journal of Flexible Systems Management*, 4(4): 1-13.

Meffert, H. 1989. Globalisierungsstrategien und ihre Umsetzung im internationalen Wettbewerb. *Die Betriebswirtschaft*, 49(4): 445-463.

Ndubisi, N.O., Jantan, M. & Hing, L. C. & Ayub, M.S. 2005. Supplier selection and management strategies and manufacturing flexibility. *The Journal of Enterprise Information Management*, 18(3): 330-349.

Nissen, V., & Bothe, M. 2002. Fourth Party Logistics – ein. Überblick. Logistik Management, 4(1): 16-26.

Perlmutter, H.V., & Heenan, D.A. 1986. Cooperate to compete globally. *Harvard Business Review*, 64(3): 136-152.

Porter, M.E., & Millar, V. 1985. How information gives you competitive advantage. *Harvard Business Review*, 63(7): 149-160.

Porter, M.E. 1985. Competitive advantage: Creating and sustaining superior performance, New York.

Porter, M.E. 1989. Der Wettbewerb auf globalen Märkten - Ein Rahmenkonzept. In Porter, M. E. (Ed.). *Globaler Wettbewerb*: 17-68, Wiesbaden.

Ricardo, E., & Bardio, K. 2000. Evaluation of supply chain structures through modularization and postponement. *European Journal of Operational Research*, 124(6): 495-510.

Robinson, St. 1993. The Application of Computer Simulation in Manufacturing. *Integrated Manufacturing Systems*, 4(4): 123-137.

Simchi-Levi, D., Kaminsky, Ph. & Simchi-Levi, E. 2000. Designing and managing the supply chain, concepts. Strategies and case Studies, Boston.

Stockton, D., & Bateman, N. 1995. Measuring the production range flexibility of a FMS. *Integrated Manufacturing Systems*, 6(2): 27-34.

Tan, K.C. 2001. A framework of supply chain management literature. *European Journal of Purchasing & Supply Management*, 7(1): 39-48.

Tan, K.C., Kannan, V. R., Handfield, R.B. & Ghosh, S. 1999. Supply chain management: an empirical study of its impact on performance. *International Journal of Operations & Production Management*, 19(10): 1034-1052.

Tracey, M., Lim, J.-S., & Vonderembse, M. A. 2005. The impact of supply-chain management capabilities on business performance. *Supply Chain Management: An International Journal*, 10(3): 179-191.

Welge, M.K., & Boettauer, R. 1991. Globale Strategien und Probleme ihrer Implementierung. *Die Betriebswirtschaft*, 51(4): 435-454.

Wilding, R. 1998. The supply chain complexity triangle. Uncertainty generation in the supply chain. *International Journal of Physical Distribution & Logistics Management*, 28(8): 599-618.

Winkler, H. 2005. Konzept und Einsatzmöglichkeiten des Supply Chain Controlling. *Am Beispiel einer Virtuellen Supply Chain Organization (VISCO)*, Wiesbaden.

THE FORMATION PROCESS OF GLOBAL STRATEGIC ALLIANCES BY FIRMS IN THE UNITED ARAB EMIRATES A Research-in-Process toward PhD

Yasir Yasin

United Arab Emirates University, UAE

ABSTRACT

In the pursuit of survival, growth, and competitive advantage, some organizations are expressing interest in mergers and acquisitions. However, many companies have insufficient capital to go that route or are concerned about the complexity and commitment required to buy another firm. Instead, an increasing number of companies are finding strategic alliances to be a more efficient means in using limited resources. Despite the increased frequency and major importance of strategic alliances in the United Arab Emirates, little is known about the formation of these alliances, or factors lead to the success or failure of these alliances affect the business practices. Research has shown that United Arab Emirates is becoming one of the most attracting countries to foreign direct investment. Domestic as well as foreign firms in the UAE are seeking strategic alliance as a strategy to survive, grow, and gain competitive advantage. Consequently, managers are seeking ways to formulate successful alliances y following a systematic process for alliance formation and implementation. The present study is a research-in-process toward PhD. It centers on strategic alliances formation in the United Arab Emirates. The aim of this study is to examine the assumptions behind strategic alliance evolution, formation and governance in United Arab Emirates and to develop a model of strategic alliance formation, in the light of the literature reviewed and the findings of the study that helps academics and practitioners understand and form successful alliances in United Arab Emirates. Although no final findings were reached, a preliminary data analysis conducted by the researcher through the use of an interpretative approach revealed some preliminary findings. In-depth case analysis is intended to be used by the researcher to further collect reliable data.

INTRODUCTION

One of the most notable developments of the 1990s has been observed in the number of emerging opportunities and challenges for cross-border direct investments and cooperative ventures (Dunning, 1993a). FDI has been of growing importance to the economies of both developed and developing countries. According to the World Investment Report prepared by the UNCTA in 1995, the estimated outward FDI stock reached \$2.6 trillion in 1995 with its growth rate substantially exceeding that of world output (GDP) and world exports (UNCTAD, 1995). The value of FDI inflows to developing countries, however, has been increasing at a much higher rate than FDI inflows to developed countries. However, strategic alliances seem to be more advantageous in theory than practice. While many writers have been celebrating their many cooperative advantages, empirical studies often present a more dismal picture. Few alliances are reported to satisfy all of their partners over long time periods. The key disadvantage of alliances appears to be associated with giving up partial control to other companies. It becomes less clear that is in charge, who owns what, who should contribute what, and who should get what of the joint outcomes. The trust that is required when sharing control typically more fragile than the hierarchical authority upon which internal and acquired growth are based. Lack of trust is likely to undermine advantages of alliances.

The U.A.E is one of the lowest taxed countries in the world, with no corporate or income taxes and no sales tax. Foreign companies investing in the U.A.E can benefit from cost efficiencies, in power, gas and water, that renders the U.A.E a lucrative location for FDI vis-à-vis other regional and international countries. UAE has low tariffs, low currency risk (due to the pegged exchange rate), extremely low financial risk (as evidenced by our high financial ratings from several international institutions), no restrictions on repatriation of profits or capital, and numerous double taxation agreements. This has made the U.A.E an attractive investment hub.

The markets today are moving fast, competition is increasing by the day, customers are more aware and demand more, and change is occurring at an unprecedented rate. To survive into the next decade,

organizations need to rethink their structures, products, processes, strategies and markets. They must reestablish themselves to be quicker to market, customer focused, innovative, nimble, flexible, and be able to handle rapid change. The increase in international inter-firm collaboration has been attributed to increased globalization and rapid changes in competitive environments (e.g. Robson, 2002a).

The rationale for this study is that the growing presence of multinational companies in the Middle East, specially in United Arab Emirates, and the increase of competition resulting from globalization have necessitated the need for understanding the nature of strategic alliances and the process of formulating them successfully as a strategy used by companies to survive, grow and gain competitive advantage.

Research Problem

Research shows that the failure rate of strategic alliances is projected to be high. For example, Harrigan (1985) and Reuer and Koza (2000) state that an estimated 37-70% of international joint ventures (IJVs) are reported to suffer from performance problems leading to costly failures. The reasons for this failure are related to:

- 1. Lack of a clear vision and underlying rationale; many firms go for strategic alliances just because they like to go this route. Koza and Lewin, (1999) argued that our experiences and research with countless alliances of every type, has led us to conclude that the root cause of alliances failing to realize the hoped for potential can be traced to failure to grasp and articulate the strategic intent for the alliance, including the failure to consider and recognize alternatives to entering into an alliance to begin with. The second most common reason involves lack of recognition of the close interplay between the overall strategy of the company and the role of an alliance in that strategy.
- 2. Lack of readiness in terms of competent personnel and alliance formation guidelines and processes and inappropriate strategic decisions regarding alliance structure, alliance partner(s) selection, and alliance governance. When asked why the alliance was dissolved or why it failed, managers often cite lack of cooperation and trust, inadequate advance planning, too much detailed negotiations and too little managing of the actual alliance, lack of organizational capabilities and resources to manage cooperative relationships, strategic mismatch, size mismatch, cultural mismatch, change in strategy of one partner, wrong choice of partner or wrong initial strategy and the list goes on Koza and Lewin, (1999).
- 3. Cultural differences between alliance partners. The majority of the literature agrees on the potentially negative effects of national cultural differences. For example national cultural distance has often been linked to alliance conflict (Lane and Beamish, 1990), misunderstandings (e.g. Lyles and Salk, 1996), collaborative problems (e.g. Mowery et al., 1996), knowledge transfer problems (e.g. Hamel, 1991), and poor performance or even failure (e.g. Meschi, 1997).
- 4. Differences and changes in national policies and environmental conditions.

Research Questions

In order to find solutions to the problems stated above, the following questions have been asked:

- 1. What are the motives for forming strategic alliances by companies in U.A.E? The literature has identified a variety of reasons behind MNC's decisions to enter into IJV agreements, including entering new and potentially profitable markets; sharing heightened economic and political risks in new business ventures; government suasion; economies of scale; pooling organizational know-how to realize synergistic benefits.
- 2. What alliance structures do firms in U.A.E choose to form strategic alliances? What factors do affect managers' decisions? Nielsen (2003) states that consistent with Chandler's (1962) early notion that structure follows strategy, the underlying assumption is that there is a correlation between alliance form and resource commitment since EJVs typically involve considerable financial investment and managerial time and hence are assumed to represent a longer-term commitment than NEJVs. The distinction between a non-equity joint venture (NEJV) and an equity joint venture (EJV) is made in order to emphasize the difference in level of integration and degree of control, which may have an impact on the selection criteria utilized to select a partner for such alliances. A non-equity joint venture (NEJV) is an agreement between partners to cooperate in some way without creating a new, joined

- entity. In contrast, an equity joint venture (EJV) involves the establishment of a newly incorporated entity in which each of the partners has an equity position.
- 3. Does partner(s) selection affect alliance formation and operation in U.A.E? What criteria are used by companies to select their venture's partner(s)? In his summary of prior research Geringer (1991) posits that the process of partner selection is considered to be of crucial importance to the formation and operation of JVs. Geringer (1991) contributed to the extant literature by developing a simple twofold typology of partner selection criteria. He distinguished task-related and partner-related dimensions of selection criteria to provide a better understanding of the partner selection process and how firms proceed in selecting partners. Task-related criteria are associated with the operational skills and resources that a venture requires for its competitive success. Task- related criteria therefore refer to those variables that are intimately related to the viability of a proposed JV's operation irrespective of whether the chosen investment mode involves multiple partners. Typical examples are patents, technical know-how, financial resources, experienced managerial personnel and access to marketing and distribution channels. Partner-related criteria, in contrast, refer to those variables that become relevant only if the chosen investment mode involves the presence of multiple partners. Typical examples are the national or corporate culture of a partner, compatibility or trust between the partners' management teams, the degree of favorable past association between the partners, and the size or corporate structure of the partner.
- 4. How do partners jointly govern their alliances? What factors do affect alliance governance and adaptation? Most organizations that enter into an alliance focus most of their attention on the technical aspects of the alliance and on whether or not the alliance makes good business sense, leaving aside whether or not the relationship can work at all. To realize the potential for joint value creation, partners must exchange information, share knowledge, enhance trust and make investments that are specific to the relationship. Nevertheless, fulfilling these basic requirements of alliances also exposes the valuable investments and proprietary knowledge of partners to opportunistic hazards because of the temptation of each partner to pursue self-interests. (Zeng and Chen, 2003). Firms have a natural tendency to favor a majority or at least a 50% equity ownership in the overseas EJV whenever possible. Part of the reason for preferring a majority equity holding is that equity ownership is the most direct means of gaining and exercising control over the venture (Beamish, 1993).
- 5. How do partners jointly evaluate the performance of their strategic alliances in U.A.E? What evaluation methods and evaluation criteria are used? For many organizations, the current business environment compels the use of collaborative alliances as an important component of strategy. Consequently, the need to assess the performance of these alliances becomes a priority as more and more companies enter into such relationships, the reality is that many companies do not develop and implement formal performance evaluation processes. It is often difficult to create a formal evaluation process due to the unique nature of the alliance structure. Traditionally, alliance success has often been measured using managerial assessments of the extent to which an alliance had met its stated objectives (Geringer and Hebert, 1991). On the other hand, recent trends show that practitioners (Andersen Consulting, 1999) and academics (Anand and Khanna, 2000) also measure alliance success and value creation in terms of how stock markets and investors react to alliance announcements.
- 6. How do cultural differences or similarities between partners in U.A.E affect partners' strategic decisions in the process of alliance formation and governance? International alliance formation involves negotiation between managers from different countries and cultures. Although JVs have many advantages, potential problems may arise due to cultural differences. Cultural differences in JVs can impair information flow and organizational learning and lead to misunderstanding and mistrust (Buckley & Casson, 1996). In addition, cultural differences can lead to instability and poor performance (e.g. Yan & Zeng, 1999) and have been found to negatively influence the survival of IJVs (e.g. Harrigan, 1985).

Aims and Objectives of the Study

The aim of this study is to attempt to answer the research questions raised above in order to achieve the following objectives:

- 1. To critically review the relevant literature on strategic alliances.
- 2. To examine the assumptions behind strategic alliance evolution, formation and governance in United Arab Emirates.
- 3. To develop a model of strategic alliance formation, in the light of the literature reviewed and the findings of the study that helps academics and practitioners understand and form successful alliances in United Arab Emirates.

The definition of strategic alliance is problematic. Sulej (1998) states that "there is considerable debate within strategic alliance and joint venture research as to what is actually meant by these terms and the way in which they are used". In his salient work, Gulati (1999) contributed that a strategic alliance is commonly defined as any voluntarily initiated cooperative agreement between firms that involves exchange, sharing or co-development, and it can include contributions by partners of capital, technology, or firm-specific assets. Other researchers were much more specific in characterizing these arrangements as being long-term or strategic in their nature. In this regard, Das and Teng (2000) characterize a strategic alliance as "an openended agreement between two or more organizations which enables cooperation and sharing of resources for mutual benefit, as well as enhancement of the competitive positioning of all organizations in the alliance".

An international joint venture (IJV) is defined as an equity sharing arrangement in which a foreign corporation and a local firm (either private or government owned) pool their resources, sharing risks and operational control to operate an independent business unit on a continuous basis for profit and/or to attain some strategic objective (Geringer and Hebert, 1991).

The academic literature suggests that the term "strategic alliance" includes a wide array of organizational forms ranging from long-term purchasing agreements to co-marketing and licensing agreements, to R&D collaboration and joint ventures. Although most of the researchers in the field of strategic alliances agreed that the former mentioned forms come under alliances, considerable argument took place regarding the forms of mergers and acquisitions.

According to Doz & Hamel (1998) and Parkhe (1993) "alliance is a broad term that captures many forms of inter-organizational cooperative arrangements, including equity joint ventures, strategic supplier arrangements, research and development partnerships, and so forth".

While some researchers argue that mergers are among the forms of strategic alliances. For example, Varadarajan and Rajaratnam (1986) argue that "strategic alliance can range from handshake agreements to licensing, mergers, and outsourcing and equity joint ventures". Many other researchers strongly argue that mergers and acquisitions are not alliances. Bernhut (2002) explicitly states that "an alliance is an agreement between two or more partners to make certain decisions jointly. It's not a merger or an acquisition; no new entity is created".

Demirbag and Mirza (2000) argued that the use of joint ventures and cooperative forms in doing business domestically and internationally is scarcely new. They are among the oldest organizational forms in existence and were originally used as a commercial device by the merchants of Ancient Egypt and Mesopotamia to conduct overseas commercial transactions. What is new in the modern era, however, especially since the 1970s, is the apparent growth in the frequency of the use of joint ventures, their geographic extent, and the unique issues and problems they raise because of their occurrence in an international and inter-cultural context.

Strategic Alliances in the Middle East

Alliances in general and joint ventures in particular in the Middle East were mainly formed for the purpose of oil production. According to Stevens (1976) "Three types of joint ventures have operated in the Middle East for the purpose of oil production. The first type is the 'old style' concessions which have dominated during the period 1901-1972. The first successful agreement of this type in the area was the concession granted to D'Acry in 1901 by the Persian Government. The second is the contract agreement,

which first appeared in the area in 1966. Of the 19 new oil agreements signed in Iran, Saudi Arabia, Kuwait, Iraq and Egypt between 1957 and 1965, 2 were concession agreements and 17 were joint venture agreements. The third type is the equity joint venture, which first came in use in 1972".

The Context of the United Arab Emirates

The U.A.E. is a confederation of seven Emirates - Abu Dhabi, Dubai, Sharjah, Ajman, Fujairah, Ras Al Khaimah, and Umm Al Qaiwain - each operating under considerable autonomy. This arrangement leaves a great deal of independence to the individual Emirates in pursuing an economic strategy based on their respective comparative advantages. Abu Dhabi, which accounts for about 95 percent of the U.A.E.'s oil and natural gas resources, has pursued prudent economic policies and continues to develop its hydrocarbon capacity along with saving considerable financial assets. Dubai is emerging as a model for economic diversification of the non-hydrocarbon sector and vying for being a leading business hub in the global marketplace. These two Emirates account for about 85 percent of the country's total GDP. The other Emirates rely on a mix of trade and light manufacturing, and they depend on financial support from the Federal government and Abu Dhabi and Dubai governments.

Preliminary estimates published by the Ministry of Economy indicate that gross domestic product rose in 2005 by 25.6%, compared to 2004 levels - the highest rate ever recorded over the last two decades. The value of gross domestic product rose from AED 386.5 billion in 2004 to AED 485.5 billion in 2005. The output of the oil sector rose by 40.5%, compared to its level in 2004, reaching AED 173.2 billion. Its contribution to overall output rose from 28.4% and 31.9% in 2003 and 2004 respectively to 35.7% in 2005. This was mainly due to the increase in oil prices from US\$ 28.1 a barrel and US\$ 36.9 a barrel in 2003 and 2004 respectively to a weighted average of US\$ 52.9 a barrel in 2005. The non-oil segment of the U.A.E's economy also is experiencing strong growth, particularly the petrochemicals and financial services sectors.

In recent years, the U.A.E has undertaken several projects to diversify its economy and to reduce its dependence on oil and natural gas revenues. The non-oil sectors of the U.A.E's economy presently contribute around 70 percent of the U.A.E's total GDP, and about 30 percent of its total exports. The federal government has invested heavily in sectors such as aluminum production, tourism, aviation, re-export commerce, and telecommunications. As part of its strategy to further expand its tourism industry, the U.A.E is building new hotels, restaurants and shopping centers, and expanding airports and duty-free zones. Dubai has become a central Middle East hub for trade and finance, accounting for about 85 percent of the Emirates' re-exports trade. The U.A.E has been a member of the World Trade Organization (WTO) since 1995, and has one of the most open economies in the region.

The World Bank has identified the U.A.E as one of the least cumbersome countries in which to set up a new business. According to a recent report, the World Bank stated that only 29 days is needed to set up a new business in the U.A.E, whereas the average period for the Middle East and North Africa (MENA) region is 60 days. The IMF Country Report No. 05/268 has shown the following facts about the global business environment of the UAE:

- 1. An outward-oriented development strategy, based on: (i) an open trade regime and unrestricted capital outflows; (ii) a deregulated and competitive business environment with low taxes; (iii) a well-developed physical and institutional infrastructure; and (iv) an open and unrestricted labor market, has resulted in an impressive economic growth and diversification of the U.A.E.'s economy
- 2. Transformation of the Economy: reduction in oil dependency, the pace of reduction in oil dependency in the U.A.E. has been the fastest in the GCC countries. Based on the oil dependency ratio, measured by the ratio of the oil revenue as a share of total government revenue to oil exports as a share of total exports, the U.A.E. has gone from being one of the most dependent (about 90 percent) in 1980 to one of the least oil dependent by 2004 (about 50–60 percent).
- 3. Openness to trade, trade facilitation, and a favorable business environment have enhanced non-oil diversification by stimulating trade and trade related services. Fundamental structural reforms in recent years together with liberal and market-oriented policies have fostered the rapid expansion of the non-oil economy with a well integrated trading system that has also ushered the participation of the private sector.

- 4. Trade facilitation and services, trade facilitation has been pivotal in enhancing the non-oil trade. Efficiently functioning ports and customs with minimal administrative procedural and logistical obstacles have contributed to the growth in trade and trade related services through the provision of good quality backbone services such as transportation, finance, and information and communication technology. The high quality infrastructure and efficient operations of the ports and airports have reduced: (i) transactions cost in trade-related activities; (ii) clearing of goods in customs: and (iii) shipping goods overseas.
- 5. Role of Free Trade Zones (FTZs), the rapid pace of non-hydrocarbon export expansion has been driven mainly by the FTZs. The FTZs host a large number of international companies that cater to the markets in the Middle East and the Indian sub-continent. These FTZs have been attractive ventures as they have no restrictions on foreign ownership and repatriation of capital and profits, and operate in a tax free environment with world class infrastructure. Jebel Ali Free Zone in Dubai currently hosts over 2200 companies with total annual revenue of over \$8 billion.
- 6. Re-exports, the U.A.E. has also positioned itself as a major re-export center for the region. As a result, the re-export market has seen rapid growth from \$5.5 billion in 1990 to \$27.4 billion in 2004.
- 7. The U.A.E. fares very well in most of the priority areas of investment climate constrains that a World Bank Investment Climate Survey has identified based on responses from more than 26,000 firms in 53 developing countries. A compilation of survey data from a number of sources, notably the Arab Executive Opinion Survey3, provides a useful rendition of the state of play in the U.A.E. investment and business environment:
- *Policy uncertainty*: The U.A.E. has consistently pursued a liberal and market-oriented policy which has continued to be the bedrock of its economic success in diversifying away from oil.
- *Macro stability:* Macroeconomic stability has been maintained over the past few decades with prudent macroeconomic management enabling a significant accumulation of assets. The macro stability of the economy as observed in the Macroeconomic Environment Index—a sub-component of the Growth Competitiveness comprising of growth, government balance, national savings rate, inflation, composition of government spending, real effective rate, interest rate spreads between lending and borrowing—ranks the U.A.E. among the top fifteen in the world along with Singapore, the U.K., and Switzerland.
- *Tax rate*: The U.A.E. has a very favorable tax environment that encourages businesses to operate in the country, especially in the Free Trade Zones (FTZs) where in most cases there are no corporate and income taxes.
- Costs and Access to Finance: Based on the World Bank's survey for Doing Business, the cost to create collateral and the cost of starting a business as a percent of income per capita is low when compared to its regional average. Bank financing is relatively accessible although capital markets are still in the incipient stages.
- Labor Regulations: Based on the World Bank's Survey of Doing Business, the difficulties facing firms in hiring and firing workers is the least rigid compared to its peers in the region.
- *Courts and Legal System:* Individual Emirates such as Dubai have adopted the Dubai International Arbitration Centre (DIAC) based on International Chamber of Commerce rules, which would help solve business disputes quicker and address the shortcomings of the existing legal framework.

RESEARCH METHODOLOGY

The approach to this research is based on the use of case studies. This involves the collection of qualitative and quantitative data through the use of self administered and semi-structured questionnaires and documentary analysis. The cases were selected from the top 31 companies listed by the Directory of the U.A.E Chamber of Commerce and Industry. In order to ensure accuracy of data, companies were selected according to specific criteria. These criteria were; first, a company should have entered at least one alliance; second, a company should be either 100 percent locally owned or a joint venture between a local company and a foreign company with at least 51 percent local equity share; third, a company should be either from the private sector or jointly owned by the private and public sector; and finally, a company should be either from the manufacturing sector or service sector.

Respondents were selected on the basis of roles occupied in the strategic alliance and they were in the capacity of directors and project managers. The questionnaire was developed from the literature in relation to the research objectives and the research questions and consists of nine sets of questions reflecting the common decisions that managers make in formulating strategic alliances. The questions were produced in English and answered in English and were checked for accuracy and suitability by my supervisor and two independent advisors; one is a professor in U.A.E University and the other is the General Director of EMAAR Company in U.A.E.

A pilot study was conducted to test the validity of the questionnaire with two managers of multinational companies that had formulated strategic alliances, one had successful alliance and the other had failed. The questionnaire was then revised in light of the pilot study. Some questions had to be deleted and others had to be clarified, that is why I included some clarifications and explanations as an attachment. Therefore, data were collected through a self administered and semi structured questionnaire and documentary analysis.

In working toward completing this research, the researcher is intending to conduct further case analysis. Documentary analysis and in-depth interviews will be conducted with executives in charge of strategic alliances in their respective companies.

PRELIMINARY RESULTS

Since the researcher is still working on the data analysis, no final findings reached yet. However, some preliminary findings were drawn out from the preliminary data analysis. These findings are as follows:

Motives for Strategic Alliances

The researcher found that the important motives for strategic alliances of the companies studied are as follows:

- 1. Transfer of valuable technology (learning).
- 2. Low cost entry to new and potentially profitable markets.
- 3. Obtaining resources possessed by other firms.
- 4. Conform to host government policy.
- 5. Controlling or reducing competition.

Alliance Structure

There was no one specifically preferred alliance structure. Companies choose different structures ranging from equity alliances to non-equity alliances and decisions were based on business requirements and strategic fit.

Partner Selection: (partner search, evaluation, and selection)

The criteria used by companies to evaluate and select potential partners differ from one alliance to another according to the motives of the alliance. Generally speaking, the most important criteria found were:

- 1. Partner's knowledge of local market.
- 2. Partner's ability to negotiate with host country's government.
- 3. Degree of readiness of potential partner to enter strategic alliances and commit resources.
- 4. Partner's experience in developing new technology application.
- 5. Partner's access to materials/natural resources.
- 6. Partner's established marketing and distribution systems.

Alliance Governance

1. Companies in U.A.E depend on legal contracts to govern and control their alliances and joint ventures.

2. Companies emphasize certain issues when designing these contracts. These issues are: joint control systems; duration of the venture; scale of the venture; venture dissolution conditions; and distribution methods of the expected income

Alliance Performance and Survival

Companies measure their alliance performance jointly. Performance is measured on the bases of: achievement of stated alliance objectives; return on investment; market share; and new product development.

Partner's Trust

Trust among partners was found to be an important factor in the process of alliance formation and management in the U.A.E. Growing trust between partners helped them to commit more resources; exchange resources more quick; and exchange knowledge and information smoothly.

Cultural Differences

Growing trust between partners helped them to commit more resources; exchange resources more quick; and exchange knowledge and information smoothly.

Contributions of the Study

This study is expected to be beneficial to both academics and practitioners. It will help in:

- 1. Identifying the best ways and techniques that can be used in alliance formation and governance as well as determining factors that could affect alliance success in United Arab Emirates.
- 2. Filling the gap of knowledge in the formation of strategic alliances in a United Arab Emirates.

REFERENCES

Anand, B. & Khanna, T. 2000. Do firms learn to create value? *Strategic Management Journal*, 21: 295-316.

Andersen, Consulting 1999. *Dispelling the myths of alliances*.

Beamish, P. W. 1993. The characteristics of joint ventures in the People's Republic of China. *Journal of International Marketing*, 1(2): 29-48.

Bernhut, S. 2002. After the deal is done: four keys to managing an alliance. *Harvard Management Update*, Harvard Business School Publishing Corporation.

Buckley, P. J. & Casson, M. 1996. An economic model of international joint venture strategy. *Journal of International Business Studies*, 27: 849-875.

Das, T. K. & Teng, B. 2000. A resource-based theory of strategic alliances. *Journal of Management*, 26: 31-61.

Doz, Y. L. & Hamel, G. 1998. *Alliance advantage: The art of creating value through partnering*. Boston: Harvard Business School Press.

Dunning, J. 1993a. *The globalization of business*. London and New York: Routledge.

Economic Bulletin, Central Bank of the United Arab Emirates, 2005.

Geringer, J. M. 1991. Strategic determinants of partner selection criteria in international joint ventures. *Journal of International Business Studies*, 22(1): 41-61.

Geringer, J. M. & Hebert L. 1991. Measuring performance of international joint ventures. *Journal of International Business Studies*, 22 (2):249-263.

Hamel, G. (1991) Competition for competence and inter-partner learning within international strategic alliances. *Strategic Management Journal*, 12, 83–103.

Harrigan, K. R. 1985. Strategies for joint ventures. Lexington Books, Lexington, MA.

IMF Country Report No. 05/268, International Monetary Fund.

Koza, M.P. & Lewin, A.Y. 1999. Managing partnerships and strategic alliances: raising the odds of success. *European Management Journal*, 18(2): 140-151.

Lane, H.W. & Beamish, P. 1990. Cross-cultural cooperative behavior in joint ventures in LDCs. *Management International Review*, 30, 87–102.

Lyles, M.A. & Salk, J.E. 1996 Knowledge acquisition from foreign parents in international joint ventures: an empirical examination in the Hungarian context. *Journal of International Business Studies*, 27(5), 877–903.

Meschi, P.-X. 1997. Longevity and cultural differences of international joint ventures: towards time-based cultural management. *Human Relations*, 50(2), 211–228.

Mowery, D.C., Oxley, J.E. and Silverman, B.S. (1996) Strategic alliances and inter-firm knowledge transfer. *Strategic Management Journal*, 17, 77–91.

Nielsen, B. B. 2003. An empirical investigation of the drivers of the international strategic alliance formation. *European Management Journal*, 21(3): 301-322.

Parkhe, A. 1993. Strategic alliance structuring: A game theoretic and transaction cost examination of interfirm cooperation. *Academy of Management Journal*, 36: 794-829.

Reuer, J. & Koza, M. P. 2000. Asymmetric information and joint venture performance: theory and evidence for domestic and international joint ventures. *Strategic Management Journal*, 21: 81-88.

Robson, M. J. 2002a. Partner selection in successful strategic alliances: the role of cooperation. *Journal of General Management*, 28(1): 1-15.

Sulej, J. C. 1998. UK international joint ventures in technology and innovation: an analysis of patterns of activity and distribution. *European Business Review*, 98 (1): 56-66.

The Annual Economic and Social Report 2006. Ministry of Economy, United Arab Emirates.

UNCTAD 1995. World investment report 1995: Transnational corporations and competitiveness. Sales No. E.95.II. A.9.

United Arab Emirates Year Book, Economic Development, 2005.

Varadarajan, P. R. & Rajaratnam, D. 1986. Symbolic Marketing Revisited. *Journal of Marketing*. 50: 7-17. Yan, A. & Zeng, M. 1999. International joint venture and instability: a critique of previous research, a reconceptualization and directions for future research. *Journal of International Business Studies*, 30, 395-414.

Zeng, M. & Chen, X. 2003. Achieving cooperation in multiparty alliances: a social dilemma approach to partnership management. *Academy of Management Review*, 28(4): 587-605.

The Importance of the Location Decision Factors in the Selection of a Profitable Foreign Country for International Manufacturing Operations

Marwan N. Al Qur'an
Al Yamamah College, Riyadh, Saudi Arabia
Email: marwan@alyamamah.edu.sa

ABSTRCAT

In this qualitative study, two comparative case studies of Western Australian internationalizing manufacturing firms were undertaken in order to underline the importance of the location decision factors in the selection of a profitable foreign country for international operations. The empirical results show that three types of location decision factors or criteria were developed by location decision-makers at three stages of the country selection process; that is, the country, city and site factors. Further, the results illustrate that the local partner for the international joint venture and the foreign country were selected simultaneously. The findings also reveal that the pre-development of these location factors contributed significantly to arriving at successful foreign direct investments and, accordingly, confirmed the theoretical assertion stated in the literature. As a result, these findings have significant theoretical and practical implications to the location strategy in international business.

INTRODUCTION

According to the 'eclectic paradigm of international production' proposed by Dunning (1980; 1988), firms which decide to internationalize their business activities and have international operations confront a very critical, challenging and strategic decision which relates to deciding about the foreign location or country for their international operations. A conceptual strategic decision-making model for the selection of a beneficial country for international operations suggested by Al Qur'an and Dickie (2005) considered the phase of developing suitable location factors as an important phase of the country selection process in order o arrive at a sound and beneficial country choice and as a result undertaking successful international expansion.

Notwithstanding no empirical evidence was reported in the international business literature concerning this claimed importance, previous research on the business location selection processes of domestic firms has confirmed the significance of identifying suitable location factors to reach healthy location choices (e.g., Augustin, 1999; Blair & Premus, 1987; Phllips, 1991; Schmenner, 1994). Furthermore, the internationalization activity of Australian firms is a relatively recent phenomenon and generally has attracted little concern from scholars (Edwards & Buckley, 1998; Maitland & Nicholas, 2000). Previous research on the location decision of Australian international firms or outward foreign direct investments has mainly looked into the locational determinants or factors subsequent to the establishment of Australian FDI (Edwards & Buckley, 1998; Edwards & Muthaly, 1999; Fittock & Edwards, 1998). More specifically, no academic attention has been given to exploring the phase of developing location decision factors involved in the location decision-making processes of Western Australian internationalizing firms which are defined in this paper as 'local firms willing and seeking to establish business operations abroad'. Therefore, as an attempt to fill this evident shortcoming and gap in the international business research, three comparative case studies of Western Australian service firms which have established successful outward foreign direct investment were undertaken to explore the strategic decision-making process relating to the foreign country selection process.

The paper begins with a review of past research on the location factors or determinants of FDI in general, and on the location factors of Australian FDI in particular. Next, the methodological framework and data collection techniques utilized for conducting this study are explained. Consequently, a discussion of the empirical findings of the selected two case organizations is presented. Finally, the study's conclusion, implications and limitations are outlined.

LITERATURE REVIEW

The literature on international location decisions has extensively investigated the location factors or determinants of international firms following the establishment of their foreign direct investments in the selected countries. However, not significant academic attention was given to the foreign investment decision-making process in general and to the phase of developing location decision factors or criteria in particular. For instance, Nonaka (1994) in examining the determinants of multinational corporations (MNCs) argued that the innovative capability of the host country is an important factor for attracting foreign subsidiaries. The Uppsala model by Johanson and Vahlne (1977) demonstrated that 'psychic distance' determines the locational choice. Psychic distance was defined as the costs of obtaining significant information about business conditions in other countries, the perception of risk and uncertainty involved in international operations and the resources required to access foreign networks. The model asserts that the costs expended in overcoming 'psychic distance' decrease over time due to the experience achieved by the firm. Therefore, firms often first enter neighboring markets because of their historical familiarity, and then expand to other foreign markets.

Other studies have stressed the global strategic focus of MNCs in the location choice. For example, Kim and Hwang (1992) affirmed that some MNCs might establish subsidiaries abroad to check the cash flow of potential global competitors. Terpstra and Yu (1988) found that the size and growth of markets are important determinants of foreign investment. Consequently, a government can influence locational decisions by limiting the demand conditions through the supply of infrastructure, and taxation policies. Boddewyn and Brewer (1994) addressed the significant influence of the government taxation and industry regulations on the locational decisions of international firms.

Bhatnagar and his associates conducted a cross-national study comparing the plant location factors between Singapore and Malaysia (Bhatnagar, Jayaram & Phua, 2003). They found that infrastructure, suppliers and markets have significant impact upon the plant location decision in both countries. William (1980) identified some country specific factors which influence the location decision of foreign investors; viz., market size and growth, tariff and non-tariff barriers to trade, input costs, geographic proximity and legal, political and economic conditions. Porcano (1993) examined twenty one factors affecting the American, British, French, German, and Japanese firms' location decisions. He concluded the factors that directly affect their ability to produce and sell a quality product were highly rated, such as product demand, labor quality and supply and the host country economy. Four case studies of international electronics firms were recently undertaken by McManus and his colleagues (McManus et. al, 2005) to explore the extent to which the telecommunications infrastructure influences the decision to select a specific foreign manufacturing site for international operation. The results indicated that telecommunications is a requirement to conduct business. Two firms showed that telecommunications was considered in their most recent site selection. Even though the other two firms did not explicitly consider telecommunications in the site selection criteria, they felt that it is critical to the success of a firm in an international market. From the domestic business location decision perspective, a study carried out by Schmenner (1994) to investigate the location decision-making process of domestic service firms found that the undertaken decision process involves a two-step procedure. The first step entails choosing a 'general area' for the service firm facility, while the second requires the selection of a 'particular site'. The study also revealed that producing a list of the 'must' and the 'wants' location factors or criteria is an important managerial step of the both location selection processes. These location factors entailed labor issues, infrastructure and quality of life, proximity to customers, proximity to competitors, low rental, favourable governmental policies, proximity to suppliers and business services and favourable tax policies.

Haigh (1990) interviewed twenty executives of twenty foreign subsidiaries owned by ten various multinationals to explore the managerial selection process concerning the site selection for these manufacturing subsidiaries. He found that the international site selection process is one part of a broader investment decision which resulted in selecting the US as a final foreign country choice for their international manufacturing operations. In addition, the study revealed that in most cases, the site selection process incorporated three separate stages: 1) the selection of a specific geographic region in the

United States, 2) the selection of two or three states within that region, and 3) the final decision on a specific site in a particular community. Nonetheless, this study has not provided insights into the location factors involved in the region and state selection process.

In the Australian context, a small number of studies has examined the location decisions of the Australian multinationals and investors. For example, Edwards and Buckley (1998) found that the motivation for the Australian manufactures in selecting the UK was the desire to access markets and the similarity of the language and political and legal systems. A study by Fittock and Edwards (1998) revealed that the size and the growth of the Chinese market were the primary motivations and factors for Australian investors to locate their foreign investments in China. However, Edwards and Muthaly (1999) found that the most important factors explaining Australian FDI in Thailand was access to local and neighboring markets, followed by low labor costs.

RESEARCH METHODOLOGY

The international location decision is an outcome of a strategic decision-making process accomplished by senior managers in the organization. In addition, this study intended to explore the phase of developing location factors as a critical aspect of the comprehensive location decision-making process of internationalizing firms, therefore, the interpretive paradigm is the most appropriate paradigm to be adopted in the current exploratory investigation by 'getting inside' the decision-makers' minds and seeing this phase from their point of view (Hassard, 1993) and experiences (Smith & Heshusius, 1986; Yeung, 1995).

The case study method was adopted in this study due to the close connection of this strategy with philosophical assumptions and foundations of the selected interpretive (phenomenology) paradigm and because it represents one of the primary research methods for studies adopting interpretivism (Gephart, 1999; Perry, 1994). Moreover, the exploratory nature of this research required the use of the case study method as it offers an opportunity for in-depth exploration and results in rich understanding and a clear picture about the research issue (Gilgun, 1994; Rowely, 2002). Additionally, practised researchers in the field of international business assert that most international business empirical research relies on secondary data and/or questionnaire responses which involve critical problems and has not provided rich theoretical analysis about important issues in international business (Boddewyn & Iyer, 1999).

Three case studies were purposefully selected (Patton, 1990) from among 4 potential Western Australian manufacturing firms which have established successful outward foreign direct investments in various foreign countries. As a result, two information-rich cases were selected and they were large sized firms which established international joint ventures in China. The characteristics of the selected cases are shown in Table 1.

		Table 1			
Firm name	Type of firm	Characteristics of the Select Ownership structure for international operation	Size of firm		
A	Manufacturing of plumbing products	Join Venture	Large		
В	Manufacturing of pipe support equipments	Joint Venture	Large		

In exploring the processes of international business as the subject matter of this study, the qualitative personal interview is the most useful method offering immense strength and richness to the collected data through entering the mindsets of the top executives and gaining access to their international

business experiences (Yeung 1995). Therefore, the data was mainly collected via in-depth interviews besides a questionnaire instrument.

The interviews were conducted between December 2004 and February 2005 with the available and most knowledgeable senior managers about the foreign investment decision-making processes (Birnbaum, 1985; Huber & Power, 1985; Papadakis, Lioukas & Chambers, 1998). Accordingly, three senior managers were interviewed, one director from each firm (managing directors of the firms). Each interview session lasted approximately two hours to two and half an hour using a semi-structured interview guide. The interview questions were open-ended and designed to explore the drivers of the internationalization decision and all managerial procedures and actions involved in the strategic decision-making processes undertaking by the selected firms to select beneficial foreign countries for their international operations. The questionnaire instrument was designed to obtain information about the company background and to confirm the interview responses.

The data analysis method employed in analyzing the interview data was based on the descriptions written by Miles and Huberman (1984;1994) which imply data reduction, data display and conclusion drawing and verification. Two main stages of analysis were utilized in the current research; that is, within-case and cross-case analyses (Ayres, Kavanaugh and Knafl, 2003; Creswell, 1998; Eisenhardt, 1989; Yin, 1994; 2003).

RESULTS

The cross-case results reveal that in all cases, the phase of developing location factors or criteria was the second important managerial aspect of the comprehensive foreign country selection process which occurred subsequent to the phase of situational analysis of the internationalization decision. The results show also that all companies established appropriate location factors compatible with the drivers of the internationalization, the type of business and the geographical nature of the potential foreign region or country. This conclusion was not addressed in the existing body of knowledge; hence bringing new light into the literature on the location strategy in international business.

In essence, the identified location factors included a variety of quantitative and qualitative location factors produced to guide the location team in evaluating the prospective foreign countries. The quantitative location factors were concerned with the cost of operating in a foreign country; fixed and variable costs such as cost of living, costs of setting up the foreign operation, labor and other related costs.

However, the qualitative location factors included non-cost issues such as cultural, political, economic development, legal, climatic, geographic issues, foreign investment attractiveness and barriers such as tax policies, trade and non-trade barriers, economic conditions of the country such as GDP, GNP, purchasing power and other economic indicators. In addition, all case firms confirmed that country, city and site factors were developed at three stages of the comprehensive international location decision-making process. However, some differences were found among these firms in relation to the attributes of the developed location factors. As explained by the managing directors of the two firms:

... and taken products so there was no need for us to resale to this area. Obviously price, when you go overseas price and availability are very important.

You have got to, really got to have the infrastructure, you have got to be confident and the government policies to ensure that you are not going to lose any money that you have to invest in there very quickly.

Raw material availability for what you want to manufacture but price is essential and very important because if you can't make a profit you can't sustain your business ... Right people in the town in the city, having the correct resources available for the manufacturing, the power resources and be confident that indeed the place that

you're in is not going to go bankrupt very quickly and Shandong will certainly not do that. (Firm A)

... the size of the domestic market... tariff and non-tariff trade barriers in different countries...

... What really concerned us was to guarantee that there was a domestic market and the manufacturing there was going to be a significant market over the time. We didn't want to make the product there and ship it to Australia. We wanted to use the business and our production offshore in that market so we could compete so aggressively.

Because we knew that our investment was going to be at least a couple of millions of dollars we wanted to make sure that the size of the domestic market opportunities that will be created, tariff and non-tariff trade barriers in different countries were right.

We use some water, electricity and other utilities ... we do shipping so the site should be close to the port... (Firm B)

Table 2 is a matrix shows the attributes of the most important location factors which were considered in the country selection processes undertaken by the two selected firms. The Table reveals very minor variations among the two firms about the country factors.

Although, Companies A and B established foreign operations in the same country (China), Company A addressed some region or province factors within China, while Company B did not developed any region factors for its international operation in China and the local partner's region was selected straightforwardly. The reason for that distinction refers to the type of product that each company manufactures. Company A produces plumbing products which require a substantial use of utilities such as gas, power and water. In addition, this type of industry is very competitive in China as many foreign firms in China produce the same product which created a strong competition and demand in relation to raw material, utilities and appropriate skilled labor. Therefore, it was important for Company A to develop location factors for the region and evaluate the potential regions thoroughly to minimize any future problems. In contrast, Company B manufactures pipe products which necessitate a small amount of utilities and the industry market for its products is not as highly competitive in China. Therefore, the region of the local partner was selected without any detailed investigation as it appeared to possess the required resources. The final conclusion about Table 2 is that the city and the site factors of Companies A and B were extremely similar.

The findings relating to the country factors agrees to some extent with the past line of research on location factors of international firms FDI subsequent to setting up the FDI in the selected foreign countries reviewed earlier in section 2 (e.g., Bhatnagar, Jayaram and Phua, 2003; Edwards and Buckley, 1998; Edwards and Muthaly, 1999; Fittock and Edwards, 1998). Nonetheless, the city factors of internationalizing firms were not addressed in the prior research, whereas most of the site factors or criteria were highlighted by Schmenner (1994) and new factors were emerged such as proximity to city CBD.

Location factors Country Factors Developed infrastructure. -Country tax policies. -Access to market and neighboring markets. -Political and economic stability. -Availability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power). -Attractive foreign investment policies. -Growth of market. -Simplicity in the foreign language. -Growth of market. -Tariff and non-tariff barriers to trade -Market size. -Region Factors (Within the Selected Country) -Developed infrastructure. -Availability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power). -Stability in the relevant labor market. -Developed infrastructure. -Availability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power). -Developed infrastructure. -Availability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power). -Proximity to the local partner place. -Proximity to the local partner place. -Adequacy of water, gas and electricity supply. Site Factors -Proximity to raw materials sources. -Proximity to raw materials sources. -Proximity to raw materials sources. -Proximity to major highways and roads. -Availability of suitable plant sites and room for future expansion. -Y Y Y P-Proximity to suppliers and business services. -Cost of land and construction.	Cross-case Findings for the Location Factors of Two Ca	ases	
-Developed infrastructure. Y Y Y - Country tax policies. Y Y Y - Country tax policies. Y Y Y - Political and eighboring markets. Y Y Y - Political and economic stability. Y Y - Political and economic stability. Y Y Y - Political and economic stability. Y Y Y - Political and economic stability. Y Y Y - Availability and the costs of qualified local labor, raw materials and natural Y Y Y resources and utilities (gas, water, power) Availability of local partner. Y Y Y - Attractive foreign investment policies. Y Y Y Y - Attractive foreign investment policies. Y Y Y Y - Geographical proximity to Australia. N N N - Simplicity in the foreign language. N N N N - Crowth of market. Y Y Y - Tariff and non-tariff barriers to trade Y Y Y - Market size. Y N Y - Market size. Y N N N N N N N N N N N N N N N N N N	Company	Α	В
-Developed infrastructure. Y Y Y -Country tax policies. Y Y Y -Country tax policies tability. Y Y -Country tax policies tability. Y Y -Country and the costs of qualified local labor, raw materials and natural Y Y resources and utilities (gas, water, power)Country of local partner. Y Y Y -Country of local partner. Y Y Y -Country of market. Y Y Y -Country of market. Y Y Y -Country of market. Y Y Y -Country of market size. Y Y Y Y -Country of market size of qualified local labor, raw materials and natural Y Y N -Country of market of qualified local labor, raw materials and natural Y Y N -Country of market	Location factors		
- Country tax policies. Y Y Y - Access to market and neighboring markets. Y Y Y - Political and economic stability. Availability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power). - Availability of local partner. Y Y Y - Attractive foreign investment policies. Y Y Y - Geographical proximity to Australia. N N N N N N N N N N N N N N N N N N N	Country Factors		
-Access to market and neighboring markets. Y Political and economic stability. Y Y Political and economic stability. Y Y Y Political partner. Y Y Y Political partner. Y Y Y Political partner. Y Y Y Political partner policies. Y Y Y Political proximity to Australia. N N N Political proximity in the foreign language. N N N N Political proximity in the foreign language. Y Y Y Political and non-tariff barriers to trade Y Y Y Political and non-tariff barriers to trade Y Y Y Political and non-tariff barriers to trade Y Y Y Political and non-tariff barriers to trade Y Y Y Political and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power). Poeveloped infrastructure. Y N N Political and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power). Political partner place. Y Y Y Political and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power). Proximity to the local partner place. Y Y Y Political partner place to live. Y Y Y Political partner place to live. Proximity to raw materials sources. Y Y Y Political partner place in displaced to live Political partner place. Y Y Y Political partner place to live. Y Y Political partner place to live. Y Y Political partner place. Y Y Y Political partner place to live. Political partner place. Y Y Y Political partner place to live. Political partner place. Y Y Y Political partner place to live. Political partner place p	-Developed infrastructure.		
-Political and economic stabilityAvailability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power)Availability of local partnerAttractive foreign investment policiesGeographical proximity to AustraliaGrowth of marketGrowth of marketTariff and non-tariff barriers to trade -Market sizeAvailability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power)Stability in the relevant labor marketCity Factors -Developed infrastructureAvailability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power)Proximity to the local partner placeProximity to the local partner placeAdequacy of water, gas and electricity supply. Site Factors -Proximity to raw materials sourcesProximity to raw materials sourcesProximity to raw materials sourcesProximity to major highways and roadsAvailability of developed industrial zonesProximity to suppliers and business servicesY -V -Availability of suppliers and business servicesY -Y -Y -Proximity to suppliers and business servicesY -Y -Y -Y -Proximity to suppliers and business services.	- Country tax policies.	Y	Y
-Availability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power)Availability of local partnerAttractive foreign investment policiesGeographical proximity to Australia. -Simplicity in the foreign languageGrowth of marketTariff and non-tariff barriers to trade -Market sizeAvailability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power)Stability in the relevant labor marketAvailability of sea portsAvailability of sea portsAvailability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power)Proximity to the local partner placeProximity to the local partner placeAttractive place to liveAdequacy of water, gas and electricity supply. Site Factors -Proximity to raw materials sourcesProximity to raw materials sourcesProximity to major highways and roadsAvailability of suitable plant sites and room for future expansionY -Availability of suitable plant sites and room for future expansionY -Proximity to suppliers and business services.	-Access to market and neighboring markets.		Y
resources and utilities (gas, water, power). -Availability of local partner. -Attractive foreign investment policies. -Geographical proximity to Australia. -Growth of market. -Tariff and non-tariff barriers to trade -Market size. -Market size. -Availability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power). -Stability in the relevant labor market. -Availability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power). -Developed infrastructure. -Developed infrastructure. -Availability of sea ports. -Availability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power). -Proximity to the local partner place. -Proximity to the local partner place. -Attractive place to live. -Adequacy of water, gas and electricity supply. Site Factors -Proximity to raw materials sources. -Availability of developed industrial zones. -Proximity to major highways and roads. -Availability and the costs of utilities (gas, water, power). -Proximity to major highways and roads. -Availability of suitable plant sites and room for future expansion. -Y Y Y Availability of suitable plant sites and room for future expansion. Y Y Proximity to suppliers and business services.	-Political and economic stability.		Y
-Availability of local partnerAttractive foreign investment policiesGeographical proximity to AustraliaSimplicity in the foreign languageGrowth of marketTariff and non-tariff barriers to trade -Market sizeY -Market sizeAvailability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power)Stability in the relevant labor marketCity Factors -Developed infrastructureAvailability of sea portsAvailability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power)Proximity to the local partner placeProximity to the local partner placeAttractive place to liveAdequacy of water, gas and electricity supply. Site Factors -Proximity to sea portProximity to raw materials sourcesAvailability and the costs of utilities (gas, water, power)Proximity to raw materials sourcesAvailability of developed industrial zonesProximity to major highways and roadsAvailability and the costs of utilities (gas, water, power)Proximity to major highways and roadsAvailability of suitable plant sites and room for future expansionY -Proximity to suppliers and business servicesY -Proximity to suppliers and business services.	-Availability and the costs of qualified local labor, raw materials and natural	Y	Y
-Attractive foreign investment policies. -Geographical proximity to Australia. -Simplicity in the foreign languageGrowth of market. -Tariff and non-tariff barriers to trade -Market size. -Region Factors (Within the Selected Country) -Developed infrastructure. -Availability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power). -Stability in the relevant labor market. -Developed infrastructure. -V N N City Factors -Developed infrastructure. -Availability of sea ports. -Availability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power). -Proximity to the local partner place. -Proximity to the local partner place. -Attractive place to live. -Adequacy of water, gas and electricity supply. Site Factors -Proximity to sea port. -Proximity to sea port. -Proximity to sea port. -Proximity to raw materials sources. -Availability of developed industrial zones. -Proximity to major highways and roads. -Availability and the costs of utilities (gas, water, power). -Proximity to major highways and roads. -Availability of suitable plant sites and room for future expansion. Y Y Y -Availability of suitable plant sites and room for future expansion. Y Y -Proximity to suppliers and business services.	resources and utilities (gas, water, power).		
-Geographical proximity to Australia. -Simplicity in the foreign languageGrowth of marketGrowth of marketTariff and non-tariff barriers to trade -Market size. -Megion Factors (Within the Selected Country) -Developed infrastructureAvailability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power)Stability in the relevant labor marketCity Factors -Developed infrastructureAvailability of sea portsAvailability of sea portsAvailability of sea portsProximity to the local partner placeProximity to the local partner placeProximity to the local partner placeProximity to sea portProximity to raw materials sourcesProximity to raw materials sourcesProximity to raw materials sourcesProximity to materials sourcesProximity to major highways and roadsAvailability of suitable plant sites and room for future expansionY -Proximity to suppliers and business servicesY -Proximity to suppliers and business services.	-Availability of local partner.	Y	Y
-Simplicity in the foreign language. Growth of marketTariff and non-tariff barriers to trade -Market sizeNewlong factors (Within the Selected Country) -Developed infrastructureAvailability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power)Stability in the relevant labor marketCity Factors -Developed infrastructureAvailability of sea portsAvailability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power)Proximity to fea portsAvailability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power)Proximity to the local partner placeProximity to the local partner placeAttractive place to liveAttractive place to liveActuractive place to liveProximity to sea portProximity to sea portProximity to sea portProximity to sea portProximity to raw materials sourcesProximity to raw materials sourcesProximity to major highways and roadsAvailability of developed industrial zonesProximity to major highways and roadsAvailability of suitable plant sites and room for future expansionY -Availability of suitable plant sites and room for future expansionY -Proximity to suppliers and business services.	-Attractive foreign investment policies.	Y	Y
Growth of market. Y Y -Tariff and non-tariff barriers to trade Y -Market size. Y Y Region Factors (Within the Selected Country) -Developed infrastructure. Y N -Availability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power). -Stability in the relevant labor market. -Developed infrastructure. Y N -Availability of sea ports. Y Y -Availability and the costs of qualified local labor, raw materials and natural Y Y resources and utilities (gas, water, power). -Proximity to the local partner place. Y Y -Transportation and freight costs. Y Y -Attractive place to live. Y Y -Adequacy of water, gas and electricity supply. Y Site Factors -Proximity to sea port. Y Y -Proximity to sea port. Y Y -Proximity to aport. Y Y -Proximity to raw materials sources. Y Y -Proximity to major highways and roads. N Y -Availability and the costs of utilities (gas, water, power). Y -Availability of suitable plant sites and room for future expansion. Y Y -Proximity to suppliers and business services. Y Y	-Geographical proximity to Australia.	<u>N</u>	<u>N</u>
Growth of market. Y Y -Tariff and non-tariff barriers to trade Y -Market size. Y Y Region Factors (Within the Selected Country) -Developed infrastructure. Y N -Availability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power). -Stability in the relevant labor market. -Developed infrastructure. Y N -Availability of sea ports. Y Y -Availability and the costs of qualified local labor, raw materials and natural Y Y resources and utilities (gas, water, power). -Proximity to the local partner place. Y Y -Transportation and freight costs. Y Y -Attractive place to live. Y Y -Adequacy of water, gas and electricity supply. Y Site Factors -Proximity to sea port. Y Y -Proximity to sea port. Y Y -Proximity to aport. Y Y -Proximity to raw materials sources. Y Y -Proximity to major highways and roads. N Y -Availability and the costs of utilities (gas, water, power). Y -Availability of suitable plant sites and room for future expansion. Y Y -Proximity to suppliers and business services. Y Y	-Simplicity in the foreign language.	<u>N</u>	<u>N</u>
-Market size. Y Negion Factors (Within the Selected Country) -Developed infrastructure. Y Negrour esources and utilities (gas, water, power)Stability in the relevant labor market. Y Negrour esources and utilities (gas, water, power)Stability in the relevant labor market. Y Negrour esources and utilities (gas, water, power)Developed infrastructure. Y Y Y Availability of sea ports. Y Y Y Availability of sea ports. Y Y Y Availability and the costs of qualified local labor, raw materials and natural Y Y Y resources and utilities (gas, water, power)Proximity to the local partner place. Y Y Y Attractive place to live. Y Y Adequacy of water, gas and electricity supply. Y Site Factors -Proximity to sea port. Y Y Y Availability of developed industrial zones. Y Y Y Availability of developed industrial zones. Y Y Y Availability of developed industrial zones. Y Y Y Availability and the costs of utilities (gas, water, power). Y Y Availability of suitable plant sites and room for future expansion. Y Y Y Availability of suitable plant sites and room for future expansion. Y Y Y Availability of suitable plant sites and room for future expansion. Y Y Y Availability of suitable plant sites and room for future expansion. Y Y Y Availability to suppliers and business services. Y Y Y	-Growth of market.	Y	Y
Region Factors (Within the Selected Country) -Developed infrastructure. Y N -Availability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power). -Stability in the relevant labor market. Y N -City Factors -Developed infrastructure. Y Y -Availability of sea ports. Y Y -Availability and the costs of qualified local labor, raw materials and natural Y Y resources and utilities (gas, water, power). -Proximity to the local partner place. Y Y -Transportation and freight costs. Y Y -Attractive place to live. Y Y -Adequacy of water, gas and electricity supply. Y Y -Site Factors -Proximity to sea port. Y Y -Proximity to raw materials sources. Y Y -Proximity to raw materials sources. Y Y -Proximity to major highways and roads. N Y -Availability and the costs of utilities (gas, water, power). Y Y -Availability of suitable plant sites and room for future expansion. Y Y -Proximity to suppliers and business services.	-Tariff and non-tariff barriers to trade	Y	Y
-Developed infrastructure. -Availability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power). -Stability in the relevant labor market. -Developed infrastructure. -Developed infrastructure. -Availability of sea ports. -Availability and the costs of qualified local labor, raw materials and natural YYY resources and utilities (gas, water, power). -Proximity to the local partner place. -Proximity to the local partner place. -Attractive place to live. -Adequacy of water, gas and electricity supply. -Adequacy of water, gas and electricity supply. -Proximity to sea port. -Proximity to raw materials sources. -Proximity to raw materials sources. -Availability of developed industrial zones. -Proximity to major highways and roads. -Availability and the costs of utilities (gas, water, power). -Availability of suitable plant sites and room for future expansion. -Proximity to suppliers and business services. Y Y Y -Proximity to suppliers and business services.	-Market size.	Y	Y
-Developed infrastructure. -Availability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power). -Stability in the relevant labor market. -Developed infrastructure. -Developed infrastructure. -Availability of sea ports. -Availability and the costs of qualified local labor, raw materials and natural YYY resources and utilities (gas, water, power). -Proximity to the local partner place. -Proximity to the local partner place. -Attractive place to live. -Adequacy of water, gas and electricity supply. -Adequacy of water, gas and electricity supply. -Proximity to sea port. -Proximity to raw materials sources. -Proximity to raw materials sources. -Availability of developed industrial zones. -Proximity to major highways and roads. -Availability and the costs of utilities (gas, water, power). -Availability of suitable plant sites and room for future expansion. -Proximity to suppliers and business services. Y Y Y -Proximity to suppliers and business services.	Region Factors (Within the Selected Country)		
-Availability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power)Stability in the relevant labor market. **City Factors** -Developed infrastructure. -Availability of sea ports. -Availability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power). -Proximity to the local partner place. -Proximity to the local partner place. -Transportation and freight costs. -Attractive place to live. -Adequacy of water, gas and electricity supply. **Site Factors** -Proximity to sea port. -Proximity to say port. -Proximity to raw materials sources. -Proximity to raw materials sources. -Proximity to major highways and roads. -Availability and the costs of utilities (gas, water, power). -Availability of suitable plant sites and room for future expansion. -Proximity to suppliers and business services. **Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y		Y	<u>N</u>
-Stability in the relevant labor market. City Factors -Developed infrastructure. -Availability of sea ports. -Availability and the costs of qualified local labor, raw materials and natural Y Y resources and utilities (gas, water, power). -Proximity to the local partner place. -Proximity to the local partner place. -Attractive place to live. -Adequacy of water, gas and electricity supply. Site Factors -Proximity to sea port. -Proximity to say materials sources. -Proximity to raw materials sources. -Proximity to major highways and roads. -Availability of developed industrial zones. -Availability of suitable plant sites and room for future expansion. -Y Y -Proximity to suppliers and business services.	-Availability and the costs of qualified local labor, raw materials and natural	Y	
-Developed infrastructure. -Availability of sea ports. -Availability and the costs of qualified local labor, raw materials and natural Y Y resources and utilities (gas, water, power). -Proximity to the local partner place. -Proximity to the local partner place. -Attractive place to live. -Adequacy of water, gas and electricity supply. -Are Factors -Proximity to sea port. -Proximity to raw materials sources. -Proximity to raw materials sources. -Proximity to major highways and roads. -Availability of developed industrial zones. -Proximity and the costs of utilities (gas, water, power). -Availability of suitable plant sites and room for future expansion. -Proximity to suppliers and business services.	resources and utilities (gas, water, power).		
-Developed infrastructure. -Availability of sea ports. -Availability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power). -Proximity to the local partner place. -Proximity to the local partner place. -Attractive place to live. -Adequacy of water, gas and electricity supply. -Site Factors -Proximity to sea port. -Proximity to raw materials sources. -Proximity to raw materials sources. -Proximity to major highways and roads. -Proximity to major highways and roads. -Availability of suitable plant sites and room for future expansion. -Proximity to suppliers and business services.	-Stability in the relevant labor market.	Y	<u>N</u>
-Availability of sea ports. -Availability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power). -Proximity to the local partner place. -Proximity to the local partner place. -Attractive place to live. -Adequacy of water, gas and electricity supply. -Adequacy of water, gas and electricity supply. -Proximity to sea port. -Proximity to raw materials sources. -Proximity to raw materials sources. -Proximity to major highways and roads. -Availability and the costs of utilities (gas, water, power). -Availability of suitable plant sites and room for future expansion. -Proximity to suppliers and business services. Y Y Y -Proximity to suppliers and business services.	City Factors		
-Availability and the costs of qualified local labor, raw materials and natural resources and utilities (gas, water, power)Proximity to the local partner place. Y Y - Transportation and freight costs. Y Y - Attractive place to live. Y Y - Adequacy of water, gas and electricity supply. Y Y Site Factors -Proximity to sea port. Y Y - Proximity to raw materials sources. Y Y Y - Availability of developed industrial zones. Y Y Y - Availability and the costs of utilities (gas, water, power). Y Y - Availability of suitable plant sites and room for future expansion. Y Y Y - Proximity to suppliers and business services. Y Y	-Developed infrastructure.	Y	Y
resources and utilities (gas, water, power). -Proximity to the local partner place. -Transportation and freight costs. -Attractive place to live. -Adequacy of water, gas and electricity supply. Site Factors -Proximity to sea port. -Proximity to raw materials sources. -Proximity to raw materials sources. -Proximity to major highways and roads. -Availability and the costs of utilities (gas, water, power). -Availability of suitable plant sites and room for future expansion. -Proximity to suppliers and business services.	-Availability of sea ports.	Y	Y
resources and utilities (gas, water, power). -Proximity to the local partner place. -Transportation and freight costs. -Attractive place to live. -Adequacy of water, gas and electricity supply. Site Factors -Proximity to sea port. -Proximity to raw materials sources. -Proximity to raw materials sources. -Proximity to major highways and roads. -Availability and the costs of utilities (gas, water, power). -Availability of suitable plant sites and room for future expansion. -Proximity to suppliers and business services. Y Y Y Y	-Availability and the costs of qualified local labor, raw materials and natural	Y	Y
-Transportation and freight costs. -Attractive place to live. -Adequacy of water, gas and electricity supply. Site Factors -Proximity to sea port. -Proximity to raw materials sources. -Proximity of developed industrial zones. -Proximity to major highways and roads. -Availability and the costs of utilities (gas, water, power). -Availability of suitable plant sites and room for future expansion. -Proximity to suppliers and business services. Y Y Y			
-Attractive place to live. Y Y -Adequacy of water, gas and electricity supply. Y Y Site Factors -Proximity to sea port. Y Y -Proximity to raw materials sources. Y Y -Availability of developed industrial zones. Y Y -Proximity to major highways and roads. N Y -Availability and the costs of utilities (gas, water, power). Y Y -Availability of suitable plant sites and room for future expansion. Y Y -Proximity to suppliers and business services. Y Y	-Proximity to the local partner place.	Y	Y
-Adequacy of water, gas and electricity supply. Site Factors -Proximity to sea port. -Proximity to raw materials sources. -Availability of developed industrial zones. -Proximity to major highways and roads. -Availability and the costs of utilities (gas, water, power). -Availability of suitable plant sites and room for future expansion. -Proximity to suppliers and business services. Y Y	-Transportation and freight costs.	Y	Y
-Adequacy of water, gas and electricity supply. Site Factors -Proximity to sea port. -Proximity to raw materials sources. -Availability of developed industrial zones. -Proximity to major highways and roads. -Availability and the costs of utilities (gas, water, power). -Availability of suitable plant sites and room for future expansion. -Proximity to suppliers and business services. Y Y	•	Y	Y
Site Factors -Proximity to sea port. -Proximity to raw materials sources. -Availability of developed industrial zones. -Proximity to major highways and roads. -Availability and the costs of utilities (gas, water, power). -Availability of suitable plant sites and room for future expansion. -Proximity to suppliers and business services. Y Y	-	Y	Y
-Proximity to raw materials sources. -Availability of developed industrial zones. -Proximity to major highways and roads. -Availability and the costs of utilities (gas, water, power). -Availability of suitable plant sites and room for future expansion. -Proximity to suppliers and business services. Y Y Y	- · · · · · · · · · · · · · · · · · · ·		
-Availability of developed industrial zones. Y Y -Proximity to major highways and roads. N Y -Availability and the costs of utilities (gas, water, power). Y Y -Availability of suitable plant sites and room for future expansion. Y Y -Proximity to suppliers and business services. Y Y	-Proximity to sea port.	Y	Y
-Availability of developed industrial zones. Y Y -Proximity to major highways and roads. N Y -Availability and the costs of utilities (gas, water, power). Y Y -Availability of suitable plant sites and room for future expansion. Y Y -Proximity to suppliers and business services. Y Y	-Proximity to raw materials sources.	Y	Y
-Proximity to major highways and roads. -Availability and the costs of utilities (gas, water, power). -Availability of suitable plant sites and room for future expansion. -Proximity to suppliers and business services. N Y Y Y	•	Y	Y
-Availability and the costs of utilities (gas, water, power). -Availability of suitable plant sites and room for future expansion. -Proximity to suppliers and business services. Y Y Y	· · · · · · · · · · · · · · · · · · ·	N	Y
-Availability of suitable plant sites and room for future expansion. Y Y -Proximity to suppliers and business services. Y Y		Y	Y
-Proximity to suppliers and business services. Y Y		Y	Y
· · · · · · · · · · · · · · · · · · ·		Y	Y
		Y	
-Adequacy of water, gas and electricity supply. Y Y			
-Cost of land and construction. Y Y		Y	

Notes: \mathbf{Y} (important), $\underline{\mathbf{N}}$ (not important at all)

Source: Developed for the current research by the author based on cross-case analysis of field data.

The findings show also that the foreign country and the local partner selection was undertaken simultaneously. In the two case organizations (Companies A and B) as they established IJV with a local

partner, it was crucial for the companies to search for potential foreign countries and local partners within these countries concurrently and to recognize a trustworthy and skilled local partner in conjunction with country choice. Accordingly, the local partner joined the location team of the parent company and influenced the choice of an appropriate city and site options and the relevant information acquiring and assessment phase. Moreover, having assisted the parent company to select the final city and site, the local partner supervised the implementation process for the news facility through his personal links in the country and selected. As indicated by the heads of the two firms:

We looked at the positives and negatives of various regions relevant to China in terms of cost. We were seeking for a particular region with a level of expertise and in the area where we going to manufacture ... If you entered into an area or country where many factories manufacture the same type of product, you have a very difficult problem to keep your labor up, because labor jumps from one company to another and this is where a lot of business makes mistakes in China ... You have to find a trading partner who is both capable and who's honest ... We had to consider availability of labor; we had to consider the expertise.

But the critical thing was that ... who is our Chinese partner, actually comes from that city and he knows the city well and he knows all the key people that we needed to get assistance from to support us in the beginning to build up a venture.

You have to look for a bit of stability in the partnership, part of the country your dealing with.

You have to find a trading partner who is both capable and who's honest. If you can't find that honest capable trading partner no matter what country it's in you could have a problem. So the critical thing is you have to find the right person and that's what we have ... We had that before we actually started our business. (Firm A)

They identified partners in Malaysia and Indonesia.

They agreed on the country and the local partner for the joint venture.

The local partner offered a city and site and it was then approved by the directors.

We identified a good partner we liked ...

In the period that we had gone through over the years of different involvement we believe that the relationship is the most important factor of all ... But most importantly you have to be able to develop a report with people, doesn't matter they are black, white, catholic, Muslim it doesn't matter. If you can't look each other in the eye and trust each other, the relationship will not work and that's the things I did for myself. And all the legal documents you invent in the world, all those things do is to protect you in case of dispute. But the real way to make you successful is to be able to work together; legal documents never ever work well, the relationship makes you work well.

We finally found a joint venture partner that we felt comfortable with and we could trust and then we worked together with him for the last year ...

The main purpose of this study was to investigate thoroughly the phase of developing location factors as a significant aspect involved in the country selection process undertaken by Western Australian internationalizing manufacturing firms to select beneficial foreign countries for their international operations. The results show that in all cases, the phase of developing location factor is an important managerial action to be considered in a successful foreign investment decision-making process. Further, the study concluded that this phase included the identification of primary and secondary location factors for the developed country, city and site options in agreement with the drivers of the internationalization decision, the type of business, the firm's overall business strategy and the geographical nature of the potential countries. As a result, evidently, drivers of the internationalization decision, the type of business and the firm's overall business strategy and the location strategy in particular affect the structure and the attributes of the intended location decision factors involved in the foreign country selection process. In addition, the study concluded that having appropriate primary and secondary country, city and site factors affects positively the effectiveness of the assessment phase in relation to the prospective countries, cities and sites and, accordingly, leads to the selection of beneficial location choices. Finally, the results illustrate that identifying a trustworthy and skilled local partner within the potential foreign country was a decisive action and instrumental to arrive at a sound and beneficial foreign country selection.

The study's empirical outcomes contribute to a large extent to theory and practice by providing important value to research on international business strategy and foreign direct investment through highlighting the significance of developing appropriate location decision factors in the formulation of effective international business location strategies to undertake successful international expansion. In addition, the results have important implications to business managers by improving their foreign investment decision-making processes.

It is unarguable that any empirical research has some limitations which need to be acknowledged. Initially, for the reason that the research employed the case study strategy and was built on three case studies selected purposively from among 4 potential firms, the most distinct problem associated with this approach is that of generalization (Esienhardt, 1989; Yin, 1994; 2003). The research has a limited geographical and industry focus and as it focused on Western Australian firms and only investigated two manufacturing firms and, accordingly, it is likely that the findings do not apply similarly to other international organizations in other Australian states and in other countries. Another limitation relates to 'interviewee response bias' and 'retrospective bias' as the decisions investigated occurred some time in the past, which may result in not all the information has being recalled correctly by the informants.

However, in organizational strategy research, as was the case with the current research, "the best trace of the completed process remains in the minds of those peoples who carried it out" (Mintzberg, Raisinghani & Theoret, 1976, p.248). In addition, the questionnaire was designed following the interview session to validate the interviewee's responses and the available secondary data were utilized to confirm the interview statements.

As a result, these former limitations provide opportunities for future research to be carried out in other states within Australia to investigate the phase of developing location decision factors involved in location decision-making processes of internationalizing firms. Furthermore, since this study was limited to greenfield FDI and manufacturing operations, more research is suggested to examine other international businesses from other sectors and industries adopting various entry mode strategies such as acquisition, licensing and exporting to capture the significant differences in phase of developing location factors among these entry modes in international business.

REFERENCES

- Al Qur'an, M.N & Dickie, L. 2005. How can international firms select beneficial foreign locations for their operations? In A. Ahmed, (Ed.), *World sustainable development outlook 2005: Global competitiveness: A common goal in a digital society*, Bradford, UK: Emerald Group Publishing Limited, pp. 89-102.
- Augustin, P. R. 1999. Making sense of site selection. *IIE Solutions*, (August): 34-36.
- Ayres, L., Kavanaugh, K. & Knafl, K. A. 2003. Within-case and across-case approaches to qualitative data analysis. *Qualitative Health Research*, 13(6): 871-883.
- Bhatnagar, R., Jayaram, J. & Phua, Y. C. 2003. Relative importance of plant location factors: A cross national comparison between Singapore and Malaysia. *Journal of Business Logistics*, 24(1):147-170.
- Birnbaum, P. H. 1985. Political strategies of regulated organizations as functions of context and fear. *Strategic Management Journal*, 6(2): 135-150.
- Blair, J. P. & Premus, R. 1987. Major factors in industrial location: A review. *Economic Development Quarterly*, 1(1): 72-85.
- Boddewyn, J. J. & Brewer, H. 1994. International business political behavior: New theoretical direction. *Academy of Management Review*, 19(2): 119-143.
- Boddewyn, J. J. & Iyer, G. 1999. International-business research: Beyond déjà vu. *Management International Review*, 39(2): 161-184.
- Creswell, J. W. 1998. *Qualitative inquiry and research design: Choosing among five traditions*. California: Sage Publications.
- Dunning, J. H. 1980. Toward an eclectic theory of international production: Some empirical tests. *Journal of International Business Studies*, 11(1): 9-31.
- Dunning, J. H. 1988. The electric paradigm of international production: A restart. *Journal of International Business Studies*, 19(1): 1-31.
- Edwards, R. W. & Buckley, P. 1998. The choice of location and mode: The case of Australian investors in the UK. *International Business Review*, 7(4): 503-520.
- Edwards, R. W., & Muthaly, S. 1999. Perceptions of risk and opportunity: Why some Australians have invested in Thailand. *Journal of Asian Business*, 15 (2): 79-84.
- Eisenhardt, K. M. 1989. Building theories from case study research. *The Academy of Management Review*, 14(4): 532-550.
- Fittock, S. & Edwards, R. W. 1998. The determinants of Australian direct investments in China. *Journal of Asian Business*, 14(3): 41-52.
- Gephart, R. 1999. Paradigms and research methods. Proceedings of the *Research Method Forum*, *Academy of Management Research*, [www document] http://aom.pace.edu/rmd/1999 RMD Forum Paradigms and Research Methods.htm (Accessed 18 July 2005).
- Gilgun, J. F. 1994. A case for case studies in social work research. Social Work, 39(4): 371-380.
- Haigh, R. W. 1990. Selecting a US plant location: The management decision process in foreign companies. *Columbia Journal of World Business*, 25(3): 22-32.
- Hassard, J. 1993. *Sociology and organization theory: Positivism, paradigms and postmodernity*. Cambridge University Press: Cambridge.
- Huber, G. P. & Power, D. J. 1985. Research notes and communications retrospective reports of strategic-level managers: Guidelines for increasing their accuracy. *Strategic Management Journal*, 6(2): 171-180.
- Johanson, J. & Vahlne, J. E. 1977. The Internationalization process of the firm model of knowledge developments. *Journal of International Business Studies*, 8(1): 23-32.
- Kim, C. W. & Hwang, P. 1992. Global strategy and multinationals' entry mode choice. *Journal of International Business Studies*, 3(1): 29-53.
- Maitland, E. & Nicholas, S. 2000. Internationalization of Australian firms in Asia: Does late make for nimble? Australian Centre for International Business, University of Melbourne, Australia, *Discussion Paper*, No 9, December 2000.

McManus, D. J., Carr, H. H., Snyder, C. A. & Ford, F. N. 2005. An exploratory analysis of the impact of global telecommunications on electronics manufacturing site selection. *International Journal of Management and Decision Making*, 6(2): 127-147.

Miles, M. B. & Huberman, M. A. 1984. *Qualitative data analysis: A sourcebook of new methods*. California: Sage Publications.

Miles, M. B. & Huberman, M. A. 1994. *Qualitative data analysis: An expanded sourcebook*, 2 edn. California: Sage Publications.

Mintzberg, H., Raisinghani, D. & Theoret, A. 1976. The structure of "unstructured" decision process. *Administrative Science Quarterly*, 21(2): 246-275.

Nonaka, I. (1994) 'A dynamic theory of organizational knowledge creation', *Organization Science*, 5(1): 14-37.

Papadakis, V., Lioukas, S. & Chambers, D. 1998. Strategic decision-making processes: The role of management and context. *Strategic Management Journal*, 19(2): 115-147.

Patton, M. Q. 1990. Qualitative evaluation and research methods, 2 edn., California: Sage Publications.

Perry, C. 1994. A structured approach to presenting PhD theses: Notes for candidates and their supervisors. Proceedings of the *ANZ Doctoral Consortium*, February 1994; University of Sydney, Sydney, Australia.

Phillips, P. D. 1991. Site selection: Corporate perspective and community response. *Economic Development Review*, 9 (2): 4-11.

Porcano, T. M. 1993. Factors affecting the foreign direct investment decision of firms from and into major industrialized countries. *Multinational Business Review*, 1(2): 26-36.

Rowley, J. 2002. Using case studies in research. *Management Research News*, 25(1): 16-27.

Schmenner, R. W. 1994. Service firm location decisions: Some Midwestern evidence. *International Journal of Service Industry Management*, 5(3): 35-56.

Smith, J. K. & Heshusius, L. 1986. Closing down the conversation: The end of the quantitative-qualitative debate among educational inquires. *Educational Researcher*, 15(1): 4-12.

Terpstra, V. & Yu, C. 1988. Determinants of foreign investment of US advertising agencies. *Journal of International Business Studies*, 19(1): 33-46.

William, H. D. 1980. The location of foreign direct investment activity: Country characteristics and experience effects. *Journal of International Business Studies*, 11(2): 9-10.

Yeung, H. 1995. Qualitative personal interviews in international business research: Some lessons from a study of Hong Kong transnational corporations. *International Business Review*, 4(3): 313-339.

Yin, R. K. 1994. *Case study research: Design and methods*, 2 edn. California: Sage Publications.

GLOBAL MARKET EXPANSION STRATEGIES IN WIRELESS TELECOMMUNICATION INDUSTRY-A CASE STUDY

Dr.S.Jayashree
Dr.A.Seetharaman
Dr.G.Marthandan
Mr Mohammed Elfatih Abdelelah
Multimedia University, Malaysia
Email: jayashree@mmu.edu.my

ABSTRACT

The detonation in the wireless telecommunication market resulted in a series of opportunities and challenges for the companies in the sector. After enjoying phenomenal growth for over a decade, the mobile sector is now more than slightly eager to find the Next Big Thing to spur a flagging market. The ever-picking up technological innovations in this industry makes the competition stiffer and those who are the first mover reap the benefit. Mobile manufacturers are now racking their brains as to how to get the edge in an increasingly competitive market, where any more big mistakes could be their undoing. Against this backdrop of edginess and hyper-belligerent positioning, a case study has been made on a UK based wireless telecommunication company to identify their global market expansion strategies. We have applied PEST and SWOT analysis along with Michael Porter's model which critically examines the strategies adopted and the challenges faced by the company.

INTRODUCTION

Mobile multimedia communication has had an unprecedented growth in the current trend and mobile data information and the Internet have given all mobile telephone operators the opportunity for significant growth. Telecommunication has long been recognized as the engine for economic growth(Afullo,1999). Among the major players in the field, one of the U.K. based Multinational Company (Under study – herein referred as MNC) with its wide global presence has created the niche in the global market with the scale and resource to obtain full benefit in the area of wireless and communication. It has become a leading player among global firms, ranking as the second largest multinational company in 2004 according to the world investment report, manufacturing an extensive range of mobile telecommunications services, including voice and data telecommunications and is the world's largest mobile telecommunications company with significant presence worldwide. The increasing growth of international telecommunications and the importance of the telecommunication business in the current global economy have stimulated research into the telecommunication business (Chaweewanln, 2001). The boom in the mobile telephone market resulted in a serious of opportunities and challenges for companies in the sector. It is well established as main wireless/ mobile phone operator in the world and it's highly competitive in its market. Strategic partnerships between major telecommunications operators from North/South America, Europe, Asia and other parts of the world are forming almost daily, although the pace has slowed since the decrease in telecommunication and Internet stock prices tightened capital markets in late 2000 (Rosenbush, 2001). The company is well known for its acquisition and alliances/ joint venture. All these have become a reality because of the global market expansion strategies conceived

and adopted by the MNC. This has become food for thought and a case study was made with the main purpose of examining its wide expansion in the global market, and to critically review the global strategies adopted by the MNC.

BACKGROUND INFORMATION

The company generates 12.4% of the industry's revenues and its nearest competitor accounts for a further 10.5% of the global industry value. The majority of the industry share (59%) is fragmented between smaller players, which individually hold industry value shares of less than 4.0%. The MNC provides mobile telecommunications products and services to three major groups of customers viz., Private individuals, Small businesses and Large organisations and its current target is to become one of the world's top five brands and is doing this through expanding its global presence through dual branding exercises with the 30 other companies around the world. The group's current business strategy is to grow through geographic expansion, acquisition of new customers, retention of existing customers and increasing usage through innovations in technology which helps them to retain market leadership. The first mover firms always capture market share in initial stages which helps to bring economies of scales, learning curve, and setting the industry standards and this is very true with this MNC. . The company's strategy was also complemented by timely internet-related innovations and booming stock market. In the area of company structure and its leadership, they were fortunate to have a small group of executives who had stayed with company for long time. The company's strategies, performances and other indicators have been collected from the published annual reports of the company and from other secondary sources. These data are critically reviewed using PEST analysis and SWOT analysis and are discussed here.

PEST Analysis

PEST analysis can be categorised into four categories which are: political, legal and governmental forces; Economic forces; Social, cultural, demographic and environmental forces; and Technological forces. The Relationship among these factors significantly affects all products, services, markets, and organisations in the world. Changes in these factors get translated into changes in consumer demand for both industrial and consumer products and services. They can also affect the types of products developed, the nature of positioning and market segmentation strategies, the type of services offered, and the choice of businesses to acquire or sell, also the suppliers and distributors. PEST analysis can identify and evaluate external opportunities and threats, enable organizations to develop a clear mission, to design strategies to achieve long-term objective, and to develop policies to achieve short-term objective.

Political factors: All wireless services require access to frequency bands in electromagnetic spectrum, which is a natural resource. Allocation of this precious spectrum could get increasingly difficult because of emerging wireless applications. Governments could auction spectrum which could result in excessive premium being paid for it with less economic value left for the firm. Also same frequency band being allocated in different countries would make it easier for equipment suppliers to realize economies of scale and learning as they would not have to customize their products to local requirements. The company has made substantial investments in the acquisition of 3G licenses and in its mobile networks, including the rollout of 3G networks. The Group expects to continue to make significant investments in its mobile networks due to increased usage and the need to offer new services and greater functionality afforded by 3G technologies.

Governments' watchdogs monitoring competition might affect the firm's prospects. If large companies stifle competition by enforcing patent with legal might, innovation could struggle as patents only afford limited protection and could get circumvented by adequately resourced companies backed by legal teams. Telecom industry has been deregulated resulting in lot of outsourcing by large corporations. This makes it easier for firms with little R&D to set up business.

Building the infrastructure needed to support the network usually requires permission from the government and statutory bodies to use their land.

Economic factors: The Group faces a high degree of competition in each of its geographical markets. It is subject to indirect competition from providers of other telecommunications services in the domestic markets in which it operates in addition to direct competition from existing network operators of mobile telecommunications services and mobile virtual network operators (MVNOs) who do not operate a mobile telecommunications network. Interest rates have risen in recent years in most of the countries along with oil and house prices which are very important factor determining disposable income deriving demand for wireless gadgets. Wireless industry like other industries has increasingly outsourced manufacturing to far-east and other parts of the world exposing the industry to various global risks such as political stability, exchange rates fluctuations etc.

The bidding war for 3G licenses happened at the height of an economic boom and consequently the price paid for them was extremely high which was coupled with the cost of building the network which was very expensive.

Social Factors: Risk of radiation emanating from mobile phone handsets this will be a persistent challenge facing all wireless equipment manufacturers. The wireless industry has been seeking a killer application for years to kick start high speed wireless data traffic, but has failed to find one so far. There are conflicting preferences in what consumers want as some are interested in downloading music or viewing video clips and others are interested in sending and receiving e-mails on their mobile phones and hence in order to meet the needs of the consumers the company comes up with product features which are wanted by the customers. To get leverage on the investments there must also be customer value and a market for the product. What every manager has to ask in every business is (Sjolander & Magnusson, 2002):

- Who is the customer?
- What does the customer value?
- How do we make money in this business?
- What is the underlying economic logic that explains how the company can deliver value to customers at an appropriate cost?

Demographic: Mobile phones tend to be used by the younger members of society. In countries where the population is aging, the demographics may shift to a more aged population who may have less use for the mobile phone. A lot of the take up of mobile phones has been down to fashion and/or peer pressure. If a trend of not having a phone was to materialize, this could seriously impact the usage.

Technological factors: Mobile phones for voice & data traffic, wireless PDAs which can communicate with laptops via infrared or RF links, UWB and WiFi links for local areas networking, Digital radio, digital TV are part of various wireless technologies that exist today. These are all digital technologies unlike early technologies. This would permit the possibility of so called "convergence", where various standards would merge into one single global technical standard. This would require innovation in interfaces between various protocols initially and later products which could meet universal standard. This would cause a great deal of uncertainty as predicting the dominant technical standard and its evolutionary path could influence business prospects.

Networking: Nowadays, wireless devices have to work seamlessly across different networks like UTMS, WCDMA, GSM, EDGE, GPRS, UWB which make their design challenging. 3G Handset have suffered from reliability problems due to various reliabilities issues. These include battery life, constantly evolving standards, more complexity packed in simple mobile terminals etc. Today we have continuously growing markets for wireless LANs, but there is big black hole in the security of the kind of network

SWOT Analysis

SWOT analysis is a short form used to describe the particular Strengths, Weaknesses, Opportunities, and Threats that are strategic factors for a specific company. SWOT analysis can, not only results in the identification of a corporation's distinctive competencies – the particular capabilities and resources that are firm possesses and the superior way in which they are used- but also in the identification of opportunities that a firm is not currently able to take advantage of due to a lack of appropriate resources. Using SWOT analysis on the MNC can indicate how it is positioned so as to gain to the maximum out of the future opportunities by leveraging its strengths and alleviate the threats by working on its weakness.

Strengths:

- Largest mobile telecommunications network company in the world.
- Increase of the Company revenue and profit over last fiscal year.
- Global brand acts as an effective tool to strengthen and to leverage against smaller companies in the industry.
- The company has an extensive range of communication services for its customers.
- Unique product features designed according to the customer's preferences.
- The successful introduction of its Live! service over the past year.

Weaknesses:

- The company relies on data service revenue growth.
- May not control its operations effectively in other markets and partners
- Not a popular name in other parts of the world.
- Outstanding debts are significant.
- Problems may be created due to overcrowding of the industry.
- There is no assurance that the group will not experience increase in customer churn rates.
- Lack of control over partnerships

Opportunities

- Investing in new technologies.
- New acquisitions by targeting emerging markets which might be an excellent opportunity.
- Develop a range of offering in new areas demanded from future customers.
- Increase Average Revenue Per User(ARPU)
- Increasing market share
- Accrue great revenue from large customer base.

Threats

- Increased competition can reduce market share or revenue.
- Regulatory decisions and changes in the regulatory environment.
- Currency fluctuation.
- Market saturation in some countries.
- Challenges created by competitors due to technological advancement.

Diagnosis

Despite its largest telecommunication net work in the region, the company relies on data service revenue growth and there is no assurance that the group will not experience increase in customer churn rates. Due to lack of control over its partnerships, the group may not control its operations effectively in other markets where they are not popular. Due to overcrowding and exponential growth, the outstanding debts are significant. The company lacks effective control measures and if they are allowed to persist and continue, the collapse will be sudden.

After conducting the TOWS Matrix the frequency distribution of strategies identified the several strategies and the first five frequently used strategies are Focus strategy, product development, cost strategy, market penetration and joint venture.

Focus strategy: A focus strategy is when a company concentrates on a market area, a market segment, or a product. The strength of a focus strategy is derived from knowing the customer and the product category very well so to establish a "franchise" in the marketplace (Porter, 1980). The strength of a focus strategy is derived from knowing the customer and the product category very well so to establish a "franchise" in the marketplace (Porter, 1980). As the largest mobile network in the world, the company has to use it core competences in a particular mobile users segment or develop focus strategy by breaking itself to few companies, each serve a particular need of the wireless telecom industry.

Product development: It improves present products and services (voice service and non voice service) offered by the company and they should be Innovative and initiatives should be taken to come up with new features. The Group demonstrated new mobile TV technology and a number of new handsets, including two branded handsets, jointly developed with another MNC.

Cost leadership: To deliver on this basic customer need, the MNC has to plan progressively to introduce price plans that bundle voice and data services together within an attractive value proposition for customers, whilst at the same time encouraging higher usage. The more cost efficient nature of the new technology also enables them to provide these additional services and revenue without incurring a substantial change in underlying costs, thereby creating value for shareholders. The Group also has to keep in improving network service quality to ensure that customers can use their mobile phone whenever and wherever they wan.

Market penetration: Gaining new customers depends on many factors, including network coverage and quality, customer satisfaction, product offerings and handset range but a key factor is often the pricing of handsets and tariffs. In general, as penetration rates rise in a market, competition intensifies as operators invest more in retaining their existing customers whilst offering incentives to potential new customers. These competitive pressures, along with new mobile users who generally spend less than existing users, exert a downward pressure on ARPU and result in increased acquisition and retention costs.

Joint venture: Joint venture is the most viable way to expand its global market, especially on emerging markets over business operations. The company gradually has to seek to take control of its subsidiaries.

Application of Model

Porter's Five Forces: Competition is not limited to the firms in the same industry. Companies may adopt different strategies for different competitive advantage. If firms in the industry collectively have insufficient capacity to fulfil demand, the incentive is high to for new market entrants. However such entrants need to consider the time and investment it takes to develop new or additional capacity, the likelihood of such capacity being developed by existing competitors, and the possibility of changes of customer demand over time. Indirect competition also comes from suppliers and customers as well as substitute products or services. A conceptual Porter's five forces framework that portrays the multidimensional nature of competitive industry structure is presented below.

Barriers to entry are high and include:

- Government licensing policy
- Huge financial & human resources investment
- Vertical integration
- Economies of scale

• First mover advantage

Supplier's power is also high and includes:

- Domination of few large suppliers.
- Importance of volume to supplier
- High switching costs
- High order volume

Threats of subsidies are low and include:

- Prices/services/ performance by substitute
- Difference in method of internet access
- Standardization/ switching costs
- Mobile phone operators also wants to value add

Degree of rivalry is moderate and include:

- Market growth/ saturation
- Price
- Value added service
- Concentration ratio
- Exit barriers
- Market growth/ saturation
- Price
- Value added service
- Concentration ratio
- Exit barriers
- Industry

Benefits of Global Market

Cost reduction: This can arise from saving in production global advertisement and commercial and producing promotional materials. By achieving the lowest cost structure in the industry, a company can either reduce its prices or keep the increased profits to invest in research to develop new and better product and/or to market their products more vigorously. The development of scale economies often contributes to a company's ability to materialize low cost operations.

Improve products and program effectiveness: Globalization program with a wide spread of good marketing idea overcoming local objections can often increase the effectiveness of the program on a global basis.

Enhance customer preference: The MNC concentrates on satisfying the customers on a world wide basis. A global marketing strategy helps to build recognition which can enhance customer preferences through reinforcement. A uniform marketing message, whether communicated through a brand name, slogan or advertisement, reinforces the awareness.

d. Increase the competitive advantage: Focused competitive strategy allows the MNC to compete with large competitors in the field.

Global Market Expansion and Strategy

A crucial step in developing a global expansion strategy is the selection of potential target markets. To identify the markets opportunities for products or services, marketers usually starts off with a

large of pool of candidate countries and to narrow down this pool of countries, the company has to do preliminary steps and screening.

- Identify the indicators and collect data.
- Analyse and determine the importance of country indicator.
- Assign weight and rate the countries in the pool on each indicator.
- Compute the overall score for each country and finally make a choice.

A wireless telecom company has two distinct choices to pursue growth in the global market. It can either enter directly by building the product/service offerings with its own resources in the target country, or it can collaborate with other firms. The "new entrant" globalization strategy gives the wireless telecommunications firm the freedom of choice in markets and technologies. However, it is a slower and more costly process, inevitably lacks initial brand name recognition, lacks local political and business expertise, and increases risk. This approach is not desirable when time and speed are critical and where resource commitments might be too risky to pursue for a company by itself, as in the case of the global wireless telecom market. Several decision criteria will influence the choice of entry mode. Risk factor may arise due to instability in the political system and the government regulations which decide the entry mode. They heavily constrain the set of available option and that is why their entry mode differs from country to another. This MNC opts for the second type viz., collaborating with others through Joint Ventures, Merger & Acquisition. In the area of global acquisitions, this MNC has an accurate forecast about the wireless industry and capitalised on some of the changing factors that include globalization of the markets, strong product demand, network structures and reduced national barriers. In addition, the company benefited from de regulatory environment, wireless auctions, and availability of cash.

The company has to posses a certain amount of control over its global partners most especially the majority of its modes of entry are not fully ownership. This might lead to sudden collapse of the company. In some countries they have to avoid joint venture to protect the know-how priority. They should carefully consider how to allocate its resources between its different markets. The company's strategy is to continuously introduce new products and services, to make it a global player in its field while also reaching out to technology related industries. It is a strategy which requires resources beyond those of many of its competitors. Within the telecommunications, computer and media industries it is accepted that no single player has all assets needed to dominate new markets areas. This means that natural competitors such as soft ware companies and technology service providers have to have to work together. No organization has access to all the resources and capabilities required to go on it entirely alone, so it is up to the management to determine what those resources are and then prioritize according to their importance for future development and then to determine choice of entry strategy.

Why Strategy?

The telecommunications industry has undergone rapid international expansion in a process suggested by internationalization theory (Sarkar, Cavusgil & Aulakh, 1999). Telecommunication firms tend to aim simultaneously at multiple markets and follow different strategies to collaborate activities during the internalisation process. (Chaweewanln Danon 2001)

- Helps to creating revenue growth through increased marketing focus on established high quality customer base.
- Improves the financial and commercial benefits of operational leadership.
- Extending the company's service differentiation by investing in, and delivering, a branded, easy to use, customer service proposition.
- Possibility of cost reduction and revenue stimulation.
- Emerging markets are expected to generate an increasing proportion of the company's growth in the next few years. Mobile penetration remains low in many fast growing emerging economies.
- Innovate and deliver on customers' total communications needs in the context of changing customer requirements and the growing convergence of mobile, broadband and the internet.

CONCLUSION

The company is currently working on expanding its 3G live the newest version of their GSM net work, to all of their current markets, the goal is to go globally within the next few years as promptly as possible. New entrants to its market threaten the company's earning. Consequently, they place high priorities on being innovative. Exploiting their position as a global leader allows them to remain competitive in all the markets it conducts business and due to overwhelming reach of their networks, they try their best to satisfy its customers. They also have a benefit of exploiting their economy of scale and scope of the diversifying technology and production across markets and industry lines. The strategic alliances of the company can be the evident from their true innovation and cooperation to compliment their aggressive strategy of competitor acquisition. It is not surprising that strategic alliances have been the dominant theme of the global telecom industry considering the magnitude of product and geographical convergence occurred in the last decade (Sylvia & Mark, 2001). There are also barriers that may impede the telecom multinationals' growth in this market and the company should be very careful in making decisions.

A major strategy in achieving this position has been a complex pattern of strategic behaviour, and global alliances and its relationships. Main purpose of these alliances indicates that its strategy is aimed at continuously introducing new products and services that drives the full capacity of usage of its extensive infrastructure. They seems to follow a broad line global strategy, directed at competition world wide in full product line of the industry and even reaching beyond its core capabilities to technologically related industries. They want to venture into new markets and upgrade its position in the existing markets aiming to be more innovative by coming up with new product designs and feature while adding value to the existing products and reduce competition by raising entry barriers and alerting the technology-based competition. They need to dispose its less performing subsidiaries and concentrate on the more profitable ones. At the same time, they should slow down on acquisitions and other alliances especially in regions where the company may enter into a fierce competition against well established local operators, who might have invested heavily in R&D for latest technology.

The telecommunications market is a volatile one and customers can easily sway and change their loyalty to other brands if there are delays in catching up to the new trend and hence these companies are focussing their attention from customer acquisition to customer retention. They are facing lot of challenges viz., sustaining competitive pressure, keep pace with fast growing technology, requirement to put in place the infrastructure needed to service the ever growing customers. Considering the fallout in the telecommunications sector due to excessive operator debt and major disappointments in terms of market growth, as well as the extreme cases of vendor financing, it will most likely be more difficult to secure financing for a fresh round of investment in a future generation of mobile communications systems, in spite of heavy investment in networks and license fees. (Bjorkdahl, Bohlin & Lindmark, 2004).In this situation, going for alliances may be ideal. The company should take remedial measures identified in the diagnosis of the case and try to overcome those weaknesses .If the company wants to sustain in the market they should consequently make significant efforts to standardize its products. This will give the company an edge over their counterparts and differentiate it as a company which is unique, attributing to retain the valuable customers who will remain loyal even in the event if the company changes the geographical locations, which is more likely happening in today's world.

REFERENCES

Affullo, T. 1999. Telecommunication and information infrastructures in the Botswana and SADC development strategy, Internet Research: *Electronic Networking Applications and Policy*, 99: 287-296. Bernard W. Wirtz. 2001. Reconfiguration of value chains in converging media and communications markets. *Long Range Planning*, 34 (2001): 489-506

Ben M. Bensaou, Jawad Shaikh, & Marc Aafjes. 2005. Recharging mobile innovation strategies to create new market space.

Chaweewanln, D. 2001. Entry mode choice in telecommunication industry. *Journal of Ubon Ratchathani University*: 45-62.

Curwen, P. 2001. Rivalry through alliances: Competitive strategy in the global telecommunications market—A rejoinder to Chan-Olmstedt and Jamison. *European Management Journal*, 19(6): 678-681.

Joakim B., Bohlin, E., & Lindmark, S. 2004. Financial assessment of fourth generation mobile technologies. *Communications and Strategies*, 54: 71.

Eaton, J. & Brown, D. 2002. Coaching for a change with Vodafone, *Career Development International*, 7/5: 284-287.

Porter, M. E. 1980. *Competitive strategy*. New York: Free Press.

Porter, M. 1995. Toward a dynamic theory of strategy. In Rumelt, Richard P., Schendel Dan E. & Teece David J. (Eds), *Fundamental issues in strategy– A research agenda*, Harvard University Press, pp. 423-461.

Rosenbush, S. 2001. Telecommunications. *Business Week*, Jan: 98-99.

Sarkar, M.B., Cavusgil, S.T., & Aulakh, P.S. 1999. International expansion of telecommunication carriers: The influence of market structure, network characteristics and entry imperfections. *Journal of International Business Studies*, 30(2): 361-382.

Sjolander S. & Magnusson M. 2002. Entrepreneurial discovery, resource transformation and the growth of the firm. Working paper.

Summanen, T., & Pollitt, P. 2002. *British telecom: Searching for a winning strategy*, Judge Institute of Management Studies, University of Camvridge, November 2002.

The Importance of Corporate Social Capital for an integrated Reputation Management Approach

Klaus-Peter Wiedmann Nadine Hennigs Barbara Gassmann

ABSTRACT

Embedded in an increasing expansion and density of economic and social interactions, recognizing the existence and improving the quality of a company's network of relations has become a critical success factor. Strongly associated to the strategic relevance of corporate reputation, a better understanding and management of a company's social capital and the identification of those internal and external actors and relationships with the highest potential for network-related value effects is vitally important. This paper aims at the development of a conceptual framework which gives reason for adding the construct of social capital to the field of reputation management.

INTRODUCTION

Theoretical as well as empirical arguments support the importance of corporate reputation and reputational status as a critical resource in gaining competitive advantage and to maximize a company's economic and non-economic (social) status (e.g., Fombrun 1996; Fombrun & Shanley 1990; Hall 1992, 1993; Shrum & Wuthnow 1988; Weigelt & Camerer 1988). Against the background of the strategic relevance of intangible resources and the increasing importance of the concept of corporate responsibility to the company's stakeholders and to the community, a company's reputation is not last evident in a number of studies and published in diverse journals' rankings (e.g., Fortune's "America's most admired corporations").

Since corporate reputation is a characteristic or attribute ascribed to a company by its stakeholders, it is at least in part the product of the company's network of relations (Wilson 1985). Understood as the awareness or perception about corporate social behavior, corporate social capital will contribute to the development of corporate image, reputation and "social legitimization" of the company in the network members' view. During recent years, the topic of social capital in general and in the context of organizations has gained growing interest in the strategic management literature. Existing studies (e.g., Adler & Kwon 2002; Bouty 2000; DeFilippi & Arthur 1998; Koka & Prescott 2002; Nahapiet & Ghoshal 1998; Ordóñez de Pablos 2000, 2001, 2002; Tsai 2000; Tsai & Ghoshal 1998) point out the fact that social capital is positively related to a company's long-term competitive advantages and is an essential element of corporate value and corporate reputation. As intangible resources that are developed over time as the firm interacts with all its stakeholders, social, relational and reputational capital (Grant 1996; Nahapiet & Ghoshal 1998) represent for each firm a unique, dynamic positioning (Eisenhardt 2000).

Although several works have analyzed the concepts of corporate reputation and social capital, to date, there is no general agreement about the concepts or dimensions that these constructs include (e.g.,

Shenkar & Yuchtman-Yaar 1997). In addition, only little research has addressed the topic of their interrelations, even if both constructs refer to a company's social environment in terms of their stakeholders and network agents. Considering this background, it is important to identify, manage, and control the influence of corporate social capital to corporate reputation.

To advance existing knowledge in the field of corporate social capital, it might be an appropriate approach to start with the development of a theory based framework which contains basic suggestions concerning the impact of relevant factors of social capital on establishing high reputation. Such a framework might, of course, be a little generic or abstract in structure and content. However, it is a good starting point to make sure that further conceptualization und especially operationalization will be appropriate. In this respect, the framework presented in this paper is only a first step of our future research trying to conceptualize the key dimensions of social capital and to identify relevant impacts on the reputation of companies.

In our paper, we will elaborate a conceptual framework for the analysis of corporate social capital with its key drivers' relational and reputational capital as well as its impact on corporate reputation. Regarding further research steps to reveal basic findings about the complex causal connections regarding the impact of relational as well as reputational social capital dimensions on corporate reputation, we will outline the concept and first results of an empirical study we are going to conduct in the financial services sector. These "first pieces" of our empirical study are thought to be an input into a discussion with interested colleagues focusing further research to figure out the relative significance of relational as well as reputational capital dimensions and analyze the general influence of social capital on reputation building in the view of the different stakeholders.

CONSTRUCT DEFINITION AND LITERATURE REVIEW

Corporate Reputation

A company's value depends in a relevant rate on its corporate reputation that is often shown immediately through the involvement in scandals, cases of fraud etc. (e.g., ENRON in the USA, VW in Germany). Since the 1950's, there exists a growing interest and agreement in the concept of corporate reputation both in the academic literature and among practitioners (e.g., Berens & van Riel 2004; Brown 1998). Thus, corporate reputation is understood in different ways, is a crossroad of converging disciplines (e.g., Fombrun & van Riel 1997). In a variety of further empirical studies and publications, reputation can be distinguished in three main conceptual streams: (1) social expectations describe types of corporate association regarding company-behavior (e.g., Fombrun et al. 2000; Harris Interactive 2001; Fitzpatrick 2000; Reed 1998; Chew 1992; Goldberg 1998; Maignan & Ferrell 2003), (2) corporate personality uses individual personality traits for the characterization of a company (e.g., Davies et al. 2003; Lux 1986; Pervin 1989; Spector 1961), and (3) corporate credibility that is based on the trust concept as initial point (e.g., Newell & Goldsmith 2001; Ganesan 1994; Miyamoto & Rexha 2004; Brown & Dacin 1997; Nooteboom et al. 1997). Several considerations are apparent from the review of definitions. First, in the context of strategic marketing, Fombrun (1996; Fombrun & Shanley 1990) stresses that corporate reputation is an important aspect because as a multifaceted construct it consists of four interrelated characteristics: credibility, reliability, responsibility, and trustworthiness. With regard to Fombrun's definition, Petrick et al. (1999) refers that reputational capital is the initial part of social capital that stiffens the characteristics. Some authors argue that this view of corporate reputation is an intangible asset and predominantly considered as an important and initiating element for inter-organizational relations, relating to rivals actions and reactions, as well as a distinct element of industry-level structure (e.g., Teece et al. 1997; Fombrun & van Riel 1997; Rindova & Fombrun 1999). This understanding is supported by other authors (e.g., Balmer & Gray 2000; Walsh & Wiedmann 2004). Gotsi & Wilson (2001), for example, say that corporate reputation can be defined as "a stakeholder's" overall evaluation of a company over time, and can serve as a reservoir of goodwill in terms of accounting and public relation regarding to highly reputable companies (e.g., Batchelor 1999; Bostdorff & Vibbert 1994; Davis 1992; McGuire, Sundgren & Schneeweis 1988; Patterson 1993, Sobol et al. 1992). Over time, the firm interacts

with a complex network consisting of all its stakeholders/shareholders, the community and public to develop market and social opportunities for both, a unique, dynamic positioning and the influence on relational processes with the agents of the closer environment (i.e., customers, suppliers, partners, and competitors) via past, every day and future behavior (Goldsmith et al. 2000; Argenti & Druckenmiller 2004: Schrum & Wuthnow 1988: Haywood 2000: Eisenhardt 2000: Grant 1996: Dowling 1986: Nahapiet & Ghoshal 1998; Vergin & Qoronfleh 1998; Deephouse 2000; Weigelt & Camerer 1988; Patterson 1993). The important social structure of a company is developed from its stakeholders and determines the company's responsibility. Although the construct has sometimes been broadened from a single focus (i.e., physical and financial assets, intangible resources) to include other relevant characteristics (e.g., human capital), it remains limited to individual causes, e.g., loyalty (e.g., Spence 1974; Hall 1992; Shenkar & Yuchtman-Yaar 1997; Prahalad & Hamel 1990; Roberts & Dowling 2002; Bromley 2000). Relating to companies, marketing activities and the understanding of the key-aspects from the consumer perspective, the concept of corporate reputation is becoming ever more important (Caruana 1997; Dunbar & Schwalbach 2000). The relevant literature repeatedly points out that corporate reputation has to be purposefully and actively managed, because many organizations fail to award sufficient importance to building reputation, the complexity of the stakeholder interactions and the effect of a bad reputation can drastically affect the balance sheet (e.g., Caudron 1997; Tucker & Melewar 2005; Morley 1998; Daft & Weick 1984). That management must go beyond traditional parameters of marketing, public relations, and communications to each potential audience (Patterson 1993; Holmes 1995) to aim at the effectiveness and the best possible source of sustainable competitive advantages and a fully development of a company's potential for increasing corporate value (Mahon 2002; Fombrun 1996; Fombrun & van Riel 2004; Dentchev & Heene 2003; van Riel 1995).

Corporate Social Capital

Opposed to other forms of capital like classical financial or human capital, social capital has no physical substance and cannot be identified in physical existences. As an umbrella concept used in a variety of disciplines to describe resources embedded within social networks (Adler & Kwon 2002), social capital can be defined as (a) "the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition" (Bourdieu 1986, p. 248), (b) "the capacity of individuals to employ (scarce) resources such as information, contacts and money because they are participants and members in social networks" (Faist 1995, p. 4), (c) "the existence of a certain set of informal values or norms shared among members of a group that permit cooperation among them" (Fukuyama 1997), or (d) "the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or an social unit. Social capital thus comprises both the network and the assets that may be mobilized through that network" (Nahapiet & Ghoshal 1998, p. 243). Referring "to friends, colleagues, and more general contacts through whom you receive opportunities to use your financial and human capital" (Burt 1992, p. 9) and "to connections among individuals, social networks and the norms of reciprocity and trustworthiness that arise from them" (Putnam 2000, p. 19), social capital is "a product of embeddedness" (Portes 1995, p. 13), which "inheres in the structure of relations between persons and among persons" (Coleman 1990, p. 302), and whose "effects flow from the information, influence, and solidarity it makes available to the actor" (Adler & Kwon 2002, p. 23). On the whole, social capital is the "stock of active connections among people: the trust, mutual understanding and shared values and behaviors that bind the members of human networks and communities and make cooperative action possible" (Cohen & Prusak 2000).

In certain conditions, social capital is convertible into economic capital (Bourdieu 1986) and facilitates "the achievement of goals that could not be achieved in its absence or could be achieved only at a higher cost" (Coleman 1990, p. 304). The social capital concept was used to explain access to employment, mobility, and entrepreneurial success (e.g., Allen 2000, Anheier et al. 1995, Bertrand et al. 2000, Davern 1999, Hagan et al. 1996, Ingram & Roberts 2000, Light 1984, Montgomery 1991, Reingold 1999, Wegener 1991). In particular, research has identified three major benefits of social capital (e.g.,

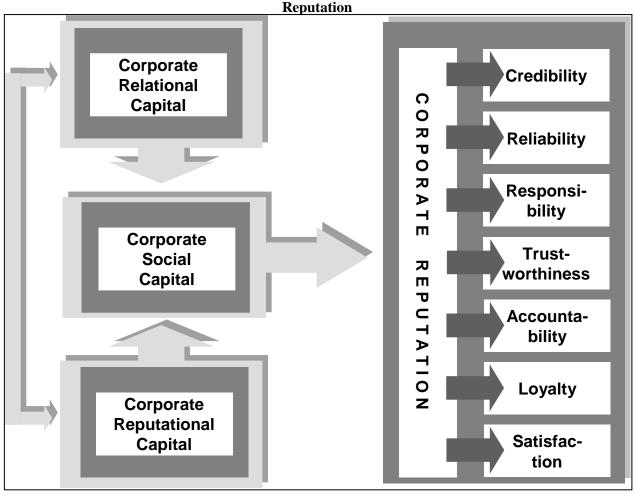
Adler & Kwon 2002; Sandefur & Laumann's 1998): (1) the access to broader sources of information in the form of information volume, information diversity and information richness (Koka & Prescott 2002), (2) provision of control and influence as well as of (3) solidarity benefits of closure and trust. However, as the development and nurture of social capital demands considerable investments, in particular situations, its positive outcomes can be outweighed by risks such as over investment or over-embeddedness (Hansen et al. 1999; Leana & Van Buren 1999).

With reference to organizations and their members, to a combination of firm specific and personal relations, corporate social capital can be defined as "the set of resources, tangible or virtual, that accrue to a corporate player through the player's social relationships, facilitating the attainment of goals" (Gabbay & Leenders 1999, p. 3). As a unique organizational resource, that is difficult to acquire and imperfectly tradable (Araujo & Easton 1999; Pennings & Lee 1999), corporate social capital is strongly associated to network structure and the value inherent in long-term relationships between individual employees, teams, departments and companies. Generally spoken, embedded within a profound understanding of corporate value and referring to the connections that exist within and outside of the company on individual as well as on organizational level, corporate social capital encompasses both, the existence of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition as well as the sum of actual and potential resources that might be available through and derive from that network.

Conceptual Framework

First of all, analyzing the influence of corporate social capital on corporate reputation, it seems to be very important to better conceptualize what we mean by corporate social capital and to identify its key drivers and goal constructs. To provide a first overview of our research, figure 1 shows the main parts of our proposed conceptual model which could be used as a basic framework to investigate whether and to what extent corporate social capital affects corporate reputation.

Figure 1
The Conceptual Model
Basic Framework for the analysis of Corporate Social Capital and its influence on Corporate
Reputation



In the following we will only sketch the basic idea of our conceptual framework and briefly describe the different sectors of our model.

Since social capital as a complex construct is not only difficult to define, but in particular difficult to measure and to adopt for empirical purposes, Bourdieu states in consistency with his social capital definition that "the volume of social capital possessed by a given agent (...) depends on the size of the network of connections he can effectively mobilize and on the volume of the capital (economic, cultural or symbolic) possessed in his own right by each of those to whom he is connected" (Bourdieu 1986, p. 249; Edwards & Foley 2001, p. 9). Therefore, social capital which is embedded within and derives from network relations has both, quantitative and qualitative dimensions. Referring to the analysis of corporate social capital and its influence on corporate reputation, it is useful to conceptualize corporate social capital in a "relational perspective" referring to the shape and extent of network links as well as in a "reputational perspective" referring to the content and quality of the relationships. In this context, it has to be emphasized that relational and reputational dimensions as initial parts of social capital represent first of all only "capital potentials" which have to be efficiently and effectively managed to gain real value.

Corporate Relational Capital

Recent literature shows enough evidence to claim for the relevance of relational dimensions in the development of social capital which can be regarded as the value of social relations formed through a social network – the medium to create, maintain and use social capital. Thus, social capital is strongly associated to network structure, and the benefits of social capital are a function of how network relationships are structured (e.g., Baker 1990; Burt 1992). Indicating an individual actor's position within a network of relations, the structural dimension of social capital refers to the formation and the *structure* of ties between network agents in terms of density, connectivity or hierarchy (Burt 1992, 1997; Coleman 1988; Granovetter 1973; Hansen 1999). Viewing social relationships through the lenses of social network theorists (e.g., Burt 1992; Granovetter 1973; Hansen 1999; Wasserman & Faust 1994) the structural dimension of social capital deals with the pattern, configuration, and purpose of social interactions. Analyzing cliques, communication roles (e.g., liaisons, bridges, isolates), and structural indexes (e.g., connectedness, integration, diversity, openness) (Rogers & Kincaid 1981), relational capital considers the existence of connections between network actors, the proximity of connections to the major powerful players, the diversity of the connections and the network position of an actor relative to other network players and investigates how the overall network configuration assists or hinders the flow of resources within the network.

Included within the concept of corporate social capital, corporate relational capital addresses the network of relations that go further the company's organizational frontiers with the agents that are part of its closer environment or industry. Encompassing not only the value of customer relationships but also the value of relationships with suppliers, shareholders, governments, partners of strategic alliances, mass media, government agencies etc., relational capital comprises external partner relationships (Bontis 1998, 1999; Bontis & Choo 2002; Ordóñez de Pablos 2001, 2002). Overall, corporate relational capital can be defined as a component of corporate social capital with special focus on the value of the network of relations that a company maintains with its stakeholders, the different environmental agents (Euroforum 1998). Regarding this framework of a company's social relations, it is at first vitally important to identify who are the relevant network agents, to analyze the characteristics, and to assess the potential outcomes in terms of opportunities and benefits as well as risks of the individual network relation. In general, structurally categorized as strong or weak, one can distinguish according to the *strength of a tie*

(Granovetter 1973) which is characterized by a combination of the duration, emotional intensity, intimacy, and reciprocity of interactions. In view of a company's network of relations, strong ties form the closer market environment of the firm and refer to the relationships to customers, suppliers, alliance partners, shareholders, and competitors, whereas less direct weak tie relationships to e.g. government agencies or the community shape the wider environment.

Apart from relational dimensions as constitutive part of corporate social capital, it seems suitable to consider that any proposed model about a company's network of relations has to take into account the reputational dimension as the second initial part of corporate social capital and corporate reputation.

Corporate Reputational Capital

Regarded as the perception of corporate behavior by its stakeholders (Fombrun 1996; Fombrun & Shanley 1990; Deephouse 2000) and "the reflection of an organization over time as seen through the eyes of its stakeholders and expressed through their thoughts and words" (Saxton 1998), the judgment of corporate reputation is not uniform, but depends on the observer (Baden-Fuller et al. 2000). Thus, a single firm might be judged differently by its stakeholder agents who may weigh different aspects of corporate reputation. In consequence, the individual perception of a company's reputation will influence the outcomes and processes of a company's existing network relations to the agents of the closer market environment as well as the community in general. Therefore, apart from the existence in terms of the presence or absence of network relations to a company's stakeholders, linked to corporate reputation, the quality and content of the relationships are important to identify, manage and control.

Referring to the emotional aspects of relationships (Naude & Buttle 2000), reputational capital as prerequisite for the formation of effective and stable relationships encompasses group process phenomenon like shared norms and values, interpersonal obligations and expectations, reciprocal obligation, mutual identification, commitment, understanding, honesty and trust which organizations or groups of individuals have developed with each other through a history of social interactions (Nahapiet & Ghoshal 1998). Measured by trust, trustworthiness and commitment, reputation allows actors to determine the amount of capital and level of risk when exchanging resources and will increase strength of preference for a particular exchange partner (Gwinner et al. 1998). Trust as "the willingness to be vulnerable to the actions of another party" (Mayer et al. 1995, p. 712), and trustworthiness as "the quality of the trusted party that makes the trustor willing to be vulnerable" (Levin et al. 2002) are among the most important facets of social capital. The existence of high trust in a relationship is proportional to the ability to freely share information, to take risks and innovate and to acquire information from this tie as well as to the credibility of information (Fukuyama 1995; Ring & van de Ven 1992, 1994) and produces certain outcomes such as cooperation and sensitive information exchange (Mayer & Davis 1999). Without high levels of trust and mutual solidarity, individuals or organizations are not going to establish and maintain inter-organizational relations or give other actors access to useful knowledge or confidential information (Gherardi & Masiero 1990; Krackhardt 1992; Oliver 1997; Staber 1994; van de Meer & Calori 1989). Shared trust (or lack of it) influences the extent of information exchanged, the scope of search for and the commitment of managers to implement solutions and is considered as a significant determinant of managerial effectiveness (Zand 1972).

According to the closeness and the quality of a firm's inter-organizational linkages, the *tie strength* has been found to be one of the most significant factors to explain the influence of network relations, their overall success and the value created (Ghoshal & Bartlett 1990). Stronger ties may bring increased trust, prospective reciprocity, and commitment (Krackhardt & Stern 1988; Uzzi 1997; Gabbay 1997; Gabbay & Stein 1999) and are more likely to be activated than weak ties as sources of information and are perceived as more credible (Rogers 1995) and more influential (Brown & Reingen 1987; Reingen & Kernan 1986; Bansal & Voyer 2000). Further, stronger ties are typically more easily available (Granovetter 1982) and favor mutual interaction and feedback loops between the sender and the recipient (Leonard-Barton 1993). However, weak-tie information sources – not being limited to the social circle of the individual or organization – are more numerous, promote generation of new ideas and opportunities and offer varied and better information (Duhan et al. 1997). Moreover, weak ties may bring information

on distinct social circles (Granovetter 1973), are more likely than strong ties to facilitate knowledge and referral flows (Brown & Reingen 1987). In conclusion, in situations where information should circulate at a high speed and a high degree of trust, confidence and intimacy is required, strong tie-sources will be more influential. However, when information relate to generation of new ideas and opportunities, weak tie-sources with a wide-ranging knowledge level are likely to have more influence.

Deriving from membership in specific networks of mutual acquaintance and recognition, social capital in the form of reputation – reputational capital – can be described as generating trust between organizations and between organizations and individuals. Under conditions of uncertainty, reputation plays an important role in facilitating social capital activation and acts as a signal in the formal economic sense. To reduce perceptions of risk associated with uncertainty, actors attend to reputation on the assumption that past behavior is indicative of how individuals/organizations will act in the future. The better a company's reputation, the lower is the perceived risk and the higher an individual's willingness to trust.

Defined as generating and signaling trust between an organization and its stakeholders, reputational capital - since reputation can informally, but powerfully fill the stakeholders' information needs - may reduce information asymmetry and information costs (Shenkar & Yuchtman-Yaar 1997) and can be used to guarantee quality (Balvers et al. 1988; Beatty & Ritter 1986; Booth & Smith 1986; Carter et al. 1998; Carter & Manaster 1990; Firth & Liau-Tan 1998; Holland & Horton 1993; Titman & Trueman 1986). Referring to complex situations associated to risks and uncertainty, corporate reputation acts as a signal (Spence 1974) that lowers the perceived risk of loss and leads to an expectation of quality what facilitates decision-making Kollock 1994). The higher the present amount of uncertainty, the more important is a company's reputational status as a signal for quality (Podolny 1994; Podolny et al 1996; Shrum & Wuthnow 1988; Stuart et al. 1999), uncertainty reduction, and thus creates a cumulative, reinforcing advantage (Podolny & Feldman 1997). For instance, empirical findings show the value of corporate reputation in e.g., differentiating products and gaining an overprice for them (Roberts & Dowling 2002), in establishing a joint-venture (Dollinger et al. 1997), as intermediate element in the relation with present and future shareholders (De La Fuente & De Quevedo 2003), as well as in attracting and maintaining talented people (Gatewood et al. 1993) and better-trained professionals (Roberts & Dowling 2002).

In this context, it has to be stated, that the development of trust and reputation involves a certain closure of networks, since in an open structure, reputation cannot arise and collective sanctions that would ensure trustworthiness cannot be applied (Coleman 1988, 1990). Participants embedded within a close network of relations with a sufficient density of ties among the network agents restrain their opportunistic behavior towards each other to build up and maintain reputation and show trustworthiness within the group and to avoid exclusion or lighter forms of punishment. Following this, network closure serves to develop norms of trustworthiness and reputation, but tends to exclude others, whereas open networks act like bridging capital and promote access to different networks.

Goal Constructs

An important aspect of our model is a differentiated measure of corporate reputation referring to seven interrelated characteristics – Credibility, Reliability, Responsibility, and Trustworthiness (Fombrun 1996) as well as Loyalty, Satisfaction and Accountability (Petrick et al. 1999) – which can be regarded both, goal constructs of corporate social capital and fundamental components of corporate reputation. As trustworthiness has been outlined in the Corporate Reputational Capital paragraph, we will now take a closer look to the other constructs.

Credibility: According to the interrelating context of Fombrun (1996; Belch & Belch 1994) and the stakeholder perceptions of a company, the concept of corporate credibility is a valuable asset because credible sources of information attract attention to advertisements and encourage their recall (Sternthal et al. 1978). As "the perceived expertise reliability, trustworthiness, and truthfulness of a company" (Newell

& Goldsmith 2001), credibility is therefore a critical component of corporate reputation and corporate success (Caruana 1997; Fombrun 1996; Keller 1998; Herbig & Milewicz 1995).

Reliability: Referring to the understanding that trust is the predicting behavior of social actors, reliability as "the perceived ability to keep an implicit or explicit promise" (Selnes & Gønhaug 2000) has been found to be a characteristic trait of underlying trust (Barber 1983; Genesan 1994). Moreover, reliability is concerned with the likelihood that a firm will accomplish the explicit promises, but in a cooperative behavior (Berens & van Riel 2004).

Responsibility: As one key dimension of corporate reputation, responsibility definitions tend to imply both, the management and community view (Dollinger et al. 1997). Therefore, responsibility is directly linked to reputation and social capital because of the stakeholder interactions addressing a variety of levels and positive effects of trust resulting from trust between stakeholders (Nahapiet & Goshal 1998).

Loyalty: With regard to the improvement of corporate reputation, loyalty as "willingness to maintain present location of business" (Andreassen, 1994) has a positive correlation with customer and employee loyalty (Forman & Argenti 2005; Saxton 1998). That means, an investment in corporate reputation can increase loyalty and as a result stabilize corporate relationships to stakeholders (Helm, 2006; Odekerken-Schröder, 1999) and in that way reduce the perceived risk (Morgan & Hunt 1994; Shijns, 2005).

Satisfaction: Strongly related to the loyalty dimension, different authors point out that, in the customer's perception, satisfaction is influenced by expectations and experienced service performance (Yi 1989; Andreassen & Lindestad 1998). Uunderstood as "the accumulated experience of a customer's purchase and consumption experiences" (Andreassen 1994), satisfaction has an explored influence on corporate reputation (Duque Zuluaga, 2003; Fornell, 1992; Helm 2006).

Accountability: In terms of building reputational capital, Petrick et al. (1999) present accountability as a key dimension that includes company activities among community and public constituencies by focusing organizational, social and natural assets with the goal accomplish stakeholder interests by building a sustainable fair competition area.

DICUSSION AND IMPLICATIONS

Limitations and Next Research Steps

Focusing on the link between corporate relational, reputational capital, and social capital, this paper has examined the role of social context in determining a company's reputation. We suggest that corporate social capital is rooted in the presence and quality of a certain set of network relations in which a company is embedded.

Based upon our theoretical framework as well as different case studies and experiments, we are developing an elaborated causal model to be able to conduct an empirical study in the financial services sector to gain further managerial as well as scientific progress regarding the following question: Under which circumstances might relational and/or reputational capital dimensions have what kind of influence on corporate social capital and corporate reputation in the contrast between what is perceived and expected from different stakeholders?

In our pre-study we found for instance some empirical evidence that, following a social network perspective, companies of high status and reputation are attracted to other companies of high status and reputation (c.f., the theory of homophily; Chung et al. 2000). We also find reasons to believe that association with trustworthy and prestigious "others" might be status- and reputation-enhancing (Stuart 1999), thus, attributing reputational capital effects to a single company or type of company embedded within a certain network of relationships might be problematic (c.f., Balvers et al. 1988; Beatty & Ritter 1986; Carter et al. 1998; Carter & Manaster 1990; Datar, Feltham, & Hughes 1991; Firth & Liau-Tan 1998; Holland & Horton 1993; Johnson & Miller 1988; Titman & Trueman 1986). Therefore, corporate social capital and corporate reputation is perceived at and has to be analyzed in a network-level of

analysis. Another point which should be taken into account is that, regarding the interplay between the relational and reputational capital dimension, a lot of positive and negative correlations exist. Under some specific situational conditions a company's network of relation and the question "whom one knows" can be considered as relational as well as reputational capital. Social capital and reputation can derive from the membership in a well-known status-enhancing network; however, the access to such a network might require a certain degree of social capital and reputation. In addition, comparing different companies and different groups of stakeholders, we found out that more or less the same social capital drivers might lead to totally different perceptions of corporate reputation.

Of course, these are only very first empirical hints, but anyway, we could incorporate such thoughts into formulating and testing hypotheses to develop causal models on a much more elaborated level. Preparing the empirical test of our model the dimensions of corporate reputation and social capital need to be operationalized. In some cases we already can fall back on already existing and somewhat tested measures, in other cases we will have to start from scratch. Especially in view of the different dimensions of social capital it might be worth starting with exploratory interviews with different stakeholder agents and network members that are likely to yield further items. Further steps of the empirical work have, of course, to meet the state of the art of the use of sophisticated multivariate methods. For example, it might be useful to compare different approaches of formative and reflexive construct development and testing (Diamantopoulos & Winklhofer 2001; Jarvis et al. 2003), and, due to the fact that we cannot assume linear relationships between the different variables, we should also draw on nonlinear causal modeling (c.f., also using neural networks).

Despite the limitations and necessary steps in future research, the primary contribution of our framework lies in developing and explaining a model of corporate reputation integrating the concept of social capital. The relational as well as reputational social capital dimensions could be used as a basis to develop a more robust measurement instrument to measure and manage a company's reputation.

Managerial Implications

Having more robust measures of corporate social capital and reputation is of course as well a key for managerial practice. Concerning the impact of social capital on the company's reputation, managers might discover the existence and value of internal and external network relationships (to employees, customers, shareholders, business partners as well as government agencies, respected professionals and the community in general) and might come to a broadened view of corporate value. Overall, taking the interplay between corporate social capital and reputational status into account, our framework already might lead to the opportunity of a better understanding and management of a company's valuable social connections as well as of the conditions and drivers of its perception in view of their stakeholders. This will of course enlarge the efficiency of identifying and selecting different stakeholder groups to measure, leverage, and use their relational and reputational capital potentials.

As a strategic and critical asset of a company, corporate reputation may lead to both, the reduction of transaction costs (related to the exchanges in which the firm and its customers take part) and the reduction of information asymmetries, what will improve the relationships and the exchange processes between a company and its network environment. Against this background, social capital in terms of aggregated reputation can be regarded as the network glue. Continuously communication and interaction with the multiple stakeholders as the primary enabler lead to a better understanding of their specific expectations and concerns. Moreover, if permission and trust are sustained, confidence and a "reservoir of goodwill and public support" can be built up that protects the company in a hostile business environment or a crisis and represents a sustainable competitive advantage (Forman & Argenti 2005).

REFERENCES

Argenti, P.A. and Druckenmiller, B. 2004. In practice: Reputation and the Corporate Brand. *Corporate Reputation Review*, 6 (4), 368-374

Batchelor, A. (1999): Is the balance sheet outdated? Accountancy International, 123 (1266), 81

Berens, G.; van Riel, C.B.M. 2004. Corporate Associations in the Academic Literature: Three Main Streams of Thought in the Reputation Measurement Literature. *Corporate Reputation Review*, 7 (2), 161-178

Bostdorff, D. and Vibbert, S. 1994. Values advocacy: Enhancing organizational images, deflecting public criticism, and grounding future arguments. *Public Relations Review*, 20, 141-158

Bromley, D.B. 2000. Psychological Aspects of Corporate Identity, Image and Reputation. *Corporate Reputation Review* 3 (3), 240-252

Brown, T..J.; Dacin, P.A. 1997. The company and the product. Corporate associations and consumer product responses. *Journal of Marketing*, 61, January, 68-84

Brown, T.J. 1998. Corporate associations in marketing, antecedents and consequences. *Corporate Reputation Review*, 1 (3), 215-233

Grant, R.M. 1996. Knowledge, strategy and the theory of firm. *Strategic Management Journal*, 17 (S2), 109-122

Hall, R. 1992. The strategic analysis of intangible resources. *Strategic Management Journal*, 13, 135-144

Harris Interactive 2001. EURO RQ: Company-Specific Diagnostic Report for [Company], New York.

Spector, A.J. 1961. Basic dimensions of the corporate image. *Journal of Marketing*, 25 (October), 47-51

Spence, A.M. 1974. Market Signalling: Informational Transfer in Hiring and Related Screening Procedures, Harvard University Press, Cambridge, MA

Tucker, L. and Melewar, T.C. 2005. Corporate Reputation and Crisis Management: The Threat and Manageability of Anti-corporatism. *Corporate Reputation Review*, 7 (4), 377-387

Walsh, G. and Wiedmann, K.-P. 2004. A Conceptualization of Corporate Reputation in Germany: An Evaluation and Extension of the RQ. *Corporate Reputation Review*, 6 (4), 304-312

Weigelt, K. and Camerer, C. 1988. Reputation and corporate strategy: a review of recent theory and applications. *Strategic Management Journal*, 9 (Autumn), 458-466

Van Riel, C.B.M. 1995. Principles of Corporate Communication, Prentice-Hall, London

Yi, Y. 1989. A Critical Review of Customer Satisfaction. in Zeithaml, V.A. (Ed.) 1989 *Review of Marketing. American Marketing Association*, Chicago, IL, 68-123

INTERNATIONAL JOINT VENTURES: STRATEGIES FOR MANAGING VENTURES WITH STATE-SPONSORED FOREIGN PRINCIPALS

Valentin H. Pashtenko Christopher Newport University, USA

ABSTRACT

Present international joint venture (IJV) management literature primarily deals with increasing venture revenues through predicting, anticipating, and assessing potential partner risks. Host partner risks are typically evaluated by estimating the product of potential returns along with their respective probabilities. The resulting assessment is then used to decide among a series of possible venture alternatives. Nonetheless, the resultant information is only conceptually compatible with the initial decision regarding with whom to enter into an IJV (Tallman & Shenkar, 1994). The problem with this approach thus becomes how to manage ongoing venture operations once the decision to commit has been made. Admittedly, managerial literature successively presents how to control these ventures, but only with respect toward limiting the variance from the inceptive venture agreement (Beamish & Delios, 1996). Finally, there is no body of knowledge addressing how to strategically manage the subsequent venture from the perspective of the firm-level, especially when the host principals have close ties with their respective government's essential interests (Inkpen, & Beamish, 1997; Pashtenko, Roy, & Dugal, 1999b). A theoretical gap exists with respect to maintaining continued operations between a foreign venture entrant and the associated coercion of foreign venture operations under the affect of government influence (Porter, 1985). Consequently, a review of market entry modes, venture employment, and government influence is necessary to begin an assessment of venture susceptibility under these circumstances.

INTRODUCTION

Foreign Market Entry Modes

Existing managerial research has typically categorized foreign market entry mode in order of increasing efficiency (Contractor & Lorange, 1988; Li, 1995), or through successively increasing levels of technical support (Enen, 1991). Respective to both cases, these modes are: direct export, licensing, international joint ventures, and wholly owned subsidiaries. Briefly, foreign market entry through export is typically employed when technical requirements are low, logistical requirements are minimal, and respective export volumes are small (Blodgett, 1991). As volume increases, logistical costs such as storage facilities, requisite increased administrative support, technical support, as well as commissions, typically increase at an accelerated rate (Kogut, 1988b). Thus, the ratio of profit to investment is reduced, as is overall export mode efficiency. Subsequently, this decreased export effectiveness is replaced by licensing agreements as volume increases.

Licensing, while more efficient monetarily, reduces the collective control of the firm entering the foreign market and typically requires additional technical and administrative support to augment expanded foreign market operations (Harrigan, 1988b). Profitability is low since a disproportionate level of capital investment and risks are assumed by the foreign licensee. However, it is as a rule greater than that of exporting at this increased level of market activity. Another significant concern regarding foreign market licensing is that of quality control (Lyles & Baird, 1994). There are often conflicts in this mode of

foreign entry when brand equity concerns by the partner seeking foreign entry conflict with the profitability concerns of the foreign licensee.

Finally, wholly owned subsidiaries are the result of a complete investment of requisite technical, managerial, and monetary investments within the foreign market (Killing, 1982). This is typically employed to limit or eliminate the costs associated with of partial or shared administrative control inherent in other modes of market entry.

INTERNATIONAL JOINT VENTURE EMPLOYMENT

Given the fact that joint venture operations are neither as administratively efficient as the wholly owned mode of market entry, nor substantially more monetarily more efficient than licensing (Harrigan, 1986), there is a need to justify the existence of this compromised mode of market entry. IJVs have typically been employed in what have been traditionally categorized as developing economies (DEs) and post-planning economies (PPEs). That is to say in economies in which market development is advancing at a continually accelerated rate (Blodgett, 1992). In the former case there are a diversity of reasons for this rate of development; in the latter, these changes have been brought about by the recent political, economic, and ideological changes within these markets. Due to this rate of growth, these markets have persistently relied upon outside markets and firms for assistance in the development of supportive infrastructures. Accordingly, this external reliance has resulted in an inherently cautious approach in those markets, industries, or in technologies where ant measure of foreign control such as a wholly owned subsidiary is strategically unacceptable to the government (Pashtenko, 1999a). Examples of this are in utility ownership, such as power and telecommunications, in transportation networks, or within the military support structure. It is in these markets that governmental influence routinely prescribes a singular IJV mode of entry to foreign principals.

These same markets can leverage the inceptive venture agreements to acquire requisite goods and services by means of promoting joint venturing however; through an atypically large amount of capital, goods, or services with respect to the ownership percentage of the resultant IJV. Other strategies are venture augment incentives such as exclusive licensing agreements, tax deferrals or exclusions. With the risks being admittedly high, foreign entrants typically apportion these risks through multiple high-risk, high-return ventures (Gerringer & Hebert, 1989). Thus, international joint venture entry mode has been disproportionately employed, in relation to other modes of foreign market entry, to DEs or to endeavors that are vulnerable to government influence (IJVs) (Contractor, 1990).

GOVERNMENT INFLUENCE

In PPEs, market entry mode, percentage of international joint venture ownership, and contractual longevity are decisions typically enacted by the host government. Recently, these determinations have also been made by the host principal firms in the government's stead (Contractor, 1990). Restrictions are not uniform, rather different levels of influence are imposed for each respective industry or business either by the host principal or in combination with the host government (Fagre & Wells, 1982). Furthermore, these limitations repeatedly change for each foreign entrant.

Recent, unprecedented changes have occurred in these same DEs and PPEs (Beamish, et al., 1996). These changes have involved firm-level negotiation, the lifting of unilateral, market-wide bargaining restrictions, and increased, even majority, ownership of IJVs within PPEs (Gomes-Cassares, 1987; Pashtenko, 1999a). Consequently, a firm-level managerial assessment of host principal risks should be integrated with understanding of the strategic goals of the host partner. This is necessary to provide a conceptual resolution at the organizational level (Shan, 1991).

Present managerial inquiry has yet to make such an appraisal. Extant research has focused upon assessing venture risk through an aggregate evaluation of foreign partner risk factors prior to market entry as a predictor of IJV success (Gerringer & Hebert, 1991; Beamish & Inkpen, 1985; Shan, 1991). Typical measures have been susceptibility to political influences, potential for industry nationalization, conflicting alliances, cartels, and trade disputes with the respective foreign entrant firm country (Shan, 1991; Meschi,

and Roger, 1994). Other measures have been monetary risk such as inflation, currency devaluation, and trade deficits (Gerringer, 1986). Finally, issues such as radical political change due to issues such as susceptibility to war and political or religious ideological changes (as in Iran during the late 1970s) have also been used in forming these assessments (Gerringer, 1986).

The most pronounced criticism of not employing a firm-level analysis of government risk in these cases is that it implies comparable levels of venture uncertainty for each foreign principal within the same market. Again, this has been repeatedly unproved as able to be generalized to specific industries, and even less so, to specific ventures (Beamish et al, 1996, Pashtenko, 1999a). A subsequent criticism of using these measures lies in the assumption that these measures are equally indicative of all principals or potential ventures within a specific economy. Certainly, this has not been the case in PPEs, and DEs (Contractor, 1990). While existing measures may accurately report the aggregate level of venture risk for a particular market, specific ventures are subject to considerable variance from the predicted mean rate of success as measured in terms of revenue (Chi & McGuire, 1996).

Present managerial IJV research that has been conducted at the firm-level has successively been directed toward leveraging the inceptive agreement (Porter, 1980, 1985), and maintaining this advantage through congruent measures of success (Beamish et al., 1996). These academic approaches are unreliable and contradictory when used to determine firm-level IJV success in DEs and PPEs. These markets are methodically assigned negative weights in assessments of this kind (Gray & Yan, 1992). Admittedly, these markets do have a high aggregate rate of IJV failure. However, at the firm-level, specific endeavors within these markets generate atypical rates of revenue.

There is conflicting firm-level information for IJV entrants into developing countries as well. Endeavor variance has been routinely seen as a negative factor for venture success. Thus, there seems to be a conceptually incompatible aversion to change even when it leads to less aggregate market risk according to existing measures of venture success and market entry determinants (Pashtenko, et al., 1999a). Present managerial literature fails to explain these respective successes and failures by employing aggregate market, instead of firm, measures of IJV stability (Dymsza, 1988; Gerringer, 1986; Shan, 1991).

Assumptions of Existing Research

Managerial literature widely acknowledges the host principal environment as the likely foundation on which to base market entry and venture participation decisions (Beamish & Inkpen, 1995). The most apparent explanation for this deficiency is that DEs and PPEs had initially developed marketwide approached for foreign IJV entrants (Beamish et al., 1995). Consequently, aggregate measures developed during this period were proficient assessing market risk. Additionally, IJVs were commonly governmentally augmented to meet a specific performance levels (Yan & Gray, 1994). This situation has now radically changed and managers entering these markets face an entirely different set of issues (Beamish et al., 1996).

The Case for a Firm-Level Perspective

Current conditions have diverged from a consistent, performance expectations in DEs, and PPEs (Lyles & Baird, 1994). Foreign learning curves, partner asymmetry, informal cooperation, or trust and distrust are similarly unable to accurately moderate aggregate market entry risk assessments (Westney, 1998). Admittedly, these factors have already been incorporated into aggregate government and market revenue assessments prior to making the initial commitment to market entry itself.. The fact that the market was already selected in this manner points to the inherent weakness of this methodology (Ring and Van de Ven, 1994).

The final criticism of firm-level employment of these assessments has to do with their inherently defensive position and resulting biases (Harrigan, 1986). External dependence by the host market in these assessments is depicted as increased uncertainty. Consequently, essential, stable, and artificially (government) sheltered venture opportunities are repeatedly missed.

To achieve strategic goals, PPEs have already been shown to employ firm-level strategies parallel to market level strategies of DEs. This is done in order to attract strategically essential foreign goods and services (Fagre, et al., 1982). Thus, tax benefits, the elimination of many import and export restrictions, the lessening of capital repatriation limitations, the elimination of competition to foreign entrant, and additional shelters are employed as positive forms of government influence for specific foreign principals (Porter, 1980; Chi & McGuire, 1996).

These characteristics, inherent in all ongoing venture operations, should be considered when making the determination regarding which market to enter. Further, foreign partner ability to maintain host reliance offers significant implications for the market entry decision as well. Finally, this model offers a conceptual, strategic explanation for government support that is lacking in other strategic models (Porter,1986). There is a significant need for the development of a firm-level strategic assessment of host market and host firm tactics at this time in order to assess market entry and revenue potential (Root, 1987). This understanding, not simply an inceptive assessment, should then be used to determine firm-level IJV tactics (Pashtenko et al., 1999b). Admittedly, this is not meant to be an exhaustive overview of the applicability of every PPE market entry strategy. However, the overall suggestion is that a conceptual framework examining such a firm-level understanding is conceptually justified at this time.

Hypotheses

The subsequent hypotheses are presented and rationalized from an integrative firm-level strategic perspective. Market entry risk assessments are conceptually related to underlying foreign partner and their associated foreign government strategies. They are based upon a host partner strategic perspective consistent with each of the offered conceptual strategic models. There are three propositions in all.

The first hypothesis is related to firm-level IJV operations within sectors that are restricted from foreign majority ownership or control due to government security concerns. Examples of this are public utilities, telecommunications, and in defense support industries. The intention of this hypothesis is to indicate perspective considerations that foreign market entrants should regard when dealing with IJV operations in which the foreign partner is the foreign government itself (Porter, 1980). The second hypothesis is associated with venture operations in economies and industries in which the effect of government influence is considerable, and yet, inceptive negotiations are conducted at the firm-level. Finally, the last hypothesis offers a conceptual understanding regarding the moderating effect that the foreign principal's own economy and government has upon host government influence within these IJVs.

All three hypotheses are based upon an integrative aggregate market risk and a firm-level strategic assessment of the resultant ventures. In this manner, the suitability of assessing aggregate government and market risk, strategic perspectives, or the integrated combination of both perspectives, can be theoretically evaluated. This is necessary at this time to understand joint venturing under conditions that have yielded inconclusive and, at times, contradictory results (Kogut, 1988a; Kogut & Singh, 1988; Beamish, 1988; Beamish et al., 1996).

Hypothesis 1: Host government instability will positively affect venture revenue when the foreign partner augments host government strategic goals in government restricted industries (such as in public utilities, telecommunications, and in the defence support industries).

This hypothesis shows the misleading effects of an aggregate market risk assessment under these circumstances. Again, host governments continue to employ considerable coercion or offer atypical benefits for foreign entrants able to supplement government strategic needs (Yan, and Gray, 1995). The existing indication for managers is that this government dependency or instability is a sign of weakness, therefore something that should be avoided by foreign market entrants.

The primary consideration in deciding market entry and subsequent venture operations should be how the foreign principal fits the strategic needs of the host government in these markets and industries. This should be considered above what aggregate risk would assess to be unacceptable instability (Pashtenko, 1999a). Thus, the resulting conclusion is that a strategic perspective assessment will yield more accurate results in these markets and industries. Under these conditions the host principal or in its

stead, the host government, is able to artificially support the resultant IJV to meet its strategic needs and attract foreign principals.

It must be understood that aggregate market risk indicators are more suited at indicating market entry risk under consistent conditions while strategic assessments more accurately reflect the effects of government-created artificial environments or venture performance within changing economies. In these cases an aggregate measure indicates venture instability while a strategic assessment indicates the direct opposite.

The next hypothesis is related to the first in that it addresses market entry risk when dealing with newly employed, firm-level negotiation in previously government regulated industries such as in ventures with newly privatized enterprises and in post-planning economies.

Hypothesis 2: Foreign principal augmentation of host government strategic goals will positively affect venture revenue in post-planning economies at the inter-firm level. This affect will diminish as the PPEs transition toward a market economy status.

This hypothesis states that supplementing governmental strategic goals will bring about more revenue in joint ventures within economies that have more recently begun the transition toward a market structure than those that have begun the process somewhat earlier. The specific reason for choosing these respective economies is to indicate the diminishing nature of government suasion over time in Eastern European PPEs.

Moreover, this hypothesis states that the ability to meet host principal strategic goals is comparable, if not identical, to IJV operations with the foreign government. This is distinctly true when these markets make the initial transition away from a PPE (Peng, and Heath, 1996). There is extensive support for this hypothesis; privatized firms and firms with extensive ties to host government concerns have continually employed government coercive tactics in order to redress firm-level concerns (Porter, 1980). Thus, host partner strategic concerns paralleling government/market concerns, but in conflict with the inceptive venture agreement, have led to numerous instances of foreign principal dissatisfaction with venture performance.

Venture inequities, as perceived by the host principal have recurrently been resolved through foreign government legislation affecting the inceptive venture agreement in favor of the host partner. Additionally, government supported operational stalemates are oftentimes the result of foreign partner unwillingness to re-negotiate the venture when it conflicts with host government strategic goals.

Again, former PPEs initially developed market-wide approaches for foreign market entrants. Thus, a strategy developed in which foreign principals systematically adhered to this compelled mode (IJV) of market entry. Further, without privatization and with extensive artificial support of, virtually all commerce was inter-related in some manner with host government strategic interests. The transition toward privatization and a market economy has reduced this interdependence and diminished the number of industries in which the government has a decided strategic interest in supporting.

Hypothesis 3: Foreign principals from market economies and from foreign economies where firms are strongly government supported will be exposed to less host government coercion during the inceptive agreement and during continuing venture operations than principals from unsupported and individualistic economies in all cases and thus will generate greater revenue.

Host governments or, in their stead host principals, use influence to influence firm-level foreign tactics when there are distinct advantages in doing so. Nevertheless, when foreign principals are closely associated with, or supported by their respective governments, or by strong market economies, this becomes considerably more difficult to accomplish. Anticipated rival responses and reciprocal strategies by the host principals and governments must subsequently address not only firm-level responses, but foreign government responses as well. Thus, foreign government support of the foreign principal is postulated to be a direct moderator upon the affect of government influence on international joint ventures within these environments.

METHODOLOGY

The research methodology that was used in this study consisted of a time-series analysis of 10-K and 10-Q forms via the Internet from the Securities and Exchange Commission's Web pages. Specifically, a random sample of organizations containing definite keywords was conducted via a programmed keyword search, codified, and checked for inter-rater reliability. This resulted in IJV data from developing economies (DEs), and post–planning economies (PPEs) between the US and Eastern Europe (*Note 1*). Within these external financial reports were exhaustive listings of each organization's activities within specific, restricted IJVs. Supplemental data were correspondingly compiled from a random, time-series prospectus sampling of IJV investment between DEs, and PPEs using a comparable approach.

These data contained exhaustive listings of organizational joint venture involvement, listings of all principals involved within these ventures, the extent of participation by the various principals, and each principal's respective percentage of ownership in the resultant ventures. A sample of 196 agreements were codified and assigned their respective categories. Remaining ventures such as equity joint ventures and independent joint ventures were systematically eliminated. In every case, each hypothesis was subjected to ANOVA to test for significant mean differences between the dependent variables.

RESULTS

The result of the first hypothesis reveals a significant difference between the dependent variables at the p < .01 level of significance. Here we also reject the null hypothesis H1 and accept that there is a significant difference between host government instability in positively affecting ventures revenue when the foreign principal augments host government strategic goals in the aforementioned examples of government restricted industries. Again, the difference between the dependent variables yields a result in the manner predicted. Thus, we accept that government instability yields significantly higher revenue in these circumstances.

Table 1
Hypothesis H1 ANOVA: Results of Host Government Instability and Venture Stability When the Foreign Principal Augments Host Government Strategic Goals in Restricted Markets/Industries (Such As In Public Utilities, Telecommunications, And In The Defense Support Industries)

Source	df	Sum of Squares	Mean Square	FRatio	Prob>F
Model	002	5154372.882	2577186.441	5.040	0.0047***
Enor	051	26078359.830	511340.389		
CTotal	053	31232732.710			

Note: *** p < 0.01

Table 2
Hypothesis H2 ANOVA: Results Of Foreign Principal Augmentation Of Host Government
Strategic Goals at the Inter-Firm Level in Former Post-Planning Economies.

Source	df	Sum of Squares	Mean Square	FRatio	Prob>F	
Model	002	746788.876	373394.438	17.235	0.0000***	

Error	032	693284.413	21665.138
CTotal	034	1440073.289	

Note: *** p < 0.01

The result of the second hypothesis indicates that foreign principal augmentation of host government strategic goals positively affects venture revenue in post-planning economies at the p < .01 level of significance. Accordingly, we reject the null hypothesis H2 and accept that there is a significant difference in venture revenue under these conditions. In addition, the difference between the dependent variables yields a statistically significant result in the manner predicted. Consequently, we accept that these affects are more pronounced in markets that have more recently instituted the change toward a market economy.

Table 3
Hypothesis H3 ANOVA: Results of Host Government Influence on Foreign Principals from Market and Strongly Government Supported Economies Versus Unsupported and Individualistic Economies with Respect to Government Coercion During the Inceptive Agreement and During Continuing Venture Operations

Source	df	SumofSquares	Mean Square	FRatio	Prob>F	
Model	002	845732,652	422866.326	4.463	0.0092***	
Error	046	4357863.884	94736.171			
CTotal	048	5203596536				

Note: *** p < 0.01

Finally, the result of the third hypothesis also reveals a significant difference between the dependent variables at the p < .01 level of significance. Here we also reject the null hypothesis H3 and accept that there is a significant revenue difference between principals from market economies and from economies where firms are strongly government supported and those from unsupported and individualistic economies. Accordingly, we also accept that foreign government or foreign market support has a significant moderating affect on host government suasion upon the resultant joint venture.

Recent, unprecedented changes in developing and post-planning economies have resulted in numerous commercially turbulent environments for managers to administer. These changes have involved firm-level negotiation, the lifting of unilateral, market-wide bargaining restrictions, and increased, even majority, ownership of international joint ventures. Finally, it is in these same economies that, while allowing negotiation at the firm-level, routinely employ considerable host government coercion in order to promote government, as well as firm-level concerns.

Existing managerial inquiry has, as a rule, employed aggregate market risk indicators to assess the suitability of entry into specific international joint ventures. Again, we maintain that these indicators are singularly appropriate for indicating entry risk under constant conditions. Correspondingly, we present that in Eastern European PPEs, DEs, and a firm-level strategic assessment yields significant insight for management. It is these same environments which currently yield conflicting results using existing methods of analysis; it is also these environments that were chosen to support our hypotheses.

The first implication for managers is that strategic augmentation of host government will antithecally increase venture revenue. This presents that the ability to supplement host government strategic goals is significantly more important at predicting overall venture revenue than aggregate market

risk measures. Consequently, of the two, it is the more important measure of venture revenue. The second implication for managers is that augmentation of host government strategic goals will lead to increased revenue at the inter-firm level. That is to say, that as a rule, government influence encompasses firm-level negotiation in post-planning economies. In addition, this affect is significantly more pronounced in the PPEs of Eastern Europe, currently in the initial stages of transition, than those that are more advanced in this process. This is also important for manages to realize because it discloses the collusive outcome between host governments and firms, an effect that diminishes with further market development. Finally, the last implication is that foreign government support, whether direct or indirect, has a significant moderating effect on post-planning IJVs. Consequently, foreign principal management from these markets have a clear strategic advantage over principals from other markets. This does not indicate that joint ventures with these government-supported foreign principals will be more likely to take place. Rather, the antithesis is in all probability true. However, those that do take place will significantly diminish the collusive effect by government on the resultant joint ventures.

Limitations and Suggestions For Future Research

Admittedly, there are significant limitations to the applicability of this study at this time. Foremost among these is that it is presently limited to non-equity and non-independent post-planning joint ventures (Gomes-Cassares, 1990). The presumption behind this limitation is that it is the remaining endeavors are the most acceptable under transitory market conditions and consequently are the most fundamental in shaping post-planning joint ventures. Accordingly, firm-level strategy under host government influence is viewed from this sole perspective. Venture revenue in all other conditions and by other means of measurement is, at present, undetermined.

A second limitation to this study is that it does not address government influence on non governmentally-strategic joint ventures. It is widely acknowledged that post-planning markets employ collusion to forestall foreign profiteering during economic transition. Thus, these governments routinely employ limitations on foreign principals such as capital repatriation limits, property ownership, and limitations on the percentage of joint venture ownership. The result is that they maintain the ability to prevent depredation of their economies. Ultimately, while the appropriateness of these tactics remains to be adequately deliberated, it must be conceded that they have a noticeable effect upon post-planning joint ventures at this time.

A third limitation is that is that this study can only be generalized to international joint ventures with post-planning economies at this time. Subsequent inquiries should focus upon developing an understanding of how our findings apply to other markets such as firm-level negotiation with governments from established market economies. Our findings do indicate that government influence is reduced as post-planning economies progress toward market economies (*H2*). However, we presume that government influence only diminishes, not disappears under these conditions until it reaches a state of equilibrium supported by he results of our final hypothesis (*H3*).

Finally, successive efforts should concentrate on managerial strategy during market transition as the authors strongly believe that stability between markets is a transitory condition at best. Consequently, subsequent managerial inquiry should be directed at leveraging organizational position and management during continual market revision.

REFERENCES

Beamish, P. W. 1988. Multinational joint ventures in developing countries. London: Routledge.

Beamish, P.W. 1993. Characteristics of joint ventures in the People's Republic of China. *Journal of International Marketing*, 1(1): 29-48.

Beamish, P. W. & Banks, J. C. 1987. Equity joint ventures and the theory of the multinational enterprise. *Journal of International Business Studies*, 19(2): 1-16.

Beamish, P. W. & Delios, A. 1996. Improving joint venture performance through congruent measures of success. *Cooperative Strategies: European Perspectives Conference*.

- Beamish, P. W. & Inkpen, A. C. 1985. Keeping international joint ventures stable and profitable. *Long Range Planning*, 28(3): 26-36.
- Blodgett, L. L. 1991. Partner contributions as predictors of equity share in international joint ventures. *Journal of International Business Studies*, 22 (1): 63-78.
- Blodgett, L. L. 1992. Factors in the instability of international joint ventures: An event history analysis. *Strategic Management Journal*, 32 (3): 489-515.
- Chi, T. & McGuire D. J. 1996. Collaborative ventures and the value of learning: Integrating the transaction cost and strategic option perspectives on the choice of market entry modes. *Journal of International Business Studies*, 27(2): 285-308.
- Chowdhurry, J. 1992. Performance of international joint ventures and wholly owned foreign subsidiaries: A comparative perspective. *Management International Review*, 32 (2): 115-133.
- Contractor, F. 1990. Ownership patterns of U.S. joint ventures abroad and the liberalization of foreign government regulations in the 1980s: Evidence from benchmark surveys. *Journal of International Business Studies*, 21 (1): 53-73.
- Contractor, F. & Lorange, P. 1988. *Cooperative strategies in international business*. Lexington MA: Lexington Books.
- Dymsza, W. A. 1988. Successes and failures of joint ventures in developing countries: Lessons from experiences. In F. Contractor and P. Lorange (Eds.), *Cooperative strategies in international business*. Lexington, Mass.: Lexington Books.
- Enen, J. 1991. *Venturing abroad: International business expansion via joint ventures*. New York: Liberty Hall Press.
- Fagre, N. & Wells, L. T. Jr. 1982. Bargaining power of multinationals and host governments. *Journal of International Business Studies*, Fall 3: 9-23.
- Gerringer, J. M. 1986. Joint venture partner selection. New York: Quorum Books.
- Gerringer, J. M. & Hebert, L. 1989. Control and performance of international joint ventures. *Journal of International Business Studies*, 20(2): 235-54.
- Geringer, J. M. & Hebert, L. 1991. Measuring performance of international joint ventures. *Journal of International Business Studies*, 20.
- Gomes-Cassares, B. 1987. Joint venture instability: Is it a problem? *Columbia Journal of World Business*, Summer: 97-102.
- Gomes-Cassares, B. 1990. Firm ownership preferences and host government restrictions: An integrated approach. *Journal of International Business Studies*, 21(1): 1-22.
- Gray, B. and Yan, A. (1992). A negotiations model of joint venture formation, structure, and performance: Implications for global management, *Advances in International Comparative Management*, 7. Greenwich, CT: JAI Press, pp. 41-75.
- Harrigan, K. R. 1986. *Managing for joint venture success*. Lexington, MA: Lexington Books.
- Harrigan, K. R.1988a. Joint ventures and competitive strategy. *Strategic Management Journal*, 141 158.
- Harrigan, K. R. 1988b. Strategic alliances and partner asymmetries, In F. Contractor and P. Lorange (Eds.), *Cooperative strategies in international business*. Lexington, Mass.: Lexington Books.
- Inkpen, A. C. & Beamish, P. W. 1997. Knowledge, bargaining power, and the instability of international joint ventures. *Academy of Management Review*, 22(1): 177-202.
- Killing, P. J. 1982. How to make a global joint venture work, *Harvard Business Review*, (3): 120-127.
- Killing, P. J. 1983. Strategies for joint venture success. New York: Praeger.
- Kogut, B. 1988a. A study of life cycle of joint ventures. Management International Review, 28: 73-84.
- Kogut, B. 1988b. Joint ventures: Theoretical and empirical perspectives. *Strategic Management Journal*, 8 (4): 319-332.
- Kogut, B. & Singh, H. 1988. The effect of national culture on the choice of entry mode. *Journal of International Business Studies*, 19 (3): 411-432.
- Li, J. (1995). Foreign entry and survival: Effects of strategic choices on performance in international markets. *Strategic Management Journal*, 16: 333-51.

- Lyles, M. A. & Baird, I. S. 1994. Performance of international joint ventures in two Eastern European countries: The case of Hungary and Poland. *Management International Review*, 34 (4): 313-329.
- Meschi, P. & Roger, A. 1994. Cultural context and social effectiveness in international joint ventures. *Management International Review*, 34 (3): 197-215.
- Pashtenko, V. H. 1999a. The misleading effects of international joint venture aggregate market entry risk indicators: The case for integrating a strategic perspective, *Northeast Decision Sciences Conference*, Newport, RI.
- Pashtenko, V. H., Roy, M. H. & Dugal, S. S. 1999b. The relationship between transitory organizational structures and non-linear environments. *Management Decision*.
- Peng, M. W. & Heath, P. S. 1996. The growth of the firm in planned economies in transition: Institutions, organizations, and strategic choice. *Academy of Management Review*, 21(2): 492-528.
- Porter, M. E. 1980. Competitive Strategy: Techniques for Analyzing Industries and Competitors, New York: Free Press.
- Porter, M. E. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*, New York: Free Press.
- Porter, M. E. 1986. *Competition in global industries*. Boston: Harvard Business School Press.
- Ring, P. S. & Van de Ven, A. 1994. Developmental processes of cooperative interorganizational relationships. *Academy of Management Review*, 19 (1): 90-118.
- Root, F. R. 1987. Entry strategies for international markets. Lexington, Mass: D.C. Health.
- Shan, W. 1991. Environmental risks and joint venture sharing arrangements. *Journal of International Business Studies*, 22: 555-578.
- Tallman, S. B. & Shenkar, O. 1994. A managerial decision model of international cooperative venture formation. *Journal of International Business Studies*, (1): 91-113.
- Westney, E. 1988. Domestic and foreign learning curves in managing international cooperative strategies, In F. Contractor, & P. Lorange (Eds.), *Cooperative strategies in international business*. Lexington, Mass.: Lexington Books.
- Yan, A. & Gray, B. 1994. Bargaining power, Management control and performance in international joint ventures: A comparative case study. *Academy of Management Journal*, 37(6): 1478-517.
- Yan, A. & Gray, B. 1995. Reconceptualizing the determinants and measurement of joint venture performance. *Advances in global high-technology management*: 87-113, Greenwich, CT: JAI Press.

MANAGERIAL SUCCESS – A ROADMAP FOR NEW HRD PARADIGMS

Anjani Koomar

Indian Institute of Management, Lucknow, India Email: aaykay56@gmail.com

ABSTRACT

Management Educators, HR professionals, Corporate Leaders *et al* have been looking for ideal ways to improve the productivity & throughput of their people, specially their managers. 'Our people are our greatest asset' is the most oft quoted cliché in any Chairman's report and yet they grope in the dark to make it a reality. Naturally, this is not for any lack of will or trying, but, for sheer ignorance of what is really needed, for want of a kind of roadmap for discovering what exactly is to be given for optimal performance in the changing business realities. This formal empirical study asks successful managers to rank 24 critical skill-sets/ attributes, identified *a priori*, in their personal and professional success. An attempt is then made to capture this collective wisdom for formulating a HRD roadmap. Only when this basic element, the starting point of need determination, is known, one hopes that HR people, specially the HRD professionals, can formulate their HR Strategies and Plan of Action more effectively to improve managerial productivity & effectiveness.

INTRODUCTION

The research domain is India which is facing severe competition thanks to opening of the economy, WTO pressures etc. and the consequent large influx of Multi National Corporations (MNCs). Markets have shifted dramatically from a Seller's to a Buyer's scenario with rapid frequency. The situation is far worse here than other developing countries. Globalization was supposed to make the country more prosperous through increased access to foreign trade. However, the ground realities are far different as "The studies also show that globalization of Indian industry is still a far cry. Instead of emerging as a global player, India is fast becoming a global market only.........the country's global competitiveness as a provider of final goods and services is reducing with increasing foreign collaborations. It requires urgent attention to initiate reforms in not only management education curricula, but, perhaps the management of the management education itself........ It will take more time and requires development of new managerial skills for industrial restructuring". Unfortunately, neither the national (a.k.a. Govt.) nor the corporate leadership has fully understood its real import – either for managers, total job creation or national economy & hence continue to go down the dangerous path with impunity.

THEORETICAL BACKGROUND

Managers are increasingly finding the going very tough worldwide thanks to a globalized economy and very turbulent market conditions. Old skill sets, perhaps learnt even in a good Business School, are no longer adequate for survival, let alone success. One has to continuously re-skill himself throughout his/ her managerial life cycle in order to remain relevant in a fast changing environment. While companies can now be blind-sided by anyone anywhere in the world, managers face the continuous threat of not only their knowledge obsolescence, but also the threat of younger eager beavers who are ready to work far more for far less. BPOs, KPOs *et al* have brought this harsh reality to the doorsteps of even developed economies where jobs are increasingly being 'Bangalored' despite all the entire social & political chest thumping.

On top of that, it has often been seen that there are wide differences in the performance of managers, even if they come from the same background and have the same knowledge base – e.g. MBAs from say the same reputed Business School. This research was undertaken in order to understand the causes of this anomaly to begin with and to improve the overall performance of managers on a continuous basis.

This becomes more critical as organizations are fast moving from old bureaucratic format to Organic or Learning Organization to combat the new realities of market place. As Dee Hock, the creator and Chairman Emeritus of VISA, says "The Industrial Age, hierarchical, command-and-control institutionsare increasingly irrelevant in the face of exploding diversity and complexity of society worldwide." Michael Hammer also chips in with, "The traditional concept of Management is reaching the end of the road. The notion of management as a significant idea in itself, and as a major part of the organization, is obsolete." Fortunately, that's not the end of road if managers keep renewing their skill profiles in synch with the new realities. Companies do try their best to upgrade their human resources through continuous training and development, but, by and large, grope in the dark about what exactly is to be imparted. As a result, one has a situation where what is being provided is not perceived as something necessary or important by the recipients. Training need identification through the Performance Appraisal system exists, but, the bosses mostly do not have any clue, especially on soft skills side, as to what is required or what to recommend. Consequently, the recipients are naturally less than enthusiastic about such interventions and as a result, the training internalization suffers and thus the bottom lines do not improve as per the expectations or plans.

Thus, there is a very critical need to know the training skills requirements which managers need to face the new paradigms of management. This is over and above the knowledge one acquires in a typical MBA course. Therefore, this research project looks at the training needs from a typical marketing perspective – by trying to identify the customer needs as per the current corporate realities. Before selling something, you've got to know what the customer wants which in this case are the managers.

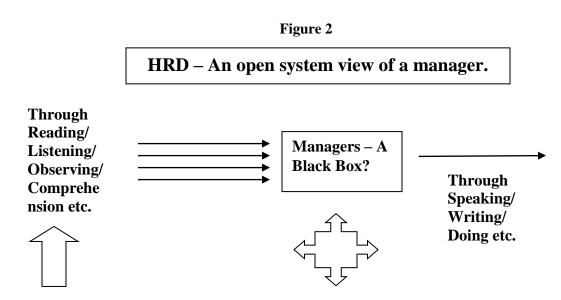
RESEARCH METHODOLGY

Anthony Robbins highlights in his 'The Syntax of Success' the outlines of the path for becoming successful. He suggests the use of modeling by closely observing the person you want to be like (idol), making inferences and implementing the learnings. Accordingly, this research idea was conceptualized at Indian Institute of Management, Lucknow (IIML), one of the leading B School of the country, where the main objective behind this study was to study 'good' managers in action from different perspectives & catch the quintessence of their knowledge or wisdom. From this, one could hopefully come up with general/ generic inferences, which can then perhaps be used to make a model to improve all-round managerial performance/ effectiveness. A detailed Research Plan was made, instrument designed, pretested & improved, data collected & analyzed & a working paper published. The full details can be seen there. Briefly, twenty four skill sets/ traits/ attributes (referred as 'skill sets' henceforth) were identified through prior field experience/ research and Focus Group Discussions (FGDs) which were considered to be sine qua non for professional success by very senior and successful managers at high levels. To make the set exhaustive & to capture whether they have any other skill-set in mind which may have been missed out by the 'a priory' identification process, an 'others' column was also added where they had to identify the variable. The whole approach was based on the crying need to understand the customers' actual needs (as they say in Marketing), before one can develop any 'product' to meet it. Hence, this research study was designed to make a perceptual map of managers' mind set. The target population for this survey was defined as elements consisting of people working in managerial capacity, preferably successful and considered 'high potential' by their respective companies. Sampling units from whom the information was collected were drawn from broadly four different industrial sectors - Private Sector, Public Sector (big Central Government run Corporations), Banking Sector and State Government owned/ run Departments/ Corporation (SGUs). It may be relevant to explain the logic behind the selection of these sectors as in the general perception in the country, Private sector is considered the most efficient followed by successful Public Sector units. Banking sector is considered the next and the SGUs hold the so called wooden spoon of corporate performance. The private sector companies include successful

corporate names like Bajaj Auto, Godrej Consumer Products, Jaiprakash Industries, J P Associates, Clariant (India), General Motors India, Galaxy Medicare, Godfrey Phillips, Frito-Lay India, Tata Tele Services, Apollo Tyres, Novo Nordisk etc. The Public Sector was represented by very large Corporations like Oil and Natural Gas Commission of India, Indian Oil Corporation, Gas Authority of India, Bharat Petroleum Corporation etc., majority being *Navaratnas or 9 jewels* of the Central Government. Respondents from the National Bank for Agricultural and Rural Development, State Bank of India etc. were the giant representatives of the Banking Sector. Finally, the managers/officers from the Department of Family Welfare, Provincial Medical Services, Government of Uttar Pradesh and UP Power Corporation etc. made up the respondents referred to as SGUs. 511 such managers were surveyed over a period of almost one full year. A total of 320 filled questionnaires were received, out of which 291 were found to be useful. The break up of usable responses was 58, 127, 47 & 59 respectively in the 4 sectors mentioned above.

Since we wanted to know 'success factors', i.e., to know the secrets of success of "successful" managers, the majority proportion of the respondents in this study were chosen to be "good" managers. This was achieved by carrying out the surveys at various Management Development Programs (MDPs) held at IIML, where "good" managers (considered high potential - 'Hi-Pots' - by their respective companies) come for further skill-improvement. As the cost of training at IIML is many times over the normal in the country or any In-Co. programs, companies do take care of sending their best. The MDPs, however, where the surveys were carried out, were chosen at random to avoid any bias. Moreover, to cover the whole spectrum, we also took samples from SGUs in order that the other end of the scale is also represented, which can then perhaps be used for comparison. The identified managers being surveyed were asked to rate each skill set on a 5 point Likert scale through a structured questionnaire. A new system/ process was developed to make them rank each of the 24 skill sets also which is normally considered very difficult. "A drawback to forced ranking is the number of stimuli that can be handled by this method. Five objects can be ranked easily, but respondents may grow careless in ranking 10 or more items. In addition, rank ordering produces ordinal data since the distance between preferences is unknown." Therefore, to facilitate a structured thinking, the respondents were asked to fill the ratings columns first. Then they were asked to stratify the data as per the ratings so to say and then start ranking each stratum in a sequential manner. An example would perhaps illustrate the full process. Let us suppose that a particular respondent has rated 7 skill-sets 5 out of 5. Far as ratings go, they are all equally important and hence should be ranked equally. However, when asked to rank these 7 skill-sets from 1 to 7 and thus show us their relative importance to each other, they could easily do it with some further reflections and thus give us absolutely unambiguous prioritized data. This was the rich source of data being sought showing absolutely unambiguous ranking which we wanted to capture somehow, despite it being ordinal data. Thus, it was a 2 stage reiterative process where the respondents had to concentrate & give some very valuable data. To further facilitate this structured thinking, a detailed Excel Worksheet was also introduced later on with detailed guidelines and examples. Moreover, researcher was always at hand to clarify/ assist in case of any doubt/ difficulty. Whether there is any significant difference in the perception of the relative importance of the said skills among the respondents on the basis of sectoral background, work-experience, age or levels of hierarchy was then analyzed in details. This data was then aggregated from 4 different perspectives (Refer to Table 1 & 2) to come out with overall generic skill set requirements & patterns as per the wisdom of these Hi-Pots. One of these skills was then given to 3 random groups of managers and their productivity. Benchmarked through pre and post hoc measurements (Refer to Fig. 1). A simple conceptual model is then proposed to look at some of these skill sets which can be termed as Meta-skills in a systemic manner (Refer to Fig. 2).

Figure 1 Fast Reading J P Cem Series 1 400 Series2 350 Reading 300 Speed in 250 Words per Minute. 200 150 100 50 O Comprehension 15 17



Meta Skills for Skills Upgradation – Got to improve each part for any substantial/ sustainable gains! Check Current Levels/ Improvement Potential?

RESULTS

Knowledgeable panels of judges, especially Professors in HRM Area at IIML, were consulted to check whether all aspects of the topic were covered in the instrument. It was found that the content coverage in the instrument was adequate. In order to test the reliability of the data, the Cronbach Alpha

Test was carried out. For all the variables, the Alpha came out to be between 0.8680 and 0.8765, implying a high reliability level for the data set.

The consolidated ranking (based on the mean of their ratings) for the all the respondents combined is as follows:

Table 1
Overall Ranking by Mean Ratings

Overall Ranking by Mean Ratings								
Skill sets	Mean Ratings							
Planning	4.4							
Leadership	4.4							
Time Mgmt.	4.2							
Team Building	4.2							
Team Working	4.2							
Reality Sense	4.1							
Facing Crises	4.1							
Listening	4.1							
AGAP(AGAP)	4.0							
Oral Communication	4.0							
Working in Parallel	3.8							
Facing Chaos	3.8							
Stress Management	3.8							
Written Communication	3.8							
Reading	3.7							
Creativity	3.6							
Negotiation	3.4							
Fast Mental Calculation	3.3							
Salesmanship	3.3							
Writing	3.2							
Memory for Figs./ faces/ nos. etc.	3.0							
PC Skills								
Charisma	2.7							
Dictation	2.7							
Others (Please specify)	0.2							
	Skill sets Planning Leadership Time Mgmt. Team Building Team Working Reality Sense Facing Crises Listening AGAP(AGAP) Oral Communication Working in Parallel Facing Chaos Stress Management Written Communication Reading Creativity Negotiation Fast Mental Calculation Salesmanship Writing Memory for Figs./ faces/ nos. etc. PC Skills Charisma Dictation							

Planning is considered as the most important skill, followed by Leadership and Time Mgmt. Team Skills i.e. Team Working and Team Building follow at Ranks 4 and 5. Surprisingly, average ratings of none of these skills came below 2.7 which show that the whole skill set was judged to be very significant by the respondents. It was also interesting to note that hardly anyone could add any substantial skill-sets in item 25 i.e. the 'others' column. Two corollaries may follow, namely that either the list was 'exhaustive' or the respondents were 'exhausted' after going through the 24 skill-sets.

Comparison by factors

Other than Sectoral Background, we also considered following 3 perspectives (numbers of the respondents given in the bracket in each case). Only the top 5 skills are being tabled due to space constraints:

Comparison by Age

Here, the respondents were classified on the basis of age as: a) Below 35 years of age (52), b) Between 35 and 50 years of age (154) & c) More than 50 years of age (85). This was done so as to get an

understanding of the changes in time-spending patterns and mind sets due to age. These particular ages were chosen as cut-offs since it is commonly believed that they represent crucial landmarks in a person's life which tends to affect his thinking pattern and actions (no data to prove it, though).

Comparison by Length of Work Experience

The three categories for comparison are: a) Less than 15 years of work experience (91), b) Between 15 and 30 years of work experience (157) & c) More than 30 years of work experience (43). The assumption behind this classification is that one spends time in different ways as one gains work-experience.

Comparison by Hierarchical Level

For this analysis, the classification was made in the following manner: a) Lower Level Management (93), b) Middle Level Management (126) & c) Senior Level Management (72). This was done in order to understand the changing time-spending patterns and perceptions/ outlooks of a person as he rises in the hierarchy of a corporation & takes on more responsibilities/ work loads.

Looking at the whole set from the sectoral background perspectives first as given above, some interesting trends emerge. The Private Sector respondents agree with the Total Ranking for the first 2 ranks. At Ranks 3 and 4, this sector brings in the Team Skills - Team Working and Team Building, with Listening being ranked 5. Time Mgmt., which is at Rank 3 overall, comes at Rank 6 for the Private Sector.

The public sector gives the highest ranking to Leadership, demoting Planning to Rank 5. The skills of Team Building, Time Mgmt. and Team Working fill the ranks in between. The other skills that this sector considers important are AGAP and Oral Communication. The banking sector shows quite a variation from the overall norm, nothing retaining the same spot as a matter of fact. AGAP is being ranked 1st and Reading skill showing up in the Top 5 skills (ranked 4th). Time Mgmt. and Planning occupy the 2nd and 3rd ranks, respectively. Leadership shows its face only at Rank 5. Facing Chaos and Working in Parallel (ranked 9th and 10th respectively) are also considered important skills. The SGUs respondents give the highest rank to Planning, followed by Leadership, Reality Sense, Team Working and Team Building, in that order. Team Working and Team Building have swapped places.

Comparing by Age

In the first group of respondents here (< 35 years of Age), the top two skills remain the same as for the Total. They place more weightage on team working, raising its rank by two (from 5 to 3). Time Mgmt. is at Rank 9, way below the Total Average of 3. The ability to face crisis features higher at 4. The ability to work in parallel and listening skills are also rated higher than the Group Average.

On the whole, the rankings by the respondents in the second age-group (35 - 50 years) are quite close to the overall patterns barring few rank changes. Leadership exchanges its rank with Time Mgmt. and Team Building with Team Working in this group's wish list.

The last group (> 50 years) mostly agrees with the Total Group's rankings for all the top 5 skills, except for some rank swaps. Only Planning goes down from #1 to # 4.

Table 2 Comparing by Age

Rank	Overall	< 35 years	35 - 50 years	> 50 years	
1	Planning	Planning	Planning	Leadership	
2	Leadership	Leadership	Time Mgmt.	Team Building	

3	Time Mgmt.	Team Working	Leadership	Time Mgmt.	
4	Team Building	Facing Crises	Team Working	Planning	
5	Team Working	Team Building	Team Building	Team Working	

Comparison by Length of Work Experience: The respondents, who have a 'Work Experience > 15 years', agree with the total ranking, as far as the first two ranks are concerned. They give the 3^{rd} rank to the ability to face crises. The skill of team building is downgraded from 4 to 7 in this list, as is listening from 8 to 11.

'15 - 30 years Work Experience' group have given the 1st rank to Team Building, as compared with its 4th rank in the Total Ranking. Also, they have ranked Listening at 6 (against 8), Time Mgmt. at 5 (against 3) and Reality Sense at 7 (against 6). These are the skills that show major variations from the Total Rankings, the rest, typically, are moving one place up or down. The last group, composed of people with '> 30 years of Work Experience', mostly agrees with the Total Ranking, with minor variations in the higher ranks (Leadership at the top, followed by Planning). Time Mgmt. retains its rank but the lower rankings see some major variations in the form of Facing Chaos, Negotiation, Salesmanship, Memory for Figures and Charisma.

Table 3
Comparison by Length of Work Experience

Rank	Total	Below 15 yrs.	15 to 30 yrs.	Above 30 yrs.	
1	Planning	Planning	Team Building	Leadership	
2	Leadership	Leadership	Leadership	Planning	
3	Time Mgmt.	Facing Crises	Planning	Time Mgmt.	
4	Team Building	Team Working	Team Working	Team Working	
5	Team Working Reality Sense		Time Mgmt.	Reality Sense	

Comparison by Hierarchical Level: The junior management group agrees with the total ranking, for the first 2 ranks. Stress Management features at 11, 2 places higher than it does in the Total Ranking. This group downgrades the AGAP, from 9th to 12th position.

Table 4
Comparison by Hierarchical Level

Rank	Overall	< 35 years	35 - 50 years	> 50 years	
1	Planning	Planning	Planning	Leadership	
2	Leadership	Leadership	Time Mgmt.	Team Building	
3	Time Mgmt.	Team Working	Leadership	Time Mgmt.	
4	Team Building	Facing Crises	Team Working	Planning	

5	Team Working	Team Building	Team Building	Team Working
---	--------------	---------------	---------------	--------------

The middle management group gives AGAP the 2nd rank, which is in direct contrast with their juniors or seniors who had downgraded it. Team Working is replaced by Time Mgmt. Oral Communication is also given a higher rank at 6, than the 10th rank that it gets in the Total List. Finally, the senior managers downgrade Planning to the 4th place, bringing, in its place, Time Mgmt. They also raise the Reading skill to 10th from 15th and downgrade Facing Chaos from 12th to the 17th rank. Leadership and Team Working retain their relative positions though.

Analysis of Ranking Data

Kendall's W Test was carried out to find the Coefficient of Concordance on the ranking data, but the value returned was very low (0.293), thereby making the data not very amenable to aggregating in the traditional sense. We then tried to check whether there was any inter-rater reliability within the sectors. The values of Kendall's Ws were: a) Private Sector - 0.313; b) Public Sector - 0.237; c) Banking Sector - 0.287; d) SGUs - 0.289. Again it showed no agreement and one could thus assume that the ranking appears to be independent of any Sectoral bias or pattern. Hence, even within the sectors, one couldn't aggregate the rankings.

Overall ranking system: In order to come out with an overall ranking based on the individual rankings given by the respondents on each skill-set, the options were: 1. Take the Modal value i.e. the skill sets having the maximum frequency, 2. Take the Median value or 3. Try the typical Olympic Ranking System in which the number of Gold medals decides the hierarchy first and only in case of a tie on Gold Medals tally, the judges look at the number of Silver Medals obtained to determine the next ranking. In this, the ranks were decided by the comparison of the number of the 1st ranks that a particular skill-set got. The one with the highest frequency (modal value) got the overall 1st rank; the next one got the 2nd rank and so on. In case 2 or more skill-sets had the same number of 1st ranks, then their 2nd ranks frequencies were compared to arrive at their overall ranks. However, one did feel that through this system, a major portion of the richness of the data was not being factored in and hence a lot of information loss is taking place.

Surprisingly, while Leadership and Planning are common at the top two positions, Team building at 4th and Faster Mental Calculation at 15th. in all the 3 methods, the rest are changing. One would have expected modal and Olympic methods to be quite similar, yet rankings have changed significantly on many elements like Team Working (from 3rd. to 7th.), Written Communication (from 8th. to 12th.), AGAP (from 13th. to 9th.) & so on.

Factor Analysis

Factor Analysis was done using Principal Component Analysis and Varimax Rotation with Kaiser Normalization with Rotation converging in 11 iterations. Bartlett's Test of Sphericity showed that the Correlation Matrix was significantly different from an Identity Matrix. This further justified the need of Factor Analysis. Factor Analysis was done so as to see if there was some sort of relationship between the different skill-sets and whether they could be clubbed together in order to have a more coherent and manageable picture. As a result of the Factor Analysis carried out on SPSS, seven (7) factors were identified, encompassing all 24 original skills and explaining 68.48% of the Total Variance. The cut-off Eigen-value was taken as 1.

On studying the variables involved in each, these 7 factors could be labeled as:

Basic managerial skills: This factor has an Eigen-value of 7.426 and explains 30.94% of the Total Variance. It is composed of the following variables (in the decreasing order of strength of relation): stress management, planning, creativity and lateral thinking, team building, leadership, team working, charisma and oral communication. These variables reflect the very basic requirements that one needs for being a manager. Hence, they are jointly being named as "Basic Managerial Skills". For building a team, the need for effective communication to take place, cannot be overemphasized.

Equanimity: This factor's Eigen-value is 2.173 and it explains 9.055% of the Total Variance. The constituents for this factor include memory for faces / figures / numbers, reality sense, ability to work in parallel, ability to face chaos / unstructured situations and ability to face crisis. All these variables, except 1, point to the need for a manager to keep his cool in even tense scenarios so as to find his way out of any situation. With a little stretch, even the 1st. variable can be construed as the overall ability to recognize patterns/ people which would be very handy while facing a crisis. Hence, they are being collectively called as "Equanimity".

Thinking on one's toes: This factor has an Eigen-value of 1.809 and explains 7.537% of the Total Variance. This factor is made up by the coming together of the following variables: fast mental calculation, salesmanship / marketing and negotiation. These skills require one to think quickly, on the run so to say, and innovatively and help a manager in getting an edge over others. Hence, they come together under the heading of "Thinking on One's Toes".

People skills: This factor has an Eigen-value of 1.469 and explains 6.120% of the Total Variance. The variables that combine to form this factor are: AGAP, written communication and listening. These managerial skills are heavily dependent on one's communication and social abilities. Effective listening is the cornerstone of AGAP while written communication is the life blood of any organizational HR system.

Basic Skills: This factor has an Eigen-value of 1.312 and explains 5.467% of the Total Variance. The variables that come together to form this factor are: reading, writing and time management. Even though these are basic skills, they are extremely important in today's world where information plays a critical role in making or breaking a business and information flows are getting larger with every passing day.

Dictation: This factor is composed of only one variable – Dictation skills. It has an Eigen-value of 1.207 and explains 5.028% of the Total Variance. Dictation may seem to be an unlikely skill, but a majority of communication in India still takes place through the old hard-copy method, despite the advent of e-mails and internet. The practice of having single boss secretaries is also very common in the country still because of the low labor costs. Thus, this is reflected in this skill-set's high strength (0.837) of positive relation with this factor.

Computer literacy: Like the previous factor, this factor is also composed of only one variable namely PC Skills. It has an Eigen-value of 1.040 and explains 4.335% of the Total Variance. Taking off from the previous factor, due to the excessive increase in the need for and the flow of information, the computers have become omnipresent & a *sine qua non* for a managers' survival in this cyber world. At the same time, specialized tools for information analysis e.g. data mining etc. are also getting developed which makes his decisions more objective. Hence, there is need for the manager to be technically proficient. This explains the origin of this independent factor. It may be mentioned here that the Middle and Senior Managers, especially in Public Sector & SGUs, still suffer from serious Technophobia and are still not hands-on with PCs by and large. PCs are still glorified typewriter for quite a few. However, the importance has sunk in now and they realize that it is almost an evil necessity – to be mastered sometime soon.

Cluster Analysis

Cluster Member characteristics: The following are the inferences drawn from the values of the 24 attributes at the 4 cluster centers: The members of cluster 1 belonged essentially to the Private Sector and were assistant managers or engineers, while the members of other cluster could not be differentiated on this basis. The representatives of the other 3 clusters were from the public sector. No differentiation was possible in between the 4 clusters on the basis of age group or work experience. No significant differences were found to exist in between the 4 clusters in terms of the 24 skill-sets at 10% level of significance. One

plausible explanation could be that there seems to be almost a universality of perceptions about the need for these skill-sets & their respective ranks, *irrespective of their sectoral backgrounds* & *managerial effectiveness*, which normally would have been expected considering their different work cultures and overall performance levels.

Discriminant Analysis

Discriminant Analysis of the data to arrive at the significant differentiating variables in between the 4 clusters didn't show any results as Box's M Test showed a non-significant value. This again may be interpreted as supporting the results/ inferences of Cluster analysis as given in the preceding paragraph. Perhaps it may hence be construed as a *generic skill set* which working managers believe to be highly desirable, whether or not they really use it/ practice in their working lives.

CONCLUSIONS

As this study indicates, a generic list of skill-sets for success of a manager seems to exist as per the wisdom of a large number of successful managers themselves. Using this collective wisdom or the knowledge base of the managers surveyed, HR can now explore a novel path to address issues in transfer of knowledge for managerial success. For this learning to take place in the organization, HR should consider the managers as a classical Marketing 'customer' & address his 'manifest' as well as 'latent needs' to get their 'customer wows'. B Schools, on their parts, can do their own soul searching as to how much of these skill sets are they covering/imparting in their curricula. I agree with Henry Mintzberg that Industry doesn't need MBAs but Managers. My conviction is that management is ultimately a 'performing art' & not just a knowledge bank. How many of us would pay to listen to a Musicologist e.g.? On the other hand, we'd pay through our noses & go miles if a performing musician like Pandit Ravi Shanker was to give a Sitar concert. Similarly, managers should primarily have what Ram Charan & Larry Bossidy call 'Execution Power – The Discipline of Getting Things Done'. The author hopes that this research may help in this crucial area to bridge the Industry Academe divide - the former is a customer of latter after all & must seek their 'Wows' a la Philip Kotler. Professor Jeffrey Pfeffer of Stanford won't perhaps then predict 'The End of Business Schools?' & Students will then perhaps take a more active learning role.

The HR people, on their part, can now find the skill gaps far more easily at an individual level & prioritize their task accordingly. Proper marketing of their training interventions is a prime responsibility for any kind of a sustainable success. This research should help them in it as a supporting proof or as a referral. The rationale for improving a few basic skills can be illustrated by a simple training intervention on Reading skills carried out by me at an IIML MDP for a group of 27 senior executives. With just 6 half hour sessions spread over 5 days, the results were plotted as follows:

Limitations

Though 291 is a large number, it is still a small survey base which somewhat limits the credibility of our findings. We feel that it should be done in a much larger setting, perhaps cross culturally across several countries to triangulate the data. Since we picked our respondents from MDPs, where only the high-profile managers are normally sent by the companies, the sample drawn is not fully representative of the entire managerial population of the country. However, it is a saving grace in a way at the same time, because it shows the perceptions of hopefully a positive set of people who are successful themselves and the aim was to seek recipes for success anyway. Ideally, this research should have been done in the field where one could have access to the respondents' performance records as well to ensure that they really are the Hi-Pots. The assumption that only the best are being sent to IIML MDPs is an educated guess at best which needs to be cross-checked. Most of the respondents had difficulty in filling up the questionnaire, since they had never thought in this manner. Explanations were required by most of them, especially those from SGUs. Due care was taken to avoid giving any bias but that's only our fond hope only. Fortunately, no problem was encountered in the skill-set part once the new ranking process was

explained. Though we have tried to take as broad a sample as possible, we are aware of the fact that only 4 sectors of the industry have been covered, which is another limitation of the study. The Basic Activities – Reading, Writing etc. have each been defined as distinct from each other & a discrete activity whereas a person may be engaged in more than one of them at a given time e.g. he may be writing and thinking at the same time. The respondents were asked to overlook such intersections for the sake of simplicity. Though the list of Managerial Skills seems to cover almost all the facets of a manager's life, it is by no stretch exhaustive (even though none of the respondents managed to add anything substantial to it.). The list does not include several other factors like Political Skills, Networking, Health Management, Managerial Style etc. which are also a part and parcel of any successful manager's repertoire.

Acknowledgements: To many Professors colleagues of IIML with whom I have been discussing several aspects of this research for over two years. Profs. Anil Chaturvedi & Abha Chaturvedi on HRM angles, Prof. Krishna Kumar on Strategic issues, particularly the ones facing the national economy, Profs. A. Bhattacharya & G. K. Shukla of Decision Science Group on statistical analysis, Profs. Raj Nargundkar & J. K. Das of Marketing Area on research design issues etc. are just a few of a long list of eminent professionals. Scores of my MBA friends & working professionals who participated in the FGDs, formally as well as informally, to make the *a priory* list of skill sets. Finally, my thanks are due to our student Mr. S. Rajat Ray for doing the analysis as per our queries/ guidelines.

AN EXPLORATORY STUDY ON THE MORPHOLOGY AND MEASUREMENT OF SPIRITUALITY

Dr. Himanshu Rai Indian Institute of Management, Lucknow, India

E-Mail: himanshu@iiml.ac.in

ABSTRACT

Spirituality has been a subject of discussion and reflection for ages. It has been variously defined in religions and by scholars. Further, it has been variously defined in different contexts. Of late, there has been a keen interest among social scientists to look at the significance of spirituality at the work place. Consequently several models attempting to define spirituality and study its effect on organizational performance have been forwarded by scholars. Attempts have been made to link workplace spirituality with organizational dynamics. Further, scholars have also attempted to distinguish spirituality from religion, religiosity and ethics. However, most of these studies are conceptual and derive predominantly from existing literature or perceptions of people. Further, studies have argued that non-western societies are better in integrating personal life, work, leisure, prayer, religion and other aspects of one's life. Increasingly scholars have looked at some of the Indian texts to derive richer insights into the understanding of spirituality. However, there is little clarity in the definition of spirituality which encompasses all these human values irrespective of the context. Further, there is no validated scale to measure spirituality blind of context. Vedas are the earliest written texts in the world and form the backbone of Vedic philosophy. They have played an important role in formation of the Hindu way of living and have significantly impacted culture at all levels in India. Most scholars agree that the text of Vedas is universal in nature and does not cater to any specific religion or set of people. Specifically, Chapter 40 of Yajurveda provides rich insights into the understanding of spirituality. The 17 mantras (hymns) of this chapter also form a part of Ishopnishad, an Indian text on philosophy. Further, an expanded understanding of these 17 mantras forms the text of Gita, which provides the basic philosophy which has driven the Indian thinking since its inception. This study attempts to derive from these texts and attempts to provide a better understanding of spirituality in humans. Further, it has also developed a culture blind scale based on the elements derived from these texts. The research design included three broad stages: item generation, scale development, and assessment of scale's psychometric properties (validity and reliability). The sample included a cross section of post graduate students of a premier business school in India, cutting across vocations, religions, and personalities. The emerging scale shows robust psychometric properties and is expected to be useful for academics and practitioners alike.

INTRODUCTION

Spirituality has been a subject of reflection and study for ages and has been variously defined by philosophers, religious leaders and scholars. Philosophers have tried to look at it from the lens of metaphysics in an attempt to understand the nature of human conscience and his relationship with the external environment. They have attempted to understand the relationship between self and the outside with an interpretive synthesis aimed at answering the ontological questions of nature and purpose of self. In both occidental and oriental traditions the questions related to matter, mind and their interrelationship have been dwelt upon at lengths. However, the western philosophy has predominantly looked at spirituality in the context of metaphysics or ethics.

Religious leaders, on the other hand, have tried to link it to the values, ethics and the connections of the self with the higher being. Spiritual connotations have attempted to give a purpose, meaning and life in religious discourses. Scholars have increasingly tried to distinguish spirituality from religion (Miller, 2004) though the distinction has not been substantiated either theoretically or statistically. The importance of studying spirituality as a distinct concept has been firmly established in literature due to its significant contribution to shaping lives (Koenig, McCullough & Larson, 2001), recovery from illnesses (O'Connell and Skevington, 2005), and coping with stress (Calicchia & Graham, 2006; Pargament, 1997). There is a renewed interest in understanding the spiritual meaning of life (Miller, 2004) and the advent of spiritual gurus in all parts of the world bears ample testimony to this assertion.

A critical review of existing literature brings out two significant gaps in the understanding of spirituality, first in terms of conceptualization and the second in terms of the measurement.

LITERATURE REVIEW

Spirituality: The Conceptual Gap

To begin with, there seems to be no operational definition of spirituality (Miller, 2004). One of the reasons for this could be that the contexts of values, culture, religion and ethnicity make it too complex for systematic investigation (Maher & Hunt, 1993). Another reason could be that spirituality and religiosity are often studied as one (e.g. Calicchia & Graham, 2006; McManus, 2006) while looking at their relation with other variables. While religion, and by extension religiosity may buffer stress in individuals (Rai, 2005), its constituency is distinctly different from that of spirituality (Larson, Swyers & McCullough, 1997).

Studies that have defined spirituality (e.g. Duffy, 2006; McManus, 2006; Miller, 2004) have done so subsequent to their development of a measure. Miller (2004: 427) defines spirituality as "one's core prosocial beliefs about the world, humanity, nature, and one's higher being; the values by which one should ideally live". While prosocial beliefs about one's higher being delve into the realm of religion, the ideal values denote ethics. As such, this definition is confounded by two other concepts and would reflect in its subsequent attempts at measurement. Citing Hill & Pargament (2003) and Miller & Thoresen (2003), Duffy (2006: 52) suggests that spirituality refers to "an individual's relationship with a higher power or powers, a type of energy or guiding force, or a belief system in a common good'. Once again while the relationship with higher powers strays into theological domains, belief system in common good confounds spirituality with the concepts and thoughts of ethics. McManus (2006: 24) suggests that spirituality pertains to "a search for the sacred" where 'sacred' could include God (Corsini, 2002) or things worthy of veneration (Haring, 1950). These conceptualizations, by their very definition put spirituality beyond the reach of atheists and others who may not believe in the existence of a higher power besides the self. The introduction of ethics in its constituency would also make it dependent on other social and cultural variables that would color the 'spirit' in spirituality. It is therefore necessary to either reconcile these conceptual contaminations or do away with them.

Spirituality: The Measurement Gap

The gap in the measurement of spirituality arises out of two reasons: one following from the vague definition, and the other because of inadequate analysis of psychometric properties. These innate problems with the existing measures of spirituality would be highlighted using the analysis of three scales viz. Spiritual Well-Being Scale (Paloutzian & Ellison, 1982), Spiritual Orientation Inventory (Elkins, Hedstrom, Hughes, Leaf & Saunders, 1988), and Miller Measure of Spirituality (2004).

The Spiritual Well-Being Scale (SWB) measures spiritual quality through two separate but related subscales of Religious Well-Being (RWB) and Existential Well-Being (EWB). RWB items consistently talk about God, e.g., "I believe that God loves me and cares about me". The concept of religiosity is thus likely to confound the measure of spirituality in one of the subscales to begin with. Further, Miller (2004: 425) suggests that some of its items in the EWB may be measuring some other constructs, e.g., ""I feel very fulfilled and satisfied with life" which may be more related to the construct of neuroticism". Thus, both its subscales seem to have psychometric problems. Further, some studies

suggest that the two dimensional structure of this scale is not supported and may have a more complex factor structure (Genia, 2001).

The Spiritual Orientation Inventory (SOI) makes direct reference to spiritual factors and would therefore induce a bias among respondents. Moreover, Miller (2004) points out through an example that the SOI suffers from endemic flaws since it has items with two independent statements. However, Miller Measure of Spirituality (MMS) also suffers from similar drawbacks. It measures spirituality through two separate subscales of 'Prosocial Beliefs' and 'The importance of a higher being'. Prosocial Beliefs subscale has issues related to content validity. For instance, one item states, "If you think someone or something is important to you, then you should deeply value it". The item includes both 'someone' and 'something' and takes away the choice of differentiating between the two from the respondent. Next, one item states, "Religious leaders must always emphasize the importance of compassion and tolerance for all". This item seems to be measuring one's opinion on religious leaders rather than spirituality which is intrinsic in a person. Even the other subscale has some serious flaws. For instance, one item states, "I consider myself to be a spiritual person", thereby making a direct reference to the construct it is attempting to measure. Further, the two dimensional structure of this scale has also not been supported and analyses suggest a more complex factor structure.

In the light of the above gaps, there was a felt need for a clearer conceptualization, systematic subsequent operationalization, and development of a robust measure for spirituality. The conceptualization of spirituality had to be distinct from the concepts of religion, religiosity and ethics, and had to be defined clearly. Further, all these studies are derived predominantly from existing literature or perceptions of people. Of late, studies have argued that non-western societies are better in integrating personal life, work, leisure, prayer, religion and other aspects of one's life and increasingly, scholars have looked at some of the Indian texts to derive richer insights into the understanding of spirituality. This study makes an attempt to analyze the prominent Indian scriptures in order to derive insights into the meaning of spirituality and subsequently develop a scale to measure it.

Spirituality in the Indian Scriptures

Vedas are the earliest written texts in the world and form the backbone of Vedic philosophy, which in turn has shaped the Indian philosophy and culture (Rai, 2005). Most scholars agree that the text of Vedas is universal in nature and does not cater to any specific religion or set of people. The knowledge of Vedas has been organized in four Vedas, Rig, Yajur, Sam, and Atharva. Although all four contain a variety of literature within them, the Yajurveda primarily talks of Karma, the commentary on action, duties and responsibilities. Specifically, Chapter 40 of Yajurveda provides rich insights into the understanding of spirituality through its17 mantras (hymns) that also form a part of Ishopnishad, an Indian text on philosophy. Subsequently, an expanded understanding of these 17 mantras forms the text of Gita that provides the basic philosophy which has driven the Indian thinking since its inception.

The Sanskrit word for spirituality is *Adhyatma* or *Adhyatmikta*. The word *Adhyatma* is derived from the combination of two words, *Adhi* and *Atma*. Adhi implies empowerment and *Atma* could mean soul, self, higher being or conscience. The implied meaning of *Adhyatma* would be everything that is done by the empowerment of *Atma*. This is to say that everything the *Atma* allows. In this context, therefore, the meaning of the word *Atma* would be closer to conscience. Thus the meaning of spirituality would be the development of this conscience. The scriptures further suggest that this conscience is developed in people by understanding their own self and their purpose in life. People also need to understand their relationship with the universe around them as well as their obligations towards this universe and self. Finally, people ought to act by the dictates of this developed conscience. Deriving from this explanation, therefore, the following definition of spirituality is proposed: "Development of one's conscience through understanding one's own self, one's purpose in life, and one's relation with the universe around one (and by extension one's obligations)". The definition would also extend to include one's following (as in acting in accordance with) this developed conscience.

Item Generation

The three stages of scale development, item generation, scale development, and scale evaluation, as suggested by Schwab (1980) were followed systematically to create a robust measure. The construction, development and evaluation process of the *Himanshu Rai Measure of Spirituality* (HRMS) was carried out in two phases. In Phase one, 63 items designed to measure spirituality were created through a detailed analysis of the 17 mantras from the 40th chapter of *Yajurveda*, the *Ishopnishad*, and the *Gita*. For the purpose of this study, *Gita* and *Ishopnishad* published by Gita Press, Gorakhpur, and *Yajurveda*, published by Arya Pratinidhi Sabha, New Delhi, were used. The items were generated using the deductive approach (Hinkin, 1995). For each item, a statement which would capture spirituality was generated.

Content Validation

The content validity was assessed by using ten raters, seven from academia and three from industry. The raters were given the definition of the spirituality along with a yes/no option for each of the items. Besides ensuring that the statements were representative of the domain for EDHC variable, the raters also provided feedback on the difficulty, comprehension and sufficiency of the items. Interrater agreement was sought and items with eighty percent of raters agreeing were retained. Two items were dropped at this stage and the remaining 61 items were retained for the pilot study.

Pilot Study

In phase 2, the anchor points of the 61 items were determined and a 5 point Likert scale was developed ranging from 'totally disagree' to 'totally agree'. Thirty three items were negatively worded and all items were randomized so that no patterns emerged within them. Besides these 61 items, Miller Measurement of Spirituality (MMS) scale (Miller, 2004), and the scale on Detachedness dimension of Dispute Handling Capability (Rai, 2005) were added to the questionnaire. The questionnaire was given to 250 post graduate students of a premier management school in India, and 170 usable responses (68%) were received. About 71% of the respondents were male, with a mean age of 25 years.

RESULTS AND DISCUSSION

Item Total Correlation

The correlation between the 61 items and their total was analyzed to see if the items significantly correlated and were hanging together. This leads to selection of closely associated items thereby increasing the reliability of the scale (Nunnally, 1967). The analysis suggested that 14 items did not have significant item to total correlation. These items were dropped and the remaining 47 items were subjected to exploratory factor analysis.

Exploratory Factor Analysis

The remaining 47 items were subjected to exploratory factor analysis using principal component method with a varimax rotation. Items that loaded below 0.4 on a factor were dropped. The remaining items were then subjected to further factor analysis. The iterations were continued till no more items could be dropped. Fifteen more items were dropped this way and the remaining 32 items showed a 13 factor structure (with Eigen values more than 1).

There were two courses of action available at this stage. The first was to force a higher order factor analysis using surrogate variables (Nunnally, 1967; Hair, Anderson, Tatham & Black, 1998), summated scales (Hair et. Al., 1998) or factor scores (Hair et. Al., 1998). Use of surrogate variables was discarded since it would not have controlled measurement errors while the use of summated scales and factor scores was discarded because of low sample size and the fact that there was no a priori conceptual theorization and definition of the factors.

The second option was to chart a Scree Plot and analyze the various factors. This option seemed to be the most appropriate given the small sample size. The Scree Plot for these 32 items with 13 factors is shown in Figure 1. As is evident from Figure 1, the line straightens after the fourth factor. Accordingly,

items corresponding to the first four factors were retained and subjected to further factor analysis. The factor analysis suggested a 4-factor structure with 13 items: 5 items formed the first factor, which was labeled as 'Reflections on Life and Existence'; 3 items formed the second factor, which was called 'Emotional equanimity'; 3 items constituted the third factor, which was named 'Control over Mind'; and 2 items formed the fourth factor, which was labeled as 'Control over Fear'. Together they explained 62.4% of the variance.

Figure 1

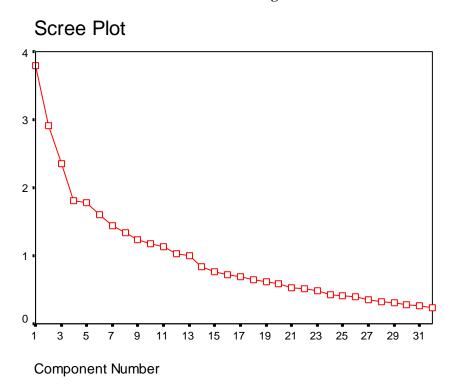


Table 1 shows the correlation between the four factors. As can be seen from Table 1, the factors are clean since the correlation between them is very small. The only significant (though small) correlation between factors 2 and 3 can be explained by the fact that they are both looking at some aspect of control; one over mind and the other over emotions. However, the values are too low and this can be said to be a robust 4-factor structure.

Table 1 Correlations

Factors	F1	F2	F3	F4
F1	1	-0.12	-0.03	0.12
F2	-0.12	1	0.20**	0.11
F3	-0.03	0.20**	1	0.16
F4	0.12	0.11	0.16	1

^{**} Correlation is significant at the 0.01 level (2 tailed)

Sampling Adequacy

The Kaiser-Meyer-Olkin Measure of sampling adequacy showed a value of 0.716 while the Bartlett's test of Sphericity was significant. These indicated satisfactory psychometric properties for the scale.

Reliability

Next, the reliability of the various measures was checked. The reliability of an instrument is its ability to measure consistently the phenomenon it is designed to measure (Selltiz et. al., 1959) and can be determined by using procedures which measure the internal consistency of the scale and subscales. Cronbach alpha is one of the commonly used reliability coefficients and is an indication of the internal consistency of items which constitute a measure. It is different from procedures like split-half technique and item analysis (Black and Champion, 1976) and generally a value above 0.6 is considered to be acceptable (Loewenthal, 2001). The reliability values (Cronbach Alpha) of the overall scale and the various factors as well as the other measures are shown in Table 2. As can be seen from the table, the reliability scores for all the measures are satisfactory.

Table 2

Scale/Factors	HRMS	F1	F2	F 3	F4	MMS	MMS1	MMS2	Detach
Reliability	0.64	0.82	0.66	0.63	0.71	0.91	0.87	0.93	0.83

External Validity

Next, the external validity of the scale and the subscales was tested. The values are given in Table 3.

Table 3
Statistics

				~ ~	at tip ties					
		HRMS	MMS	MMS1	MMS2	F1	F2	F3	F4	DETACH
N	Valid	170	170	170	170	170	170	170	170	170
	Missing	0	0	0	0	0	0	0	0	0
Mean		2.7561	3.5647	3.9325	2.9824	3.0953	2.6686	2.2118	2.8559	3.6892
Median		2.7692	3.5806	4.0000	3.1250	3.0000	2.6667	2.0000	3.0000	3.6842
Skewness		073	268	760	320	192	.260	.798	.007	.110
Std. Error of Skewness		.186	.186	.186	.186	.186	.186	.186	.186	.186
Kurtosis		481	.208	.767	500	.014	254	.515	939	.146
Std. Error of Kurtosis		.370	.370	.370	.370	.370	.370	.370	.370	.370

The external validity of a study refers to the extent to which findings can be generalized across time, persons and settings (Cook and Campbell, 1979). The external validity of findings would be threatened if the sample were systematically biased, for instance, if the responses on the HRMS scale had either "very high" or "very low" scores. The responses show good distribution on HRMS and its factors since the mean and median are similar, skewness is less than 2 and Kurtosis is less than 5 (Ghiselli, Campbell & Zedeck, 1981). Overall, there does not seem to be an evident bias due to the dependent variable measure used in this study.

Validity Results

Table 3 also shows that the mean values for all constructs are significantly above zero. The results for convergent and discriminant validity assessment are given in the following discussion.

Convergent validity: Table 4 shows the correlation between HRMS and its factors with MMS and its factors. In order to display convergent validity, the scale, and especially its first factor was expected to show moderate correlation with MMS and its factors. As can be seen, both HRMS and the first two factors show significant correlation with MMS and its two factors. MMS predominantly had items that talked about outlook towards life and hence the higher correlations with the first factor that signifies reflections on life and existence. The third and the fourth factors of HRMS do not show significant correlations with MMS perhaps due to their exclusion from the definition of spirituality proposed by Miller. The preceding sections have already pointed out the problems with Miller's (2004) definition of spirituality. Despite this, there is some support for the convergent validity of the HRMS scale.

Table 4

Construct	HRMS	F1	F2	F3	F4
MMS	0.28**	0.57**	-0.26**	-0.12	0.12
MMS1	0.1	0.32**	-0.23**	-0.13	0.05
MMS2	0.35**	0.61**	-0.21	-0.08	0.14

^{**} Correlation is significant at the 0.01 level (2 tailed)

Discriminant Validity

Table 5 shows the correlation between HRMS and its factors with Detachedness. As is evident, none of the correlation values are significant at the 0.01 level. The detachedness dimension of dispute handling capability represents the elements of rational thinking and dissociating judgment from desires (Rai, 2005). With elements like control over anger, ability to distinguish between subject and object, devoid of ego etc., it could be thought of coming close to spirituality. The low and insignificant correlations demonstrate the discriminant validity of the HRMS scale and its subscales.

Table 5

Construct	HRMS	F1	F2	F3	F4
Detachedness	0.18	0.09	0.15	0.04	0.12

Although the HRMS scale and its subscales show robust psychometric properties, they have to be further validated. Since the responses for all constructs were taken from the same source using the same method, common source variance and common method variance cannot be ruled out. Besides, the sample size for the study was small and the sample was limited to post graduate students. Therefore, further assessment of the psychometric properties of the HRMS scale with larger and more disparate samples is an imperative. The study, however, provides a more comprehensive definition of spirituality and discriminates the construct from other related and confounding constructs. Further, it also provides a robust empirical measure for spirituality, which would be of great use to researchers and practitioners alike due to its applications especially in the context of modern day stress laden society.

REFERENCES

Black, J.A. & Champion, D.J. 1976. *Methods and issues in social Research*. New York: Wiley.

Calicchia, J.A. & Graham, L.B. 2006. Assessing the relationship between spirituality, life stressors, and social resources: Buffers of stress in graduate students. *North American Journal of Psychology*, 8: 307-320.

Corsini, R. 2002. *Dictionary of psychology*. London: Routledge.

Duffy, R. 2006. Spirituality, religion and career development: Current status and future directions. *The Career Development Quarterly*, 55: 52-62.

Elkins, D., Hedstrom, L., Hughes, L., Leaf, J., & Saunders, C. 1988. Toward a humanistic phenomenological spirituality: Definition, description and measurement. *Journal of Humanistic Psychology*, 13: 51-74.

Genia, V. 2001. Evaluation of the spiritual well-being scale in a sample of college students. *International Journal for the Psychology of Religion*, 11: 25-33.

Ghiselli, E.E., Campbell, J.A., & Zedeck, S. (1981). *Measurement theory for behavioral sciences*. San Francisco, CA: W.H. Freeman and Co.

Hair, J., Anderson, R., Tatham, R., & Black, W. 1998. *Multivariate data analysis*, New Jersey: Prentice Hall International.

Haring, B. 1950. Das Heilige und Das Gute. Freiburg: Herder.

Hill, P. & Pargament, K. 2003. Advances in the conceptualization and measurement of religion and spirituality: Implications for physical and mental health research. *American Psychologist*, 58: 64-74.

Hinkin, T.R. 1995. A review of scale development practices in the study of organizations. *Journal of Management*, 21: 967-988.

Koenig, H., McCullough, M. & Larson, D. 2001. *Handbook of religion and health*, Oxford: Oxford University Press.

Larson, D., Swyers, J. & McCullough, M. 1997. *Scientific research on religion and spirituality: A consensus report*. National Institute for Healthcare Research, Rockville MD.

Loewenthal, Kate Miriam. 2001. *Introduction to psychological tests and scales*. Sussex: Psychology Press.

Maher, M.F. & Hunt, T.K. 1993. Spirituality reconsidered. Counseling and values, 38: 21-28.

McManus, J. 2006. Spirituality and health. *Nursing Management*, 13: 24-27.

Miller, E.D. 2004. The development and validation of a new measure of spirituality. *North American Journal of Psychology*, 6: 423-430.

Miller, W. and Thoresen, C. 2003. Spirituality, religion and health: An emerging research field. *American Psychologist*. 58: 24-35.

Nunnally, J.C. 1967. *Psychometric theory*. New York: McGraw-Hill.

O'Connell, K. & Skevington, S. 2005. The relevance of spirituality, religion and personal beliefs to health-related quality of life: themes from focus groups in Britain. *British Journal of Health Psychology*, 10: 379-398.

Paloutzian, R. & Ellison, C. 1982. Loneliness, spiritual well-being, and quality of life. In A. peplau, and D. Porlaman (Eds.) *Loneliness: A sourcebook of current theory, research and therapy*: 224-237. New York: Wiley.

Pargament, K.I. 1997. *The psychology of religion and coping: Theory, research and practice*. New York: Guilford.

Rai, H. 2005. The Role of Hinduism in Global India and her Business Ethics. In Capaldi, N, (Ed.), *Business and religion: A clash of civilizations?* 379-389. Salem, MA: M&M Scrivener Press.

Rai, H. 2005. An Exploratory-Formulative Study of Executive Dispute Handling Capability: Morphology, Measurement and Modalities. A doctoral thesis at Indian Institute of Management, Ahmedabad, India.

Schwab, D.P. 1980. Construct validity in organizational behavior. In B.M Staw and L.L. Cummings (Eds.) *Research in organizational behavior*, 2: 3-43, Greenwich, CT: JAI Press.

Selltiz, Claire, Jahoda M, Deutsch M., & Cook, S.W. 1959. *Research method in social relations*. New York: Holt, Rinehart and Winston.

PREFERRED AND PERCIEVED LEADERSHIP STYLES: ADAPTING IMPORTANCE-PERFORMANCE ANALYSIS AS A DIAGNOSTIC TOOL FOR THE MANAGERS AND LEADERS.

Jessica Ho Sze Yin David Yong Gun Fie Poon Wai Ching Multimedia University, Malaysia syho@mmu.edu.my

ABSTRACT

Organizational effectiveness and growth in this global economy is often tied to the effectiveness of heads of companies in managing their resources (both human and capital assets) well. As employees are significant assets of organization, and managers' or leaders' actions can have an impact on their employees, organization heads must strive towards improving their leadership styles in order to bring changes to the organization. This paper offers a new theoretical framework (Preferred-Perceived Analysis), an adaptation of the Importance-Performance Analysis (IPA), as a diagnostic tool for leadership styles for global managers and leaders. This new theoretical framework aims to identify the gap between preferred leadership styles and leadership styles portrayed by global managers and leaders. The study will result in a matrix that will be used to provide suggestions and recommendations for a better leadership line of attack for global leaders and managers.

INTRODUCTION

While globalization has occurred for centuries, today it is smeared out further, faster, and cheaper. International business had open-up the windows of opportunities, allowing to a greater extend the numbers of products and services to be offered in the market (Konopaske, and Ivancevich, 2004). This massive radiation of businesses proliferated around the globe had contributed to a vastly competitive business environment. Astute business leaders are consistently looking out for ways in which they can bring their organization towards a higher level of achievement in terms of profit and growth. Among the imperative issue ushering the growth of businesses in this internationalize economy is the consciousness in regards to the importance of 'people' or human capital as a contributing factor to organizational success (Pfeffer, & Viega, 1999).

Employees are assets to organization, in which their absent will mean shortfall to an organization. Employee turnover issues is alarming for managers as it does not only incur monetary expenses involved in recruiting and training but also it's great impact on productivity (Lucas, Parasuraman, Davis, and Enis, 1987) and most importantly, the extinction of knowledge (intangible assets) gained throughout the job span of the employee in the organization, which is now a common problem that companies faced in this knowledge economy era (Droege, & Hoobler, 2003). According to a study by Carter, and Lynch (2004), employee turnover can cost an organization to loose fifty percent up to two hundred percent of an employee's annual salary.

One of the determinants influencing employee turnover is inevitably, leadership (Mazuki, Chong, & Maimun, 2005). Leadership refers to the position of a leader, the capacity to lead, and the act or an instance of leading (Merriam-Webster, 2006). It is also described as "the ability to influence a group towards the achievement of vision or a set of goals" (Robbins, & Judge, 2007: 356). Leadership, when used strategically, can serve as an essential passport towards a successful organization (Beatty, & Quinn, 2002). Being a popular area of study for the past several decades, leadership concepts had been discussed

in several major perspectives. Among which is the Transactional and Transformational Leadership Theory. Both leadership styles, Transactional leadership (focusing on the exchange of goals and rewards) and Transformational leadership (focusing on values, inspiration and motivation) have their own reputation although transformational leadership is said to be a more effective leadership style (House, & Aditya, 1997; Cardona, 2000; Jung, & Avolio, 2000; Ehrhart, & Klein, 2001; Berson, Shamir, Avolio & Popper, 2001; Aldoory, & Toth, 2004). Although transformational leadership is asserted to be more preferable, to choose between practicing transactional leadership approaches or transactional leadership approaches might vary based on subordinates' preferences.

Discrepancies or gaps between what is one's expectation (preferred) versus the reality (perceived) often exist in ones career lifecycle (Jackson, & Schuler, 1983; Cordes, Dougherty, & Blum, 1997) and when ones expectation is not met, the feeling of dissatisfaction occurs and there is a tendency to withdraw, hence turnover increases (Brown, & Peterson, 1993). Since, leadership is one of the factor that influences employee satisfaction and turnover (Pool, 1997; Fleishman, 1998), knowing the gap between the leadership treatments being attended to employees (perceived leadership) and how it is different from employees' actual expectations (preferred leadership) will definitely offer some insights to managers and leaders on how to adjust their leadership style to suit their subordinates.

Given the above clarification, this research aspires to study the potential leadership styles to be adopted by leaders and managers. This paper proffers a new theoretical framework (Preferred-Perceived Analysis), adapted from the Importance-Performance Analysis (IPA), as a diagnostic tool for leadership styles for managers and leaders. This new theoretical framework aims to identify the gap between preferred and perceived leadership preferred leadership styles of managers and leaders. The gap identified will be applied into a matrix that will be used to provide suggestions and recommendations for a better leadership approach among future managers and leaders.

LITERATURE REVIEW

Definition of Leadership

Leadership is seen as a set of characteristics used to influence people's action. As uttered by Jago (1982), "As a *property*, leadership is the set of qualities or characteristics attributed to those who are perceived to successfully employ such influence" (p. 315). This was supported by some other scholars later on, who also believe that leadership can be defined according to traits, qualities, and behaviors of leaders (Horner, 1997; Kinicki, & Kreitner, 2006). Besides being a set of characteristics used to influence people's action, leadership has also been defined as a *process* of influencing people, or bringing changes in an environment or an organization, to improve people's lives and to achieve organizational cohesiveness (Jago, 1982; Savery, 1994; McShane, & Von Glinow, 2000; Aldoory, & Toth, 2004; Robbins, & Judge, 2007). Leadership processes involve setting up directions as well as aligning, motivating and inspiring people (Kotter, 1990).

Keeping all the above definition aside, there was one common cited notion that is the 'Voluntary Influence' existence in leadership. Leadership involved influencing and getting people to work without force and coercion (Jago, 1982). This was supported by Schriesheim, Tolliver, and Behling (1978), as cited by Kinicki, and Kreitner (2006), who defined leadership as a "social influence process in which leaders seeks the voluntary participation of subordinates in an effort to reach organizational goals" (p.342). Popper, and Zakai (1994) also cited a few popular leadership scholars for instant, Kotter, 1990 and Bass, 1995 who also agreed with this common concept.

Transactional and Transformational Leadership Theory

In the early days, approaches towards leadership are discussed within several key perspectives, specifically Traits, Behaviors and Contingency or Situational Leadership. Studies then move on to descant about leaders' ability to transform organizations through their vision and some discussions on Charismatic leadership (Jung, and Avolio, 2000). Apart from that, the study of Transformational and Transactional Leadership has also been popularized under the *Full-Range Approach to Leadership* since

the 1970s when the Theory of Transformational and Transactional Leadership emerged (Kuhnert, and Lewis, 1987; Deluga, 1988; Lowe, and Galen Kroeck, 1996; Kent, Crotts, and Aziz, 2001). Recent decades also sees an evolvement of leadership discussions in additional perspectives such as Leader-Member Exchange (LMX), Shared Leadership, Servant-Leadership, Level 5 Leadership and Super Leadership.

The Transformational and Transactional Leadership Theory was first introduced by Burns in his book, "Leadership, 1978". First introduced by Bass in 1985 and improved by himself with Avolio (1989, 1990, 1994, 1995, 2000 and 2004), the Multifactor Leadership Questionnaire (MLQ) is the most popular and most thoroughly developed instrument to measure transformational and transactional leadership (Dubinsky, Yammarino, Jolson, & Spangler, 1995; House, and Aditya, 1997; Javidan, & Carl, 2004; Avolio, and Bass, 1995, 2000, and 2004). The earliest version of the MLQ introduced by Bass in 1985 contained three elements of transformational leadership (Charisma/Inspiration, Individualized Consideration and Intellectual Stimulation) and 2 elements of Transactional leadership (Contingent Rewards and Management-by-Exception) (Avolio, Waldman, and Einstein, 1988; Hater, and Bass, 1988; Lowe, and Galen Kroeck, 1996; Bass, 1997; Kent, Crotts, and Abdul Aziz, 2001).

Progressively, over the last few decades of research, this theory of leadership had improved from five factors to seven factors, with four transformational leadership factors (Idealized Influence, Inspirational Motivation, Intellectual Stimulation, and Individual Consideration); two transactional leadership factors (Contingent Reward, and Management-by-Exception: Passive); and a non-leadership (Laissez-faire). From that, it increased to the current at nine factors. The nine factors of transformational and transactional leadership, also identified as the Full Range Leadership Theory contained five transformational leadership factors (Idealized Influence - Attributed, Idealized Influence - Behavior, Inspirational Motivation, Intellectual Stimulation, and Individual Consideration), three transactional leadership factors (Contingent Reward, Management-by-Exception: Active, and Management-by-Exception: Passive), and maintaining the non-transactional, laissez-faire leadership (Bass, 1997; Arnold, Barling, and Kelloway, 2001; Kent, Crotts, and Abdul Aziz, 2001; Sarros, and Santora, 2001; Antonakis, Avolio, and Sivasubramaniam, 2003). Description about each factor are as given below cited from Antonakis, Avoilo and Sivasubramaniam (2003):

- Transformational Leadership: Idealized Influenced Attributes (IA)
- "...socialized charisma of the leaders, whether the leader is perceived as being confident and power, and whether the leader is viewed as focusing on higher-order ideals and ethics."
- Transformational Leadership: Idealized Influenced Behaviors (IB)
- "...charismatic actions of leader that are centered on values, beliefs and a sense of mission."
- Transformational Leadership: Inspirational Motivations (IM)
- "...the ways leaders energize their followers by viewing the future with optimism, stressing ambitious goals, projecting and idealized vision, and communicating to followers that the vision is achievable."
- Transformational Leadership: Intellectual Stimulation (IS)
- "...leader actions that appeal to followers' sense of logic and analysis by challenging followers to think creatively and find solutions to difficult problems."
- Transformational Leadership: Individualizes Consideration (IC)
- "...leader behavior that contributes to follower satisfaction by advising, supporting, and paying attention to the individual needs of followers, and thus allowing them to develop and self-actualize."
- Transactional Leadership: Contingent Reward (CR)
- "(i.e., constructive transactions)...leader behaviors focused on clarifying role and task requirements and providing followers with material or psychological rewards contingent on the fulfillment of contractual obligations."
- Transactional Leadership: Management-by-Exception (Active) (MBEA)
- "(i.e., active corrective transactions)...active vigilance of a leader whose goal is to ensure that standard are met."
- Transactional Leadership: Management-by-Exception (Passive) (MBEP)

"(i.e., passive corrective transactions) leaders only intervene after non-compliance has occurred or when mistakes have already happened."

- Laissez-faire Leadership (LF)
- "...represents the absence of transaction of sorts with respect to leadership in which leader avoids making decisions, abdicates responsibility, and does not use their authority."

Transformational and transactional leadership studies evolved around the discussion on leaders' influence over employee and organization in terms of employees satisfaction and performance (Deluga, 1988; Hater, and Bass, 1988; Howell, and Avolio, 1993; Bass, 1997; Dubinsky, Yammarino, Jolson, and Spangler, 1995; Podsakoff, MacKenzie, and Bommer, 1996; Howell, and Hall-Merenda, 1999; Manning, 2002; Bass, Avolio, Jung, and Berson, 2003), employees trust and value (Podsakoff, MacKenzie, and Bommer, 1996; Pillai, Schreisheim, and Williams, 1999; Jung, and Avolio, 2000; Arnold, Barling, and Kelloway, 2001; Gillespie, and Mann, 2004), and overall organizational effectiveness (Avolio, Waldman, and Einstein, 1988; Eisenbach, Watson, and Pillai, 1999).

The significantly proven correlation between transformational and transactional leaders and their impacts had made this theory a widely researched area providing opportunities for earlier scholars to test out the theory not only in a confined lab situations but also in real scenarios (Barling, Weber, and Kelloway, 1996), in which this theory had been applied into many different sectors including the military sector by Bass, Avolio, Jung, and Berson (2003), the training and education sector by Barling, Weber, and Kelloway (1996); Kirkbride (2006), and some other sectors for instance, manufacturing by Deluga (1988), and corporate by Avolio, Waldman, and Einstein (1988); Howell, and Avolio (1993); Bass (1997), Dubinsky, Yammarino, Jolson, and Spangler (1995); and Jung, and Avolio (2000).

Preferred and Perceived Leadership

Evidently, leadership styles study is not an uncommon research in the area of leadership. However, while most of the studies focused on either preferred leadership style or perceived leadership style separately, studies that looked into both perspectives the preferred and perceived elements together are limited. Studies in relevance to the preferred and perceived element of leadership are exemplified in Figure 1.

Studies	Author (s)	Studies
Preferred Leadership	Lucas, Messner, Ryan, & Sturm (1992)	Preferred leadership style differences in the defense industry.
	Savery, & Meakes (1994)	Preferred leadership styles of the workforce of the post (Australia)
Perceived Leadership	Sav ery (1994)	The influences of the perceived styles of leadership of a group of workers on their attitudes to work
	Madzar (2001)	Effects of perceived leadership style (transformational and transactional leadership) and individual difference on subordinate's information inquiry.
Preferred & Perceived Leadership	Savery (1991)	Perceived and preferred styles of leadership influences on employee job satisfaction (mining company in Australia).

Figure 2-1: Studies in relevance to the preferred and perceived element of leadership

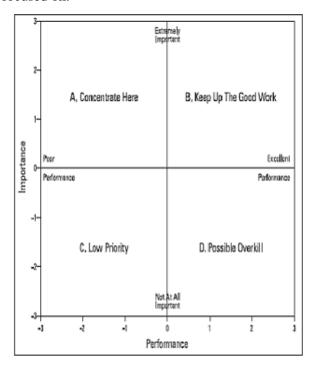
As mentioned in before, discrepancies or gaps between what is the expected (preferred) and what is reality (perceived) can have a major impact on one's satisfaction level. In the case of leadership style, if the subordinate's expectation is unmet, the tendency for withdrawal or turnover from he or she is undeniable. Knowing the difference or the gap is therefore essential as a mean to provide the direction in

which leaders can move ahead for improvement. To avoid confusion between preferred and perceived leadership, the below definitions had been determined:

- *Prefer* is defined as 'to choose one thing rather than something else because you like it better or desire for it more,' (Merriam-Webster, 2006; The Free Dictionary, 2006). In this research, therefore, Preferred Leadership Style is defined as 'the leadership style which is expected, desired or liked by subordinates'.
- *Perceive* is defined as 'to become aware of something through their senses, especially seeing or hearing', (Merriam-Webster, 2006; The Free Dictionary, 2006). In this research, therefore, Perceived Leadership Style is defined as 'the leadership style portrayed by leaders, as observed by subordinates'.

Importance-Performance Analysis

The Importance-Performance Analysis (IPA) was first introduced in the late 1970s by Martilla and James and was often used for the study of service operations/marketing (Slack, 1994) (as shown in Figure 2). The Importance-Performance model is used to study customer satisfaction as a result of consumers' perceptions of the importance of salient product attributes and judgment on their performance (Martilla, and James, 1977; Crompton, and Duray, 1985; Graf, Hemmasi, and Nielsen, 1992). The Importance-Performance Model applied the gap-analysis approach for action recommendation. This 'Gap-based' method or 'Action Grid' from Importance with Performance will result in four areas specifically, "Concentrate Here", "Keep Up the Good Work", "Low Priority", and "Possible Overkill" (Martilla, and James, 1977). Results out of this matrix will provide hints for areas of improvements that should be focused on.



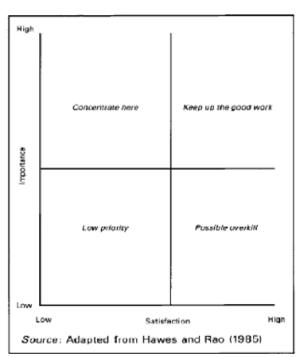


Figure 2-2: Importance-Performance Action Grid Figure 2-3: Importance-Satisfaction Action Grid

Although the earlier-introduced Importance-Performance Analysis (IPA) was merely done for the service operations/marketing area, as time moved on, this model has been modified and widely applied into many organizational studies and industries, from business operations to strategies determination (Graf, Hemmasi, and Nielsen, 1992; Nale, Rauch, Wathen, and Barr, 2000; Joppe, Martin, and Waalen, 2001; Magal, and Levenburg, 2005). Among the modifications were the introduction of *Importance-Satisfaction Analysis (ISA)*, whereby, the modified IPA has been used to determine the elements in which

the samples have ranked the importance of service operations/marketing area, compared to their satisfaction level (Graf, Hemmasi, and Nielsen, 1992; Joppe, Martin, and Waalen, 2001) (as shown in **Figure 2-3**).

A model derived from IPA and ISA models will be applied in this study to determine the improvement priorities of the leadership styles involved. The new model will be introduced and discuss further in the theoretical framework of this study.

THEORITICAL FRAMEWORK

The Gap

The Gap is defined as generally as the 'difference or imbalance; a disparity', (The Free Dictionary, 2006). In this study, the gap will exclusively measure the difference between preferred leadership and perceived leadership in this study. All the 9 variables (Idealized Influence – Attributed, Idealized Influence – Behavior, Inspirational Motivation, Intellectual Stimulation, Individual Consideration, Contingent Reward, Management-by-Exception – Active, Management-by-Exception – Passive, and Laissez-faire Leadership) under the Transformational and Transactional Leadership Theories will be taken into consideration for this measurement.

GAP = PREFERRED LEADERSHIP - PERCEIVED LEADERSHIP

Preferred-Perceived Analysis/Action Grid

As mentioned in the earlier chapter, this study will use an adapted model of Importance-Performance Analysis (IPA) and Importance-Satisfaction Analysis (ISA), named here as Preferred-Perceived Analysis (PPA) to determine the area of improvement for leaders to into consideration in their future action plan. IPA was often used as satisfaction study model especially in case of service operations/marketing (Slack, 1994). The adapted action grid, Preferred-Perceived Action Grid was derived in modification of both the axis of the IPA/ISA matrix. In IPA/ISA, Importance represents the aspects of service in which the customer are looking for to fulfill their wish or needs, and Performance/Satisfaction is the actual result of task and service delivered by provider and the pleasure and contentment feeling derived from gratification of the service delivered (Ng, 2004). Since Preferred leadership was defined earlier as the leadership style which is expected, desired or liked by subordinates; and Perceived leadership was defined earlier as the leadership style portrayed by leaders, as observed by subordinates; the Importance axis (y-axis) was therefore replaced with the Preferred axis, while the Performance/Satisfaction axis (x-axis) was replaced with the Perceived axis. This adaptation is important whereby suggestions and recommendations on the area of improvement of the study would be provided. Figure 3-1 below pictured the adaptation of the model.

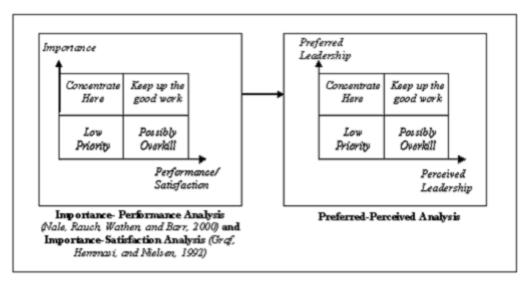


Figure 3-1: Adaptation of the Importance Performance Analysis (IPA) & Importance-Satisfaction Analysis (ISA) to Preferred-Perceived Analysis (PPA).

Conceptual Framework for the study

Based on the above rationalities, the conceptual framework for this study aimed to address the objectives discussed earlier is as shown in the **Figure 3-2** below.

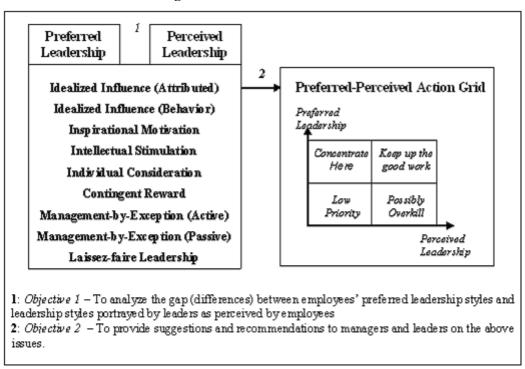


Figure 3-2: Conceptual Framework of the Study

A proposed conceptual framework (Preferred-Perceived Analysis) based on the Importance-Performance Analysis (IPA) matrix developed will to be used as an analytical tool indicating the areas of improvements for managers and leaders. The matrix, which will pinpoint the vicinity of improvement from the leadership standpoint, hopes to help managers and leaders in rectifying their leadership styles towards the preferences of their subordinates.

REFERENCES

- Aldoory, T., & Toth, E. 2004. Leadership and gender in public relations: Perceived effectiveness of transformational and transactional leadership styles. *Journal of Public Relations Research*, 16(2): 157-183.
- Antonakis, J., Avolio, B. J., & Sivasubramaniam, N. 2003. Context and leadership: An examination of the nine-factor full-range leadership theory using the multifactor leadership questionnaire. *The Leadership Quarterly*, 14(3): 261-295.
- Arnold, K. A., Barling, J., & Kelloway, K. 2001. Transformational leadership of the iron cage: Which predicts trust, commitment and team efficacy? *Leadership and Organizational Development Journal*, 22(7): 315-320.
- Avolio, B. J., & Bass, B. M. 2004. *Multifactor leadership questionnaire Manual and Sampler Set*. CA: Mind Garden, Inc.
- Avolio, B. J., Waldman, D.A., & Einstein, W.O. 1998. Transformational leadership in management game simulation: Impacting the bottom line. *Group and Organizational Studies*, 13(1): 59-80.
- Barling, J., Weber, T., & Kelloway, K. 1996. Effects of transformational leadership training on attitudinal and financial outcomes: A field experiment. *Journal of Applied Psychology*, 81(6): 827-832.
- Bass, B. M. 1997. Personal selling and transactional/transformational leadership training on attitudinal and financial outcomes: A field experiment. *The Journal of Personal Selling and Sales Management*, 17(3): 19-29.
- Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. 2003. Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, 88(2): 207-218.
- Beatty, K., & Quinn, L. 2002. Strategic command: Taking the long view for organizational success. *LIA*, 22(2): 3-7.
- Berson, Y., Shamir, B., Avolio, B.J., & Popper, M. 2001. The relationship between vision strength, leadership style, and context. *The Leadership Quarterly*, 12: 53-73.
- Brown, S. P., & Peterson, R.A 1993. Antecedents and consequences of salesperson job satisfaction: Meta-analysis and assessment of causal effects. *Journal of Marketing Research*, 30(1): 63-77.
- Cardona, P. 2000. Transcendental leadership. *The Leadership and Organization Development Journal*, 21(4): 201-206.
- Carter, M. E., & Lynch, L.J. 2004. The effect of stock option re-pricing on employee turnover. *Journal of Accounting and Economics*, 37(1): 91-112.
- Cordes, C. L., Dougherty, T.W., & Blum, M. 1997. Patterns of burnout among managers and professionals: A comparison of models. *Journal of Organizational Behavior*, 18(5): 685-701.
- Crompton, J. L., & Durray, N. A. 1985. An investigation of the relative efficacy of four alternative approaches to importance-performance analysis. *Journal of Academy of Marketing Science*, 13(4): 69-80.
- Deluga, R. J. 1988. Relationship of transformational and transactional leadership with employee influencing strategies. *Group and Organizational Studies*, 13(4): 456-467.
- Dubinsky, A., Yammarino, F. J., Jolson, M. A., & Spangler, W. D. 1995. Transformational leadership: An initial investigation in sales management. *The Journal of Personal Selling and Sales Management*, 15(2): 17-31.
- Droege, S. B., & Hoobler, J.M. 2003. Employee turnover and tacit knowledge diffusion: A network perspective. *Journal of Managerial Issues*, 15(1): 50-64.
- Eisenbach, R., Watson, K., & Pillai, R. 1999. Transformational leadership in the context of organizational

- change. Journal of Organizational Change Management, 12(2): 80-88.
- Ehrhart, M. G., & Klein, K. J. 2001. Predicting followers' preference for charismatic leadership: The influence of followers values and personality. *The Leadership Quarterly*, 12: 153-179.
- Fleishman, E. A., & Harris, E. F. 1988. Patterns of leadership behavior related to employee grievances and turnover: Some post hoc reflections. *Personnel Psychology*, 51(4): 825-834.
- Gillespie, N. A., & Mann, L. 2004. Transformational leadership and shared values: The building blocks of trust. *Journal of Managerial Psychology*, 19(6): 588-607.
- Graf, L. A., Hemmasi, M., & Nielsen, W. 1992. Importance-satisfaction analysis: A diagnostic tool for organizational change. *Leadership and Organizational Development Journal*, 13(6): 8-12.
- Hater, J. J., & Bass, B. M. 1988. Superiors' evaluation and subordinates' perceptions of transformational and transactional leadership. *Journal of Applied Psychology*, 73(4): 695-702.
- Horner, M. 1997. Leadership theory: Past, present and future. *Team Performance Management*, 3(4): 270-287.
- House, R. J., & Aditya, R. N. 1997. The social scientific study of leadership: Quo vadis? *Journal of Management*, 23(3): 409-473.
- Howell, J. M., & Avolio, B. J. 1993. Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of consolidated-business-unit performance. *Journal of Applied Psychology*, 78(6): 891-902.
- Howell, J. M., & Hall-Merenda, K. E. 1999. The ties that bind: The impact of leader-member exchange, transformational and transactional leadership, and distance on predicting follower performance. *Journal of Applied Psychology*, 84(5): 680-694.
- Jackson, S. E., & Schuler, S.S. 1983. Preventing employee burnout. *Personnel*, 60(2): 58-68.
- Jago, A. G. (1982). Leadership: Perspective in theory and research. *Management Science*, 29(3): 325-336.
- Javidan, M., & Carl, D. E. 2004. East Meets West: A cross-cultural comparison of charismatic leadership among Canadian and Iranian executives. *Journal of Management Studies*, 41(4): 665-691.
- Joppe, M., Martin, D. W., & Waalen, J. 2001. Toronto's image as a destination: A comparative importance-Satisfaction analysis by origin of visitors. *Journal of Travel Research*, 39: 252-260.
- Jung, D. I., & Avolio, B. J. 2000. Opening the black box: An experimental investigation of mediating effects of trust and value congruence on transformational and transactional leadership. *Journal of Organizational Behavior*, 21(8): 949-960.
- Kent, T. W., Crotts, J. C., & Aziz, A. 2001. Four factors of transformational leadership behavior. *Leadership and Organizational Development Journal*, 22(5): 221-229.
- Kinicki, A., & Kreitner, R. 2006. *Organizational behavior Key concepts*, *skills and best practices -* 2nd Ed. New York: McGraw-Hill.
- Kirkbride, P. 2006. Developing transformational leaders: The full range leadership model in action. *Industrial and Commercial Training*, 38(1): 23-32.
- Konopaske, R., & Ivancevich, J. M. 2004. *Global management and organizational behavior*-International Ed. New York: McGraw-Hill.
- Kotter, J. P. 1990. What leaders really do? *Harvard Business Review*, 68(3): 103-111.
- Kuhnert, K. W., & Lewis, P. 1987. Transactional and transformational leadership: A constructive/developmental analysis. *Academy of Management Review*, 12(4): 648-656.
- Lowe, K. B., & Galen Kroeck, K. 1996. Effectiveness correlated of transformational and transactional leadership: A meta-analytic review of the MLQ literature. *The Leadership Quarterly*, 7(3): 385-426.
- Lucas, P. R., Messner, P. E, Ryan, C. W., & Sturm, G. P. 1992. Preferred leadership style differences: Perceptions of defence industry labor and management. *Leadership and Organizational Development Journal*, 13(7): 19-22.
- Lucas, G. H. J., Parasuraman, A., Davis, R.A, & Enis, B.M. 1987. An empirical study of sales force turnover. *Journal of Marketing*, 51(July): 34-59.
- Madzar, S. 2001. Subordinate's information inquiry: Exploring the effect of perceived leadership style

- and individual differences. Journal of Occupational and Organizational Psychology, 74(2): 221-232.
- Magal, S. R., & Lavenburg, N. M. 2005. Using importance-performance analysis to evaluate e-business strategies among small businesses. *Proceedings if the 38th Hawaii International Conference on System Sciences*, Hawaii, 2005.
- Manning, T. T. 2002. Gender, managerial level, transformational leadership and work satisfaction. *Women in Management Review*, 17(5): 207-216.
- Martilla, J. A., & James, J. C. 1977. Importance-performance analysis. *Journal of Marketing*, 41(1): 77-79.
- Mazuki, J., Chong, S.C., & Maimun, S. 2005. Expectation gaps and their influences on job satisfaction and commitment of graduates. *International Conference on Information and Communication Technology in Management*, Melaka, Malaysia, 23–25 May 2005.
- McShane, S. L., & Von Glinow, M. A. 2000. Organizational behavior. USA, McGraw Hill.
- Merriam-Webster Online Dictionary. 2006. *Leadership*, [http://www.m-w.com] (Accessed, 20 September 2006).
- Nale, R. D., Rauch, D. A., Wathen, S. A., & Barr, P. B. 2000. An exploratory look at the use of importance-performance analysis as a curricular assessment tool in a School of Business.
- Journal of Workplace Learning: Employee Counseling Today, 12(2): 139-145.
- Ng, L. Y. 2004. Service quality factors of a Private Higher Education Institute, *Unpublished Master of Science Dissertation*, University Putra Malaysia, Malaysia.
- Pillai, R., Schriesheim, C. A., & Williams, E. S. 1999. Fairness perceptions and trust as mediators for transformational and transactional leadership: A two-sample study. *Journal of Management*, 25(6): 897-933.
- Podsakoff, P. M., MacKenzie, S. B., & Bommer, W. H. 1996. Transformational leader behaviors and substitutes for leadership as determinants of employee satisfaction, commitment, trust, and organizational citizenship behaviors. *Journal of Management*, 22(2): 259-298.
- Popper, M., & Zakkai, E. 1994. Transactional, charismatic and transformational leadership: Conditions conducive to their predominance. *Leadership and Organizational Development Journal*, 15(6): 3-7.
- Pool, S. W. 1997. The relationship of job Satisfaction with substitute of leadership, leadership behavior, and work motivation. *The Journal of Psychology*, 131(3): 271-283.
- Peffer, J., & Veiga, J. F. 1999. Putting people first for organizational success. *Academy of Management Executive*, 13(2): 37-48
- Robbins, S. P., & Judge, Timothy A. 2007. *Organizational behavior*-12th Ed. New Jersey, Pearson Education, Inc.
- Sarros, J. C., & Santora, J. C. 2001. The transformational-transactional leadership model in practice. *Leadership and Organizational Development Journal*, 22(8): 383-393.
- Savery, L. K. 1991. Perceived and preferred styles of leadership. *Journal of Managerial Psychology*, 6(1): 28-32.
- Savery, L. K., & Meakes, R. T. 1994. Preferred leadership styles of the workforce of the headquarters of Australia Post. *Leadership and Organizational Development Journal*, 15(2): i-iii.
- Savery, L. K. 1994. The influences of the perceived styles of leadership of a group of workers on their attitudes to work. *Leadership and Organizational Development Journal*, 15(4): 12-18.
- Slack, N. 1994. The importance-performance matrix as a determinant of improvement priority. *International Journal of Operations and Production Management*, 14(5): 59-75.
- TheFreeDictionary Online. 2006. *Leadership*. Available at http://www.thefreedictionary.com. (Accessed, Sept 20, 2006).

NOMINAL GROUP TECHNIQUE OUTPUTS: A LONGITUDINAL STUDY

Rafikul Islam

International Islamic University Malaysia E-mail: rislam@iiu.edu.my

ABSTRACT

As a decision making tool in a group setting, nominal group technique (NGT) has been widely applied by policy makers in numerous organizations. Many researchers have also conducted experimental studies on NGT to explore its various features that make the technique distinguishable from other related techniques including traditional interactive group and Delphi techniques. The purpose of the present research is to empirically investigate the outputs generated from various uniform nominal group sessions on a common issue. Conducting 8 nominal group sessions that consist of 244 undergraduate students in Business Administration, Accounting and Engineering across several academic sessions, we find that most of the important inputs on the issue appear in every list of top 10 inputs obtained from the sessions.

INTRODUCTION

The main reason for using groups in making decisions in an organization is that a group of knowledgeable individuals with diverse managerial and technical expertise is more likely to make effective decisions than a lone individual. In general, groups are superior to individuals in making decisions when the issue is relatively complex, since members of a group can generate more creative solutions than one individual working alone (Blanchard, 1992).

Employees feel enthusiastic and consider themselves valued when they are made a part in the group decision making process. The majority of the decision making groups use the traditional interactive group approach (also known as focus group) in which the members, under the direction of a chairperson, communicate with one another in a relatively unstructured manner. However, a number of weaknesses are

inherent in this approach (Pringle & Neeley, 1983). To overcome these weaknesses, a number of structured group decision making techniques have been developed of which the three main are Brainstorming, Delphi Technique and Nominal Group Technique (Anderson, 1990).

Osborn (1957) proposed brainstorming as a technique for improving productivity and making quality decisions using groups. The technique stands on four principles: (1) state as many ideas as possible, (2) the wilder and more creative the ideas the better, (3) improve or combine ideas, and (4) accept all the ideas without any criticism. Brainstorming as a group idea generation technique has been in use over the last half century. Its principles are easy to understand and many participants experience the kind of synergy that is regarded as the technique's main plus point. That is, some people do hear ideas that prompt them to think of other ideas of which they might not have otherwise thought. As a result, brainstorming has strong appeal as a way for groups to generate ideas (Gallupe et al., 1992). However, in many practical brainstorming sessions, it has been observed that the aggressive participants take control of the whole session whereas lesser aggressive participants' views are almost unheard. That is, brainstorming technique suffers from the absence of egalitarian participation (Miles, 1983).

To ensure balanced participation in a typical brainstorming session, Andrew Delbecq and Van de Ven developed nominal group technique in 1968. It is actually a structured brainstorming technique that ensures balanced participation among the group members and it is used to gather a large amount of subjective information pertaining to some issue. Fredrick B. Kraft, Robert H. Hoiss, and Joseph G. Paolillo (cited in Roth et al., 1995) proposed NGT as an alternative to traditional focus group sessions and they proved that in group problem solving situations, focus groups have produced a smaller number of problem solving dimensions, fewer high quality suggestions, and smaller number of different kinds of solutions than groups in which members were constrained from interaction (as in NGT) during the generation of solutions. Since the main subject of this paper is an experiment with NGT, its brief description is provided below.

LITERATURE REVIEW

Nominal Group Technique

Nominal Group Technique (NGT) is not only used to generate a large number of ideas, but also to prioritize those ideas and consequently the ideas which receive majority of the votes can be selected (Delbecq *et al.*, 1975). NGT is usually applied to identify problems and generate solutions to these problems. To apply NGT, first of all, a group should be formed comprising 7 to 10 persons who are expected to be knowledgeable about the issue for which the session is convened. A room should be prepared which should have preferably a U-shaped table. A marker board, marker pen and some sheets of paper should also be available. A facilitator should be chosen who is expected to have prior experience in conducting or at least participating at a number of nominal group (NG) sessions.

Following are the six steps of NGT: (1) Opening the session, (2) Silent generation of ideas in writing, (3) Round-robin recording of ideas, (4) Serial discussions on the ideas, (5) Voting to select the most important ideas, and (6) Discussion on the selected ideas. For a successful nominal group session, the following rules should be observed: (1) No criticism about anybody's ideas, (2) No evaluation about anybody's ideas, (3) Generate as many ideas as possible, (4) Modifying and combining ideas, and (5) Anonymity of input.

The technique has been extensively applied in education, business, health, social services and governmental organizations (Moore, 1987). Few specific areas of application are change management (Lane, 1992; Tribus, 1992), consumer research (Claxton, Ritchie, and Zaichkowsky, 1980), education (Davis, Rhodes, & Baker, 1998), health (Hofemeister, 1991), meeting management (Blanchard, 1992; Finlay, 1992), organizational development (Mendelow & Liebowitz, 1989), strategic planning (Sink, 1985). The present paper describes an experiment with NGT involving academia. A brief of relevant literature is provided below.

Previous Experiments on NGT Involving Academia

Gallupe et al. (1992) conducted two experiments to investigate the effects of computer-mediated technology and group size on the productivity of brainstorming groups. At Queen's University Decision Lab in Kingston, Ontario, 120 undergraduates participated in 3 group sizes (2, 4, and 6 members). At the Park Student Center Lab at the University of Arizona in Tucson, 144 undergraduates participated in 2 group sizes (6 and 12 members). Groups used both electronic and non-electronic, i.e., usual brainstorming techniques. The larger groups in both experiments generated more unique ideas and more high-quality ideas, and members were more satisfied when they used electronic brainstorming than when they used usual verbal brainstorming.

Hazard (1983) designed an experiment to determine whether techniques for achieving group consensus are superior to the more traditional group decision making techniques. Six groups of 5 members each, randomly selected from an undergraduate management class, were assigned the problem of recommending a system of teacher evaluation to a board of education for a fictitious school district. Each group was given 4 tasks: 1. selecting goals of a teacher evaluation system, 2. determining general criteria for assessing teacher performance, 3. deciding who should select and apply the assessment system, and 4. identifying the main data sources to be used. Three groups were assigned traditional technique and three groups were instructed to use NGT. Each group was judged on its effectiveness according to relevancy, reliability, and validity. In each of the experiments, the groups employing the NGT achieved higher scores in overall effectiveness and in each of the structured criteria except validity.

Bristol and Fern (2003) investigated through the involvement of students from a south-eastern university in US, whether consumer attitudes change in focus group and NGT. They found that interaction and discussion among focus group members changed their attitudes, where as this shift among NGT participants, is minimal. The authors cautioned the researchers in using focus groups in consumer research and recommend using NGT instead.

Hornsby, Smith, and Gupta (1994) investigated the impact of three group decision making techniques, namely, traditional interactive, NGT, and Delphi on job evaluation outcomes. The authors formed 21 groups of students that consisted of 105 second-semester seniors majoring in Business Administration at a medium sized Midwestern university. Evaluation data were collected on three consecutive nights, each night employing a different decision making technique. The authors found that there were no change between initial and group evaluation for the Delphi technique and that is congruent with the fact that this method allows the greatest degree of evaluation decision anonymity. On the other hand, the findings that both the NGT and the traditional technique result in a significant shift from initial evaluations and that are due to comparatively decreased confidentiality.

Kramer, Kuo, and Dailey (1997) involved 200 students who enrolled in a multi-section basic communication course, to investigate the outcomes of untrained, brainstorming, and nominal groups. The authors found no difference in the decision quality of these three groups. However, brainstorming and nominal group members were more satisfied, felt their groups used a more effective process, and felt they communicated more effectively than untrained groups.

Mahler (1987) points out that though NGT has been increasingly used for public planning, budget setting, and policy making, but NGTs assumptions about group processes and about politics are not thoroughly researched. In particular, the author searches answer of three questions: (1) what do actors perceive about their level of participation in the NGT process? (2) To what degree do they accept and feel committed to the outcome of the process? (3) To what degree do they feel that the process produces consensus? The author conducted several group exercises in organization theory classes for political science and public administration majors at the masters and upper-division undergraduate levels. One hundred and one students in five classes over three semesters participated in the exercises. Half of the groups were instructed to use traditional group technique and the remaining half NGT and in each case the issue assigned was: determine how to improve county high school education amidst the report of declining quality of secondary education. At the end of every session, each group was given a questionnaire to fill in and the purpose was to know their feedback about the participation level and acceptability of the results. The author found that though NGT generates larger number (on the average 16.83 compared to merely 5.25 from interactive groups) of ideas compared to interactive groups, the

members in the interactive groups felt greater sense of participation than NGT groups. However, no significant difference was found in acceptability of the results.

REESEARCH METHODOLOGY

Department of Business Administration of the Kulliyyah (Faculty) of Economics and Management Sciences of International Islamic University Malaysia (IIUM) consists of about 600 students at the undergraduate level. After entering into the Department, the students need to register for the Departmental required courses followed by the Departmental elective courses. One of the elective courses is Operations Management (MGT 4010) and this is also offered for the Bachelor of Accounting and Bachelor in Manufacturing Engineering students as an elective course. But majority (about 80%) of the students register for the course come from Department of Business Administration.

International Islamic University's mission is Islamization of knowledge. In particular, wherever and whenever suitable, the lecturers are required to discuss the course that they are teaching from an Islamic perspective. For the course Operations Management (OM), one full lecture (80 minutes) is allocated to discuss Islamic inputs in the course. As the instructor of the course, instead of giving inputs from my side, I take inputs from students' using nominal group technique. It is to be noted that the students of IIUM regardless of their faculty affiliation, possess the basic knowledge about Islam. For example, the students before entering into the Business Administration Department, are required to take the courses: The Islamic Worldview (UNGS 2030), Islam and Knowledge (UNGS 2040), Ethics and Fiqh for Everyday Life (UNGS 2050), Studies of Religion I (RKUD 3220), Foundation of Islamic Economics (ECON 1710), Fiqh for Economist I (ECON 3510) and Fiqh for Economist II (ECON 3511). Furthermore, before taking the OM course, some students also take the course Management from an Islamic Perspective (MGT 4820), because it is an elective course. Therefore, the students are in a position to provide inputs on Operations Management from an Islamic perspective.

Ever since (2002-2003 onwards) I started teaching the course Operations Management; I have been conducting nominal group sessions in the class to collect inputs from Islamic perspective. Though the main objective of conducting the sessions is to collect inputs on the issue from the students, but it is also an objective to demonstrate the working of NGT as a structured brainstorming technique. We anticipate that many of our students will be working as managers in various organizations, and if necessary, they can use the technique in a suitable situation.

Average class size of a typical class in the Kulliyyah is 35. However, nominal group technique requires much lesser number of participants. As it has been mentioned above, apart from discussing OM from an Islamic perspective, it was also the objective to give a demo on NGT before the students. Altogether, eight sessions were conducted spanning from 2002-2003 session until the present 2005-2006. In each academic session, two nominal group sessions were conducted in two different sections. It is to be noted that the course (having two sections) is offered in only one semester in an academic year. The students are in third or fourth year of their respective bachelor program. Therefore, it can be reasonably assumed that across the NG exercises conducted over the years, the participants, i.e., the students had uniform background.

RESULTS

The list of inputs, their corresponding weights obtained in NG exercise conducted in Section 1, 2002-2003 session are shown in Table 1. Due to space limitation, we are not able to provide the lists generated in all other exercises.

From the overall weights, we can easily identify the top 10 inputs (the input that receives highest total weight is assigned rank 1) from every NG exercise across academic sessions. As it is usually observed in a typical nominal group exercise, in some cases, more than 1 input possess the same rank. For example, in session 2002-2003, Section 1, three inputs (ensure quality in product/services, always seek knowledge to improve ourselves, promote Islamic environment in the working place) received the same 5th rank, because of the equality in their total weights. Notice also the widely different total weights for rank 1 holder inputs across various sessions (vide Appendix 1). This is due to the fact that the number of

students participated in various exercises are not the same. In some exercise, only 23 students participated, where as in another exercise, the total number of students participated was 38.

In the next phase, we look into the content of the top 10 inputs obtained in various sessions and identify the similar items. The details are shown in Table 2.

Table 1
Results of NG Exercise Conducted in Section 1 of 2002-2003 Session

No.	Inputs	Individual wts.	Total wt.
1.	Fair allocation of work among employees	3, 3, 3	9
2.	Employee should promote <i>Ukhuwah</i> among team members	5, 3, 2, 1, 3	14
3.	Use resources wisely	1, 4, 1	6
4.	Do not waste	3, 1	4
5.	Treat every work as amanah	3, 5, 3, 1, 3, 3, 1, 3,	42
		1, 4, 5, 4, 1, 5	
6.	Payment should be fair for the employees and on time	5, 2, 3, 2, 2	14
7.	Provide product /service which benefit people	3, 5	8
8.	Train Muslims to become good employees	1, 5	6
9.	Implement shura in decision making	4, 3, 4, 5, 5, 3, 5, 3,	44
		3, 3, 4, 2	
10.	Have a place for <i>solat</i> /prayer	4, 1, 5, 4, 5	19
11.	Ensure safety for the employees	4	4
12.	Deliver the product on time	2, 2	4
13.	Strengthen the spirit of teamwork	2	2
14.	Ensure and enhance honesty and truthfulness in all business activities	3, 4, 4, 3, 5, 5, 5, 5, 2,	33
		2	
15.	While maximizing profit, do not ignore the interest of society	2, 2, 4, 2, 4	14
16.	Work with sincerity	1	1
17.	Provide only halal product/service	2	2
18.	Avoid any form of <i>riba</i>	5	5
19.	Be careful about not polluting environment		
20.	Give accurate measurement	3	3
21.	Manager should be role model	5, 2, 4, 4	15
22.	Business should be carried out following Shariah principles	1, 1, 1, 1, 5, 3, 5, 5,	53
		4, 3, 5, 4, 5, 5, 4, 1	
23.	Uphold justice in the organization	3, 1	4
24.	Ensure quality in product/services	4, 4, 2, 4, 5, 5,	24
25.	Provide prayer time	4	4
26.	Take care the welfare of the employees	1, 4	5
27.	Do not use low quality raw materials	2, 2	4
28.	Select suppliers who do halal business	1	1

29.	Assign task according to employee's ability	2	2
30.	Always seek knowledge to improve ourselves	5, 5, 2, 4, 1, 3, 4	24
31.	Keep promise in every dealing	2	2
32.	Manager should not only seek profit but also the blessings of Allah (swt)	4, 2, 5, 1	12
33.	Be tolerant and flexible with suppliers		
34.	Have good documentation and revise data for further improvement (SPC)	4, 1, 1, 1	7
35.	No backbiting		
36.	Provide suggestion box	2	2
37.	Promote healthy competition	5, 1, 1, 2	9
38.	No discrimination among nationalities		
39.	Promote continues improvement culture so that tomorrow becomes better	5, 2, 2	9
	than today		
40.	Manager should provide good working condition	3	3
41.	Promote Islamic environment in the working place, e.g., salam, mutual	3, 1, 5, 2, 3, 2, 3, 4,	24
	respect	1	
42.	Have a good work schedule		
43.	No cheating in labeling		
44.	Listen to customers feedback	2, 1	3
45.	Employees should be rewarded according to performance	3, 1	4
46.	Have a proper layout so that <i>purdah</i> is preserved	1	1

Table 2
Similar Items in the Top 10 Lists Across Various NG Exercises

No.	Input	0203(1)	0203(2)	0304(1)	0304(2)	0405(1)	0405(2)	0506(1)	0506(2)	Frequency
1	Business should be carried out following <i>Shariah</i> principles	√(1)*			√(1)	√(1)	√(1)	√(1)		5
2	Implement shura in decision making	√(2)	$\sqrt{(1)}$	√(3)	√(2)	√(9)	√(7)	√(5)		7
3	Treat every work as amanah	√(3)	√(5)		√ (6)					3
4	Ensure and enhance honesty and truthfulness in all business activities	√(4)								1
5	Ensure quality in product/services	√ (5)		√(3)				√(9)	√ (4)	4
	Promote Islamic environment in the working place, e.g., salam, mutual respect	√(5)	√ (4)	√(2)	√(9)	√(4)		√(3)		6
6	Have a place for solat/prayer	√(6)					√(5)			2
7	Manager should be role model	√(7)	√(2)							2
8	Payment should be fair for the employees and on time	√(8)			√ (8)		$\sqrt{(10)}$	√(6)		4
	While maximizing profit, do not ignore the interest of society	√(8)			√(7)		√(4)			3
9	Manager should not only seek profit but also the blessings of Allah	√(9)		√(1)		√(3)				3
10	Fair treatment for all the employees	√ (10)			$\sqrt{(4)}$	$\sqrt{(5)}$	√(2)			4
11	Promote continues improvement culture so that tomorrow becomes better than today	√ (10)	√ (10)							2
12	Promote healthy competition	√(9)						√(8)	√(9)	3
13	Business should involve only halal products		√(3)	√(8)	√ (5)	√(2)	√(3)	√(2)	√(1)	7
14	Uphold justice for all the employees		√(6)							1
15	No haram activity in any part of the supply-chain		√(7)						√(2)	2
16	Leaders should be knowledgeable and pious		√(8)		√(8)	√(7)	√(1)		√(3)	5
17	Be concerned of employees' welfare		√(9)				√(9)	√(4)	√(5)	4
18	Use time efficiently			√(4)			√(6)		√(4)	3

19	Promote moral and ethical values	√(5)	√(3)					2
20	Be more creative and innovative	√(6)						1
21	Avoid bribery and corruption	√(7)		√(6)				2
22	Build good relationship with customers	√(8)			√(9)			2
23	Have sound planning before the work	√(9)						1
24	Have good communication between employees and	√ (10)						1
25	employer Deliver the product on time and according to specifications		√(10)					1
26	Do not waste in utilization of resources			√(10)	√(8)		√(8)	3
27	Promote teamwork			√(2)			√(6)	2
28	Respect employees' ideas				√(9)			1
29	Do not force employees to do which is beyond his/her					√(7)		1
30	ability Expired goods should not be sold					√(10)		1
31	Charge reasonable price for the product/service						√(7)	1

^{* &#}x27;\sqrt{}' sign indicates that the corresponding input appears in that particular exercise within the top 10 list and the number in inside the parenthesis shows the rank of its appearance in the list.

It is observed that most of the perceived important inputs appear in almost every NG exercise. For example, 'Implement *shura* in decision making' appear in all the top 10 lists except the last exercise. Similarly, 'Business should involve only *halal* products' featuring in seven out of eight top 10 lists. The last column shows the frequency of appearance of the items in the top 10 lists for all the 8 exercises. The items whose frequencies are in the range 4-7 are cited below:

- Implement *shura* in decision making
- Business should involve only *halal* products
- Promote Islamic environment in the working place, e.g., salam, mutual respect
- Business should be carried out following *Shariah* principles
- Leaders should be knowledgeable and pious
- Ensure quality in product/services
- Payment should be fair for the employees and on time
- Fair treatment for all the employees
- Be concerned of employees' welfare

It is interesting to note that 'Business should be carried out following *Shariah* principles, has retained number one slot in all its 5 out of 8 appearances. Similarly, 'Implement *shura* in decision making' and 'Business should involve only *halal* products' have competed for the second and third positions after 'Business should be carried out following *Shariah* principles.' In fact, both of them have been ranked as first or second or third in a number of exercises. On the basis of average ranks, the three most important inputs on OM from an Islamic perspective have been the following:

- Business should be carried out following *Sharia*h principles
- Business should involve only *halal* products
- Implement *shura* in decision making

Apart from the above, the following items possess immediate lower and equal frequency (i.e., frequency = 3):

- Treat every work as amanah
- While maximizing profit, do not ignore the interest of society
- Manager should not only seek profit but also the blessings of Allah
- Promote healthy competition
- Use time efficiently
- Do not waste in utilization of resources

The following items have featured only twice in various NG exercises:

- Have a place for *solat*/prayer
- Manager should be role model
- Promote continuous improvement culture so that tomorrow becomes better than today
- No haram activity in any part of the supply-chain
- Promote moral and ethical issues
- Avoid bribery and corruption
- Build good relationship with customers
- Promote teamwork

Number of common inputs within the top 10 lists in all possible pairs of exercises across all the academic sessions are also identified and shown in Table 3. We observe that in two pairs of exercises (0203(1) & 0304(2)), (0304(2) & 0405(2)), the number of common inputs is as high as 7.

Table 3
Number of Common Inputs Across Various Nominal Group Exercises

Number of Common	Inputs Across	s various Nominai Grou	p Exel cises
Exercises	No. of	Exercises	No. of
	common		common
	inputs		inputs
0203(1) & 0203(2)	5	0304(1) & 0405(1)	5
0203(1) & 0304(1)	4	0304(1) & 0405(2)	4
0203(1) & 0304(2)	7	0304(1) & 0506(1)	4
0203(1) & 0405(1)	5	0304(1) & 0506(2)	3
0203(1) & 0405(2)	6	0304(2) & 0405(1)	6
0203(1) & 0506(1)	6	0304(2) & 0405(2)	7
0203(1) & 0506(2)	1	0304(2) & 0506(1)	5
0203(2) & 0304(1)	3	0304(2) & 0506(2)	2
0203(2) & 0304(2)	5	0405(1) & 0405(2)	6
0203(2) & 0405(1)	4	0405(1) & 0506(1)	4
0203(2) & 0405(2)	4	0405(1) & 0506(2)	4
0203(2) & 0506(1)	4	0405(2) & 0506(1)	5
0203(2) & 0506(2)	4	0405(2) & 0506(2)	5
0304(1) & 0304(2)	4	0506(1) & 0506(2)	4

In exercise (0203(1) & 0405(2)), (0203(1) & 0506(1)), (0304(2) & 0405(1)), (0405(1)) & 0405(2), the number of common inputs is 6. The least number of common inputs has been observed in 0203(1) & 0506(2). The average number of common inputs across all the exercises (computed pairwise as shown in Table 3 and then taken average) is 4.46.

Not only a large number of elements are common in various exercises, in many instances, the common inputs have been observed to preserve their ranks as well, e.g., rank correlation coefficients for the common inputs in (0405(2) & 0506(1)), (0405(2) & 0506(2)), (0203(2) & 0304(2)) are found to be 0.900, 0.800, and 0.700, respectively.

From the frequencies of all the items in the top 10 lists and their number of common occurrences in the lists, we can conclude that, given the uniformity in the background and level of the NG participants, important items pertaining to one particular issue will be captured by the participants and they will appear in the top 10 lists across the nominal group exercises. Therefore, the facilitator of a NG session should have confidence that even if he/she repeats the exercise another time involving participants having similar background and for the same issue, no significantly different results will be obtained.

CONCLUSIONS

The technique has been used widely in Social Science research, especially in terms of policy making pertaining to varieties of social issues. The present research through students' participation investigates the nature of prioritized outputs generated from a number of nominal group exercises where participants' backgrounds are fairly uniform. We conclude that given the uniformity in the background of the participants, the perceived important ideas will feature in the top 10 lists from various nominal group exercises conducted on a common issue. Therefore, the facilitator (in whatever context, be social or business or political, etc) will have sufficient confidence that even if he/she replicates the exercise at some other time involving the same type of participants, the output of the exercise will be almost the

same. The managerial implication is that managers do not need to replicate the exercise for uniform NG session at a later time, because the results are already known from the previous exercise.

REFERENCES

Anderson, D. R. 1990. Increased productivity via group decision making. *Supervision*, 51(9): 6-10.

Blanchard, K. 1992. Meetings can be effective. Supervisory management, 37(10): 5-6.

Bristol, T. & Fern, E.F. 2003. The effects of interaction on consumers' attitudes in focus groups. *Psychology and Marketing*, 20(5): 433-454.

Claxton, J.D., Ritchie, B.J.R., & Zaichkowsky, J. 1980. The nominal group technique: its potentials for consumer research. *Journal of Consumer Research*, 7(3): 308-313.

Davis, D.C., Rhodes, R., & Baker, A.S. 1998. Curriculum revision: reaching faculty consensus through the nominal group technique. *Journal of Nursing Education*, 37(7),: 326-330.

Delbecq, A.L., Van de Ven, A.H., & Gustafson, D.H. 1975. *Group techniques for program planning: A guide to nominal group and Delphi process*. Glenview, IL: Scott-Foresman.

Finlay, M. 1992. Belling the bully. *HR Magazine*, 37(3): 82-86.

Frankel, S. 1987. NGT + MDS: An adaptation of the nominal group technique for ill-structured problems. *Journal of Applied Behavioral Science*, 23(4): 543-551.

Gallupe, R., Brent, D., Alan, R., Cooper, W.H., Valacich, J.S., Bastianutti, L.M., &

Nunamaker, J.F., Jr. 1992. Electronic brainstorming and group size. *Academy of Management Journal*, 35(2), pp.350-369.

Hazard, T.W. 1983. An experiment in group decision making: traditional vs. nominal group technique. *Industrial Management*, 25(4): 14-15.

Hofemeister, T.L. 1991. Goals to guide the interactions of the mental health and justice systems. *Journal of Mental Health Administration*, 18(3): 178-197.

Hornsby, J.S., Smith, B.N., & Gupta, J.N.D. 1994. The impact of decision making methodology on job evaluation outcomes. *Group and Organization Management*, 19(1): 112-128.

Kramer, M.W., Kuo, C. L., & Dailey, J.C. 1997. The impact of brainstorming techniques on subsequent group processes beyond generating ideas. *Small Group Research*, 28(2), : 218-242.

Lane, A.J. 1992. Using Havelock's model to plan unit-based change. *Nursing Management*, 23(9): 58-60.

Mahler, J.G. 1987. Structured decision making in public organization. *Public Administration Review*, 47(4): 336-342.

Marx, A.E. 1995. Management commitment for successful suggestion systems. *Work Study*, 44, pp. 16-18

Mendelow, A.L. & Liebowitz, J.S. 1989. Difficulties in making organizational development a part of organizational strategy. *Human Resource Planning*, 12(4): 317-329.

Miles, M. 1983. Getting bright ideas from your team (part 1). Computer Decisions, 15(2): 194-195.

Moore, C.M. 1987. *Group techniques for idea building*. Newbury Park, CA: Sage Publications.

Osborn, A.F. 1957. Applied Imagination. New York: Scriber.

Pringle, C. D. & Neeley, S. E. 1983. Nominal vs. interacting groups: further evidence. *Mid-Atlantic Journal of Business*, 21(2): 25-34.

Roth, P. L., Schleifer, L. F. & Switzer, F.S. 1995. Nominal group technique – An aid in implementing TQM. *The CPA Journal*, 65(5): 68-69.

Sink, S.D. 1985. Strategic planning: a crucial step toward a successful productivity measurement program. *Industrial Engineering*, 17(1): 52-60.

Tribus, M. 1992. A simple method for promoting cooperation in an enterprise built on internal competition. *National Productivity Review*, 11(3): 421-424.

An Empirical Study of the Work Attitudes of Generation Y College Students in the USA: The Case of Hospitality and Merchandising Undergraduate Majors

Bharath M. Josiam, Ph.D.
Christy Crutsinger, Ph.D.
Johnny Sue Reynolds, Ph.D.
Dotter, Thao-Vi
University of North Texas, Denton, TX, USA
Sumeetra Thozhur, Ph.D.
University of Surrey, UK
Tom Baum, Ph.D.
University of Strathclyde, Glasgow, UK
Frances. G. Devine, M.A.
University of Ulster, Northern Ireland, UK

ABSTRACT

In the workplace, attitudes towards work and the job at hand are of obvious importance. However, the literature has placed greater emphasis on job satisfaction and related issues, where attitudes are the *outcome* of work. It could be argued that attitudes to work, *before* entering a job, are perhaps more important, as they are antecedents and precursors to workplace performance and job satisfaction. This study aims to address this gap by studying the attitudes to work of college students in career oriented fields, particularly Hospitality Management and Merchandising Management. This study has chosen to use these two student groups as their sample to identify the attitudes to work of career-oriented GEN Y college-students in the USA. We are recognizing work attitude as a multi-dimensional construct by segmenting it into the following composite categories of consideration: positive work attitude, negative work attitude, work value, work ethic, job involvement and work motivation. These composite scales have been adopted by previous research in order to gain the benefit of developed and tested measurement techniques. This study found GEN Y students to be largely positive in their attitudes to work and to exhibit relatively low levels of cynicism about work and promotion. Furthermore, the study found that with increasing age and work experience, students positive work attitude was enhanced, while their negative attitudes were ameliorated. As GEN Y enters the workforce, both industries have to better understand their needs in order to effectively address human resource management issues. This study provides some understanding of these important work related issues.

INTRODUCTION

In a study by Flynn (1994), a majority of human resource managers reported the significance of attitude in the choice of qualified candidates. At the entry level particularly, the refrain often heard is "We can teach people skills; but we cannot teach them the right attitudes." Employee attitudes are an indicative factor as to whether an organization will succeed in the future (Alas, 2005; Hurst, 1995). In the workplace then, attitudes towards work and the job at hand are of obvious importance. However, the literature has placed greater emphasis on job satisfaction and related issues, where attitudes are the *outcome* of work. It could be argued that attitudes to work, before entering a job, are perhaps more important, as they are *antecedents* and *precursors* to workplace performance and job satisfaction. This study aims to address this gap by studying the attitudes to work of college students in career oriented fields, particularly Hospitality Management and Merchandising Management.

The fields of hospitality and merchandising are different, yet similar. There is an increasing trend to convergence in these two sub-fields of the broader service sector. Kim, Forney and Sullivan (2007, forthcoming), have pointed that "more than ever before, consumers are seeking hedonic and utilitarian benefits in their shopping and consumption experiences.....in the marketplace we witness multiple businesses merging to deliver products and services. This is illustrated by retail establishments such as restaurants and soft-goods retailers for which both food and gifts/apparel have become an integral part of

the product mix.....in shopping malls and tourist attractions, fashion, food and fun have become key components in creating the optimal consumer experience."

The main challenge of both hospitality and merchandising industries is to attract and retain qualified and motivated employees. In a decentralized structure, the managerial skills and responsibilities have expanded in scope. Both industries are catering to the needs of the consumer, whether it is of service or product orientation. Hence, this study has chosen to use these two student groups as their sample to identify the attitudes to work of career-oriented GEN Y College students in the USA.

LITERATURE REVIEW

Generation Y

Research has found considerable differences between the Generation X (GEN X) and Generation Y (GEN Y) work attitudes. Members of Generation X were born from 70's to 80's. Generation X were considered being lazy and cynical (Filipczak, 1994). He showed some characteristics of GEN Y in U.S.A. More collaborative, less hierarchical, more altruistic, more comfortable with female bosses, more skilled in management, more tech-savvy, balanced, candid in their communications, and self -reliant. GEN Y is just entering the work place. They think visually, want immediate gratification, and emphasize fun and excitement. GEN Y ers are not shy to tell others what they want. They have had better education, are more techno-savvy, and value personal creativity. GEN Y ers have been treated more as individuals than any other generation.

In this study, we are exploring the work attitudes of the undergraduates of merchandising and hospitality management specifically in terms of the emerging GEN Y demographic in regards to their attitudes towards work. College undergraduates satisfy an age range of 18-26 years of age. This emerging demographic segment will dominate the job market and provide service industries with new challenges to consider as they enter the workforce. The challenge of retaining qualified employees is of definite concern in both fields due to the substantial economic impact of turnover rates on profit gains (Brien, 2004; Hinkin & Tracey, 2000; Simons & Hinkin, 2001). The hospitality industry, in particular is often plagued by an overall negative image of a temporary employment option, even for highly motivated individuals (Brien, 2004). Career developments of both industries are based on generally similar plans with skills extended at the entry level and promotions predominantly sourced from within the company, as a strategy to develop the sensitivity and understanding necessary to meet the needs of their consumer base.

The process of clarifying the components of work attitude is necessary due to common misuse of the variables (Kanungo, 1982). There has been an inconsistent use of the terms *work* and *job* in sociological and psychological research that has complicated the understanding and development of work phenomena. These concepts differ significantly in their scope. *Job* is considered more of a component of a specific occupational experience whereas *work* is viewed as a general and complex concept that involves the consideration of specific intrinsic and extrinsic components, such as involvement and motivation (Blood, 1969; Dubin, Champoux, & Porter, 1975; Faunce, 1959; Kanungo, 1982; Lodahl & Kejner, 1965; Wollack, Goodale, Wijting, & Smith, 1971).

Work Attitudes

We are recognizing work attitude as a multi-dimensional construct by measuring different aspects of it, such as: positive work attitude, negative work attitude, work value, work ethic, job involvement and work motivation. These composite scales have been adapted from previous research in order to gain the benefit of utilizing tested and existing measurement techniques. In general, attitude is a psychological component that expresses an individual tendency towards an expression of either positive or negative degree of inclination to a particular entity (Eagly & Chaiken, 1993). An attitude will incline an individual towards a certain way of reacting, instead of another, due to a previous experience (Cooper & Croyle, 1984).

Work attitude variables: Six dimensions of work attitudes are included in this study: positive work attitudes, negative work attitudes, work value, two scales of work involvement, work motivation and work ethic. Work motivation has two subcategories of economic and social motivations. Negative and positive work attitude scales are based on thirty-one items established by Stone III and Josiam (2000) as significant regression variables for adolescent work attitudes. The negative work attitude was further segmented into two composites labeled work cynicism and promotion cynicism. Work cynicism involves the perception of work as a necessary evil to be completed with minimal effort. *Promotion cynicism* is the viewpoint of job promotion as an avoidable evil, being more likely to increase stress and workload, rather than providing any additional benefits. Positive work attitude was clarified into "positive job attitudes, work ethic, job satisfaction, social motivations for work, and economic motivations for work" (Stone III & Josiam, 2000, p. 545). These questions related to overall work attitude also implied work as a "central life interest," correlating with studies conducted by Dubin (1956) and explored by Faunce (1959) as occupational involvement. Maurer (1968) combined the scales of Dubin and Lodahl and Kejner to revisit the analysis on industrial supervisors initiated by Dubin (1956), where it was concluded that the two scales measured similar work values. We are measuring work involvement on scales adopted from Kanungo (1982), that were used extensively by him in regards to work alienation and job satisfaction.

The measurements of work value and work ethic are often used interchangeably; however we are defining them in terms of two separate indicators of attitude. Our *work value* measurement items were adopted from "life interest variables" used in the 1972 National Longitudinal Survey on a high school senior class (Cappelli, Constantine, Chadwick, 2000).

Our measurement of *work ethic* was adopted directly from Blood (1969), which was an extension of previous work introduced by Weber (1904). Work ethic introduces a core aspect of work attitude that has been shown in previous research as being "listed as something needed for job success and are an area that schools in general and vocational education programs specifically are expected to address" (Hill & Petty, 1995, p. 60). The scale questions relate directly to viewpoints projected by the Protestant faith on the "ethical" approach to viewing work in relation to one's life. Three items were adopted to indicate the individual's reflection on "work success, children's opportunities, and the importance of steady work."

Career Stage

Cron (1984) developed a framework for a career stage theory from the initial development by Super (1957). The framework proposes an individuals career stage experience as (1) exploration, (2) establishment, (3) maintenance, and (4) engagement. Flaherty and Pappas (2002) found a potential correlation between career stage and job attitude and motivation. College undergraduate students, presently in the GEN Y demographic are then clearly in the exploration stage of their careers. In line with earlier studies, we have explored the influence of experience on the cognitions of attitudes by taking into consideration career stage in terms of work experience within chosen major, class or year in university (Cron, 1984; Flaherty & Pappas, 2002; Super, 1957). Current work status was included, because it can impact an individual's attitude towards work due to the challenges of balancing this additional responsibility with that of furthering their higher education (Polson & Nida, 1998).

Need for the Study

Stone III and Josiam completed a study on adolescents where work values were considered as "important determinants of vocational choice and actual occupational destinations" (2000, p. 536). Students currently in college are predominantly from GEN Y, born between 1979 and 1989. This generation is different from previous ones, as it has been shaped by different forces and events. As GEN Y members enter college and the work force in large numbers, it is imperative that educators and employers gain deeper insights into their mindset. Employers are particularly interested in their attitudes towards work. Such attitudes have been shown to impact a host of human resource issues such as absenteeism, turnover, deviant behaviors, and quality and quantity of work. The hospitality and merchandising industries, being labor intensive, are certainly impacted by each one of these issues.

Attitudes to work have not been addressed in the literature in sufficient detail. Given the tremendous costs and related problems associated with human resource management in service industries, this study aims to address this gap in the literature and propose research based solutions. Our research is an exploration of whether the work attitudes of GEN Y students are compatible with career success, as well as the goal of gaining an understanding of the dynamics of this emerging workforce demographic. In this study, we are conducting a comparison of GEN Y undergraduate hospitality and merchandise students. This study focuses on one main issue of attitudes to work from a multi-dimensional perspective.

Objectives of the Study

The specific objectives for this study were to:

- 1. Determine the attitudes to work of GEN Y hospitality management and merchandising management college students in the USA using multiple measures, such as:
 - a. Positive Attitudes to Work
 - b. Negative Attitudes to Work
 - i. Work Cynicism
 - ii. Promotion Cynicism
 - c. Work Involvement
 - d. Work Values
 - e. Work Ethic
 - f. Economic Motivation for Work
 - g. Social Motivation for Work
- 2. Determine the relationships between different measures of attitudes to work for both groups of students
- 3. Determine the relationship between demographics of the students and their work attitudes for both groups, identifying similarities and differences
- 4. Identify the job factors of students of both groups of students and the relationship between these factors and job attitudes
 - a. Type and amount of prior work experience,
 - b. Type of job and amount of current working hours,
 - c. Lay-off experience
- 5. Determine the relationships between parent's demographics, their job factors and work attitudes of students in both hospitality and merchandising management

RESEARCH METHODOLOGY

Data was collected at a large, public southwestern university in the USA. The participant pool consisted of a convenience sampling of students attending merchandising and hospitality courses. A self-administered questionnaire was distributed during selected course periods and no incentive was offered for participation. The questionnaire included a brief introduction and instructions in the beginning. It contained the following sections:

Positive Attitude to Work scale: This composite variable was constructed, using the mean of ten variables, measured on agreement level with the description of the work attitude, using 4-point scale.

• Sample statement: A worker should feel responsible to do a decent job whether or not his/her supervisor is around.

Negative Attitude to Work scale: This composite variable was constructed, using the mean of thirteen variables, measured on agreement level with the description of the work attitude, using 4-point scale.

- Sample statement: Workers are entitled to call in sick when they do not feel like working Work Cynicism Scale: This composite variable was constructed, using the mean of ten variables, measured on agreement level with the description of the work attitude, using 4-point scale. This was a sub-scale of the Negative Attitudes scale.
 - Sample statement: To me, working is nothing more than making a living

Promotion Cynicism Scale: This composite variable was constructed, using the mean of three variables, measured on agreement level with the description of the work attitude, using 4-point scale. This was a sub-scale of the Negative Attitudes scale.

• Sample statement: A promotion to a higher level job usually means more worries and should be avoided for that reason

Work Value scale: This composite variable used the mean of eight variables, measured on agreement level with the description of the item, using a 4-point scale.

• Sample statement: Hard work makes one a better person

Work Involvement scale: This composite variable was constructed, using the mean of six variables, measured on agreement level with the description of the item, using a 4-point scale.

Sample statement: Work should be considered central to life

(Personal) Involvement in Work scale: This composite variable was constructed, using the mean of four variables, measured on a 7-point bipolar scale using word pairs.

• Sample item: To me work, in general, is "Trivial...to....Fundamental"

Work Ethic scale: This composite variable was constructed, using the mean of three variables, measured on the importance level with the description of the item, using a 4-point scale.

• Sample statement: (It is important to me to be) Successful in my line of work

Economic Motivation for Work scale: This composite variable was constructed, using the mean of two variables, measured on agreement level with the description of the item, using a 4-point scale.

- Sample statement: A person should choose one job over another, mostly because of higher wages Social Motivation for Work scale: This composite variable was constructed, using the mean of three variables, measured on agreement level with the description of the item, using a 4-point scale.
 - Sample statement: A person who holds down a good job is the most respected person in the community

Job Factors: Nature and amount of present job, previous jobs, and questions regarding being subject to a lay-off at work or having a father or mother being laid-off from work.

Demographic: Data about the respondent and their parents.

RESULTS

Demographics

A total of 436 surveys were completed, yielding 376 usable surveys at a successful retrieval rate of 86.24%. Eliminations were based on survey completion, satisfying undergraduate merchandising or hospitality major requirement and GEN Y age bracket. Merchandising students provided 187 surveys, while Hospitality students provided 189. The average age of the respondents was 21.69, with female students predominating, particularly in the merchandising major. The majority was White-American for both departments. Other ethnic categories were African American, Asian-American, Hispanic-American, and Other. The dominant profile for a hospitality student respondent was either a junior or senior with an average GPA within the 3.0-3.4 range and taking 12 to 14 credit hours. A merchandising student profile had a similar GPA average of 3.0-3.4; however there was a majority of seniors and possibly taking more course hours (Table 1).

Table 1
Demographic Profile of Respondents

	Hospita	Hospitality		andising
	N	%	N	%
Gender				
Male	74	38.7%	7	3.7%
Female	117	61.3%	181	96.3%
Year in School				
Freshman	18	9.4%	2	1.1%
Sophomore	34	17.8%	11	5.8%
Junior	62	32.5%	64	33.9%
Senior	77	40.3%	112	59.3%
Age				
18 - 20	59	31.2%	34	18.2%
21 - 23	107	56.6%	129	69.0%
24 - 26	33	17.5%	24	12.8%
Race				
African-American	15	7.9%	11	5.9%
Asian-American	8	4.2%	3	1.6%
Hispanic-American	18	9.4%	23	10.8%
White-American	130	68.1%	143	72.0%
Other	20	10.5%	8	7.4%
GPA				
1.5 - 1.9	5	3.0%	1	0.6%
2.0 - 2.4	24	6.5%	11	6.5%
2.5 - 2.9	48	27.6%	47	27.6%
3.0 - 3.4	69	41.8%	71	41.8%
3.5 - 4.0	25	23.5%	40	23.5%
Credit Hours				
3 to11	9	4.7%	12	6.3%
12 to14	101	53.2%	84	48.8%
15 or more	80	42.1%	93	49.2%

Scale Reliability

The reliability of each construct was determined by calculating the Cronbach's Alpha of each scale (Table 2). The low reliability of the involvement scale that was reconstructed to fit the "work" construct reflects the previous criticism made by Kanungo (1982). The low reliability score of the work ethic scale relates to an assertion made by Hill and Petty, "attitudes and beliefs supporting hard work have blended into the norms of Western culture, and are no longer attributable to a particular religious sect" (1995, p. 60). The low reliability of the Protestant Work Ethic (PWE) theory indicates the loss of its reliability to the next generation as issues of cultural diversity and a global ethical awareness may surpass the traditional issues of ethics founded by the Protestant religion. Furthermore, since the sample is of youth, they may not be thinking about having children yet, while the concept explores the need for a "better life for my children." Unfortunately, according to a study by Porter (2004), the expectations of managers still correlate strongly with that of this traditional work ethic concept. This gap needs to be bridged in order to appeal to this new generation.

Table 2
Reliability of Measurement Scales

Construct	Cronbach's Alpha
Positive Work Attitude	0.633
Negative Work Attitude (Promotion & Work Cynicism)	0.766
Work Motivation	0.599
Job Involvement	0.553
Involvement (General to work)	0.878
Work Ethic	0.491
Work Value	0.775

Objective 1: Determine college students multi-dimensional work attitudes

Students in both the hospitality and merchandising majors reported very similar mean and standard deviation scores that indicate a similarity of overall work attitudes. The overall attitude is highly positive, falling between an "agree" and "strongly agree" response to the item measurements. Similarly, overall negative attitudes mean fall between a "strongly disagree" and "disagree". It appears that both groups of students are not cynical either about work or about promotion. The response to the standard 7-item involvement scale indicated a high mean involvement level towards work. The 4-item work involvement scale that was reconfigured from a general job involvement measurement had low reliability, so the average of 2.83 lacks robustness. The issue is the same for the motivation scores due to the blending in and redundancy of some of the items that relate to overall positive, negative, as well as motivational factors. The overlapping of items may be the cause of the low reliability issues related to these measures.

Table 3
Mean Score of Work Attitude Measurement Scales

	Hospitality Merchandising					
Mea	surement Scales	Mean	Std Dev.	Mean	Std Dev.	Scale Range
1	Positive Work Attitude	3.34	0.36	3.37	0.37	
2	All Negative Work Attitude	1.91	0.41	1.85	0.37	
2a	Negative – Work Cynicism	1.90	0.44	1.84	0.42	1 to 4
2b	Negative – Promotion Cynicism	1.97	0.57	1.89	0.55	
3	Work Involvement	2.25	0.42	2.19	0.38	
4	Work Value	2.83	0.36	2.84	0.35	
5	Involvement	5.32	1.37	5.45	1.33	1 to 7
6a	Work Motivation – Social	2.37	0.49	2.41	0.50	1 to 4
6b	Work Motivation - Economic	2.74	0.36	2.77	0.35	1 10 4

Analysis of variance (ANOVA) revealed no significant differences between the work attitude variables of hospitality and merchandising students. This is not surprising, since both group of students

are studying to be managers in different facets of service industries, and are comparable in age and other demographics.

Objective 2: Determine the relationship between students' "Positive Work Attitude," "Negative Work Attitude" and "Work Motivation, Work Value, Work Ethic, and Work Involvement".

The subscales measures of each category of positive and negative attitudes were correlated for review of internal consistency (Tables 4 and 5). Significant correlations were found in both Hospitality and Merchandising groups for positive and negative attitude variables. Not surprisingly, Table 4 shows that in both groups, strong and significant negative correlations were found between Positive Attitudes to Work and Negative Attitudes to Work. Work Ethic was found to be positively correlated to Positive Attitudes in the Hospitality group only, while Work Value was significantly correlated for merchandising students only. Work Involvement was not correlated in either case, suggesting that it measures a different construct.

In both groups, those with stronger positive attitudes to work are likely to be less cynical about work and promotion. The differences lie in the categories of Work Ethic and Motivation – Economic. Hospitality Management students with higher Positive Attitude scores report significantly higher levels of Work Ethic and appear to be less motivated by money. Merchandising students with stronger positive attitudes are more likely to also place a higher value on the role of work in their lives.

Table 4
Relationship between Positive Attitude and other Variables

	Hospitality		Merchandising		
Work Attitude Variables	Correlation	Sig. (2-tailed)	Correlation	Sig. (2-tailed)	
Work Involvement	-0.052	0.470	0.094	0.199	
Work Value	0.051	0.480	0.427**	0.000	
Work Ethic	0.289**	0.000	0.036	0.625	
Negative Attitude	-0.472**	0.000	-0.431**	0.000	
Work Cynicism	-0.454**	0.000	-0.458**	0.000	
Promotion Cynicism	-0.289**	0.000	-0.180*	0.013	
Motivation – Social	0.168*	0.017	0.087	0.235	
Motivation – Economic	-0.106*	0.017	0.003	0.966	
Involvement	0.055	0.442	0.153*	0.036	

Note: * = p < 0.05; ** = p < 0.01

Correlation analyses with students' negative attitude show that students in both groups with greater involvement in work are less likely to have negative attitudes. Hospitality management students with stronger work ethic have lower negative attitudes also. These relationships are to be expected and point to the internal consistency of the measures used. While the relationships between negative attitudes and related variables are somewhat mixed, Economic Motivations are significantly correlated with Negative attitudes in both groups. This suggests that money-motivated students are more cynical about work, and view work from a purely monetary perspective. The results are in Table 5 below.

Table 5
Relationship between Negative Attitude and other Variables

	Hospitality		Merchandising		
Work Attitude Variables	Correlation	Sig. (2-tailed)	Correlation	Sig. (2-tailed)	
Work Involvement	0.231**	0.001	0.181*	0.013	
Work Value	0.204**	0.004	-0.478**	0.000	
Work Ethic	-0.311**	0.000	0.066	0.367	
Motivation – Social	0.068	0.337	0.176*	0.016	
Motivation – Economic	0.241**	0.001	0.335**	0.000	
Involvement	-0.162*	0.023	-0.302**	0.000	

Note: * = p < 0.05; ** = p < 0.01

Objective 3: Determine the impact of Gender, Race, and Age on college students' Work Attitude, Work Value, Work Involvement, and Work Motivation.

Gender Differences: Since the merchandising group was almost completely female, it was decided to combine the two samples to identify gender differences. The ANOVA analysis shows us that there are very few significant differences between the genders in most of the attitudinal variables (Table 6). This commonality of attitudes between males and females in the USA is to be expected, for one main reason. For a few decades now, the USA has afforded women equal rights and opportunities in the work place. Over time then, it is not surprising to see a convergence of values in relationship to work issues. This similarity indicates either an overall lack of defined structure based on weakness in the measures, or the skew of an under-representation of males in our sample frame. Previous studies have found distinctive gender differences in regards to job-related values (Gooderham, Nordhaug, RIngdal, & Birkelund, 2004), which may indicate the difference of *job* focus and our focus on the *work* construct.

The males in our sample are significantly more inclined towards negativity in regards to overall work attitudes, flowing from their cynicism towards the role of work in life. Males are also seen to exhibit lower scores on the work value variable. However, males do report significantly *higher* levels of work ethic.

Table 6
Relationship between Gender and Work Attitudes of All Students

	1		C4andand	
Attitudinal Variables		Mean	Standard	F Values
		Scores	Deviations	
	Gender	2.001	4221	C 7 CO**
Average Negative Attitude	Male	2.001	.4231	6.768**
	Female	1.878	.3913	
	Gender			
Work Cynicism	Male	1.964	.4556	5.630*
•	Female	1.832	.4405	
	Gender			
Work Value	Male	2.982	.4940	24.336**
	Female	3.355	.6120	
	Gender			
Work Ethic	Male	3.624	.4486	50.230**
	Female	3.117	.5957	
		3.117		

Note: * = p < .05; ** = p < .01

Females have been shown to exhibit a higher level of commitment to their pursuit of education than males (Luzzo, 1994). Indeed, these samples show that. The significance of a predominantly positive attitude to work by the female gender indicates the transition in American culture. Unlike other cultures, where gender roles are strictly defined and oriented, as in for example Hjalager (2003) study on Swedish workplace cultures, the USA is more egalitarian.

Ethnic Differences: The race composite of the sample of participants had to be further categorized for focused analysis. The intention is to avoid oversimplifying issues that pertain to racial groups that are underrepresented within the study (see Table 1). The results provided by Asian-Americans, in particular may be skewed by the minimal number of our sample frame (N=11, 2.9% cumulative). Asian-Americans were recoded into the "Other" variable (Table 7).

Table 7
Adjusted Race Composition

	Hospitality	_	Merchandisin	Merchandising		
Race	Frequency	Percent	Frequency	Percent		
White-American	130	68.1%	143	72.0%		
Other	61	31.9%	45	28.0%		

The results of the ANOVA comparison support the previous assertion that there is possibly no ethnic difference in work attitude within a developed society such as the United States (Luzzo, 1994). The other ethnic groups (African-American, Hispanic-American, and White-American) hold similar mean scores in all categories with a rather common range of standard deviation. Differences in attitudes of ethnic groups have however surfaced in the comparative research between such segments in other different countries (Alas, 2005; Bu & McKeen, 2000; Earley, 1993; Kumar & Thibodeaux, 1998; Peck, 1975).

Objective 4: Identify job factors of students and determine the impact of job factors on attitudinal variables.

From the job factor profile seen in Table 8, it is clear that there are many similarities between the hospitality and merchandising students. An overwhelming majority of the students are currently working in both the majors. This is not surprising, since both fields are study are career oriented. It is interesting to see that a relatively large segment of the students are already working at supervisory and managerial jobs with their attendant stresses. Furthermore, at a relatively early stage of their working lives, many students have already experienced lay-offs. A larger segment of students reported lay-offs of their father and/or mother.

Our sample frame is clearly in the exploration stage of their careers, with a few crossing into the establishment phase. This indicates a preoccupation with finding out where they belong and formulating a set of beliefs that will lead them to succeed in their future endeavors (Flaherty & Pappas, 2002). As an individual progresses through their career stages they will undergo transitions in their attitude towards work as well (Super, 1957). Their attitudes evolve, as they gain a deeper understanding of work related issues. Further analyses explored the impact of job factors on attitudinal variables (Tables 9 and 10).

Table 8
Job Factor Profile of Respondents

	Hospitality	•	Merchandisin	g
	Frequency	Percentage	Frequency	Percentage
Current Job Status				
Working	179	94.2%	147	78.2%
Not Working Currently	11	5.8%	41	21.8%
Current Job Level				
Staff/Worker	102	54.0%	107	56.9%
Supervisor/Manager	28	14.8%	28	14.9%
Job Status in Major				
Yes	92	48.9%	81	43.1%
No	46	24.5%	68	36.2%
Lay-Off Experience				
Student	29	14.5%	20	10.6%
Father	59	29.2%	54	29.5%
Mother	37	18.3%	28	15.0%

^{*} Note: Numbers may not add up to 100%, since only those currently working are categorized

ANOVA analysis revealed that hospitality management students currently working were significantly less cynical about work and promotion. Consistent with this, students in merchandising who were currently working were less motivated by economic considerations. Perhaps, the workplace experiences of students have been largely positive and shown them the value of hard work in both the long and short term and from both a monetary and non-monetary perspective (Table 9).

Table 9
Relationship between Job Factors and Work Attitudes of Students

		Hospitality		Merchand	lising
Attitudinal Variable		Mean	F Values	Mean	F Values
		Scores		Scores	
	Current Job Status				
Work Cynicism	Working	1.826	3.950*	NS	NS
	Not Working	1.974			
	Current Job Status				
Promotion Cynicism	Working	1.905	7.549**	NS	NS
	Not Working	2.163			
	Current Job Status				
Motivation - Economic	Working	NS	NS	2.309	7.610**
	Not Working			2.585	
	Lay-Off Student				
Motivation - Economic	Never	2.387	7.793**	NS	NS
	Once or More	2.051			

Note: * = p < .05; ** = p < .01; NS = No Significant Differences between groups

Further analyses on related issues are seen in Table 10. Increasing years of work experience is significantly correlated with an increase in overall job involvement for merchandising majors. For hospitality management majors, years of experience in their major, was significantly correlated with lower levels of negative attitudes and work cynicism. A stronger work ethic was observed to be

positively correlated with work experience in the major. An individual with the additional goal of a related major can understand the synergies between work and college studies and foresee the impact on their future prospects, leading to a focused and diligent attitude towards work.

As the current wage of a merchandising student increases, it is not surprising to see a positive correlation to economic motivation. The demands of higher paying position have to be compensated accordingly. However, the longer the current working hours per week the more the negative attitude and the cynicism about promotion, indicating a response to the stress levels associated with higher positions and better compensated jobs in the retailing industry. An increase in GPA positively relates to an increase in promotion cynicism. Perhaps, academically inclined students want to focus on their studies at this stage in their lives, rather than seeking greater job responsibilities.

Table 10 Significant Correlations: Career Stage

Variable & Measurement	t Correlations: Ca		Hospitality	
	R	p-value	r	p-value
Voors of Working Experience				
Years of Working Experience				
Involvement	0.147	0.143*	NS	NS
Work Cynicism	NS	NS	-0.141	0.045*
Years of Working Experience in Major	·	•		
Average Negative Attitude	-0.249	0.001**		
Work Cynicism	-0.289	0.000**	NS	
Work Ethic	0.164	0.021*		
Currently Hourly Wage				
Promotion Cynicism	NS	NS	0.162	0.032*
Current Job Level				
Motivation – Economic	0.149	0.041*	NS	NS
Promotion Cynicism	NS	NS	0.167	0.018*
Average Current Working Hours per Week				
Negative Attitude	-0.187	0.022*	NS	
Promotion Cynicism	-0.165	0.044*		
GPA				
Promotion Cynicism	0.221	0.004**	NS	
University Classification	<u>.</u>	•	•	
Motivation – Economic	NS		-0.154	0.030*
Work Value	NS		0.157	0.028*
Age				
Promotion Cynicism			-0.219	0.002**
Motivation – Economic			-0.207	0.004**
Average Positive Attitude	NS		0.183	0.009**
Average Negative Attitude			-0.149	0.036*
Work Value			0.158	0.027*

Note: * = p < 0.05; ** = p < 0.01; NS = No Significant Correlations

Age surfaced as a strong predictor of several attitudinal measures for hospitality students. Older students exhibit higher levels of positive attitudes and correspondingly lower levels of negative attitudes and cynicism. Older students are also less likely to be motivated only by monetary considerations. This is consistent with related findings on university classification and increasing work experience. It seems that a progression through their academic life and career instills in students maturity and awareness of their future goals and what it entails. These findings are consistent with a study by Handy (1981) that emphasized the motivational importance of higher educational levels and the ability to gain higher job status (as in Gooderham, Nordhaug, Ringdal, & Birkelund, 2004).

Objective 5: Identify job factors of parents and determine the impact of parental demographics and job factors on work attitudes of students.

Parental influence: The issue of parental influence is considered to be a potential factor in work attitude development that has particular significance to the GENY. Dual income family households have been discussed as impacting the early developmental stages of the work ethic (Porter, 2005). The results of this study however, indicate limited significance in the influence of the mother and no significant impact of the father.

Mother's education is positively correlated with average negative attitude (all) and in particular with work cynicism. It is also positively correlated with average work involvement. This indicates a higher involvement with work, however with an increasingly negative attitude in light of the increase in the educational pursuits of the mother. Previous research indicates a greater commitment by females when striving for a higher education. This commitment level may be leaving a negative impression on their offspring. Allen and Hawkins (1999) also researched the aspect of "maternal gate keeping" and its influence on behavior towards household work, which correlates with these findings of overall work attitude.

Table 11
Parental Demographics and Impact on Work Attitudes of Students

	Hospitality		Merchandising		
Variable	R	p-value	R	p-value	
Mother's Education					
Negative Attitude (all)	NS	NS	.197	.007	
Work Cynicism	NS	NS	.183	.012	
Average Work Involvement	NS	NS	.193	.008	
Average Involvement	.160	.026	NS	NS	

Note: NS = No Significant Correlations between variables

A small, but measurable, segment of the students had personally experienced a lay-off, as had a larger segment of either of their parents. However, in most cases, no significant attitudinal differences were found between those with personal or parental lay-off experience and those without such an experience. It could be that students feel a degree of autonomy from the experiences of their parents, or that they were too young when their parents were laid off and were therefore not impacted by it.

DISCUSSION

Our aim is to develop an empirical base for understanding the work attitudes of Generation Y, particularly within the merchandising and hospitality fields. As undergraduate students, they are going through a transitional period as their identities and social processes are evolving and rapidly adapting in an environment ripe with influences and opportunities (Holmes, 1999; Jameson & Holden, 2000; Perrone & Vickers, 2003). In particular, we focus on attitudes about work, expectation of receiving a desired reward through promotion or monetary gain, and involvement in one's vocation.

This study found GEN Y students to be largely positive in their attitudes to work and to exhibit relatively low levels of cynicism about work and promotion. Furthermore, the study found that with increasing age and work experience, students positive work attitude was enhanced, while their negative

attitudes were ameliorated. As GEN Y enters the workforce, both industries have to better understand their needs in order to effectively address human resource management issues. This study provides some understanding of these important work related issues.

Limitations & Further Study

The main limitation to this exploratory study is its reliance on a convenience sample gathered in one campus. In particular, the ethnic representation was mainly in the White-American category and the overall sample was dominated by female students. The dynamics of the departments involved may also impose limitations on the ability to generalize from this sample.

However, this study does open up the possibilities of studying the work attitudes of students in the same fields of study in other universities in the USA. In particular, the potential is there for comparison across cultures to test for cross-national differences. Significant difference may surface similar to that of Bu and McKeen (2000) in their study comparing Chinese and Canadian work and family expectations. The additional consideration of social and religious components should be also considered as past research has indicated their potential to influence value development (Kumar & Thibodeaux, 1998). Further components of family status that is indicative of conflict and balance can be explored as variables affecting job attitude, as explored in previous research in terms of general life attitude (Bass & Bass, 1976; Staines, 1977; Wilensky, 1960; Chacko, 1983).

This study found more similarities than differences between these two groups of students in their attitudes to work. It would be interesting to explore similar attitudinal variables of college students in non-career focused majors such as philosophy or art. Such studies would guide both industry and academe in their attempt to understand GEN Y.

Acknowledgements: The authors would like to acknowledge the work done by the following students in the M.S. program in Merchandising and Hospitality Management at the University of North Texas, Denton, USA. Yang, Su-Han, Heisserer, Nicholas, Huang, Fischer, & Deshpande, Amrita

REFERENCES

Alas, R. 2005. Job related attitudes and ethics in countries with different histories. *Cross Cultural Management*, 12(2): 69-84.

Allen, S.M. & Hawkins, A.J. 1999. Maternal gatekeeping: Mothers' beliefs and behaviors that inhibit greater father involvement in family work. *Journal of Marriage and the Family*, 61(1): 199-212.

Bass, B.M., & Bass, R. 1976. Concern for the environment: Implications for industrial and organizational psychology. *American Psychologist*, 31: 158-166.

Blood, M. 1969. Work Values and Job Satisfaction. *Journal of Applied Psychology*, 33(6): 456-459.

Brien, A. 2004. Do I want a job in hospitality? Only till I get a real job! In Smith, K. A. &

Schott, C. (Eds.), *Proceedings of the New Zealand Tourism and Hospitality Research Conference 2004* (35-42). Wellington Press.

Bu, N. & McKeen, A. 2000. Work and family expectations of the future manager professionals of Canada and China. *Journal of Managerial Psychology*, 15(8): 771-794.

Cappelli, P., Constantine, J., & Chadwick, C. 2000. It pays to value family: work and family tradeoffs reconsidered. *Industrial Relations*, 39(2): 175-198.

Chacko, T.I. 1983. Research notes: Job and life satisfactions: A causal analysis of their relationships. *The Academy of Management Journal*, 26(1): 163-169.

Cooper, J. & Croyle, R. T. 1984. Attitudes and attitude change. *Annual Review of Pscyhology*, 35(1): 395-426.

Cron, W. L. 1984. Industrial salesperson development: A career stages perspective. *Journal of Marketing*, 48(4): 41-52.

Dubin, R. 1956. Industrial workers' worlds: A study of the "central life interests" of industrial workers. *Social Problems*, 3(3): 131-142.

Dubin, R., Champoux, J. E., & Porter, L. W. 1975. Central life interests and organizational commitment of blue-collar and clerical workers. *Administrative Science Quarterly*, 20(3): 411-421.

Eagly, A. & Chaiken, S. 1993. *The psychology of attitudes*. Fort Worth, TX: Harcourt Brace Jovanovich.

Early, P. C. 1993. East meets West meets Mideast: Further explorations of collectivistic and individualistic work groups. *Academy of Management Journal*, 36(2): 319-348.

Faunce, W. 1959. Occupational involvement and the selective testing of self-esteem. *Paper presented at American Sociological Association, Chicago, Illinois*.

Filipczak, B. 1994. It's just a job: Generation X at work. *Training*, 31(4): 21-27.

Flaherty, K. E. & Pappas, J. M. 2002. Using career stage theory to predict turnover intentions among salespeople. *Journal of Marketing Theory and Practice*, 10(3): 48-57.

Flynn, G. 1994. Attitude more valued than ability. *Personnel Journal*, 73(9): 16.

Gooderham, P., Nordhaug, O, Ringdal, K., & Birkelund, G. E. 2004. Job values among future business leaders: The impact of gender and social background. *Scandinavian Journal of Management*, 20: 277-295.

Hill, R.B. & Petty, G.C. 1995. A new look at selected employability skills: A factor analysis of the occupational work ethic. *Journal of Vocational Education Research*, 20(4): 59-23.

Hinkin, T. & Tracey, J. B. 2000. The cost of turnover. *Cornell Hotel and Restaurant Administration Quarterly*, 43(1): 14-21.

Hjalager, A.M. 2003. Global tourism careers? Opportunities and dilemmas facing higher education in tourism. *Journal of Hospitality, Leisure, Sport and Tourism Education*, 2(2): 26-37.

Holmes, L. 1999. Competence and capability from 'confidence trick' to the construction of the graduate identity. In O'Reilly, D., Cunningham, L., & Lester, S. (Eds.), *Developing the capable practitioner: Professional capability through higher education*. London: Kogan Page.

Hurst, D. K. 1995. *Crisis and renewal: Meeting the challenge of organizational change*. Boston: Harvard Business School Press.

Jameson, S. M. & Holden, R. 2000. Graduateness— who cares? Graduate identity in small hospitality firms. *Education & Training*, 42(4/5): 264-271.

Kanungo, R. N. 1982. Work alienation: An integrative approach. New York: Praeger.

Kim, Y.K., Forney, J.C., & Sullivan, P. 2007. *Experiential retailing: Concepts and strategies that sell*. New York, Fairchild Publishing.

Kumar, K. & Thibodeaux, M.S. 1998. Differences in value systems of Anglo-American and Far Eastern students: Effects of American business education. *Journal of Business Ethics*, 17(3): 253-262.

Peck, R. F. 1975. Distinctive national patterns of career motivation. *International Journal of Psychology*, 10(2): 125-134.

Perrone, L. & Vickers, M. H. 2003. Life after graduation as a "very uncomfortable world": An Australian case study. *Education & Training*, 45(2/3): 69-78.

Lodahl, T.M. & Kegner, M. 1965. The definition and measurement of job involvement. *Journal of Applied Psychology*, 49(Feb): 24-33.

Luzzo, D. A. 1994. An analysis of gender and ethnic differences in college students' commitment to work. *Journal of Employment Counseling*, 31(1): 38-45.

Maurer, J. G. (1968). Work as a 'central life interest' of industrial supervisors. *The Academy of Management Journal*, 11(3): 329-339.

Polson, M. & Nida, R. 1998. Program and trainee lifestyle stress: A survey of AAMFT student members. *Journal of Marital and Family Therapy*, 24(1): 95-112.

Porter, G. 2005. A "career" work ethic versus just a job. *Journal of European Industrial Training*, 29(4): 336-352.

Simons, T. & Hinkin. T. (2001). The effect of employee turnover on hotel profits: A test across multiple hotels. *Cornell Hotel and Restaurant Quarterly*, 42(4): 65-69.

Staines, G.L. 1977. Work and nonwork. In R.P. Quinn (Ed.), *Effectiveness in work roles: Employee responses to work environments:* 695-727. Ann Arbor, MI Institute for Social Research, The University of Michigan.

Stone III, J. R., & Josiam, B. 2000. The impact of school supervision of work and job quality on adolescent work attitudes and job behaviors. *Journal of Vocational Education Research*, 25(4): 532-574. Super, D. E. 1957. *The psychology of careers*. New York: Harper & Row.

Weber, M. 1905. Die protestantische ethik und der geist des kapitalismus. *Archive fur sozialwissenschaft.* 20-21. Translated by T. Parsons. *The protestant ethic and the spirit of capitalism*. New York: Charles Scibner's Sons.

WIlensky, H.L. 1960. Work, careers, and social integration. *International Social Science Journal*, 12: 543-560.

Wollack, S., Goodale, J. G., Witjing, J. P. & Smith, P. C. 1971. Development of the survey of work values. *Journal of Applied Psychology*, 55: 331-338.

A HYPOTHESES TESTING STUDY ON WORKPLACE ROMANCE AMONG MALAYSIAN OFFICE WORKERS

Quah Chee Heong
UNITAR, Malaysia
Email: quah@unitar.edu.my
Muhammad Hafiz Yaakub
KIPSAS, Pahang, Malaysia.
Email: hafizyaakub@kipsas.edu.my

ABSTRACT

This paper provides an introduction of workplace romance; its significance, concept, factors, and implications. The emphasis is placed on hierarchical workplace romance. A field survey is carried out in 2005 on 204 Malaysian office workers to gauge the perceptions on the adverse effects brought about by a hierarchical workplace romance (a.k.a. superior/subordinate romance) from the point of view of a subordinate in that relationship. Adverse effects perceived are Repercussions from colleagues, Decreased Morale and Jealousies. Hypothesis testing from Pearson correlation shows significant positive relationship between Repercussions from colleagues and Decreased Morale. Meanwhile, chi-square shows correlations between acceptability of hierarchical workplace romance with religion and marital status of respondents.

INTRODUCTION

Southwest Airlines, which has a reservation call center in San Antonio, openly lauds its 1,100 couples, equaling 6 percent of its work force. A recent episode of A&E's reality TV show, "Airline," featured the wedding of two Southwest pilots who met on the job. Two-thirds of the managers surveyed said they knew of a workplace romance, according to the Society for Human Resource Management. And a third of all managers admitted dating someone in their workplace in an American Management Association survey last year. (Workplace Romances Pose Special Concerns for Employers, Colleagues, 2004). Mano and Gabriel (2006) found that workplace romances are more likely to become embedded in organizational discourses in hot climates where a hedonistic approach to work enhances the aestheticization of the work environment, providing work arrangements that enhance physical contact mostly outside the premises and a policy that does not punish participants. By contrast, in cold climates, romances are more likely to emerge in opposition and occasionally as a challenge to organizational impersonality and formality. The California Supreme Court held that under that state's Fair Employment and Housing Act, an employee who was not personally harassed could be considered to have been sexually harassed by the consensual affair of others in the workplace. (Institute of Management & Administration, 2005). These are just a few of current news related to workplace romance that make it a substantial topic to be researched.

LITERATURE REVIEW

Workplace romance has actually been studied scientifically for more than 20 years. Quinn (1977) wrote the first widely cited article of workplace romance research. Quinn approached a random sample of people in an airport and asked them about workplace romances they have observed. Quinn found that many people had in fact observed a romance, and that very negative effects had occurred. Of the nearly 1,000 respondents who participated in the poll released by CareerBuilder.com, 60 percent said they had been involved in a romantic relationship with a coworker; 93 percent reported they have worked in a workplace where fellow employees were romantically involved (Leonard, 2001). According to a 1994 survey by the American Management Association, between 6 million and 8 million Americans enter into such relationships every year; about 50 percent of the time the result is either marriage or a long-term connection (Stanfield, 1999).

Workplace romance is defined as a relationship between two people who are employed by the same organization. It is characterized by mutual attraction between the parties and a desire for a personal,

romantic relationship. For research purposes, the definition is often more limited. In 1977, Robert E. Quinn, author of the first widely cited research article on workplace romance, defined organizational romance as a relationship between two members of the same organization that is perceived by a third party to be characterized by sexual attraction. These employees can be single or married and of any sexual orientation. This type of romance may also encompass individuals such as clients, vendors, and independent contractors. In addition, the individuals involved might be peers in the organization or in a direct or indirect supervisor-subordinate relationship.

Pierce, Byrne, and Aguinis (1996) defined workplace romance as "any heterosexual relationship between two members of the same organization that entails mutual sexual attraction". As defined here, workplace romance has likely been happening as long as men and women have been working together.

According to Lisa Mainiero (Loftus, 1995), a management consultant, professor at Fairfield University, and author of Office Romance: Love, Power and Sex in the Workplace, companies act as a type of modern dating service, since they pre-screen large groups of employees with similar talents and interests. Individuals are more likely to fall for colleagues for the following reasons:

- Proximity: Close working conditions encourage shared confidences. The more you are around someone, studies show, the more you tend to like them.
- workaholism Convenience: With some estimates. half almost the American population; a large part of employees' lives are spent on the job. If each workday one puts in 10 to 12 hours at the office, sleeps for seven, and commutes for one, that leaves for two. between two and four hours everything else.
- Safety: You get to know your coworkers in intimate ways before dating is broached.
- Familiarity: Corporate offices have replaced singles bars as a prime mating market and are usurping churches, neighborhoods, social clubs, and family networks as the way couples meet.
- Trust develops over time: People tend to share hopes, dreams, and troubles with coworkers.
- Similarities: Individuals tend work with people who like themselves to are ways, with similar social class, education and income levels. manv interests. attitudes, and values.
- Respect: The gender revolution in the workplace has mirrored a shift in gender roles at home. Being economic partners on equal footing and sharing similar workloads and job demands brings interdependence to marriages. It takes the pressure off men to be the sole providers and gives women more rights and respect.
- Arousal: When the workplace environment is intense, whether through excitement or anxiety, Misattribution Theory comes to call. People become aroused due to job conditions, but transfer those feelings onto the attractive man or woman working nearby.
- Intensity: Office especially romances are common in professions where employees are expected to spend long hours together under intense circumstances, sometimes depend and on each other in matters of life and death. such as inside hospitals, police and fire stations, newspaper offices, and law firms.

A survey of 960 professionals conducted by online job search engine CareerBuilder.com this year found that 42 percent of those polled admitted fearing preferential treatment among couples. At least 31 percent of respondents lost respect for couples who brought romance into the office, 30 percent feared the relationship would harm productivity, and 17 percent expected a demoralized staff, according to the study (Cummings, 2001). Research shows that four out of 10 of us are destined to meet our husbands or wives in the workplace, and there will be a fresh outbreak of inter-departmental relationships. On a private level, such liaisons can mean happiness and fulfillment. Professionally, however, the implications can be quite

dangerous (Veale, 1999). Researchers have found that performance has decreased, quality of output has decreased, more errors have occurred, and gossip interrupts working (Anderson & Hunsaker, 1985). This negative perspective has tended to color many popular press accounts of workplace romance as well (Chesanow, 1992; Flax, 1989; Rapp, 1992).

Companies believed that the intermingling of personal and professional could sour workplace relationships and even diminish productivity. Relationships between managers and subordinates were especially discouraged. Co-workers who get involved need to evaluate whether they can handle a breakup if it occurs. If they can't, one of them may end up looking for another job (Stanfield, 1999). From researches done by Powers, sexual harassment charges are just one unfavorable outcome that may result from failed romantic involvements at the office. Other undesirable effects include damaged professional reputations, unhappy coworkers, decreased performance levels, conflicts of interest, and forced career changes (Yunker, 1999). However, an even larger expense to employers is the loss of valuable employees who are unhappy working alongside someone who is receiving preferential treatment because of an office relationship (Solomon, 1998).

According to the survey by CareeerBuilder.com, the most common problems related with office romance are the following (Leonard, 2001).

- Favoritism displayed between the people involved in the romance.
- Diminished respect for the parties involved.
- Decreased productivity of the people involved.
- Retaliation or public confrontation between the people involved.
- Decreased morale of co-workers.
- Complaints of sexual harassment.

Meyer (1998) found that love could have devastating consequences in small firms. Depending on the situation, office love affairs can wreak havoc on morale, productivity, and even the bottom line - the job itself. Some workplace romances can even lead to sexual-harassment charges against a company. Powers (1999) has shown that an unmarried partner who met his or her mate in the workplace might claim sexual harassment, whereas such charges are unlikely with married couples who divorce. According to Veale (1999), the implications of an office romance can be very dangerous to your career. Workplace romances can cut productivity, result in inter- office jealousies and unnecessary distractions and increase the risk of fraud.

Jealousies often arise when one partner is senior to the other. Charges of favoritism can be difficult to avoid but, ironically, the reverse of favoritism is also frequently true. For instance, to be seen to be fair, a line manager can discriminate against his or her partner. In extreme cases, this can lead to the breakdown of team working and of the relationship itself. In the case where one partner is the other's supervisor, nepotism rules may come into play, and other employees may become disgruntled. Pierce et al. (1996) said hierarchical romance- boss/subordinate is the most likely romance to lead to problems, other coworkers may see it as being a job-initiated romance. But not all hierarchical romances are initiated for career enhancement; one or both of the partners may just be seeking a sexual adventure. However, recently the views have changed somewhat. Other authors believe that workplace romance can have some very positive effects (Anderson & Hunsaker, 1985; Brown & Allgeier, 1995; Dillard, 1987). Anderson and Hunsaker (1985) found that some participants were observed to be more productive, easier to get along with, enjoyed being at the office more, and experienced less tension. Yager (1991) also pointed out that friendship in business and office romance are crucial and beneficial. Coworker friendships help job satisfaction, teamwork, and productivity. Brown and Allgeier (1995) found that in specific instances, perceptions of workplace romance were very positive.

A psychology professor at Montana State University-Bozeman, Dr. Charles A. Pierce insisted that, though some office romances are sure to have their problems, some employers may actually benefit when a relationship between co-workers goes beyond strictly professional and becomes personal. Pierce claimed that people who are involved in a workplace romance actually have higher job performance ratings, though they are self-ratings, but the measures they use are considered to be very good. Job

satisfaction also goes up for most peers involved in an office romance, the professor has found. Not only are they are happier with their job performance, but they may also be more satisfied with the company itself and their relationships with other co-workers (Joyner, 1996).

Leola Furman, an associate professor at the University of North Dakota in Grand Forks (Fisher, 1994), studied the faculty in eight departments at five Midwestern colleges. She compared the work of teams of both male and female members with those made up of all men or all women. She found that, without exception, the mixed-sex teams were faster and more imaginative at problem solving than the single-sex groups. She concluded that sexual tension in the mixed teams made people try harder to understand and help one another and maybe to impress one another too. A growing body of academic research suggests that sexual attraction between co-workers, whether or not it is acted upon, may boost people's productivity on the job. If two employees marry, the company where they work often ends up getting a terrific deal, including higher levels of job commitment. Sexual energy can drive people into a better working relationship.

James Dillard, director of the Center for Communication Research at the University of Wisconsin at Madison (Fisher, 1994), has done several detailed studies of how office romances affect both the productivity of the two workers involved and that of the people around them. His conclusion: "The most likely thing that will happen to productivity is nothing - no change." The second most likely effect, he found, is a positive one. People who are in love with a colleague often begin coming to work earlier and leaving later. They also embrace work with a new fervor and show an unusual burst of enthusiasm for life in general. Once co-workers have married, they snuggle into a routine, centered on the company that allows them to get the most possible work done with the least amount of fuss and bother.

Hypotheses

The following hypotheses have been developed:

H1_o: Significant relationship does not exist between perceived repercussions from colleagues and decreased morale.

H1_A: Significant relationship does exist between perceived repercussions from colleagues and decreased morale

H2_o: Religion and acceptability of superior/subordinate romance will be significantly independent.

H2_A: Religion and acceptability of superior/subordinate romance will be significantly related.

*H3*₀: *Marital status and Acceptability of superior/subordinate romance will be significantly independent.*

*H3*_A: *Marital status and Acceptability of superior/subordinate romance will be significantly related.*

RESEARCH DESIGN

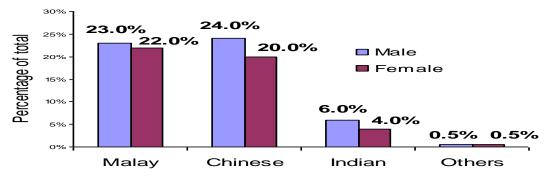
Population

Kuala Lumpur is situated midway along the west coast of Peninsular Malaysia, at the confluence of the Klang and Gombak rivers. It is approximately 35 km from the coast and sits at the center of the Peninsula's extensive and modern transportation network. Kuala Lumpur is easily the largest city in the nation, possessing a population of over one and a half million people drawn from all of Malaysia's many ethnic groups. Its estimated population in 2000 was 1.1 million (city) and 1.8 million (metropolitan area) with ethnic mix; 58% Malay, 31% Chinese, 8% Indian, and 3% others.

The population of interest in this study is Malaysian office workers who work in Kuala Lumpur and aged from 15-64 years, which are comprised of 123 322 Malays, 122 713 Chinese, 28 973 Indians and 2728 others; totaling to 277 736 workers according to 2000 census shown in Figure 1.

Figure 1
Office Workers Population Distribution in Kuala Lumpur 2000

Office workers aged 15-64 by gender and ethnic 2000



Source: Department of Statistics, Malaysia (2003).

Due to the fact that the census for office workers is not available, workers who work by the occupation; legislators, senior officials and managers, professionals, technicians and associate professionals and clerical, are assumed to be working in the office or office-like environment. In addition, the figures of 2000 are used because the Malaysian population census is held every ten years and thus the figures for current year 2005 are best approximated by 2000 figures. This distribution by percentage is crucial as it serves as a basis to determine the sample distribution, to ensure adequate representativeness of the population is secured.

Sampling Design

A non-probabilistic, convenience sampling with quota approach is adopted in this research. To enhance the generalizability to the population, the office workers in Kuala Lumpur, I have set some quotas especially on gender and ethnic group. The percentages of the quota are set according to the worker population data taken from the census report by Department of Statistics, Malaysia. From the population, the sample targeted are therefore 46 Malay males, 44 Malay females, 48 Chinese males, 40 Chinese females, 12 Indian males, 8 Indian females and 2 others. This is the most important table as it shows the representativeness of the sample structure to that of the population. Since quota sampling is used to ensure representativeness of the population, the sample distribution is somewhat similar with the population, as shown in chapter one. Table 1 shows sample structure vis-à-vis the population structure. Minor deviations exist but on the whole the structure does reflect the population.

Table 1
Comparison of Sample and Population

Ethnic	Gender	Sample	Population
group			
Malay	M	20.6 %	23 %
	F	20.6	22
Chinese	M	23.5	24
	F	22.5	20
Indian	M	5.9	6
	F	4.9	4
Others	M	1.5	.5
	F	.5	.5

Survey Instrument

Measure is created and revised following comments from professors who gave feedback via email. Among them are Dr. Gwen Jones, Associate Professor of Management from Fairleigh Dickinson University and Professor Dennis Powers from Southern Oregon University. Both of them have done extensive research in the area of workplace romance as well as in the aspects of organizational behavior and management.

Validity Test: Factor Analysis

Factor analysis attempts to identify underlying variables, or factors, that explain the pattern of correlations within a set of observed variables. Factor analysis is often used in data reduction to identify a small number of factors that explain most of the variance observed in a much larger number of manifest variables. Factor analysis can also be used to generate hypotheses regarding causal mechanisms or to screen variables for subsequent analysis (for example, to identify collinearity prior to performing a linear regression analysis).

Table 2
Factorability Test

KMO and Bartlett's Test

Kaiser-Meyer-Olkin I Adequacy.	.651	
Bartlett's Test of Sphericity	Approx. Chi-Square	2444.621
Spriencity	df	300
	Sig.	.000

Table 2 shows that Bartlett's Test of Sphericity is significant, p< .05 and that the Kaiser-Meyer-Olkin Measure of Sampling Adequacy is more than .6. Therefore, the items for are factorable. The rotated component matrix in table 3 shows that there are clear groupings for items. Those items that do not conform to factoring results are omitted. The "grouped" items are reshuffled and are shown in the Reliability Test section. The remaining factors are:

- 1. Repercussion from colleagues
- 2. Jealousies
- 3. Decreased morale

Reliability Test: Cronbach's Alpha

Reliability analysis allows us to study the properties of measurement scales and the items that make them up. The reliability analysis procedure calculates a number of commonly used measures of scale reliability and also provides information about the relationships between individual items in the scale. Cronbach's Alpha is a model of internal consistency, based on the average inter-item correlation. All variables tested have alpha score more than .70, which is good.

Table 3
Rotated Component Matrix

Rotated Component Matrix

				Comp	onent			
	1	2	3	4	5	6	7	8
A18	.909							
A19	.835							
A16	.793							
A17	.694							
A10	.600							
A11	.588							
A4		.783						
A9		.674						
A25		.503						
A2			.799					
A1			.755					
A20			.683					
A5				767				
A8		.558		.585				
A6				.541				
A22					.647			
A12					.628			
A14	.557				.617			
A23						.762		
A7						575		
A13								
A24							.743	
АЗ								
A15								
A21								.870

Extraction Method: Principal Component Analysis. Rotation Method: Quartimax with Kaiser Normalization.

Normality

Normality can be assessed by looking at the skewness and kurtosis. From the descriptives above, variables found to be considered normal are Decreased morale, and Repercussion from colleagues. Variables that divert from normality is Jealousies. Jealousies are excluded for hypothesis testing. The prevailing Decreased morale, and Repercussion from colleagues are included into hypothesis testing.

Table 4 Cronbach's Alpha of Variables

Factor	Item	Cronbach's	
		Alpha	
	A10 Coworkers dislike when I display affection with my lover at workplace.		
	A11 I don't think superior/subordinate romance would be bad-mouthed by others.*		
Paparaussian from	A14 My reputation must be damaged		
Repercussion from colleagues	A16 They will even avoid me.	.8608	
coneagues	A17 Nowadays people are open; therefore they will still cooperate fully with me.*		
	A18 I'll experience information shutdown from others.		
	A19 Being isolated by coworkers is inevitable.		
	A8 No matter what, I strongly believe my lover is faithful.*		
Jealousies	A9 Superior/subordinate romance definitely provokes jealousies.	.7102	
	A25 It is always dangerous to get into a superior/subordinate romance		
	A1 Romance with a superior or subordinate surely distracts me from work.		
Decreased morale	A2 Conflict of personal and work interest with lover upsets mood.	.7138	
	A20 Company rules allow superior/subordinate relationship.*		
* denotes reverse sco	oring	·	

a. Rotation converged in 10 iterations.

Table 5 Descriptives for Variables

Descriptives

			Statistic	Std. Error
Repercussions	Mean		30.82	.559
from colleagues	95% Confidence	Lower Bound	29.72	
	Interval for Mean	Upper Bound	31.92	
	5% Trimmed Mean		30.76	
	Median		30.00	
	Variance		63.824	
	Std. Deviation		7.989	
	Minimum		10	
	Maximum		49	
	Range		39	
	Interquartile Range		8.00	
	Skewness		.180	.170
	Kurtosis		.124	.339
Decreased Morale	Mean		14.73	.248
	95% Confidence	Lower Bound	14.24	
	Interval for Mean	Upper Bound	45.00	
			15.22	
	5% Trimmed Mean		14.88	
	Median		15.00	
	Variance		12.575	
	Std. Deviation		3.546	
	Minimum		5	
	Maximum		21	
	Range		16	
	Interquartile Range		4.00	
	Skewness		666	.170
	Kurtosis		.660	.339
Jealousies	Mean		15.54	.258
	95% Confidence	Lower Bound	15.03	
	Interval for Mean	Upper Bound	16.05	
	5% Trimmed Mean		15.82	
	Median		16.00	
	Variance		13.540	
	Std. Deviation		3.680	
	Minimum		3	
	Maximum		21	
	Range		18	
	Interquartile Range		4.00	
	Skewness		-1.165	.170
	Kurtosis		1.980	.339

RESULTS

Hypotheses outlined previously were tested and results are highlighted in this section.

Table 6 Descriptive Statistics

Descriptive Statistics

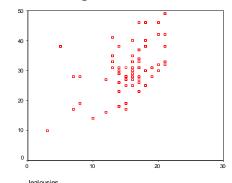
	N	Mean	Std.	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Repercussions from colleagues	204	30.82	7.989	.180	.170	.124	.339
Decreased Morale	204	14.73	3.546	666	.170	.660	.339
Valid N (listwise)	204						

The distribution of four variables in table 6 shows normal distribution, indicated by skewness and kurtosis.

Figure 2 Correlations and Scatterplot

Correlations

		Repercussi ons f rom colleagues	Decreased Morale
Repercussions	Pearson Correlation	1	.233*
from colleagues	Sig. (2-tailed)		.001
	N	204	204
Decreased Morale	Pearson Correlation	.233**	1
	Sig. (2-tailed)	.001	
	N	204	204



Scatterplot (Figure 2) has been viewed and linearity can be assumed. From the correlation matrix, significant positive relationship exists between Repercussions and Decreased Morale with very good significance, p<.01. Null hypotheses can be rejected.

Pearson has a value of 19.3 with a significance of .000, p<.05. The minimum expected count is 8.51, more than 5. Therefore, no assumptions have been violated. We can conclude that majority of Muslims say "No" to superior/subordinate romance while majority of Buddhists, Christians, and Hindus say "Yes". We can reject the null hypothesis that Religion and Acceptability of superior/subordinate romance will be significantly independent.

Table 7
Chi-Square for Religion and Acceptability

Religion * Acceptability Crosstabulation

			Accept	tahility	
			Yes	No	Total
Religion	Islam	Count	26	50	76
		Expected Count	40.1	35.9	76.0
		% within Religion	34.2%	65.8%	100.0%
		% within Acceptability	27.1%	58.1%	41.8%
		% of Total	14.3%	27.5%	41.8%
	Buddhism	Count	44	24	68
		Expected Count	35.9	32.1	68.0
		% within Religion	64.7%	35.3%	100.0%
		% within Acceptability	45.8%	27.9%	37.4%
		% of Total	24.2%	13.2%	37.4%
	Christianity	Count	12	8	20
		Expected Count	10.5	9.5	20.0
		% within Religion	60.0%	40.0%	100.0%
		% within Acceptability	12.5%	9.3%	11.0%
		% of Total	6.6%	4.4%	11.0%
	Hinduism	Count	14	4	18
		Expected Count	9.5	8.5	18.0
		% within Religion	77.8%	22.2%	100.0%
		% within Acceptability	14.6%	4.7%	9.9%
		% of Total	7.7%	2.2%	9.9%
Total		Count	96	86	182
		Expected Count	96.0	86.0	182.0
		% within Religion	52.7%	47.3%	100.0%
		% within Acceptability	100.0%	100.0%	100.0%
		% of Total	52.7%	47.3%	100.0%

Chi-Square Tests

	Value	df	Asy mp. Sig. (2-sided)
Pearson Chi-Square	19.3a	3	.000
Likelihood Ratio	19.8	3	.000
Linear-by-Linear Association	11.7	1	.001
N of Valid Cases	182		

a. 0 cells (.0%) have expected count less than 5.
 The minimum expected count is 8.51.

^{**} Correlation is significant at the 0.01 lev el (2-tailed).

Table 8
Chi-Square for Marital status and Acceptability

Marital status * Acceptability Crosstabulation

			Acceptability		
			Yes	No	Total
Marital	Single	Count	79	62	141
status		Expected Count	72.3	68.7	141.0
		% within Marital status	56.0%	44.0%	100.0%
		% within Acceptability	80.6%	66.7%	73.8%
		% of Total	41.4%	32.5%	73.8%
	Married	Count	19	31	50
		Expected Count	25.7	24.3	50.0
		% within Marital status	38.0%	62.0%	100.0%
		% within Acceptability	19.4%	33.3%	26.2%
		% of Total	9.9%	16.2%	26.2%
Total		Count	98	93	191
		Expected Count	98.0	93.0	191.0
		% within Marital status	51.3%	48.7%	100.0%
		% within Acceptability	100.0%	100.0%	100.0%
		% of Total	51.3%	48.7%	100.0%

Chi-Sq	uare	Tests
--------	------	-------

	Value	df	Asy mp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.802t	1	.028		
Continuity Correction	4.108	1	.043		
Likelihood Ratio	4.832	1	.028		
Fisher's Exact Test				.033	.021
Linear-by-Linear Association	4.777	1	.029		
N of Valid Cases	191				

a. Computed only for a 2x2 table

Pearson has a value of 4.802 with a significance of .028, p< .05. The minimum expected count is 24.35, more than 5. Therefore, no assumptions have been violated. We can conclude that majority of married respondents say "No" to superior/subordinate romance while majority of singles say "Yes". We can reject the null hypothesis that marital status and Acceptability of superior/subordinate romance will be significantly independent.

DISCUSSION AND CONCLUSIONS

Hypothesis 1a is substantiated. Correlation results show that the two workplace romance dimensions; Repercussions from colleagues and decreased morale are positively correlated. It means that they move in the same direction. The power is moderate at correlation of .233. Within the domain of superior/subordinate workplace romance, Repercussions from colleagues comprise disapproval, badmouthing, damaged reputation, avoidance, information shutdown and isolations. As for Decreased morale, it consists of distraction from work, personal and job conflict and the threat from management condemnation. Though the measurement is perception, the impact is very real. In the questionnaire, respondents are requested to answer as if they are one of the parties in a superior/subordinate relationship. Now, this indirectly measure the degree of openness to this type of affair of the respondents. What we are interested is their view on this matter and how would they respond to this type of complication. Fundamentally, office workers in Kuala Lumpur which can be said to be representative of that of the nation, regard that superior/subordinate romance does bring impediments and this can be viewed from the results.

Logically, repercussions from colleagues will sure affect morale. However, the inverse is also true. Therefore, we can believe that there is reciprocal relationship between Repercussions and Decreased morale. They affect each other. This result is a bad news to those who are or intend to begin a superior/subordinate romance. Although, correlation cannot tell us which causes which, but it is clear that external factor, in this case the repercussions from coworkers will affect the internal factor more, morale. Consequently, readers who are interested in superior/subordinate romance must be wary and think twice as which is more crucial; the job or romance. It is because once repercussions from colleagues are felt, morale will be affected. It doesn't matter if morale is truly affected; the key point is that because population thinks that this will happen, they may react in such a manner too. Simplistically, it is self-prophecy which augments the effect. This is the power of perception, it is perception which makes things happen; the employee's morale may be affected because the presumption is already implanted in them. To the management, it is also a bad news, but if only bad treatment arises from coworkers; morale which contributes to performance will not be hindered.

Hypothesis 2a is substantiated. Chi-square result finds that religion, and whether respondents will accept superior/subordinate romance or not, are related. Majority of Muslims say "No" to superior/subordinate romance while majority of Buddhists, Christians, and Hindus say "Yes". It is no

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 24.35

astonishment since Muslims are generally adherents to the teachings of Islam and thus more conservative on this matter. No doubt, modernization has eroded some of the religious values of the Muslims; the results however clearly prove that the influence of the holy teaching is still strong. On the other hand, respondents of other religions are by and large more open about superior/subordinate romance. Once again, the implications are clear-cut. Superiors and subordinates ought to adhere to the norm and belief of the organization. Certainly one of the ways, but not the only way is to take into consideration the religion or belief of the majority people in a firm before deciding on matters of superior/subordinate romance.

Hypothesis 3A is substantiated. Results find that majority of singles vote for while majority of married workers vote against superior/subordinate romance. This is very intuitive. Married workers relatively have higher stakes since they have spouse and family. Supposedly, they are more mature. It does not matter if married respondents put themselves into a workplace romance affair when answering the question, or just answering from an audience point of view; the deduction is that most of them are more reserved towards superior/subordinate romance. Conversely, singles presumably are more adventurous and most probably still seeking for Miss or Mr. Right. These people will have a different view; partly because they are not attached and thus have less responsibility.

The implications; again, any decisions made on superior/subordinate romance must consider the marital status of all workers concerned. Obviously, when courting someone, his or her marital status is crucial. However, in the scope of superior/subordinate romance, marital status is even more crucial not only of the persons involved but also that of the rest of the coworkers. The acceptability of the environment is very important to the life and death of a superior/subordinate romance.

Limitations

Correlations show that positive relationships exist between Repercussions from colleagues and Decreased Morale. But, we know that correlations cannot tell which causes which and a furthermore positive relationship may yet actually be caused by another factor. Chi-square in this study deals with only one level of category. Although a multiple level analysis can be executed, with the amount of time, resources and sample size that are constrained, it is too difficult to be done. A substantial amount must be obtained for each cell to fulfill the expected count assumption of Chi-square. Besides, this study is confined to Kuala Lumpur only; as such the sample selected is inadequate and hence, does not intend to reflect the perception of all office workers in Malaysia. A sample size that is more representative in terms of geographical strata is required in order to generalize the findings to all Malaysian workers in all the states. Therefore, generalizability is limited to Kuala Lumpur metropolitan area only.

REFERENCES

Anderson, C. I., & Hunsaker, P. L. 1985. Why there's romancing at the office and why it's everybody's problem. *Personnel*: 57-63.

Anderson, C. J., & Fisher, C. 1991. Male-female relationships in the workplace: Perceived motivations in office romance. *Sex Roles*, 25: 163-180.

Applewhite, P. B. 1965. Organizational behavior. NJ: Prentice Hall.

Beer, M. 1964. Organizational Size and Job Satisfaction. Academy of Management Journal.

Brown, T. J., & Allgeier, E. R. 1995. Managers' perceptions of workplace romances: An interview study. *Journal of Business and Psychology*, 10 (2): 169-176.

Bruggemann, A., Groskurth, P., & Ulich, E. 1975. *Arbeitszufriedenheit [Job satisfaction]*. Bern: Huber. Bureau of National Affairs. 1988. *Corporate affairs: Nepotism, office romance, & sexual harassment*. Washington D.C.

Bussing, A. 1992. A dynamic view of job satisfaction. Work & Stress, 6 (3): 239-59.

Bussing, A., Bissels, T., Fuchs, V., & Perrar, K. M. 1997. A dynamic model of work satisfaction: Qualitative approach. *Human Relations*.

Ceniceros, R. 1998. Some employers using contracts to cut romance risks. *Business Insurance*, 32 (41): 3-4.

Cherrington, D. J. 1994. The work ethics- Working values and values that work. NY: AMACOM.

Chesanow, N. 1992. Do office affairs ruin careers? New Woman: 84-87.

Collins, E. G. C. 1983. Managers and lovers. *Harvard Business Review*, 61 (5): 142-153.

Cummings, B. 2001. An affair to remember. Sales and Marketing Management, 153 (8): 50-57.

Dillard, J. P. 1987. Close relationships at work: Perceptions of the motives and performance of relational participants. *Journal of Social and Personal Relationships*, 4: 179-193.

Dillard, J. P., & Broetzmann, S. M. 1989. Romantic relationships at work: Perceived changes in job-related behaviors as a function of participant's motive, partner's motive, and gender. *Journal of Applied Social Psychology*, 19: 93-110.

Dillard, J. P., & Witteman, H. 1985. Romantic relationships at work: Organizational and personal influences. *Human Communication Research*, 12, 99-116.

Du Brin, A. J. (2002). *Fundamentals of organizational behavior*. Ohio: South-Western College Publishing.

Fisher, A. B. 1994. Getting comfortable with couples in the workplace. (office romance, relationships and marriages). *Fortune*, 130 (7): 138-143.

Flax, E. 1989. Should you outlaw romance in the office? Working Woman, 16.

Gatewood D., Taylor R., & Ferrell C. 1995. *Management-Compression, Analysis and Application*, USA: Austen Press.

George, J. M., & Jones, G. R. 2000. *Essentials of managing organizational behavior*. Upper Saddle River, NJ: Prentice-Hall.

Greenwald, J. 2000. Office romances may court trouble. *Business Insurance*, 34 (7), 3.

Gutek, B. A. 1985. Sex and the workplace. San Francisco, CA: Jossey-Bass.

Harpaz, I. 1983. *Job satisfaction: Theoretical perspectives and a longitudinal analysis*. NY: Libra Publishers.

Hequet, M. 1996. Office romance. *Training*, 33 (2), 44-48.

Institute of Management & Administration. 2005. Workplace romance can create

unforeseen issues for employers. HR Focus, 82(10), 2.

Jabatan Perangkaan Malaysia. 1991. *Laporan Penduduk Daerah Pentadbiran*. Pekerjaan dan Industri, Kuala Lumpur.

Jennifer, M. G. & Gareth R. J. 2000. *Essentials of managing organizational behavior*. Upper Saddle River, NJ: Prentice Hall.

Joyner, A. 1996. Personal lives ... Professional limits. *The Billings Gazette*, D1.

Kennedy, M. M. (1992). Romance in the office. Across the Board, 29 (3): 23-27.

Leonard, B. (2001). Workplace romances seem to be rule, not exception. *HR Magazine*, 46 (4): 32-33.

Locke, E. A. 1976. The nature and causes of job satisfaction. In M.D. Dunnette (Ed.), *Handbook of industrial and organizational psychology*. NY: Wiley.

Locke, E. A., & Henne, D. 1986. Work motivation theories. In C.L. Cooper & I.T.

Robertson (Eds.), *International review of industrial and organizational psychology* (Vol. 1: 1-35), Chichester: Wiley.

Loftus, M. J. 1995. Romance in the Workplace. USA Today, 124 (2606): 28-30.

Mano, R. & Gabriel, Y. 2006. Workplace romances in cold and hot organizational climates: The experience of Israel and Taiwan. *Human Relations*, 59(1): 7-36.

Mainiero, L. A. 1986. A review and analysis of power dynamics in organizational romances. *Academy of Management Review*, 11: 750-762.

Mainiero, L. A. 1989. *Office romance: Love, power, and sex in the workplace*. NY: Rawson Associates. Mainiero, L. A. (1993). Dangerous liaisons? A review of current issues concerning male and female romantic relationships in the workplace. In E. Fagenson (Ed.) *Women in management: Trends, issues, and challenges in managerial diversity*: 162-185. Newbury Park, CA: Sage Publications.

Majlis Perbandaran Petaling Jaya. 2000. Maklumat Asas Petaling Jaya 1999/2000. Petaling Jaya.

Martin, J. 2001. *Organizational Behaviour*. The University Of Hull, London: Thomson Learning.

McDonald, J. J. 2000. Failed workplace romances: If you're lucky you'll just get sued. **Employee Relations Law Journal**, 26 (2): 101-111.

Mead, M. 1980. A proposal: We need taboos on sex at work. In D. A. Neugarten and J. M. Shafritz (Eds.), *Sexuality in organizations*, 3rd ed.: 53-56. Oak Park, IL: Moore.

Meyer, H. R. 1998. When cupid aims at the workplace. *Nation's Business*, 86 (7): 57-59.

Mumford, E. 1972. Job satisfaction- A study of computer specialists. London: Longman.

Pierce, C. A., & Aguinis, H. 1997. Bridging the gap between romantic relationships and sexual harassment in organizations. *Journal of Organizational Behavior*, 18: 197-200.

Pierce, C. A., Byrne, D., & Aguinis, H. 1996. Attraction in organizations: A model of workplace romance. *Journal of Organizational Behavior*, 17: 5-32.

Pierce, J. L., & Gardner, D. G. 2002. *Management and organizational behavior: An integrated perspective*. Ohio: Thomson Learning.

Powers, D. M. 1998. The office romance: Playing with fire without getting burned. NY: AMACOM.

Powers, D. M. 1999. Consensual workplace relationships: The stereotypes, policies, and challenges. *Compensation & Benefits Management*, 15 (3): 20-32.

Quinn, R. E. 1977. Coping with cupid: The formation, impact, and management of romantic relationships in organizations. *Administrative Science Quarterly*, 22 (1): 30-45.

Rapp, E. 1992. Dangerous liaisons. Working Woman: 56-61.

Schaefer, C. M., & Tudor, T. R. 2001. Managing workplace romances. *S.A.M. Advanced Management Journal*, 66 (3): 4-10.

Smith, Patricia, Kendall, Ronald L., Hulin & Charles. 1969. *The measurement of satisfaction in work and retirement*. Chicago: Rand McNally.

Solomon, C. M. 1998. The secret's out: How to handle the truth of workplace romance. *Workforce*, 27 (7): 44-48.

Stanfield, D. 1999. Playing with fire without getting burned. *The Chronicle of Higher Education*, 45 (49): A12.

Stanton, M. 1998. Courting disaster: The perils of office romance. *Government Executive*, 30 (10): 35-39.

Stoner, A. F., Freeman, A., Edward & Gilbert Jr. 1995. *Management*. NJ: Prentice Hall.

Veale, S. 1999. Why an office romance may endanger your job. *Management Today*, 8.

Vroom, V. H. 1962. Ego-involvement, job satisfaction and job performance. *Personnel Psychology*.

Vroom, V. H. 1964. Work in Management. NY: John Wiley and Sons.

Westhoff, L. A. 1985. Corporate romance. NY: Times Books.

Yager, J. 1991. *Business protocol*. Connecticut: Wiley.

Yunker, G. W., & Yunker, B. D. 1999. The office romance: Playing with fire without getting burned. *Personnel Psychology*, 52 (4).

Workplace Romances Pose Special Concerns for Employers, Colleagues. (2004, Apr 12).

Knight Rider Tribune Business News: 1.

AN EXAMINATION OF TURNOVER INTENT MODEL: EVIDENCE FROM HOTEL EMPLOYEES IN INDONESIA

Harif Amali Rivai

Andalas University, Indonesia Email: harifamali71@yahoo.com

ABSTRACT

This study aims to test a model of employee's intention to leave the organization. The antecedents of the model included work-related perceptions (i.e., procedural justice and distributive justice) and attitudes (i.e., job satisfaction and organizational commitment). A theoretical model was proposed to address the research question: What model accurately portrays the relationships among distributive justice, job satisfaction, affective commitment, continuance commitment, normative commitment and turnover intent? The model was estimated with a sample of employees drawn from several four stars' hotels (N=320) in West Sumatera Province. An examination of goodness-of-fit model using structural equation modeling (SEM) provided strong support that the model fit well with the sample. The findings noted that among three dimensions of commitment, both affective and continuance commitment have negative affect on turnover intent. Job satisfaction has also indirect influence on turnover intent through affective and continuance commitment. The findings also suggested that distributive justice has a direct influence on job satisfaction. The study contributes significant implications to understand workers' attitude and behavior, particularly in Indonesia context

INTRODUCTION

Attempts to explore employees' behaviors have increased significantly since the last decade. These attempts are grounded on the important role of human resources in an organization, as a determinant of firm success. In service organizations, such as hotels, customer satisfaction and perceptions of service quality are directly related to attitudes and behaviors of employees. Turnover as one of employees' behaviors toward their organization has been considered to have significant effect on organization effectiveness (Mowday, Porter & Steers 1982). A high level of turnover may lead to negative consequences on either employees or organizations, such as lower company productivity, lower organizational performance, and increased costs of human resource investment.

In the service sectors, quality of service might be determined by employees' commitment in which they are likely to enhance organization's efficiency and add value to the firm's output. Employees with a strong commitment are also positively associated with a 'willingness to help' and as an organizational member that may foster a feeling of sharing (O'Reilly & Chatman 1986). Organizational commitment can be viewed as one factor that contributes to turnover behavior. This factor can encourage positive behaviors on the part of employees. One study has documented that an organization whose membership shares the organization's goals and values can ensure that its employees will act instinctively for the benefit of the organization (O'Reilly & Chatman 1986).

The current study attempts to explain how employees come to produce behavioral outcomes (turnover intention) and relate this to individual perceptions and attitudes in the workplace. At the core of the argument is that the behavioral outcomes have emerged as result of psychological stages that guide the individual to take a course of action. The psychological stages may be contingent on work-related perceptions and attitudes in the work setting which can be indicated by distributive justice and job satisfaction and commitment. Their relationships are illustrated in Figure 1.

LITERATURE REVIEW

Theoretical Framework and Hypotheses

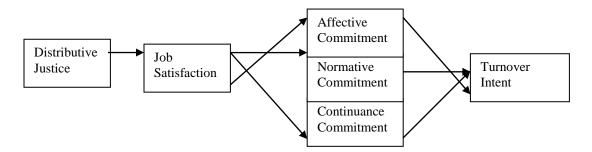
The purpose of this study is to present and test a model that identifies the impact of perception of justice on job satisfaction and the effects of that job satisfaction on three types of commitment. At the

same time, the impact of these types of commitment on turnover intent is also examined. The relationship between the proposed hypotheses is shown in Figure 1.

Figure 1. The theoretical model of the research

Meyer and Allen's three-component model of commitment has emerged as the predominant conceptualization of organizational commitment (Clugston 2000). Among these components, affective commitment is more widely studied in organizational research. Affective commitment is defined as an emotional attachment to an organization, which includes support for organizational objectives and organizational values (Meyer & Allen 1984). Continuance commitment refers to one's perceived investment in the organization (both psychological and economic), thus that it is associated with the perceived exiting an organization. Normative commitment reflects a feeling of obligation to continue employment (Meyer & Allen 1991). Allen and Meyer (1990) said 'employees with strong affective commitment do so because they want to, those with strong continuance commitment because they need to, and those with strong normative commitment because they feel ought to do so' (p. 3).

Figure 1
Affective commitment, continuance commitment, normative commitment and turnover intent



Somers (1995) and Hackett, Bycio, Hausdorf (1994) have demonstrated the dominant role of affective and normative commitment in explaining turnover behavior. Compared to contractual worker permanent workers are more likely to be concerned with their long-term relationship with their organization. Their identification and involvement with the organization will strengthen their attachment and make them less likely to look for other employers.

Affective commitment has also been found to have a greater influence on behavioral intention than continuance and normative commitment (Somers & Birnbaum 2000). According Hartmann and Bambacas (2000), work experience and personal characteristics may contribute to affect affective commitment. Consequently, it appeared that shared values engender conformity between the individual and organization, which eventually creates feelings of belonging, a sense of attachment and willingness to work toward the organization's mission. Therefore, affective commitment is regarded as an important factor that guides suitable behavior directed toward maintaining membership status within the organization.

The employee-organization link may also be affected by individual continuance commitment. This type of commitment reflects 'member's dedication to the survival of the organization' due to her or his personal sacrifices and investments which makes it costly to leave the organization (Kanter 1968; as cited in Mowday, Porter & Steers 1982, p. 23). However, an employee who demonstrates this type of commitment, does not intend to stay with the organization due to emotional attachment, but because the costs of leaving the organization are simply too high. Leaving an organization could mean that the employee would feel lost or will waste the time, money or effort that have been invested (Meyer & Allen 1997). Thus, economic reasons can be seen as a binding mechanism to the organization, and individual's decision to stay can be because of his perception of investment he has made in the organization and the potential loss if he quits.

Etzioni (as cited in Mowday, Porter & Steers 1982) pointed out that this type of commitment develops if an individual perceives a beneficial or equitable exchange relationship between his contributions to the organization and the rewards he receives for his service. This idea is parallel to Becker's (1960) notion, who proposed the idea of 'side-bets' as influences that produce a willingness to remain attached to the object of commitment. Individuals' rewards and benefits are elements in an exchange process in an organization. When side-bets are applied to an organization (e.g. pension plans or benefits), the individuals are aware the possibility of losing those investments. Thus, they may be reluctant to lose their investments and are more likely to stay longer in the organization (Stevens, Beyer & True 1978). In addition, Steven et al. (1978) noted that tenure can affect the side bet, leading to increased continuance commitment.

Penley and Gould (1988) suggested that a highly positive emotional attachment to the organization might reduce turnover, lower absenteeism, increase willingness to accept greater responsibly, and that those employees are likely to perform better. Likewise, individuals with continuance commitment will remain committed to the organization as long as the exchange relationship is satisfactory. Hence, both affective and continuance commitment may able to strengthen membership status in organization.

Wiener (1982) documented that normative commitment will be influenced by an individual's experiences based on his familial/cultural socialization before joining an organization. After entry into an organization, normative commitment will be influenced by organizational socialization. In relation to familial/cultural socialization, an employee would have strong normative commitment to the organization if significant others (e.g. parents) have been long-term employees of the same organization and encourage loyalty (Allen & Meyer 1990). Normative commitment is emphasized in an individual who consider reducing their level of effort or even choose to quit the organization, once they believe they have repaid their debt owing rewards they have received. Therefore, the reciprocity motive (e.g. social exchange) can be a characteristic of normative commitment which suggests that individuals who receive benefits from an organization are required to repay them in some way (McDonald & Makin 2000).

Hartman and Bambacas (2000) explained that the more distant an employee is from the organization, the less opportunity there is for the development of affective commitment and normative commitment – i.e. a sense of obligation to the organization. For example, affective commitment and normative commitment of permanent workers are likely to be more stable compared with non-permanent workers. This is because the permanent workers keep in touch with day-to-day organizational activities. Employees who perceive that a sacrifice would be involved in leaving the organization are possibly linked to positive feelings for the organization. This effect will be more significant when employees' needs are met by the organization.

Jaros et al. (1993) examined models of employee withdrawal processes. The model represented individual dispositions to leaving organizations – withdrawal tendency – as indicators of unmeasured latent factors. They argued that 'a change in an individual's level of commitment will affect the formation of overall tendency to withdraw from or stay with an organization' (p. 960). Their research findings pointed out the three components of commitment (affective, continuance and moral commitment) explain approximately 68 percent of the variance in withdrawal tendency variables.

All the three components of commitment show a link between the employee and organization which decrease the likelihood of turnover, but the nature of these links may be different (Meyer et al. 2000). Nevertheless, the impact of all three commitments is not mutually exclusive (Meyer, Irving & Allen 1998). For example, although the *desire* to remain with an organization (affective commitment) is not the same as the feeling of *obligation* to do so (normative commitment), both conditions can co-occur (Allen & Meyer 1990), leading to an intention to remain with an organization. Similarly, continuance commitment, as a consequence of the high cost of leaving, may reduce the intention to leave. Therefore the study proposed the following hypotheses:

H1a: The higher the level of employees' affective commitment, the lower the employees' intention to leave their current organization.

H1b: The higher the level of employees' normative commitment, the lower the employees' intention to leave current organization

H1c: The higher the level of employees' continuance commitment, the lower the employees' intention to leave their current organization

The Effect of Job Satisfaction on Organizational Commitment

The proposition that job satisfaction is an antecedent of organizational commitment, has been demonstrated in the previous research primarily research on the turnover model (e.g. Bluedorn 1982; Price & Mueller 1981). Meyer and Allen (1987) have exemplified employee behavior as being affected by three component of commitments (affective, normative and continuance commitment). Affective commitment may develop on the basis of psychologically rewarding experiences. The development of affective commitment in an organization might be influenced by the extent that the organization is able to satisfy employees' needs, meet their expectations, and allow them to achieve their goals (Meyer, Allen & Smith 1993). The meta analysis of Mathieu and Zajac (1990) found that affective commitment is likely to be low among employees who are unsure about what is expected of them or who are expected to behave in ways that seem incompatible with organizations' values. Job satisfaction can be seen as conformity between two perceptions which can be explained as the 'balance concept', between the degree of similarity or difference an individual perceives between what their work should be and what it actually is (Igalens & Roussel 1999). Positive work attitudes that reflect job satisfaction may also develop from initial entry to an organization, i.e. new workers would be satisfied when their expectations of the job and/or organization are confirmed by their experiences.

Wanous et al. (1992) supported the view that employee expectations moderate the extent to which an individual's experiences will be associated with affective commitment. Meta-analysis in terms of relationships between employee expectations and affective commitment showed that average correlation is .39 (Wanous et al. 1992). Therefore, job satisfaction that implies conformity to a person's expectations and his or her experiences is significant in building the affective commitment.

Investigations of the effect of normative commitment and continuance commitment on job satisfaction have received less attention, especially in non-western literature. The major focus of normative commitment is the belief that it is appropriateness to be loyal to one's organization, particularly the organization to which the employee belongs (Meyer, Allen & Topolnytsky 1998). Normative commitment refers to an individual's feeling of obligation to remain with the organization. This obligation can be the result of a particular kind of investment that the organization makes in the employee, which should be reciprocated by employees (Meyer & Allen 1991), for instance, organization-sponsored tuition payments made on behalf of employees. Yousef (2002) revealed that job satisfaction directly and positively influences affective commitment and normative commitment. Therefore, happy workers are likely to be more willing to remain in the organization, either because they want to do so, or because they feel they ought to do so.

The effect of job satisfaction on continuance commitment is concerned with the economic exchange process (McDonald & Makin 1999). The level of continuance commitment is based on the recognition of the cost associated with leaving the organization. Continuance commitment can be related to satisfaction when economic reasons (i.e. satisfaction of payment) individual expectations are unmet. The rewards related to current job (i.e. pay) may be associated with the employees' commitment, which influences their intention to find another organization or job (Meyer & Allen 1997). In terms of continuance commitment, employees view their investments as an input to exchange process between themselves and their organization (Stevens, Beyer & True 1978). As described in equity theory, the investment or job input (e.g. skill, abilities and training), might be the most important component of job satisfaction (Adam 1965), that are likely to affect a feeling of satisfaction. In keeping with continuance commitment, those inputs can be seen as the individual investment which is taken into account when the employee intends to leave organization. Therefore, it can be argued that job satisfaction is also likely to be associated with continuance commitment. On the basis of the existing literature, the research proposes that job satisfaction lead to all types of commitment, thus:

H2a: The higher the level of job satisfaction perceived by employees, the higher the level of employees' commitment to the organization, in terms of their affective commitment.

H2b: The higher the level of job satisfaction perceived by employees, the higher the level of employees' commitment to the organization, in terms of their normative commitment.

H2c: The higher the level of job satisfaction perceived by employees, the higher the level of employees' commitment to the organization, in terms of their continuance commitment

The Effect of Distributive on Job Satisfaction

Perception of justice is a crucial concept in an explanation of individual behavior in the workplace. The distributive justice seeks to explain how individuals react to the amount and form of compensation they received. In other words, it addresses employees' concerns about fairness of managerial decisions relative to the distribution of outcomes such as pay and promotions (Treamblay, Sire & Balkin 2000). The logic of distributive justice theory derives from a functional relationship between outcomes (rewards) and contributions of input compared with some standards of comparison, called 'equity theory'. The degree to which a distribution is judged to be fair or unfair will depend on the valuation of these comparisons. The sources of comparison may be other people, a generalized other or ones' own past rewards. Perceptions of fairness of distribution is a cognitive decision, thus, it may lead to emotional outcomes or emotional behavior.

The relationship between distributive justice and job satisfaction has been investigated in several studies. The work of Folger and Konovsky (1989) and McFarlin and Sweeney (1992) indicates that procedural justice strongly associates with evaluations of the supervisor and organizational commitment. Procedural justice refers to the reaction of individuals to the procedures used to determine compensation and focuses employees' attention on 'how' such decisions are made. On the contrary, distributive justice is more related to job satisfaction and intention to stay. The correlation between job satisfaction, intention to stay and distributive justice can be stronger because with recent recognition of rewards, and the rewards will affect their outcomes (Folger & Konovsky 1989). Brockner and Adsit (1986) and Sweeney and McFarlin (1997) also found that distributive justice has a greater impact on job satisfaction for men than it does for women.

The studies conducted by Folger and Konovsky (1989) and McFarlin and Sweeney (1992) that investigated employees' reactions to organizational pay system found distributive justice to be a stronger predictor of pay satisfaction than procedural justice. Employees who perceive that they are being fairly treated with regarding to a pay rise are not only satisfied with their raise but also demonstrate an increase in organizational commitment. They also found the strongest relationships were those between distributive justice and pay satisfaction, and procedural justice and organizational commitment.

Lawler (1971) demonstrated that the distribution of organizational rewards including pay, promotion, status, performance evaluations, and job tenure, have significant effects on several outcomes, namely job satisfaction, quality of work life, and organizational effectiveness. Folger and Konovsky (1989) also showed similar findings, that pay rises and job satisfaction significantly relate to the perceptions of distributive justice. Thus, the research proposes the following hypotheses:

H5: The higher the level of distributive justice perceived by employees, the higher the level of perceived job satisfaction.

REESRACH METHODOLOGY

Sample and Data Collection

Data were obtained from workers who work for four stars' hotels in West Sumatera, Indonesia. There were four hotels to give consent to take part in this study. A survey with non-probability sampling method was administrated to the respondents. The questionnaires were sent along with a cover letter explaining the importance of the research. They were addressed to personnel managers of the selected

hotels to be distributed to the respondents by supporting Human Resource Managers. Participation was voluntary and responses were treated with confidentiality. Data were collected over a 3-month period. Each respondent received a personalize envelope, and completed questionnaires were returned sealed in envelops provided by the researcher to a specially marked box in receptionist. The result of survey produced a usable response rate of 75.12 percent (N=320). The socio-demographic profile of the respondents as follows: 66.4% were male, 67.2% graduated from diploma of hospitality, average age was 35.4 years, and average tenure was 2.3 years.

Measurement of Variables

Measurement variable of distributive justice, job satisfaction, affective commitment, normative commitment, continuance commitment, and turnover intent were adopted and developed on the basis of established existing variables from previous studies. All variables were measured with 5-point Likert type scaled.

The distributive justice measures consisting of four items were adapted from Yoon and Thye (2002) with the anchors to strongly disagree (1) and to strongly agree (5). The sample items are 'Compared to other employees in this hospital, my work reward is proper in view of my training and education'. Job satisfaction scale was measured by four items scale which was developed by Brayfield and Rothe (1951). These items were intended to measure a global index of satisfaction of the worker in the workplace. The sample items are 'I am contented with my job itself' and 'I like my current job', with the anchors very dissatisfied (1) and very satisfied (5).

Affective commitment, normative commitment, and continuance commitment scale was adapted from Allen and Meyer (1990) in which the respective scale consist of eight items. Affective commitment refers to emotional attachment to, identification with, and involvement in, and enjoys membership in, the organization (Allen & Meyer 1990). The sample items of each component of commitment are: (a) 'I would be very happy to spend the rest of my career with this hospital', (b) 'I think that people these days move from hospital to hospital too often' (reverse coded), (c) 'I am not afraid what might happen if I quit my job without having another one lined up' (reverse coded), respectively, with anchors strongly disagree (1) and strongly agree (5). Intentions turnover was measured by a 3-item scale that contained information about individual's intention to look for another job and their possibility of leaving the current organization. The items were adapted from Lum et al (1998). A sample item such as "In the last few months have you ever thought seriously about looking for a nursing job at another hospital".

Data analysis was conducted in two stages. Firstly, checking for data entry includes validity and reliability of variables, identification outliers and normality of the data. Unidimensionality of measures was assessed by Principal Component Analysis (PCA) Secondly, testing of a fit model was conducted by using Structural Equation Modeling (SEM). AMOS 5.0 computer program was utilized to run data from questionnaires. 'Goodness-of-fit' model were assessed by three criteria: absolute fit measure, incremental fit measure and parsimonious fit measure (Table 2) (Hair et al 1998).

Table 2
Evaluation of SEM with Goodness-of-fit Measures

Types of Measures	Goodness-of-fit Measures	Level of Acceptable
Absolute Fit Measure	Goodness-of-fit index (GFI)	Greater than .90
	Root mean square error of approximation (RMSEA)	Under .08
Incremental Fit Measure	Adjusted goodness-of-fit index (AGFI) Tucker-Lewis index (TLI) Normed fit index (NFI) Comparative Fit Index	Greater than .90 Greater than .90 Greater than .90 Greater than .90
Parsimonious Fit Measure	Normed-chi-square (χ^2/df)	
		Lower limit 1.0
		Upper limit 2.0/3.0 or 5.0

Source: Adopted from Tabachnick & Fidell (2001); Hair et (1998); Byrne (2001)

RESULTS

Psychometric Properties of the Scales

Each measurement variable was tested using principal factor analysis (PCA) to assess whether the items represent a single underlying construct. Unidimensionality of the construct can be demonstrated by extracting a single component with an eigenvalue greater than 1. Furthermore, items with factor loading are 0.50 or greater; they are considered practically significant (Hair et al. 1998). Results of PCA asserted that not all measure indicated single underlying construct. The constructs of affective commitment, normative commitment and continuance commitment show more than one factor. Therefore several items of commitment were dropped from those instruments. The psychometric properties of scales are reported in Table 1.

Table 1
Psychometric Properties of the Scales

Constructs	Number of	N	Alpha	Mean	S.D
	items				
Job satisfaction	5	320	.79	3.51	.54
Distributive justice	4	320	.89	2.64	.87
Affective commitment	5	320	.73	3.31	.66
Continuance commitment	6	320	.74	3.45	.61
Normative commitment	5	320	.79	3.26	.92
Turnover intent	3	320	.84	3.27	.93

The reliability of composite variables is also presented in Table 1 using Cronbach alpha. Hair et al. (1998) suggested that usual lower limit for Cronbach alpha is .70, but in exploratory research this limit may decrease to .60. The coefficient (Cronbach's alpha) of job satisfaction, distributive commitment, affective commitment, continuance commitment, normative commitment, turnover intent, is found greater than .70; therefore all measurement variables are reliable. The estimated correlation matrix for the constructs can be seen in Table 1 and shows that estimated correlation among constructs do not indicate multicollinearity problem of lack of discriminant validity.

Table 2
Correlation of the Variables

Variables	1	2	3	4	5	6
JS (1) DJ (2)	1.00 .338(**)	1.00				
AC (3) CC (4)	.332(**) .133(*)	.152(*) .320(**)	1.00 .127	1.00		
NC (5) TOI (6)	.299(*) 196(*)	.153(**) 049	.196 471(**)	.144 027(*)	1.00 038	1.00

^{**} Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

Testing the Theoretical Model

The theoretical structural model was tested using SEM. To run the SEM analysis, AMOS 5 software was utilized. The chi-square of the theoretical model was 87.336 and significant at p<.001. Although SEM requires a non-significant chi-square, "statistical non-significance does not assure the researcher that another model would not fit as well or better" (Hair et al. 1998, p. 654) because chi-square values are sensitive on sample size. For this reason others fit indices (χ^2 /df; GFI; RMSEA; AGFI; TLI; NFI; CFI), that may minimize the effect of sample size, are utilized to assess the fit model. The fit model

requires: χ^2 /df ranging between 1 and 5; GFI, AGFI, TLI, NFI, and CFI should be greater than .90; RMSEA less than .08 (Hair et al. 1998; Tabachnick & Fidell 2001). The result of the structural equations test of the composite variables indicated that the theoretical model achieved an acceptable fit to the data, (χ^2 /df = 4.73; GFI = .95; RMSEA = .7; AGFI = .92; TLI = .94; NFI = .92; CFI = .91).

Furthermore, to answer each hypothesis, the test statistic for parameter estimates is assessed by critical ratio value (c.r) (Table 3). It represents the parameter estimate divided by its standard error. Critical ratio values are larger than 1.96 indicating the path coefficient to be statistically significant (Byrne 2001). The critical t value (CR) used to assess the significance of the relationship between the two paths is 1.96 (p< .05). A CR value above 1.96 means the relationship of the causal model is significant. The results of the hypotheses testing are shown in Table 3.

Table 3
Standardize Regression Weight and Critical Value

Hypothesis	Path	Standardize	Critical	Judgment
		Regression	Value	
		Weight (β)	(t)	
H1a	ac→ toi	-0.42**	-6.25	Supported
H1b	nc→ toi	0.17*	2.48	Not supported
H1c	cc→ toi	-0.03*	-4.67	Supported
H2a	js → ac	0.34**	6.67	Supported
H2b	js → nc	0.40*	9.95	Supported
H2c	js→ cc	0.36*	8.19	Supported
Н3	dj → js	-0.20**	-2.69	Supported

^{**} β coefficient is significant at level p< 0.05, * β coefficient is significant at level p< 0.001. ac = affective commitment; nc = normative commitment; cc = continuance commitment; toi = turnover intent; js = job satisfaction; dj = distributive justice.

DISCUSSION

The results of the hypotheses testing showed that affective commitment is a strong predictor of and negatively associated with turnover intent, as hypothesized. The results reflect that as employees perceives a higher level of affective commitment; they are more likely to have a lower level of intention to leave the organization. This result is consistent with the previous research (Allen & Meyer 1990; Meyer & Allen 1991; O'Reilly & Chatman 1986). A willingness to maintain membership status in an organization may be due to employees feeling a congenial organizational climate. In other words, value and goal conformity between individual and organization will reduce employee intention to leave their current organization. Alternatively, it can lessen the attractiveness of other organizations. O'Reilly and Chatman (1986) note that affective commitment, as a reflection of value conformity, can maintain individuals' positive behaviors, for instance, reduce the intention to leave and also create feelings of pride towards the desired affiliation with the organization.

With reference to the model, the results from the path analysis showed an unexpected finding (H1b), in which there is a positive, significant relationship between normative commitment and turnover intent. One possible explanation is that the current findings of this study may be confounded by contractual workers as the sample. It may produce different effects on attitudes and behaviors (McDonald &Makin 1999). Contractual workers' contracts are likely to constrain their intentions to reward their organization through sense of duty. Therefore, although the workers possess a high normative commitment, they are likely to look for other organization where they can exercise their sense of duty. It may be surmised that a pragmatic position for contractual workers exists, in which they are commonly viewed as being on the periphery of organizational activity.

The nature of individuals' attachment to an organization is also indicated by continuance commitment. Continuance commitment refers to the calculation of costs and benefits if individuals leave

the organization (Allen & Meyer 1990). Steven at al. (1978) note that where continuance commitment appears in individuals' assessments they are more likely to be promoted by an economic motive, what the researcher called 'economically committed'. That is to say, individuals continue their relationship with the organization because they experience personal sacrifices and investments which make it costly to discontinue their membership status with organization (Kanter 1968; Meyer & Allen 1997). The components of personal sacrifices and investments can be implied from several factors such as benefits pension plans, increased skill, tenure and training.

The part of the model also supports previous research on the impact of job satisfaction on both affective and normative commitment (Yousef 2002). In reality, employees may have this kind of commitment before entering an organization as the result of familial socialization, and this commitment will be stronger during the early stages of employment. Therefore, the majority of the workers with short-term tenures, as in this study, are likely to have strong normative commitment. Positive experiences then strengthen normative commitment when during the term of employment.

Hypothesis 2c supported that job satisfaction was found to be a significant predictor of continuance commitment. Employees may feel satisfied with their job; they would affect their level of continuance commitment. The motive to be committed associates with transactional or economic reasons (McDonald & Makin 1999; Rousseau 1990), and employees may be satisfied with their job. Perception of investment can be seen as a meaningful for the worker hotel, because they felt that investment balanced with their rewards. Additionally, the employees were hard to find other job opportunities due to economic conditions. Furthermore, the research model also highlights the relationship between job satisfaction and turnover intent. Based on path analysis findings, job satisfaction has an indirect effect on turnover intention. The indirect effect between job satisfaction and turnover intention is mediated by the three components of commitment. The findings of this study affirm result of previous studies in this regard (Clugston 2000; Meyer & Allen 1991; Williams & Hazer 1986).

This part of the model supports distributive justice as being significant antecedents of job satisfaction. The predicted influence of distributive justice on job satisfaction supports empirical evidence from previous study (Alexander & Ruderman 1987; Folger & Konovsky 1989). In terms of distributive justice, individuals' reactions to their organization are more determined by the amount and form of compensation they receive. The findings of the present study showed that there is a significant positive relationship between distributive justice and job satisfaction. Employees' perceptions of a just allocation of resources are likely to be influenced by how individuals assess their outcomes (rewards) and their input contributions as compared to some comparison standards, as explained in equity theory (Adam 1965). Feelings of satisfaction towards employees' outcomes are likely to occur when there is a belief that the rewards received are equitable and proportional relative to a comparison other (Martin, J 1981). In other words, employees feel satisfied with their outcomes when they believe that the content of rewards they perceive to be fair is higher than the content of rewards they perceive to be unfair (Cropanzano and Greenberg 1997).

The study provides several implications of understanding individual's attitude and behavior in the work setting. First, implication for the hotel industry in Indonesia is that various type of commitment demonstrated dissimilar effects on the intention to leave an organization, and the effect of affective commitment has dominated these dimensions. The result advocates that it would be more advantageous for an organization to build affective commitment in order to lessen intention to leave, rather than develop either normative or continuance commitment. Second, the findings demonstrate the importance of understanding the consequences of perceived fairness by individuals in the hotel industry. Managers must be aware that the impact of perceptions of justice in managing rewards, which includes content of rewards, does not only enhance job satisfaction but also can strengthen organizational commitment, particularly affective commitment. Thirdly, job satisfaction does not only appear to affect commitment directly, but also indirectly influence turnover intent. Therefore, organizations can reduce the degree of employees' intentions to leave by means of developing affective commitment. Nevertheless, developing organizational commitment takes a time longer than developing job satisfaction. Alternatively,

organizations can also directly control turnover intent through improving job satisfaction. The study found additional evidence that organizational justice also directly affects job satisfaction.

It is important to consider the limitations of the reported research findings. Although the SEM findings supported the prediction that most the hypotheses in the model fitted with the data, the direction of causality is somewhat difficult to interpret as the data were collected at a single point in time rather than longitudinal data. Secondly, the data collection of this study relied on self-reports. All variables in the study were measured from the same respondents and attempts were made to interpret their correlational nature, thus, common method variance problems could emerge to affect the correlation among variables. Finally, although perhaps many other factors influence turnover intent (e.g. pay satisfaction, kinship responsibility and employment opportunity), the study have limited analysis to several factors which were distributive justice; job satisfaction; affective commitment; normative commitment and continuance commitment. It is expected that future studies consider additional factors beyond those variables.

CONCLUSIONS

The result of the Structural Equation Modeling analysis demonstrated that affective commitment has the strongest affect on turnover intent. That to say, an organization might avoid turnover intent by means of strengthening employees' affective commitment. The evidence strengthens the prediction about the dominating role of affective commitment. An employee with strong affective commitment may also have other types of commitment (i.e. normative and continuance) which are not as strong as their affective commitment. Although various types of commitment associate with reasons to continue membership status in an organization, there is a possibility of conflict among the different kinds of commitment. Employees' desire to remain with an organization is not the same as a feeling of obligation to do so, though these feelings may occur simultaneously. The empirical evidence from the testing model also pointed out that distributive justice has an important role in improving job satisfaction and reduce turnover intent. In other words, the more increased perceptions of satisfaction, the lesser the employees' intention is, to leave the organization.

REFERENCES

Adam, J.S. 1965. Injustice in social exchange. In L Berkowitz (Ed.), *Advances in experimental social psychology*: 267-299. New York: Academic Press

Alexander, S., & Ruderman, M. 1987. The role of procedural and distributive justice in organizational behavior. *Social Justice Research*, 1: 177-98.

Allen, N.J., & Meyer, J.P. 1990. The Measurement and Antecedents of Affective, Continuance and Normative Commitment to the Organization. *Journal of Occupational Psychology*, 63 (1): 1-18.

Becker, H.S. 1960. Notes on the concept of commitment. American Journal of Sociology, 66: 32-40.

Bluedorn, A.C. 1982. A Unified Model of Turnover from Organizations. *Human Relations*, 35 (2): 135-53.

Brayfield, A.H., & Rothe, H.F. 1951. An index of job satisfaction. *Journal of Applied Psychology*: 35: 307-11.

Brockner, J., & Adsit, L 1986. The Moderating impact of sex on the equity-satisfaction relationship: A field study. *Journal of Applied Psychology*, 71 (4): 585-90.

Begley, T.M., & Czajka, J.M. 1993. Panel analysis of the moderating effects of commitment on job satisfaction, intent to quit, and health following organizational change, *Journal of Applied Psychology*, 78 (4): 552-56.

Byrne, B.M. 2001. *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. Multivariate applications book series. Mahwah, N.J: Lawrence Erlbaum Associates. Clugston, M. 2000. The mediating effects of multidimensional commitment on job satisfaction and intent to leave, *Journal of Organizational Behavior*. 21 (4): 477-86.

- Cropanzano, R., & Greenberg. 1997. Progress in organizational justice: Tunneling through the maze. In C Cooper and I Roberstson (Eds.), *International review of industrial and organizational psychology*,12: 312-72. New York: John Wiley & Sons.
- Folger, R., & Konovsky, M.A. 1989. Effects of procedural and distributive justice on reactions, *Academy of Management Journal*. 32 (1): 115-30.
- Hair, J.R., Anderson, R.E., Tatham, R.L., & Black, W.C. 1998. *Multivariate data analysis*. Upper Saddle River, New Jersey: Prentice-Hall, Inc
- Hackett, R.D., Bycio, P., & Hausdorf, P.A. 1994. Further assessments of Meyer and Allen's (1991) three-component model of organizational commitment, *Journal of Applied Psychology*. 79 (1): 15-23.
- Hartmann, L.C., & Bambacas, M. 2000. Organizational commitment: A multi method scale analysis and test of effects. *International Journal of Organizational Analysis*. Special Issue: Experiment in Developing Scholars. 8 (1): 89-108.
- Igalens, J., & Roussel, P. 1999. A study of the relationships between compensation package, work motivation and job satisfaction. *Journal of Organizational Behaviour*. 20 (7): 1003-25.
- Jaros, S.J., Jermier, J.M., Koehler, J.W., & Sincich, T. 1993. Effects of continuance, affective, and moral commitment on the withdrawal process: An evaluation of eight structural equation models, *Academy of Management Journal*. 36 (5): 951-95.
- Lawler, E.E. 1971. *Pay and organizational effectiveness: A psychological view*. New York: McGraw-Hill series in psychology.
- Mathieu, J.E., & Zajac, D.M. 1990. A Review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment, *Psychological Bulletin*. 108 (2): 171-94.
- McDonald, D.J., & Makin, P.J. 1999. The psychological contract, organizational commitment and job satisfaction of temporary staff, *Leadership & Organization Development Journal*, 21 (1): 84-91.
- McFarlin, D.B., & Sweeney, P.D. 1992. Distributive and procedural justice as predictors of satisfaction with personal and organizational outcomes, *Academy of Management Journal*. 35 (3): 626.
- Meyer, J.P., & Allen, N.J. 1991. A three-component conceptualization of organizational commitment, *Human Resources Management Review*. 1 (1): 61-89.
- Meyer, J.P., 1997. Commitment in the workplace: Theory, research, and application. *Advanced topics in organizational behavior*. Thousand Oaks, Calif: Sage Publications.
- Meyer, J.P., Allen, N.J., & Topolnytsky, L 1998. Commitment in a changing work of work, *Canadian Psychology*. 39 (1/2): 82.
- Meyer, J.P., Irving, P.G., & Allen, N.J. 1998. Examination of the combined effects of work values and early work experiences on organizational commitment, *Journal of Organizational Behaviour*.19 (1): 29-52.
- Mowday, R.T., Porter, L.W., & Steers, R.M. 1982, Employee-organization linkages: The psychology of commitment, absenteeism, and turnover. *Organizational and occupational psychology*. New York: Academic Press.
- Meyer, J.P., Stanley, D.J., Hersecovith, L., & Topolnytsky, L 2000. Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behaviour*. 61: 20-52.
- O'Reilly, C.A., & Chatman, J. 1986. Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behavior. *Journal of Applied Psychology*. 71 (3): 492-9.
- Penley, L.E., & Gould, S. 1988. Etzioni's Model of organizational involvement: A perspective for understanding commitment to organizations, *Journal of Organizational Behaviour*. 9 (1): 43-59.
- Stevens, J.M., Beyer, J.M., & True, H.M. 1978. Assessing Personal, Role and Organizational Predictors of Managerial Commitment. *Academy of Management Journal*, 21 (3): 380-96.
- Somers, M.J. 1995. Organizational commitment, turnover and absenteeism: An examination of direct and indirect effects. *Journal of Organizational Behaviour*, 16 (1): 49-58.
- Somers, M., & Birnbaum, D. 2000. Exploring the relationship between commitment profiles and work attitudes, employee withdrawal, and job performance. *Public Personnel Management*, 29 (3): 353-65.

Tremblay, M., Sire, B., & Balkin, D.B. 2000. The role of organizational justice in pay and employee benefit satisfaction, and its effects on work attitudes. *Group & Organization Management*. 25 (3): 269-90.

Wanous, J.P., Poland, T.D., Premack, S.L., & Davis, K.S. 1992. The effects of met expectations on newcomer attitudes and behaviors: A review and meta-analysis. *Journal of Applied Psychology*, 77 (3): 288-97.

Wiener, Y. 1982. Commitment in organizations: A normative view. *Academy of Management*, 7 (3): 418-28.

Williams, L.J., & Hazer, J.T. 1986. Antecedents and consequences of satisfaction and commitment in turnover models: A Reanalysis using latent variable structural equation methods. *Journal of Applied Psychology*, 71 (2): 219-31.

Yoon, J., & Thye, S.R. 2002. A dual process model of organizational commitment: Job satisfaction and organizational support. *Work and Occupations*, 29 (1): 97-124.

Yousef, D.A. 2002. Job satisfaction as a mediator of the relationship between role stressors and organizational commitment: A study from an Arabic cultural perspective. *Journal of Managerial Psychology*, 17 (4): 250-66.

UPWARD INFLUENCE TACTICS, CAREER SUCCESS AND GENDER

Shazia Akhtar Zahid Mahmood Air University,E-9, Islamabad, Pakistan.

Email: shaziaakhter@gmail.com

ABSTRACT

Career success is a way for individuals to fulfill their needs for achievement and power. Managerial advancement and success are largely dependent on a manager's effective use of upward influence tactics. With more and more women joining the work place, gender becomes a significant construct given that upward influence tactics may have nuances different for men and women. Within the past decade, organizational theory and research have made substantial contributions to our understanding of the upward influence process in organizations by which participant's attempts to gain compliance from those at higher levels in the formal organizational structures. Conspicuously missing from this research literature is information on the relationship between the use of upward influence tactics to managerial career success and gender .The purpose of this conceptual paper is to look at how the tactics of upward influence adopted by the managers play a role in their career advancement and whether gender differences exist in the choice of upward influence tactics. A set of potentially testable propositions regarding the relation between career success, use of influence tactics and gender is developed and discussed.

INTRODUCTION

Career success is a way for individuals to fulfill their needs for achievement and power. Those who perform well progress to higher levels, whereas poor performers remain at the same level. Success in ones' career improves people's quantity and quality of life therefore the study of who can get ahead is of interest and value. Since Whyte's (1956) influential work on the organization man, managerial career success has represented a popular topic for occupational research. Managerial advancement and success are largely dependent on a manager's effective use of influence (Yukl, 1994).Influence can be defined as the process by which people persuade others to follow their advice, accept their suggestion or comply with their orders. It is the effect, either intended or unintended of the agent (influencer) on the target's (to be influenced) attitude, perception or behavior (Yukl, 1998).Specifically, the agent uses influence for organizational purpose (Yukl & Tracy,1992) but it can also be used for the development of personal goals.

While influencing enhances productivity and employees morale at all levels, upward influence is of significant importance as it aids cooperation and collaboration within team, makes organizations democratic, and enhances their receptivity to change (Waldron,1999). Therefore among the four different levels of influence tactics-upward, downward, lateral, and outward-upward influence tactics have the most profound effect on ones' career success.

LITERATURE REVIEW

Upward Influence Tactics

Although there are a number of typologies of upward influence tactics, the tactics identified by Kipnis et al. (1980) and Yukl and Falbe (1990) have received the most attention in the literature. Kipnis et al. (1980) identified the following eight dimensions of influence: assertiveness, ingratiation and exchange, rationality, sanctions, exchange, upward appeals, blocking, and coalitions. They found that ingratiation and exchange (e.g., acting humble, making the superior feel important) and rationality (e.g., developing detailed plans, explaining reasons behind requests) were the most frequently used upward influence tactics. This has also been documented in other research (e.g., Ansari & Kapoor, 1987).

The goals of influence attempts on ones' superior may be of two types: personal and organizational (Ansari & Kapoor, 1987). Personal goals may include securing benefits such as better work assignments or career advancement, whereas, organizational goals may include encouraging others to perform effectively, to promote new ideas, or to introduce new work procedures (Schmidt & Kipnis, 1984). Previous studies done (Ansari & Kapoor, 1987; Kipnis, Schmidt, & Wilkinson, 1980; Schmidt & Kipnis, 1984) showed that individuals seeking personal goals will make more frequent use of such strategies as ingratiation and those pursuing organizational goals will make more frequent use of such tactics as reason and persuasion. Based on the above review this paper will also focus at two categories of upward influence tactics that is rational persuasion, and ingratiation and exchange (e.g., exchange of benefits, self-enhancement, and instrumental dependency), which are briefly explained as follows:

Rational Persuasion

Rational persuasion involves the use of logical arguments to encourage compliance by the target; agents may present facts, figures, and critical information in order to influence behavior (Ansari, 1990). In a similar manner, Yukl and Falbe (1990) and Yukl, Kim, and Falbe (1996) defined rational persuasion in which meaning and factual reasoning are provided to requests, and explanations of what is to be done and why are furnished. Rational persuasion is known as a flexible tactic because it can be applied in any situation and it may result in positive impression because employees who practice this tactic tend to interact with their superior by giving logical arguments or evidence (Wayne & Liden, 1995; Yukl & Tracey, 1992). This strategy is used most often and most effectively to influence superiors at all level of organizations. When they are presented with documents or logical arguments, superiors appear to pay more attention to requests (Ansari & Kapoor, 1987; Kipnis et al., 1980).

Ingratiation and Exchange

Researchers have operationalized ingratiation in a variety of ways including favor doing, flattery, opinion conformity, or subservient behavior (Ferris & Judge, 1991; Wayne & Liden, 1995). It is used to get one's way with the boss as well as to persuade subordinates and coworkers to work in specific ways (Ansari, 1990; Ansari & Kapoor, 1987; Kipnis et al., 1980). Individuals may render favors for the purpose of ingratiating themselves with target and it is positively related to managers' liking for his or her subordinates (Kipnis & Schmidt, 1988; Liden & Mitchell, 1988). The specific form that ingratiation and exchange takes is expected to be a function of the cues provided by the supervisor concerning his or her own values and interpersonal orientation.

Jones (1964) was probably the first to identify that ingratiation is not one single tactic but it is a strategy that comprises more than one tactic. Ingratiation, according to him, could take all or any form by which interpersonal attraction may be solicited. Pandey and Bohra (1984) developed the first multidimensional scale and the items of this scale were worded on the basis of ingratiation tactics defined by Jones (1964).

This multidimensional scale to measure ingratiatory behavior was further refined by Shankar, Ansari, and Saxena (1998). For the purpose of this experiment, tactics such as exchange of benefits, self-enhancement, and instrumental dependency have been categorized under ingratiation and exchange and are described as follows:

Exchange of benefits- This strategy is used by managers with superiors, peers, and subordinates to get their work done (Ansari, 1990). It involves the promise of benefits or resources in exchange for compliance with the agent's request. In addition, agents may also remind the target of past benefits or favors with the expectation that the target now comply with any request (Ansari, 1990; Yukl & Tracey, 1992). These tactics involve a subordinate's attempt to influence the manager by complying with the manager, in the hope that the favor will be reciprocated at a later time.

Self-enhancement: The usage of self-enhancement occurs when the employees try to highlight their inner ability (Ansari, 1990) or as stated by Jones (1964), it is a description of one's positive attributes to be seen as attractive to others. Shankar, Ansari, and Saxena (1998) stated that these tactics are generally sought out in two ways. The first involves the modeling of oneself along the lines of the target person's suggested ideals. The second involves oneself as possessing traits that are generally valued in the society or culture.

Instrumental dependency: It involves trying to induce a sort of social responsibility in the target while showing dependency on him or her (Pandey & Bohra, 1984; Shankar et al., 1998). Previous research has established that the use of upward influence is necessary for career success both at personal and organizational level. For nearly two decades, researchers have spent considerable time and energy examining the tactics used by employees to influence others (Porter, Allen, & Angle, 1981) however missing from this research is the relationship of the choice of upward influence tactics to career advancement / failure.

Gender

The source of gender differences in human social behavior has long held the interest of social scientist. One specific manifestation of this interest involves gender and the use of various influence strategies. That is, are there differential expectations regarding how women and men should use influence behaviors? Do women and men display different influence behavior? And, if there are any differences, do potential gender-based differences regarding expectations of influence and actual influence use affect how female and male managers are evaluated?

As early as 1976, Johnson found that men use more direct tactics and assertive influence as compared to women in organizations. Men and women working in a diverse setting are expected to display stereotypical forms of behavior in both interpersonal (Falbo and Peplau, 1980; Maccoby, 1988) and work situations (Eagley & Johnson, 1990; Mainiero, 1986). Women for instance, agree more often than men and display more positive socio emotional behavior (Anderson & Blanchard, 1982; Carli 1982, 1989; Piliavin & Martin, 1978). These gender differences have been found both within mixed-groups and between same-groups (Johnson, Warner & Funk, 1996). Investigations regarding gender and influence behavior suggest that men and women are generally expected to use forms of influence that are related to gender-based stereotypes or gender roles (Carli, 1989; Cowan, Drinkard, & MacGavin, 1984). Perceptions and stereotypes that men use direct forms of influence, whereas women choose indirect tactics may, to some extent, reflect true differences between the genders. More specifically, empirical research has demonstrated the tendency for men and women to use stereotypical forms of influence behavior in both interpersonal and work settings (Falbo & Peplau, 1980). Previous studies have shown that men are most likely to manipulate situations and people, by joking or threatening punishment, whereas women were found to use charm, appearance, and compliments more often to influence others (DuBrin, 1994).

Rationale of the Study

While different types of upward influence tactics in relation to work environment have been studied there is little research on the gender of the employees and the choice of the tactics to influence the leader. This research gap becomes more significant when we consider the fact that more women are taking on managerial positions within organizations. Moreover we need to study the relationship between gender and upward influence to assess the effectiveness of the "social composition" of the organizations. Given this limitation and the need to assess the generalizability of the upward influence tactics, this article explores whether men and women are differentially successful in their influence attempts. In this article we would be discussing as how the tactics of upward influence adopted by managers play a role in their career advancement. Influence behavior, including upward influence activity, is simply a part of organizational life and understanding upward influence in organizations is essential to the overall understanding of power and influence in organizations (Schilit & Locke, 1982).

In order to impress management, employees will use many tactics, for example, rationalization, self-enhancement, ingratiation, etc. The focus here is the use of upward influence tactics by both successful and unsuccessful male/female managers on their superior to get the thing done. We will look at the influence styles used by these managers, mainly rational persuasion, and ingratiation and exchange tactics; as such tactics have been proven to play a role in career advancement.

By discussing the above mentioned components, this paper is designed to address the following crucial questions:

- When a person succeeds or fails in his or her career, is it due to the use of rational persuasion tactics or ingratiation and exchange tactics of influence?
- Does use of influence tactics for career advancement vary between the male and female managers?

Conceptual Framework

There is considerable research on upward influence tactics which suggest that the well-being of an individual can be measured by the effectiveness of choice and application of tactics by which the subordinate influences the supervisor. Upward influence tactics have been labeled as direct/rational, hard and soft. Discussion of these tactics is based on the Profiles of Organizational Scale (POIS) developed by Kipnis and Schmidt (1982) that measured six tactic categories-rationality/reason, ingratiation, exchange/bargaining, assertiveness, coalition, and upward appeal. Studies have shown that ingratiation as upward influence strategy relates to career success through the social psychological process of affect or liking (Ralston, 1985; Wayne & Ferris, 1990), which is manifested in the performance ratings subordinates receive from their supervisors. Based on the findings of their laboratory study, Wayne and Ferris (1990) reported those ingratiatory behaviors like opinion-conformity and favor doing positively influencing the supervisor's reaction toward subordinates, as well as performance rating.

Research has also shown that there is a positive relationship between employees' use of reasoning/rationality and evaluations made by managers (Kipnis & Schmidt, 1988; Yukl & Tracey, 1992). Previous finding by Ansari and Kapoor (1987) and Kipnis et al. (1980) had shown that rational persuasion was rated as the strategy most frequently chosen as far as influencing the immediate superior is concerned. Based on existing literature and further conceptualization, the following propositions /sub-propositions are formulated on the relation of career success with upward influence tactics.

Proposition 1: Usage of upward influence tactics is a function of the managerial success.

1a: Most successful managers are more likely to use ingratiation and exchange tactics more often to influence their superior than least successful managers.

1b: Most successful managers are more likely to use rational persuasion tactics more often to influence their superior than least successful managers.

Research has demonstrated the tendency for men and women to use different influence tactics in both interpersonal and work settings. The DuBrin (1991) study on gender differences indicated that men are more likely to manipulate situations and people, joke or kid, promise rewards, threaten punishments, and use logic or reason, while women are more likely to use charm, appearance, ingratiation and exchange, and compliments to achieve their career objectives. In work situations, for example, women report using personal/dependent tactics and negotiation (Offerman & Kearney, 1988), suggesting and smiling (Steil & Weltman, 1992). Alternatively, men report using tactics such as offering rewards, coercion (Offerman & Kearney, 1988), punishment, and rational persuasion tactics (Harper & Hirokawa, 1988). Based on existing literature and further conceptualization, the following propositions /sub-propositions are formulated on the relation of mangers success with mangers gender.

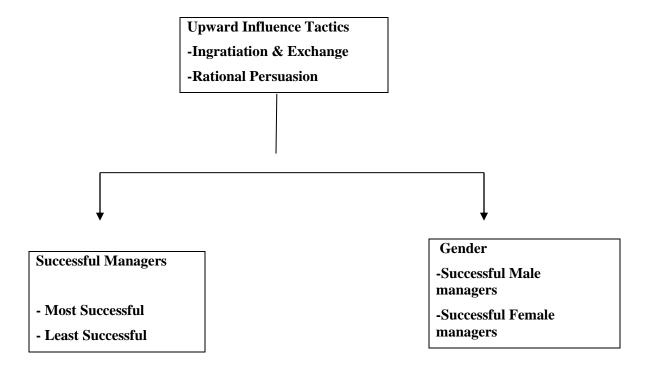
Proposition 2: Influence tactics is a function of the interaction between the managers' success and manager's gender.

2a: Most successful male managers are more likely to use rational persuasion tactics more often than others.

2b: Most successful female managers are more likely to use ingratiation and exchange tactics more often than others.

Figure 1

A Conceptual framework of Upward Influence Tactics, Career Success and Gender



DISCUSSION AND IMPLICATIONS

This article provides useful insights about the influencing patterns used for career advancement across genders, within organizations. It provides some additional support for influence tactics research findings that bystanders can be influenced by such tactics (Jones, Stires, Shaver, & Harris, 1968; Wayne& Liden, 1995). Given that influence tactics will always be present in organizations it is important not to ignore this type of workplace behavior. It also provides information that successful managers in organization use logical explanation and expertise when dealing with their superiors. This may prove to be important for managers to understand that superiors prefer subordinates to explain any situation logically to them as a means of gaining recognition. Ineffective use of influence tactics is found to be associated with unfavorable relationships between managers and subordinates. Organizations that effectively promote and manage upward influence through employee empowerment and involvement activities may enjoy greater organizational effectiveness as well as greater employee satisfaction and effectiveness. Since upward influence and the issues of organizational and employee effectiveness are related, increasing our understanding of the upward influence processes is valuable. Organizations should be more involved, through training and development, in helping employees gain valuable skills and knowledge.

Though organizations may want to increase the influence of workers, not all influence attempts may be considered equally appropriate. Thus, organizations that wish to reduce gender-based biases in,

for instance, their performance appraisal systems, may choose to provide raters with thorough information regarding the organizational role in question and provide female managers with the opportunity to use direct influence. These interventions may override potential gender-based biases. In addition, women need to be prepared to take an active role in displaying their competence and effective use of influence behavior when they are given the opportunity to present individuating information to others. These situations might include making a presentation at a business meeting or during one-on-one discussions with supervisors, peers, and subordinates.

To summarize the article we can conclude that certain tactics tend to be used more frequently by men such as rational persuasion tactics, and others, such as ingratiation and exchange tactics are used equally by both male and female managers. This is consistent with the findings of Ansari and Kapoor (1987), and Kipnis et al. (1980), where rational persuasion was rated as the strategy most frequently chosen as far as influencing the immediate superior is concerned. Tactics such as dependency, self-enhancement, or exchange of benefits do not significantly explain the reasons behind the success or failure of a manager. There can be many reasons for this, and one of them can be due to work teams. Now-a-days, more and more people across functions are being asked to work as a unit to produce work and to monitor one another's behaviors. This can further reduce the use of ingratiation and exchange tactics to influence ones' superior as such tactics are easily detected and members do not want to be outcast by other team members. Another reason for this can be based on the findings of DuBrin (1994), who stated that men and women in managerial and professional work roles will continue to move toward similar patterns of influence tactics.

Interaction between managers' success and managers' gender is significant for the usage of rational persuasion but not for ingratiation and exchange tactics. It is proposed that successful male managers use more of rational persuasion tactics such as providing facts and data, using logic, and explaining reasons to influence their superiors for career advancement than the other managers. This is in line with the research conducted in the early 1970s that revealed that men are expected to use more direct and assertive influence behaviors than are women (Johnson, 1976). Perceptions and stereotypes that men use direct forms of influence whereas women choose indirect tactics may, to some extent, reflect true differences between the genders.

Awareness of career success will help individuals make more informed decisions regarding managing their careers and at the same time they will be able to rationally assess their own strengths and weaknesses so as to develop appropriate strategies to enhance their success. Organizations will also be able to identify the real drivers of their valuable employees as well as the development of future executives. It will also allow these organizations in making more informed human resources decision.

REFERENCES

Ansari, M. A. 1990. *Managing people at work: Leadership styles and influence strategies*. New Delhi: Sage.

Ansari, M. A., & Kapoor, A. 1987. Organizational context and upward influence tactics. *Organizational Behavior and Human Decision Processes*, 40, 39-49.

Anderson, L. R., Blanchard, P. N. 1982. Sex Differences in Task and Social

Emotional Behavior. Basic & Applied Social Psychology, 3(2), 109-131.

Carli, L. L. 1989. Gender differences in interaction style and Influence. *Journal of Personality and Social Psychology*, 56, 565-576.

Cowan, G., Drinkard, J., & Mac Gavin, L. 1984. The effects of target, age, and gender on use of power strategies. *Journal of Personality & Social Psychology*, 47, 1391-1398.

DuBrin, A. J. 1991. Sex and gender differences in tactics of influence. *Psychological Report*, 65: 635-646.

DuBrin, A. J. 1994. Sex differences in the use and effectiveness of tactics of impression management. *Psychological Report*, 74: 531-544.

Eagly, A. H., & Johnson, B. T. 1990. Gender and leadership style: A meta analysis. *Psychological Bulletin*, 108, 233-256.

- Falbo, T., & Peplau, L. A. 1980. Power strategies in intimate relationships. *Journal of Personality and Social Psychology*, 38: 618-628.
- Harper, N. L., & Hirokawa, R. Y. 1988. A comparison of persuasive strategies used by female and male managers: An examination of downward influence. *Communication Quarterly*, 36: 157-168.
- Jones, E. E., Stires, L. K., Shaver, K. G., & Harris, V. A. 1968. Evaluation of an ingratiatory by target persons and bystanders. *Journal of Personality*, 36, 349-354.
- Johnson, P. 1976. Women and power: Toward a theory of effectiveness. *Journal of Social Issues*, 32, 99-110.
- Jones, E. E. 1964. *Ingratiation: A social psychological analysis*. New York: Appelton-Century-Crofts.Kipnis.
- Schmidt, S. M. 1988. Upward influence styles: Relationship with performance evaluations, salary, and stress. *Administrative Science Quarterly*, 33,528-542.
- Kipnis, D., Schmidt, S., & Wilkinson, I. 1980. Intraorganizational influence tactics: Exploration in getting one's way. *Journal of Applied Psychology*, 65, 440 452.
- Kipnis, D., & Schmidt, S. M. 1982. *Profile of organizational influence strategies* (Form M), San Diego, C A: University Associates.
- Liden, R. C., & Mitchell, T. R. 1988. Ingratiatory behaviors in organizational settings. *Academy of Management Review*, 13, 572-587.
- Maccoby, E. E. 1988. Gender as a social category. *Development Psychology*, 24, 755-765.
- Mainiero, L. A. 1986. Coping with powerlessness: The relationship of gender and job dependency to empowerment strategy usage. *Administrative psychologist*, 31, 633-653.
- Offerman, L. R., & Kearney, C. T. (1988). Supervisor sex and subordinate influence strategies. *Personality and Social Psychology Bulletin*, 14, 360-367.
- Pandey, J., & Bohra, K. A. 1984. Ingratiation as a function of organizational characteristics and supervisory styles. *International Review of Applied Psychology*, 33, 381-394
- Porter, L., Allen, R., & Angle, H. 1981. The politics of upward influence in organizations. *Research in organizational behavior*, 3, 109-149.
- Piliavin, J. A. & Martin, R. R. 1978. The effects of sex composition of groups on style of social interaction. *Sex Roles*, 4, 281-296.
- Ralston, D. A. 1985. Employee ingratiation: The role of management. *Academy of Management Review*, 10, 477-483.
- Schilit, W., & Locke, E. A. 1982. A study of upward influence in organizations. *Administrative Science Quarterly*, 27, 304-316.
- Schmidt, S. M., & Kipnis, D. 1984. Managers' pursuit of individual and organizational goals. *Human Relations*, 37, 781-794.
- Shankar, A., Ansari, M. A., & Saxena, S. 1998. Development of a measure of ingratiatory behavior in organizations. *Pakistan Journal of Psychological Research*, 13, 13-34.
- Steil, I. M., & Weltman, K. 1992. Influence strategies at home and at work: A study of sixty dual career couples. *Journal of Social & Personal Relationships*, 9, 65-88.
- Wayne, S. J., & Ferris, G. R. 1990. Influence tactics, affect, and exchange quality in supervisor-subordinate interactions: A laboratory experiment and a field study. *Journal of Applied Psychology*, 75, 487-499.
- Wayne, S. J., & Liden, R. C. 1995. Effects of impression management on performance ratings: A longitudinal study. *Academy of Management Journal*, 38, 232-260.
- Whyte, W. H. 1956. *The organization man*. New York: Simon & Schuster.
- Waldron, V. R. 1999. Communication practices of followers, members, and protégés: The case of upward influence tactics. *Communication yearbook* 22. 251-299. Thousand Oaks: Sage Publications.
- Yukl, G. 1994. *Leadership in organizations*. Englewood Cliffs, NJ: Prentice Hall.
- Yukl, G., & Falbe, C. M. 1990. Influence tactics and objectives in upward, downward, and lateral influence attempts. *Journal of Applied Psychology*, 75, 132-140.

Yukl, G., & Tracey, J. B. 1992. Consequences of influence tactics used with subordinate, peers, and the boss. *Journal of Applied Psychology*, 77, 525-535.

Yukl, G., Kim, H., & Falbe, C. M. 1996. Antecedents of influence outcomes. *Journal of Applied Psychology*, 81, 309-317.

Yukl, G. 1998. *Leadership in organizations* (4th edition). Upper Saddle River, NJ: Prentice-Hall.

EMPLOYEE MOTIVATION IN THE HEALTH CARE SECTOR: A COMPARATIVE STUDY BETWEEN PRIVATE AND PUBLIC HEALTH CARE ORGANIZATIONS IN THE UAE

Belal Barhem Hassan Younies United Arab Emirates University E-mail: BELALY@uaeu.ac.ae

E-mail: hassan.younies@uaeu.ac.ae

ABSTRACT

Employee motivation is considered as a core of human resources management in any organization. Proper materialistic and none-materialistic incentives are necessary to motivate employees to perform according to organization goals. Health care workers play a vital role in patients' well-being; hence health care motivation is an important managerial issue for both public and private health care sectors. In general, health care providers can be categorized into two groups based on their financial goals and source of funding. The two categories are a none-for-profit publicly funded organizations (NFP) and a for profit privately funded organizations (FP). In UAE the FP and NFP health care organization operate under similar conditions, such as government regulations, and workforce diversity (health staff with foreign origin). On the other hand, the objectives and source of funds for FP and NFP health care organizations affects management style and decisions. These managerial differences could be operational such as staffing decisions and staff scheduling, or it could be financial. Funding options would impose financial constraints that would affect salaries and compensations and capital investments. These differences, in addition to the differences related to job satisfaction and personal development, such as medical equipments and materials and facilities and support staff availability, would have an impact on health care workers' motivation. The differences would invite different motivational approaches in health care workers in FP and NFP organizations. In our study we will investigate the major factors affecting employee motivation and satisfaction in health care organizations. We will compare, between the incentives available within private and public organizations in UAE. According to the researchers review, no related studies were found in the UAE environment.

INTRODUCTION

Employee motivation is the core job for human resource managers. Satisfied workers are more productive with lower absenteeism and turnover rate. Workers in different sectors possess different levels of knowledge and different skills. Health care workers are among the professional workers sector. They are characterized by being professional with high level of education doing a job with significant value to society. In U.A.E. health care system is divided into private and public sectors. The public sector is a non-profit organization while the private sector is for profit organization. Workers in both sectors work under the same regulation but with different organizational structure, strategies and objectives. These organizational differences would result in different satisfaction levels among workers in both sectors. This study addresses these issues and attempt to compare among motivational levels in both sectors.

LITERATURE REVIEW

Motivation and job satisfaction theories were investigated and suggested in a huge amount of managerial literature. Schermerhorn et al (2003) defined motivation as the individual forces that account for the direction, level, and persistence of a person's effort expended at work. The authors classified the theories of motivation into three broad categories; Reinforcement theories that emphasize the means through which operant conditioning takes place; Content theories that profile different needs that may motivate individual behavior, and Process theories which seek to understand the thought processes that determine behavior

Many motivational studies in health care fields appear in literature, reporting different results. According to Khurshid et al (2005), dissatisfaction leads to high turnover rate among nurses resulting in nurses' shortage. Holland et al (1987) reported that there is a positive relationship between managerial motivation and the size of the hospital, executive compensation, and rapidity of movement to the chief administrative position. Meredith et al. (1983) reported that employee incentive plans are rare in the health care industry due to adverse regulatory factors, such as reimbursement disputes involving Medicare and Medicaid. The paper shows that obstacles to organization wide employee incentives can be overcome via proper program planning and design.

The study by Hayes (1993) revealed ways nurse managers perceive and promote job satisfaction. Hayes study is based on a survey given to senior nurse executives. The first part of the questionnaire was to elicit motivators which satisfy basic and professional needs. Part two of the questionnaire dealt with management's perceptions regarding long-term employees. Twelve respondents agreed that long-term employees have needs for special training, continuing education, and job enrichment. Half of the executives believed that long-term employees were considered strength in their settings. Half also believed that personal characteristics, not institutional reward, contributed mostly to employee vitality. In response to the question of why long-term employees remained, the most common responses included good working relationships, good benefits, and a professional practice environment.

For self-motivated individuals, reward systems are not of paramount importance.

According to Cleverley and Mullen (1982), use of executive incentive systems in the hospital industry could create some sizable cost savings. Nonprofit hospitals, and others barred from offering stock options, could establish generous bonus systems for them. Finally, some evidence of gender differences factors affecting career development is provided by the study conducted by Walsh and Borkowski (1995).

All these previous studies investigated different motivating variables in health care sectors, in different environments. Our study will investigate a set of motivating factors in UAE health care environment, with comparative aspects that have not been explored yet.

RESEARCH METHODOLOGY

The current study is applied study relies mainly on primary data collected through a questionnaire. The questionnaire used in this research, consists of 3 parts and 55 statements. Using a 5-point Likert-type scale (ranging from "strongly disagree" to "strongly agree"), the respondents were asked to respond to each of the statements by indicating whether they agreed or disagreed with them. The respondents were employees working in both private and public health organizations in the UAE. The questionnaire also captured some demographic data of the respondent (age, academic status, years of experience, marital status, gender, nature of the job, number of children, and nationality). The questionnaire covers five different dimensions. These dimensions are: Nature of the job, Organizational support, Leadership style, Career development, and Job clarity.

Hypotheses

H1: There are no differences between job satisfaction level among the health care employees in the private and the public sectors in the UAE.

H2: The following variables related significantly to the job satisfaction level; Nature of the job, Organizational support, Leadership style, Job clarity, and Career development are varied significantly between private and public sectors in the health care organizations in the UAE.

H3: There is a significant relationship between job satisfaction level and personal characteristics in the health care organizations in the UAE.

RESULTS

Reliability Statistics

This study is applied study investigated factors influencing health care employee's satisfaction and motivation in the health care organizations in the UAE. The questionnaire used in this research, consists of 3 parts and 55 statements. Using a 5-point Likert-type scale (ranging from "strongly disagree" to "strongly agree"), the respondents were asked to respond to each of the statements by indicating whether they agreed or disagreed with them. Reliability analysis of the study reported high Reliability Coefficients Alpha as shown in table (1). Cronbach's Alpha scores the highest reliability level in part one of the tools of the study in the public sector; the other reliability tests are also statistically acceptable.

Table 1
Reliability Statistics for the Tool of the Study

Organization	Part	Cronbach's Alpha	N. of Items
Private	1	0.955	37
	2	0.876	6
Public	1	0.958	37
	2	0.91	6
Total sample	1	0.956	37
	2	0.90	6
Overall		0.867	43
sample			

Sampling Frame

The data collected through a questionnaire which distributed randomly in the seven different Emirates in the UAE. Private and public health organizations (total of 18 hospitals) were covered in the operation, and the questionnaires were delivered to a convenient random sample presenting all types of tasks in all levels in the same organization. A total of 377 members participated in the study, 129 from the private sector and 248 from the public sector participated in the study. A couple of private hospitals in Dubai and Al-Ain refused to cooperate with the researchers.

Table (2) presents the respondents profile: 63% were from the public sector, the health care is a major concern for the UAE government, it work hard to develop this service to ensure delivering the highest level of health care to the people, on the other hand, recently the government encouraged the private sector to invest in the health services, 20 new private hospitals expected in the UAE in the next 2 years. The statistics related to the semipublic organizations will be ignored because of the small number of respondents.

Respondents were chosen from the different emirates. These emirates differ in size, wealth, population and business opportunities. Forty eight percent were Arab participants and Asians people in the second place with 22%, most organizations prefer to hire staff from south East Asia and India because they are qualified and cost less. Sixty-eight percent of the respondents were female and the majority of respondents are married and the majority of the respondents are with no children. Levels of education ranged from secondary to postgraduate, the majority were with Bachelors. Sample ages ranged from 25 to over 50 years, but unfortunately a large portion of the respondents (31%) characterized with less than three years working experience. Overwhelmingly, the majority (from both sectors) working in nursing, the second occupation are working as Physician. Respondents' work experience ranged from 3 years to over 12 years with 30% over 12 years. Majority of the organizations are of a size of more than 500 employees.

Table 2 Respondents Profile (N 377)

Profile	Category	Frequency	Percent
	Public	238	63.1
Type	Private	132	35
• •	Semipublic	7	1.9
	< 20 years	14	3.7
	21-25	84	22.3
	26-30 years	97	25.7
Age	31-35 years	64	17
O	36-40 years	41	10.9
	41-50	48	12.7
	> 50 years	29	7.7
	Certificate/diploma	94	24.9
	Professional	52	13.8
E-14:	Bachelors	161	42.7
Education	MD	24	6.4
	Master	35	9.3
	PhD	11	2.9
	<3 years	116	30.8
E	3-5 years	60	15.9
Experience	5-10 years	87	23.1
	>10 years	114	30.2
	Single	135	35.8
Marital	Married	227	60.2
status	Divorced	5	1.3
	Separated	10	2.7
C 1	Male	120	31.8
Gender	Female	257	68.2
	Arab	184	48.8
NT - 42 124	Asians	84	22.3
Nationality	Indians	72	19.1
	Others	37	9.8
	1-2	126	33.4
Children	3-5	86	22.8
Children	6 or more	11	2.9
	No children	154	40.8
	< 100	60	15.9
C:	100-200	63	16.7
Size	200-500	83	22
	More than 500	171	45.4
	Administration	76	20.2
	Physician	80	21.2
ar r	Laboratorial	16	4.2
Task	Nursing	135	35.8
	Technician	35	9.3
	Others	35	9.3

The analysis tools include frequencies, chi-square, and regression analysis to test the assigned hypothesizes. Table (3) presents the means and standard deviations statistics for the job satisfaction level in all dimensions for private and public health care employees in the UAE. The general mean for satisfaction level for all sample members scored a lower level (2.17), and it is in the lower level for private and public sectors (2.33 and 2.1) as well. It is clear that the job satisfaction level related to the investigated variables is not the required level, the materialistic sources seems more important to the health care employees in the UAE. The public sector employees' satisfaction level due to "job clarity" total average is the highest (2.2) and the satisfaction due to career development is the lowest (1.98). While the highest job satisfaction average score in the private sector is (2.49) due to organizational support and the lowest is (2.11) due to nature of the job.

Table 3
Means and Standard Deviations Statistics for the Job Satisfaction Level in All Dimensions for Private and Public Health Care Employees in the UAE

111vate and 1 abne 11cata Care Employees in the CAL									
	Ger	neral		Pri	vate	Public			
Category	N Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation	
Overall Satisfaction	377 2.2281	.74445	139	2.439	0.703	238	2.105	0.742	
Nature of the job	377 2.0928	.67978	139	2.115	0.66	238	2.08	0.692	
Organizational support	377 2.2679	.76829	139	2.482	0.706	238	2.143	0.777	
Leadership style	377 2.0902	.78030	139	2.223	0.762	238	2.013	0.782	
Job clarity	377 2.2759	.74611	139	2.41	0.69	238	2.197	0.768	
Career development	377 2.0902	.81039	139	2.288	0.735	238	1.975	0.831	
General mean	2.1741			2.3261			2.085		

The private sector employees feel that the organizational support is more important than other factors to increase their feeling with job satisfaction, and then the satisfaction related to the general organizational environment. While the employees in the public organizations ranked job clarity first and then organizational support, mostly in the private organizations the leaders work hard to satisfy the employees emotionally to save the cost from one hand and practice it as emotional matching on the other hand because most of them are expatriates. The health care organizations naturally provide the maximum support to enable different staff to perform their duties perfectly.

The first hypothesis: There are no differences between job satisfaction level among the health care employees in the private and the public sectors in the UAE was approved, the two sectors provide a low level of job satisfaction.

The result analysis in table (3) revealed that the influence of the following job satisfaction factors (Overall Satisfaction, Nature of the job, Organizational support, Leadership style, Job clarity, Career development, and General mean) varied between the private and the public sector. These results enable us to test the second hypothesis; the second hypothesis (The following variables related significantly to the job satisfaction level; Nature of the job, Organizational support, Leadership style, Job clarity, and Career development are varied significantly between private and public sectors in the health care organizations in the UAE) also approved.

Analyzing the result analysis in table (4) allow us to test the third hypothesis (There is a significant relationship between job satisfaction level and personal characteristics in the health care organizations in the UAE). Table (4) summarizing the regression analysis for the relationship between the investigated dependent and independent variables for both private and public sectors. In general age and

organizational size are related significantly to the dependent variables more than other variables, while number of children not influencing any of the dependent variables. Job satisfaction level was determined mostly by the age and organizational size of the health care employees. The changes of all dependent variables influenced significantly by one or more independent variables. Leadership styles reported a significant relationship with gender, ethnicity, age, and educational level. More than 16% of the changes in the overall satisfaction (\mathbb{R}^2) are due to the independent variables.

The job satisfaction level of health care employees due to the dependent variables in the public sector is more related to the independent variables investigated in the study. Eighteen-percent of the changes in the overall satisfaction level in the public sector is due to the independent variables while the changes in the same variable in the private sector ($\mathbf{R}^2 = 0.15$) is less caused by the independent variables. On the other hand 19% of the changes in career development in the private sector are due to the independent variables.

Table 4
Regression Analysis for the Relationship between the Dependent and the Independent Variables

	Regression A		erall	Nature			zational	Leade					reer
	Model	satisfa	action	jo	b	sup	port	sty	le	Job c	larity		pment
		Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.
	Gender	0.087	0.087	0.049	0.36	0.125	0.015	0.111	0.039	0.051	0.33	0.065	0.213
	Ethnicity	-0.051	0.348	0.03	0.608	0.062	0.257	-0.074	0.2	0.017	0.765	0.076	0.175
	Age	0.276	0	0.291	0	0.097	0.193	0.188	0.017	0.224	0.004	0.132	0.083
=	Education	-0.083	0.113	-0.009	0.864	-0.069	0.189	-0.123	0.026	-0.092	0.087	-0.067	0.211
era	Marital status	-0.143	0.019	-0.002	0.971	-0.106	0.086	-0.05	0.439	-0.053	0.398	0.057	0.364
General	No. of children	-0.006	0.921	0.08	0.206	-0.032	0.595	-0.022	0.732	-0.002	0.972	0.036	0.562
9	Sector	0.139	0.015	-0.052	0.392	0.122	0.034	0.106	0.08	0.067	0.258	0.075	0.202
	Size	-0.165	0.002	-0.097	0.087	-0.151	0.006	-0.084	0.141	-0.142	0.011	-0.165	0.003
	Type of work	-0.165	0.001	-0.017	0.757	-0.165	0.001	-0.101	0.058	-0.096	0.066	-0.118	0.024
	Experience	0.064	0.364	-0.068	0.361	0.139	0.051	-0.05	0.505	0.062	0.397	0.039	0.595
	\mathbb{R}^2	0.1	164	0.0	62	0.	143	0.0	63	0.1	03	0.1	105
	Gender	0.18	0.006	0.009	0.894	0.234	0	0.162	0.016	0.103	0.125	0.066	0.335
	Ethnicity	-0.112	0.1	0.08	0.269	0.056	0.418	-0.063	0.374	-0.011	0.878	0.096	0.183
	Age	0.245	0.011	0.239	0.019	0.042	0.669	0.098	0.325	0.222	0.027	0.008	0.939
	Education	-0.038	0.575	0.061	0.392	-0.019	0.787	-0.03	0.67	-0.077	0.272	-0.075	0.294
ic	Marital status	-0.09	0.263	0.02	0.81	-0.102	0.215	-0.085	0.311	-0.074	0.381	0.07	0.413
Public	No. of children	0.042	0.58	0.1	0.217	-0.002	0.982	-0.011	0.895	0.037	0.638	0.038	0.637
Д	Sector	-0.175	0.006	-0.175	0.009	-0.137	0.034	-0.159	0.015	-0.116	0.076	-0.152	0.022
	Size	-0.024	0.715	0.026	0.715	-0.016	0.816	-0.109	0.116	0.024	0.731	0.11	0.119
	Type of work	0.106	0.234	-0.088	0.346	0.216	0.019	0.061	0.511	0.116	0.213	0.145	0.125
	Experience	0.18	0.006	0.009	0.894	0.234	0	0.162	0.016	0.103	0.125	0.066	0.335
	\mathbb{R}^2	0.1	-	0.0			143	0.1		0.1)85
	Gender	-0.078	0.379	0.105	0.25	-0.074	0.407	0.018	0.846	-0.028	0.757	0.045	0.603
	Ethnicity	0.075	0.386	-0.009	0.919	0.079	0.368	-0.029	0.739	0.08	0.361	0.069	0.415
	Age	0.29	0.026	0.251	0.059	0.152	0.245	0.196	0.138	0.223	0.089	0.306	0.016
	Education	-0.099	0.279	-0.056	0.55	-0.086	0.351	-0.245	0.009	-0.065	0.486	0.05	0.575
ate	Marital status	-0.208	0.046	0.029	0.784	-0.119	0.257	0.01	0.925	-0.048	0.646	0.082	0.416
Private	No. of children	-0.076	0.471	0.046	0.671	-0.076	0.474	-0.064	0.553	-0.089	0.404	0.001	0.993
4	Sector	-0.009	0.92	-0.022	0.822	0.068	0.472	-0.091	0.342	0.13	0.174	0.04	0.663
	Size	-0.113	0.192	0.008	0.932	-0.125	0.155	0.04	0.655	-0.154	0.083	-0.106	0.213
	Type of work	0.008	0.933	0.11	0.257	-0.059	0.535	0.04	0.681	0.073	0.449	-0.053	0.562
	Experience	0.017	0.89	0.005	0.969	0.048	0.7	-0.163	0.197	-0.018	0.885	-0.132	0.272
	\mathbb{R}^2	0.1	146	0.0	97	0.	126	0.1	05	0.1	17	0.1	188

In the private sector, only three dependent variables (Overall satisfaction, Leadership style, and Career development) are related significantly with the independent variables, while in the public sector all variables were related significantly with the independent variables.

Table (5) summarizes the Cross-tabulation analysis for satisfaction level for the dependent variables for private and public health care employees in the UAE. The table reveals that most of the employees in the public sector feel with medium level of overall satisfaction, nature of the job, organizational support, and leadership style, while the majority of private sector employees feel with medium level of satisfaction related to the nature of the job. In terms of high job satisfaction level, it is

exists in the public sector as a result of job clarity. Similarly, in the private sector, for overall satisfaction, organizational support, leadership style, job clarity, and career development.

Table 5
Cross-tabulation Analysis for Satisfaction Level for the Dependent Variables for Private and Public Health Care Employees in the UAE

Donandant wariahlas			ization	Cominublio	Domoont	Cumulative	Total
Dependent variables		Public	Private	Semipublic	Percent	percent	Total
	Low	54	16	1	18.8	18.8	71
Overall Satisfaction	Medium	105	40	4	39.5	58.4	149
Overall Saustaction	High	79	76	2	41.6	100.0	157
	Total	238	132	7	100.0		377
	Low	48	21	2	18.8	18.8	71
Nature of the job	Medium	123	73	4	53.1	71.9	200
Nature of the job	High	67	38	1	28.1	100	106
	Total	238	132	7	100		377
	Low	57	17	0	19.6	19.6	74
Organizational support	Medium	90	34	4	34	53.6	128
Organizational support	High	91	81	3	46.4	100	175
	Total	238	132	7	100		377
	Low	71	25	3	26.3	26.3	99
Leadership style	Medium	93	50	2	38.5	64.7	145
Leader sinp style	High	74	57	2	35.3	100	133
	Total	238	132	7	100		377
	Low	51	15	1	17.8	17.8	67
Ich clarity	Medium	89	49	1	36.9	54.6	139
Job clarity	High	98	68	5	45.4	100	171
	Total	238	132	7	100		377
	Low	85	21	2	28.6	28.6	108
Career development	Medium	74	50	3	33.7	62.3	127
Career development	High	79	61	2	37.7	100	142
	Total	238	132	7	100		377

Table (6) presenting the Cross-tabulation analysis for satisfaction level for the dependent variables for the organizational sector and Ethnicity for health care employees in the UAE. The analysis revealed that most of the Arab employees in the public sector feel with medium level of overall satisfaction, nature of the job, organizational support, and the same level for leadership style in the private sector too. While the majority of the Asians in the private sector feel with a medium level in most dependent variables. The majority of the Indians employees feel with a high level in the private sector too. The other nationalities reported medium level of job satisfaction due to the factors investigated in both sectors.

Table 6
Cross-tabulation Analysis for Satisfaction Level for the Dependent Variables for Organizational Sector and Ethnicity for Health Care Employees in the UAE

Ethnicity		A	rab	As	sian	Inc	lian	Others	
Organization		Public	Private	Public	Private	Public	Private	Public	Private
	Low	34	6	11	7	5	3	4	0
Overall Satisfaction	Medium	62	8	16	15	12	13	15	4
	High	55	18	8	26	14	20	2	12
	Low	33	2	8	12	6	6	1	1
Nature of the ich	Medium	80	22	15	22	13	21	15	8
Nature of the job	High	38	8	12	14	12	9	5	7
	Low	39	6	11	8	3	2	4	1
Organizational support	Medium	58	8	10	11	15	12	7	3
Organizational support	High	54	18	14	29	13	22	10	12
	Low	45	4	13	12	6	7	7	2
Leadership style	Medium	56	13	13	17	13	14	11	6
	High	50	15	9	19	12	15	3	8
	Low	37	2	9	9	1	3	4	1
Job clarity	Medium	51	15	16	19	10	11	12	4
	High	63	15	10	20	20	22	5	11
	Low	59	8	17	11	5	1	4	1
Career development	Medium	45	9	6	19	12	13	11	9
-	High	47	15	12	18	14	22	6	6

Table (7) summarizing the Cross-tabulation analysis for satisfaction level for the dependent variables for organizational sector and nature of the job for health care employees in the UAE. The Majority of the Administrators in both sectors experiencing a high level of job satisfaction due to the dependent variables investigated in the study. The majority of the Physician in the two sectors also feels with high level of overall job satisfaction, while the majority of the laboratories expressing a medium level as a result of nature of the job. Nursing staff in the public sector experience a medium level of overall satisfaction and a high level in the private sector; the technicians express the same opinion in the two sectors as well as the nursing staff. Nursing staff in both sectors experience a medium level in both sectors. The majority of different employees in both sectors experiencing a medium level of job satisfaction related to nature of the job and the majority of both sectors experiencing a high level of job satisfaction related to organizational support.

In terms of job satisfaction level due to the leadership style, the case is differ according to the profession, in the case of the laboratories in the public sector, we can notice that zero respondent show a high level of satisfaction as well as the case of job satisfaction related to career development. In the contrary of this case, the majority in both sectors experiencing a high level of job satisfaction due to career development.

Table 7
Cross-tabulation Analysis for Satisfaction Level for the Dependent Variables for Sector and Nature of the Job for Health Care Employees in the UAE

-		Admin	istration	Phys	sician		atorial	Nuı	rsing	Technician		Other	
		Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
	Low	6	2	11	3	3	1	26	3	6	2	2	5
Overall Satisfaction	Medium	17	10	19	4	4	4	52	13	9	4	4	5
	High	25	16	28	15	1	1	16	20	3	11	6	13
	Low	7	6	7	2	1	1	28	7	2	2	3	3
Nature of the job	Medium	24	16	36	14	5	5	41	17	12	7	5	14
	High	17	6	15	6	2	0	25	12	4	8	4	6
	Low	6	3	15	2	2	0	28	4	2	1	4	7
Organizational support	Medium	14	6	18	6	4	2	42	11	11	3	1	6
	High	28	19	25	14	2	4	24	21	5	13	7	10
	Low	8	7	15	5	6	3	31	6	7	1	4	3
Leadership style	Medium	14	10	24	7	0	3	46	13	7	8	2	9
	High	26	11	19	10	2	0	17	17	4	8	6	11
	Low	6	4	12	3	1	0	23	4	7	1	2	3
Job clarity	Medium	17	14	18	2	5	2	40	12	4	8	5	11
	High	25	10	28	17	2	4	31	20	7	8	5	9
	Low	14	4	22	0	4	2	32	7	11	0	2	8
Career development	Medium	10	11	15	6	2	4	40	13	4	7	3	9
	High	24	13	21	16	2	0	22	16	3	10	7	6

CONCLUSIONS AND RECOMMENDATIONS

- The general mean for satisfaction level for all sample members scored a lower level (2.17), and it is in the lower level for private and public sectors (2.33 and 2.1) as well. The health authorities in the UAE required implementing a serious new strategy to ensure the development in the HR aspect in this sector. It is not enough to provide the latest technology and equipment in the health care service to guarantee the excellent service. The employees who work on this technology need to feel satisfy, otherwise their performance will not be according to standards, and the results will be reflected on the patients. TRADE UNIONS
- The public sector employees' satisfaction level due to "job clarity" total average is the highest (2.2) and the satisfaction due to career development is the lowest (1.98). The UAE government can issue new rules to provide the proper tools to develop the public health care employees. It is a fact that the majority of public health employees are foreigners; and the government rules direct HR development to the local employees. The government needs to play a role in developing the none-locals employees. In addition, the other satisfaction dimensions need to be taken in consideration.
- The highest job satisfaction average score in the private sector is (2.49) due to organizational support and the lowest is (2.11) due to nature of the job. The private health sector naturally looking to maximize profit by assigning different task to the same employee. Specialization is very important in the health services, and the reward and recognition should be linked to the nature of responsibilities attached with the job.
- The employees in the public organizations ranked job clarity first and then the organizational support.
- The influence of the following job satisfaction factors (overall satisfaction, nature of the job, organizational support, leadership style, job clarity, career development, and general mean) varied between the private and the public sector. The nature of the health services in the public or private sectors should be the same, which means that the satisfaction factors in both sectors should not varies widely. The necessary governmental development in the health care rules and regulations in the UAE can override such gap.
- Age and organizational size are related significantly to the dependent variables more than other variables, while number of children not influencing any of the dependent variables.
- Leadership styles reported a significant relationship with gender, ethnicity, age, and educational level.
- The job satisfaction level of health care employees due to the satisfaction factors in the public sector is more related to the personal differences (independent variables) investigated in the study.
- In the private sector, only three dependent variables (overall satisfaction, leadership style, and career development) are related significantly with the personal differences (independent variables), while in the public sector all variables were related significantly with the independent variables.
- Most of the employees in the public sector feel with a medium level of overall satisfaction, nature of the job, organizational support, and leadership style,
- The majority of private sector employees feel with medium level of satisfaction related to the nature of the job.
- Most of the Arab employees in the public sector feel with medium level of overall satisfaction, nature of the job, organizational support, and the same level for leadership style in the private sector too.
- The majority of the Asians in the private sector feel with a medium level in most dependent variables. The health care managers in the UAE can give more attention to the employees from Asian origins to increase their feeling with job satisfaction. However, the majority of the Indians employees feel with a high level in the private sector too. The other nationalities reported medium level of job satisfaction due to the satisfaction factors investigated in both sectors. The results are not concluding to maximize relying on the Indian health care employees, we recommend hiring the qualified staff even it will increase the operation cost.
- The Majority of the Administrators in both sectors experiencing a high level of job satisfaction due to the dependent variables investigated in the study.

- The majority of the Physician in the two sectors also feels with high level of overall job satisfaction, while the majority of the laboratories expressing a medium level as a result of nature of the job.
- Nursing staff in the public sector experience a medium level of overall satisfaction and a high level in the private sector; the technicians express the same opinion in the two sectors as well as the nursing staff.

REFERENCES

Al-Shaikh, F. 2001. Strategic planning process in developing countries: The case of United Arab Emirates business firms. *Management Research News*, 24(12).

Bowen, R. B. 2000. Recognizing and rewarding employees. NY: McGraw Hill.

Bursch, J. & Strander, A. 1999. Well-structured employee reward/recognition programs yield positive results. *HR Focus*, November: 13-15.

Cleverly. W, & Mullen. R. P. 1982. Management incentives systems and economics performance in health care organizations. *Health Care Management Review*, 7(1): 7-8.

Darling, K., Arm, J., & Gatlin, R. 1997. How to effectively reward employees. *Industrial Management*, July/August: 1-4.

Evans, J.R. & Lindsay, W. M. 2003. *The management and control of quality*, 5th edition. NY: Thomson. Hayes, E. 1993. Managing job satisfaction for the long run. *Nursing Management*, 24(1): 65-68.

Holland M., Black C., & Miner J. 1987. Using managerial role motivation theory to predict career success. *Health Care Management Review*. 12 (4): 57-64.

Kamdron, T. 2005. Work motivation and job satisfaction of Estonian higher officials. *International Journal of Public Administration*, 28(13/14): 1211-1240.

Khurshid K., Abd R., Merchant J. & Hirani D. 2005. Registered nurses perception of work satisfaction at a tertiary care university hospital. *Journal of Nursing Management*, 13(1): 32.

Meredith S., & Dennis P. 1983. Resource management - Direct financial incentives to

motivate hospital employees. *Healthcare Financial Management*. 37(7): 26-31.

Schermerhorn. Jr, Hunt J. & Osborn. R. 2003. Organizational behavior. NY: John

Wiley & Sons, Inc.

Tallman, S. & Fladmoe-Lindquist, K. 2002. Internationalization, globalization, and capability-based strategy. *California Management Review*, 45(1): 116-135.

Walsh A., & Borkowski S.1995. Gender differences in factors affecting health care

Administration career development. Hospital and Health Services Administration, 40 (2): 263.

Urichuk, B. 1999. Employee recognition and praise. *The Canadian Manager*, 24 (2): 27-29.

DISTRIBUTIVE JUSTICE, PAY STRUCTURE, AND ATTITUDES AND BEHAVIOUR: A CASE OF MALAYSIAN PUBLIC INSTITUTIONS OF HIGHER LEARNING

Azman Ismail

Universiti Malaysia, Malaysia Email: iazman@fcs.unimas.my

Yusof Ismail

International Islamic University Malaysia

Email: yusof@iiu.edu.my
Mohamed Sulaiman
Universiti Sains Malaysia, Malaysia

Email: sulaiman@usm.my

ABSTRACT

This paper investigates the mediating effect of pay distributive justice in the relationship between pay structure and individual attitudes and behaviors. Survey research method was used to gather data for this study. As a result of the survey method, 583 usable questionnaires were successfully collected from employees who have worked in 7 Malaysian public institutions of higher learning (MPIHE). The outcomes of testing mediating model using a stepwise regression analysis showed that the inclusion of distributive justice into analysis has increased the effect of pay structure on job satisfaction, job commitment and job performance. This result confirms that distributive justice does act as a full mediating variable in the pay system models of MPIHE sample. In addition, the implications of this study to compensation theory and practice, conceptual and methodological limitations, and directions for future research are discussed.

INTRODUCTION

Compensation is a strategic human resource management function (Dessler, 2005; Noe, Hollenbeck, Gerhart & Wright, 2004). It is often viewed as an employer designs and administers the various types of reward systems for paying it employee who perform work or service (Anthony, Perrewe & Kacmar, 1996; Henderson, 2005; Milkovich & Newman, 2005). Traditionally, most employers design pay systems based on job structure (Henderson, 2005; Milkovich & Newman, 2005) whereby non-monetary and monetary rewards are allocated to employees based on cost control and internal equity variables (Gomez-Mejia & Balkin, 1992a, 199b; Lawler, 1990, 1994, 1995; Ledford & Hawk, 2000). Some examples of this pay system are job-evaluation grading structures, payment by time, seniority-based pay progression and service-related benefits. These pay systems are viewed as Taylorist's product, suitable for manufacturingbased industries operating in stable and predictable business conditions, emphasize on pay distribution issues and neglect organization's strategic mission (e.g., innovation and cost leadership) as a direction (Henderson, 2005; Mahoney, 1989a, 1989b; Kanter, 1989). In an era of globalization, many organizations shift their pay systems from a traditional job based pay to person based pay (Lawler, 1994, 1995; Lee, Law & Bobko, 1999; Milkovich & Newman, 2005). Under the new perspective, the fluctuations of pay levels and structures are provided based on organizational business strategy and culture (Gomez-Mejia & Balkin, 1992a, 1992b; Kanter, 1989; Lawler, 1995). Some examples of this pay system are pay for performance, pay for skills, pay knowledge and pay for competency (Maurer, Shulman, Ruwe & Becherer, 1995; Milkovich & Newman, 2005). Many scholars think that pay for person and pay for job are clearly different in terms of rules for distributing reward (Gupta, Ledford, Jenkins & Doty, 1992; Lee, law & Bobko, 1999), but providing the type, level and/or amount of rewards based on employees' performance, skills, ability and knowledge may be a strong factor that attracts, retains and motivates good employees to support organizational and human resource management's strategy and goals (e.g.,

performance, effectiveness, and competitiveness) (Gomez-Mejia & Balkin, 1992a, 1992b; Lawler, 1994, 1995; Henderson, 2005).

LITERATURE REVIEW

Pay structure is recognized as a strategic compensation design feature (Drucker & White, 2000; Henderson, 2005; Milkovich & Newman, 2005). It is often defined as the range of pay rates that are provided for the various types of jobs, skills and/or performance in one organization (Bender, 2003; Blau & Kahn, 2003; Milkovich & Newman, 2005). Pay structure policies consist of three major characteristics: firstly, the number of levels of work which refers to the degree to which pay distributions is strongly influenced by the compressed and egalitarian, or hierarchical, and consecutively increasing like prizes in a golf tournament (Lazear & Rosen, 1981; Mahoney, 1989a, 1989b; Milkovich & Newman, 2005). Under an egalitarian pay distribution, pay structure policies tend to use not many levels, tiers and small pay differentials (e.g., wage compression). The main advantages of using such pay structure systems include improved employee satisfaction, enhanced work team motivation, and increased workers' performance (Bretz & Thomas, 1992). In a hierarchical pay distribution, pay structure policies tend to use many levels, tiers and large pay differentials (e.g., pay tier system) (Lazear & Rosen, 1981; Henderson, 2005; Milkovich & Newman, 2005). Using such pay structure systems may provide opportunity to get higher promotions, and support the recognition of differences in employee skills, responsibilities, and contributions to the organization (Henderson, 2005; Jaques, 1961, 1990). However egalitarian and hierarchical designs set different pay structure systems for employees, these systems can motivate employee behaviors to meet the organization strategy (Henderson, 2005; Milkovich & Newman, 2005).

Secondly, the pay differences between levels refer to the degree of equality or dispersion of rates between job levels. The uniform and divergent pay distributions are strongly influenced by qualifications, working conditions, work responsibilities, valuable inputs, human capital, or individual performance within a single organization (Bloom and Milkovich, 1996; Cowherd & Levine, 1992; Lamb & Moates, 1999; Milkovich & Bloom, 1998). Thirdly, the criteria used to determine the number of levels and size of the pay differentials refer to the reward bases are used to determine pay rates for employees within organizations. For example, most organizations use job based pay (e.g., seniority and/or length of service) and performance based pay (e.g., group and/or individual merits) as a basis for adjusting pays for employees (Lawler, 1994, 1995). Both reward bases have increased employee contributions in organizations for many years (Henderson, 2005; Gomez-Mejia & Balkin, 1992a, 1992b; Meyer, 1975; O'Reily, Main & Crystal, 1988).

There is no one best rule that can be used to allocate pay rates for different jobs, skills and/or performance in all organizations. Studies about pay distribution approach show that the range of pay rates for different jobs, skills and/or performance is often determined based on internal equity variables (e.g., corporate strategy, management philosophy, type of job, and level of productivity) and/or external equity variables (e.g., market product factors, labor supply and demand, and competitors) (Anthony et al., 1996; Milkovich & Newman, 2005). For example, job evaluation and survey are often used by an employer to assess the values of job and market pay conditions (Belcher & Atchinson, 1987; Henderson, 2005; Milkovich & Newman, 2005). Information gathered from both mechanisms will be used to determine the type, level and/or amount of pay according to individuals' job &/or performance; this will invoke individuals' feelings of distributive justice and thus lead to increased job satisfaction, job commitment and job performance (Adams, 1963 & 1965; Cropanzano, Rupp, Mohler & Scminke, 2001; Sweeney & McFarlin, 1993). Based on the evidence, the researchers will further explore the mediating effect of distributive justice in pay structure system.

Hypotheses

Many scholars argue that the socio-cultural differentiations are among the key factors that affect the design of pay structure in organizations (Adams, 1963 & 1965; Aryee, 1999; Homans, 1974; Money & Graham, 1999). For example, one dimension of culture that can have implications for attitudes to pay distribution system is the concept of collectivism and individualism. Collectivism is norm and standard that practice large power distance (e.g., more hierarchical structure and centralized decision making) and emphasize more on group interests, co-operation, loyalty and harmony. Individualism is value and standard that practice low power distance (e.g., less hierarchy and decentralized decision making) and focus more on individual achievement (Chang & Hahn, 2006; Farh, Dobbins & Cheng, 1991; Hofstede, 1991). Under an individualistic culture, equitable pays are determined based on an individual's input-output ratio. For example, Americans perceive fair pay as equity (e.g., pay for performance) (Gomez-Mejia, Welbourne & Wiseman, 2000; Giacobbe-Miller, Miller & Victor, 1998). Under a collectivistic culture, individuals perceive important on the same outcome regardless of his/her contribution. For example, Russians, Japanese, Chinese and Malaysian perceive fair pay as equality (e.g., pays are provided based on tenure, seniority and/or needs) (Aryee, 1999; Money & Graham, 1999; Redding & Wong, 1993; Sulaiman & Mamman, 1996).

The literature suggests that Malaysian tends to reflect collectivism culture. The influence of collectivism culture in Malaysian public sector can be traced in the reports of Malaysian royal commission on salary. In these reports, pay structure of Malaysian public sector has been established based on internal equity variables (the rate for different jobs, qualification and training) as the basis for determining salaries and other rewards (see Aziz Report, 1968; Bain Report, 1956; Benham Report, 1950; Harun Report, 1972; Ibrahim Ali Report, 1975; Mahathir Report, 1976 & 1991; Pekeliling Perkhidmatan Bilangan 4 Tahun 2002; Sheikh Abdullah Report, 1972; Suffian Report, 1967; Watson Report, 1963). Beginning of the early 90s, the fundamental changes in the Malaysian public service sector were implemented to strengthen the traditional job based pay structure by adding merit principles as a criterion to determine extra rewards for high performing employees (Mahathir Report, 1991; Pekeliling Perkhidmatan Bilangan 9 Tahun 1991; Pekeliling Perkhidmatan Bilangan 4 Tahun 2002). This change has been implemented to attract, retain and motivate public employees to enhance the performance of public sector; this achievement will help to achieve the national development strategy and goals (Abdul Halim, August 24, 2006; Azmi, August 4, 2006; Mohd Najib, 1995). In line with these changes, Sulaiman & Mamman (1996) conducted a study about pay preference criteria in Malaysian public sector and found that the majority of employees prefer to use tenure, responsibility and cost of living as criteria to determine their pay differentials. Although performance is perceived as less preferred criterion for determining pay distribution, the employees still have a positive perception that the basis of this reward may be used to complement the collectivistic compensation principles used in the public sector. Empirical evidence supporting the study is limited because of the paucity of research literature in this country (Sulaiman & Mamman, 1996).

In MIHE sector, pay systems are designed and controlled by the stakeholders (i.e. principal or owner of the organization) and administered by the Human Resource Management Departments of the institutions. These departments use a standardized and centralized approach to ensure equity in allocating pay rates to all employees who work in various job classifications in the organizations. Each department has little discretion regarding allocation of pay structure, but this must be done within certain limits determined by the stakeholder (i.e., Public Service Department). The effectiveness of pay systems is often assessed based on public servants' perspectives. For example, public sector academic staff who had worked in the public institutions of higher learning often compared their pays with employees who have held the same positions and/or qualifications in private sector companies (e.g., private universities). As a result of this comparison, they feel that they receive lower pays as compared to their counterparts, and this may decrease their perceptions of distributive justice (Arof & Ismail, 1986; Ahmad Faizal, October 2, 1992; Morris, Yaacob & Wood, 2004), thus lead to decreased job satisfaction (e.g., complaints), job

commitment (e.g., intention to leave) and job performance (e.g., decrease effort) (Ahmad Faizal, 1992; Morris, Yaacob & Wood, 2004).

Recent studies show that distributive justice has emerged as an important issue in pay distributions based on job and/or performance in collectivistic cultures (Chang & Hahn, 2004; Greenberg, 1996, 2003), including Malaysia. A thorough observation shows that the use of both job and performance criteria in the New Remuneration System and Malaysian Remuneration System are strongly initiated by Western (Mahathir Report, 1991; Pekeliling Perkhidmatan educated employees in Malaysian public sector Bilangan 9 Tahun 1991; Pekeliling Perkhidmatan Bilangan 4 Tahun 2002). At the initial stage, the inclusion of performance based pay is perceived to be the factor that initiates conflicts with the traditional collectivistic cultures. After several years of implementing such systems, they are perceived to be a remedy to increase performance of MIHE sector (Mahathir Report, 1991; Morris, Yaacob & Wood, 2004; Pekeliling Perkhidmatan Bilangan 9 Tahun 1991; Pekeliling Perkhidmatan Bilangan 4 Tahun 2002). These findings are consistent with several studies conducted in US university settings. For example, Bloom (1999) conducted a study about the pay gap in the Indiana State University and found that professors who had been promoted in the institution since the beginning of their academic career perceived that they had not received salary adjustment better than the professors who were recently hired by the institution. As a result, this could lead to increase negative perceptions, complaints, and dissatisfaction with job in the institution. Besides that, Mani (2002) studied the Performance Management Program at East Carolina University and found that employees who received outstanding and good rating in their performance appraisal were not provided adequate appropriations of merit pay (e.g., no monetary reward). The program had not invoked employees' feelings of distributive justice and could lead to decreased commitment to organization. Thus, Pfeffer and Langton (1988) investigated the wage system in the 303 US colleges and universities, and found that different wage allocation systems among department members had invoked employees' perception of fairness, which could lead to increased motivation to perform job in the organizations.

The compensation research literature is consistent with Adams' (1963 & 1965) equity theory, which clearly emphasized that an individual's perception of justice about the distribution and change of resources may affect his/her attitude and behavior (deCarufel, 1986; Greenberg, 1996 & 2003; McShane & Von Glinow, 2005; Sweeney & McFarlin, 1993). For example, when employees perceive the interaction between output (e.g., pay rates) and input (e.g., effort) ratio as equitable, this may motivate their satisfaction, commitment and performance. When employees perceive inequity in the interaction between such output and input ratio, this may cause discomfort. When employees perceive other employees are rewarded more for the same effort, they will react negatively (e.g., shirk) to correct the output to input imbalance. Relying on Adam's (1963 & 1965) equity theory, feelings of equity or inequity about pay structures may act as an antecedent of job satisfaction (Bloom, 1999; Janssen, 2000), job commitment (Sturman & Short, 2000; Tang & Sarsfield-Baldwin, 1996) and job performance (Allen & White, 2002; Lee, Locke & Phan, 1997; Pfeffer & Langton, 1988). This theory has been used as a foundation for this study.

Based on the above findings, it seems reasonable to assume that fairness of pay distribution will influence MIHE employees as this feeling influences US employees. Equity theory suggests that if MIHE employees perceive fairness about the type, level and/or amount of pay that they receive from their employers, this may lead to greater job satisfaction, job commitment and job performance. Therefore, it was hypothesized that:

- H1: Distributive justice positively mediates the effect of pay structure on job satisfaction.
- H2: Distributive justice positively mediates the effect of pay structure on job commitment.
- *H3: Distributive justice positively mediates the effect of pay structure on job performance.*

A cross-sectional technique is used as a general guideline to collect data from different organizations at the same time, and that may identify similar and/or different characteristics between organizations (Easterby-Smith, Thorpe & Lowe, 1991; Hussey and Hussey, 1997; Zikmund, 2000). This research design process allowed the researchers to gather data from compensation research literature, the in-depth interviews, the pilot study and the actual survey. Using such methods may gather accurate and less bias data (Cresswell, 1998; Davis, 1996; Sekaran, 2000). At the initial stage in the data collection procedure, in-depth interviews were conducted involving 15 experienced employees who held management and non-management positions in the organizations. Their views were sought to understand pay structure practices, distributive justice and individual attitudes ad behaviors, as well as the relationship between such variables in the organizations. The information was used to develop a survey questionnaire for this study. The second step, a pilot study was conducted involving 20 experienced employees who had worked in the organizations under study. Their feedbacks were used to verify the content of a questionnaire developed for an actual survey. Back translation technique was used to translate the content of questionnaires in Malay and English in order to increase the validity and reliability of the instrument (Hulland, 1999; Wright, 1996).

Measures

The research questionnaire had four sections. Firstly, pay structure had 5 items that were modified from compensation management literature (see Guthrie, 2000; Miceli & Lane, 1991; Tata, 2000; Young, 1999; Williams, 1995). Secondly, distributive justice had 3 items that were modified from pay justice literature (Adams, 1963 & 1965; Folger & Cropanzano, 2001; Skarlicki & Folger, 1997; Milkovich & Newman, 2005, Sweeney & McFarlin, 1993). Thirdly, job satisfaction was measured using a 12-item Overall Job Satisfaction scale developed by Warr, Cook, & Wall (1979). Job commitment was measured using a 4-item Organizational Commitment Scale developed by Mowday, Steers, & Porter (1979). Finally, job performance was measured using a 4-item instrument developed by Lawler and Hall (1970). All of these items were measured using a 7-item scale ranging from "very strongly disagree/dissatisfied" (1) to "very strongly agree/satisfied" (7). In this study, demographic variables were used as a controlling variable because the nature of this focuses on employee attitudes to assess the relationship between variables under study.

Sample

The unit of analysis for this study is employees who have worked in the Malaysia public institutions of higher learning (MPIHE). The website of Ministry of Higher Education says there were 17 public institutions of higher learning (Statistik IPTA, 2006). The researchers contacted all the institutions to obtain official permissions to conduct a survey. Only seven of the institutions in Peninsular Malaysia agreed to participate in this study. In the first step of data collection procedure, the researchers met the division/department heads in the participating higher educational institutions to find out about the rules for distributing survey questionnaires in their divisions/departments. Consequently, 2500 questionnaires were distributed to employees through contact persons (e.g., secretary of department heads, assistant managers and/or human resource managers) of the institutions. Of that total, 583 usable questionnaires were successfully gathered from participants who answered these questionnaires voluntarily and with their consent. The names of participated higher institutions were anonymous in order to avoid intrusiveness. A Statistical Package for Social Science (SPSS) version 14.0 was used to analyze the questionnaire data.

RESULTS

Sample Profile

Table 1 presents the personal characteristics of respondents. In terms of the gender structure, there were a greater number of males (53 percent) than females (47 percent). Less than a quarter (22 percent) of the respondents belongs to 31 to 35 years old age group. A large number of respondents had a

MCE qualification (28 percent). The majority of respondents were supporting staff (52 percent). Most respondents worked in an academic division (65 percent). Respondents who had worked for more than 15 years (28 percent) constitute one third of the sample. The biggest group of respondents served as permanent and confirmed staff (66 percent). The salaries of a quarter of respondents were less than RM1001-1500 (25 percent). Almost all of the respondents were Malaysians (99 percent).

Table 1
Sample Profile in the Malaysian Public Institutions of Higher Learning

Sample Profile	Sub-Profile	Percentage
Gender	Male	53
	Female	47
Age	Less than 25 years	13
8	26 to 30 years	20
	31 to 35 years	22
	36 to 40 years	18
	41 to 45 years	15
	More than 46	12
Education	SRP/LCE	8
Education	SPM/MCE	28
	STP/HSC	4
	Diploma	14
	Bachelor	19
	Master	22
	PhD	5
Position	Professional & Management Group	11
Toblion	Supporting Group	52
	Professor	1
	Associate Professor	4
	Lecturer	29
	Assistant Lecturer	3
Division	Academic	65
Division	Non-Academic	35
Length of Service	Less than 2 years	22
	3 to 5 years	18
	6 to 8 years	16
	9 to 11 years	8
	12 to 14 years	8
	More than 15 years	28
Type of Service	Permanent & Confirmed	66
	Permanent & Probation	20
	Contract	8
	Temporary	6
Salary (Ringgit)	Less than 1000	20
	1001 to 1500	25
	1501 to 2000	14
	2001 to 2500	11
	2501 to 3000	8
	3001 to 3500	7
	3501 to 4000	3
	4001 to 4500	3
	4501 to 5000	2
	5001 to 5500	1
	5501 to 6000	1
	More than 6001	5
Citizenship	Malaysian Citizenship	99
_	Non Malaysian Citizenship	1

Note: SRP/LCE: Sijil Rendah Pelajaran Malaysia/Lower Certificate of Education

SPM/MCE: Sijil Pelajaran Malaysia/Malaysia Certificate of Education

STP/HSC: Sijil Tinggi Pelajaran/Higher School Certificate

Psychometric Assessment for Measurement Scales

The survey questionnaires consist of 36 items, which related to five variables: pay structure (10 items), distributive justice (7 items), job satisfaction (14 items), job commitment (6 items) and job

n=583

performance (6 items). The factor analysis with direct oblimin rotation was done for all variables. Table 2 shows the results of factor analysis process condensed 36 items into 28 items. The Kaiser-Meyer-Olkin (KMO) and the Bartlett's test of sphericity were conducted for each variable. The KMO score for pay structure was 0.625, distributive justice was 0.624, job satisfaction was 0.895, job commitment was 0.674 and job performance was 0.783. These variables were significant in Bartlett's test of sphericity. All variables had eigenvalues larger than 1: pay structure (2.983) with factor loadings in the range of 0.40 to 0.79, distributive justice (1.876) with factor loadings in the range of 0.51 to 0.86, job satisfaction (5.501) with factor loadings in the range of 0.41 to 0.69, and job performance (2.983) with factor loadings in the range of 0.75 to 0.86. The items for each variable had factor loadings of 0.50 and above, indicating they met the acceptable standard of validity analysis (Hair, Anderson, Tatham & Black, 1998). The results of reliability analysis showed that pay structure (alpha=0.70), distributive justice (alpha=0.70), job satisfaction (alpha=0.89), job commitment (alpha=0.74) and job performance (alpha=0.88) had a value of Cronbach alpha of more than 0.63, indicating the variables met the acceptable standard of reliability analysis (Nunally & Bernstein, 1994). Table 2 presents the results of the analysis done on goodness of data.

Table 2
Goodness of Data

Measure	Items	Factor	KMO	Bartlett's Test	Eigenvalue	Variance	Cronbach
		Loadings		of Sphericity		Explained	Alpha
Pay Structure	5	0.40 to 0.79	0.625	838.161, p=.000	2.353	47.060	0.70
Distributive Justice	3	0.51 to 0.86	0.624	350.564, p=.000	1.876	62.533	0.70
Job Satisfaction	12	0.53 to 0.77	0.895	2976.230, p=.000	5.501	45.842	0.89
Job Commitment	4	0.41 to 0.69	0.674	578.447, p=.000	2.247	56.163	0.74
Job Performance	4	0.75 to 0.86	0.783	1422.984, p=.000	2.983	74.586	0.88

Pearson Correlation Analysis and Descriptive Statistics

Table 3 shows that the mean values for the research variables are between 4.8 and 6.1, indicating that the levels of pay structure, distributive justice, job satisfaction, job commitment and job performance are from high (4) to highest level (7). In terms of direct relationship, pay structure positively and significantly correlated with job satisfaction, job commitment and job performance (r=.37, p=.00; r=.33, p=.00; r=.19, p=.00, respectively). These correlations demonstrate that distribution of pay structure according to the institutions' policy and procedures may lead to increased work attitudes and behaviors in MPIHE sample. Thus, the correlation coefficients between the independent variable (i.e., pay structure), the mediating variable (i.e., distributive justice), and the dependent variable (i.e., job satisfaction, job commitment and job performance) were less than 0.90, indicating the data were not affected by a serious co-linearity problem (Hair et al., 1998). These results provide further evidence of validity and reliability for measurement scales used in this research (Barclay, Higgins & Thompson, 1995; Hair et al., 1998).

Table 3
Means, Standard Deviations, and Correlation between Variables

Variable	Mean	Standard Deviation	Pearson C	Pearson Correlation Analysis				
			1	2	3	4	5	
1. Pay Structure	4.8	1.1	1					
2. Distributive Justice	4.9	1.1	.26**	1				
3. Job Satisfaction	5.1	1.0	.37**	.42**	1			
4. Job Commitment	5.2	1.0	.33**	.36**	.55**	1		
5. Job Performance	6.1	1.0	.19**	.20**	.36**	.36**	1	

Note: *p<0.05; **p<0.01= Level of Significance Reliabilities represented on diagonal (value 1) N: 583

The items that had high psychometric properties were used to test the mediating model. Pearson correlation analysis was unable to determine the mediating effect of distributive justice in the hypothesised model. Stepwise regression analysis was recommended to assess the magnitude and direction of each independent variable, and vary the mediating variable in the relationship between many independent variables and one dependent variable (Berenson & Levine, 1992; Foster, Stine & Waterman, 1998). Baron & Kenny (1986) suggest that a mediating variable can be considered when it meets three conditions: first, the predictor variables are significantly correlated with the hypothesised mediator. Second, the predictor and mediator variables are all significantly correlated with the dependent variable. Third, a previously significant effect of predictor variables is reduced to non-significance or reduced in terms of effect size after the inclusion of mediator variables into the analysis (James, Mulaik & Brett, 1982; Wong, Hui & Law, 1995). In this regression analysis, standardized coefficients (standardized beta) were used for all analyses (Jaccard, Turrisi & Wan, 1990).

Outcomes of Testing H1

Outcomes of the regression analysis are summarized in three major steps. The first step showed that age and division positively and significantly correlated with job satisfaction (β =.13, p=.05; β =.14, p=.05), accounting for 5% of the variance in dependent variable. These results demonstrate that division has been an important determinant of job satisfaction. The second step revealed that division and pay structure were found to be significant predictors of job satisfaction (β =.14, p=.00; β =.37, p=.000), accounting for 19 % of the variance in the dependent variable. The inclusion of distributive justice in the third step of the process reveals that distributive justice is a mediating variable for the pay structure and job satisfaction relationships in the sample (β =.31, p=.000). In the second step (before the inclusion of distributive justice into the analysis) pay structure was significantly correlated with job satisfaction (β =.37, p=.000). As shown in the third step (after the inclusion of distributive justice into the analysis), the previous significant relationship between pay structure and job satisfaction did not change to non significant (β =.29, p=.00). However the strength of such relationships has decreased. This result confirms the mediating role of distributive justice in the relationship between pay structure and job satisfaction.

Table 4
Stepwise Regression Results for Job Satisfaction as a Dependent Variable

Independent Variable	Dependent Variable (Job Satisfaction)				
	Step 1	Step 2	Step 3		
Controlling Variable					
Sex	05	05	02		
Age	.13*	.11	.10		
Education	07	01	.05		
Position	07	02	.01		
Division	.14**	.14**	.12**		
Length of Service	09	02	02		
Type of Service	.08	.08	.06		
Salary	.05	07	07		
Citizenship	04	03	00		
Response and Mediating Variables		.37***	.29***		
Pay Structure		.37	.29***		
Distributive Justice			.31***		
R Squared	.05	.19	.27		
Adjusted R ²	.04	.17	.25		
F	3.64***	13.23***	18.70***		
R Square Change	.05	.13	.08		
F Change R ²	3.64***	94.22***	59.84***		

Note: *p<0.05; **p<0.01; ***p<0.001

Outcomes of Testing H2

Table 5 presents the outcomes of stepwise regression analysis for job commitment as the dependent variable. Outcomes of the regression analysis are summarized in three major steps. The first step showed that age and type of service positively and significantly correlated with job commitment (β =.20, p=.00; β =.16, p=.00) whereas citizenship negatively and significantly correlated with job commitment (β =-.12, p=.01), accounting for 8% of the variance in dependent variable. These results demonstrate that such respondent characteristics have been an important determinant of job commitment. The second step revealed that age, type of service, citizenship and pay structure were found to be significant predictors of job commitment (β =.18, p=.00; β =-.16, p=.001; β =-.10, p=.01; β =.33, p=.000), accounting for 18 percent of the variance in the dependent variable. The inclusion of distributive justice in the third step of the process reveals that distributive justice is a mediating variable for the pay structure and job commitment relationships in the sample (β =.24, p=.000). In the second step (before the inclusion of distributive justice into the analysis) pay structure was significantly correlated with job commitment (β =.33, p=.000). As shown in the third step (after the inclusion of distributive justice into the analysis), the previous significant relationship between pay structure and job commitment did not change to non significance

 $(\beta=.26, p=.000)$. However, the strength of such relationships has decreased. This result confirms the mediating role of distributive justice in the relationship between pay structure and job commitment.

Table 5
Stepwise Regression Results for Job Commitment as a Dependent Variable

Independent Variable	Dependent Variabl	e (Job Commitmer	nt)
	Step 1	Step 2	Step 3
Controlling Variable			
Sex	03	03	01
Age	.20**	.18**	.17**
Education	03	.02	.06
Position	13**	09	06
Division	.07	.07	.06
Length of Service	10	04	04
Type of Service	.16**	.16***	.14**
Salary	.01	10	09
Citizenship	12**	10**	08*
Response and Mediating Variables Pay Structure		.33	.26***
Distributive Justice			.24***
R Squared	.08	.18	.23
Adjusted R ²	.06	.17	.21
F	5.29***	12.56***	15.27***
R Square Change	.08	.10	.05
F Change R ²	5.29***	72.12***	34.88***

Note: *p<0.05; **p<0.01;***p<0.001

Outcomes of Testing H3

Table 6 presents the results of stepwise regression analysis for job performance as the dependent variable.

Table 6
Stepwise Regression Results for Job Performance as a Dependent Variable

Independent Variable	Dependent Variabl	Dependent Variable (Job Performance)				
	Step 1	Step 2	Step 3			
Controlling Variable						
Sex	.07	.06	.08			
Age	.04	.03	.02			
Education	.03	.06	.08			
Position	13*	11*	09			
Division	.10*	.10*	.09			
Length of Service	.01	.04	.04			
Type of Service	.10	.10	.09			
Salary	.10	.04	.04			
Institutions	05	05	03			
Response and Mediating Variables		.17***	.13**			
Pay Structure		.17	.13			
Distributive Justice			.15***			
R Squared	.04	.07	.08			
Adjusted R ²	.02	.05	.07			
F	2.40**	3.99***	4.79***			
R Square Change	.04	.03	.02			
F Change R ²	2.40**	17.65***	12.04***			

Note: *p<0.05; **p<0.01; ***p<0.001

Outcomes of the regression analysis are summarized in three major steps. The first step presents the results of regression analysis that division and type of service positively and significantly correlated with job performance (β =-.13, p=.12; β =.10, p=.04), accounting for 4% of the variance in dependent variable. These results demonstrate that such respondent characteristics have been an important factor that may increase job performance. The second step revealed that position, division, and pay structure were found to be significant predictors of job performance (β =-.11, p=.05; β =.10, p=.04; β =.17, p=.000), accounting for 7% of the variance in the dependent variable. The inclusion of distributive justice in the third step of the process, reveals that distributive justice is a mediating variable for the pay structure and job performance relationships in the sample (β =.15, p=.001). In the second step (before the inclusion of distributive justice into the analysis) pay structure was significantly correlated with job performance (β =.17, p=.000) as shown in the third step (after the inclusion of distributive justice into the analysis), the previous significant relationship between pay structure and job satisfaction did not change to non significant (β =.13, p=.00). However, the strength of such relationships has decreased. This result confirms the mediating role of distributive justice in the relationship between pay structure and job performance.

DISCUSSION

The findings of this study confirm that distributive justice does act as a full mediator in the pay system models of MPIHE sector. In the higher educational sector, HR managers and/or managers use the policy and procedures set up by the stakeholders to determine pay rates to employees who work in different work groups. From employees' perspective, the majority perceive that their employers have determined the appropriate types, levels and/or amounts of pay based on their contributions (as described in Table 3, mean value for pay structure is 4.8). These employees perceive that justice about the pay structures is determined by their employers (as described Table 3, mean value for distributive justice is 4.9). When employees' perceptions of distributive justice are high, this may lead to increased job satisfaction, job commitment and job performance in MPIHE sector.

The implications of this study can be classified into three categories: theoretical contribution, robustness of research methodology, and practical contribution. In terms of theoretical contribution, the findings of this study advocate that the effect of pay structure on individual attitudes and behaviors (i.e., job satisfaction, job commitment and job performance) is indirectly influenced by feelings of distributive justice. These findings have provided a great potential to understand the notion of distributive justice in the pay system models of MPIHE sector, as well as supported and extended previous research conducted in US countries (see Adams, 1963 & 1965; Bloom 1999; Pfeffer & Langton, 1988). With respect to the robustness of research methodology, the data gathered from compensation management literature, the indepth interviews and the survey questionnaire have satisfactorily met the requirements of validity and reliability which can lead to the production of accurate findings.

In terms of practical contributions, the findings of this study may be used by human resource practitioners to improve the design and administration of pay structures in organizations. In order to improve the design and administration of pay structure, human resource practitioners need to consider several strategies. Firstly, pay structures should be designed based on multiple criteria, such as (1) the nature of work, workloads and work difficulties, (2) qualifications and experiences, (3) group and individual performance), (4) costs of living allowances (e.g., basic necessity expenses) and (5) other competitors' pays. Distributing pays using these criteria may increase employees' appreciations and acceptance of the pay structures in organizations. Secondly, adequacy of monetary rewards (e.g., levels of salary, bonus and pay rise) and benefit entitlements (e.g., leave, health care, children education, traveling allowances, and retirement plans) should be adjusted according to current external and internal organizational changes. Adjusting pay structures according to these variables may increase the type, level and/or amount of rewards for employees who work in different jobs, skills and/or performance. As a result, it may help employees to meet basic needs, and improve standards of living and life styles in society.

Finally, the contents of compensation training for HR managers and/or managers need to be renewed according to current organizational changes. Using updated training contents will increase the capabilities of HR managers and/or managers to link compensation system to other aspects of business (e.g., finance, marketing and business development) and human resource development and management issues (e.g., human resource planning, performance appraisal, career development). This may increase the competencies of HR managers and/or managers to use the rules of distributing various types, levels and/or amounts of pays for different kinds of jobs, skills and/or performance in the organizations. Considering the above suggestions will invoke employees' feelings of justice about pay structure allocations, this may lead to increased positive subsequent individual attitudes and behaviors such as increase satisfaction, commitment and performance, as well as decrease dissatisfaction, turnover, and deviant behaviors in organizations.

CONCLUSIONS

The conclusion drawn from the results of this study should consider the limitations below. Firstly, this study was a cross-sectional research design where the data were taken one time within the duration of this study. This research design did not capture the developmental issues (e.g., intra-individual change and restrictions of making inference to participants) and/or causal connections between variables of

interest. Secondly, this study only examines the relationship between latent variables (i.e., pay structure, distributive justice, job satisfaction, job commitment and job performance) and the conclusion drawn from this study does not specify the relationship between specific indicators for the independent variable, mediating variable and dependent variable. Thirdly, the outcomes of multiple regression analysis have focused on the level of performance variation explained by the regression equations and it is also helpful to indicate the amount of dependent variable variation not explained (Tabachnick & Fidell, 2001). Although a substantial amount of variance in dependent variable explained by the significant predictors is identified, there are still a number of unexplained factors that can be incorporated to identify the causal relationship among variables and their relative explanatory power. Therefore, one should be cautious about generalizing the statistical results of this study. Finally, the sample for this study was taken from one organizational sector that allowed the researchers to gather data via survey questionnaires. The nature of this sample may decrease the ability to generalize the results of this research to other organizational settings.

The conceptual and methodological limitations of this study need to be considered when designing future research. Firstly, this study sets a foundation for research on relationships between pay structure, distributive justice, job satisfaction, job commitment and job performance. It has raised many questions as well as confirming initial propositions. A few research areas can be further explored as a result of this study. Secondly, the organizational and personal characteristics as a potential variable that can influence fairness of pay structure needs to be further explored. Using these organizational (e.g., division and type of institution) and personal (e.g., age, position and type of service) characteristics may provide meaningful perspectives for understanding of how individual similarities and differences affect pay structure policies within an organization. Thirdly, the cross-sectional research design has a number of shortcomings, and therefore, other research designs such as longitudinal studies should be used as a procedure for collecting data and describing the patterns of change and the direction and magnitude of causal relationships between variables of interest. Fourth, the findings of this study rely very much on the sample taken from the MPIHE. To fully understand the effect of pay structure on individual attitudes and behaviors via its impact upon feelings of distributive justice, more organizational sectors (e.g., multinational companies, local companies, and government linked companies) need to be used as a pay referent in future study. Fifthly, as an extension of the distributive justice studies, the theoretical constructs of procedural justice and inter-actional justice need to be considered in future research because it has been widely recognized as an important link between pay structure and individual attitudes and behaviors. For example, perceptions of fairness about the process and systems of distributing pays and managers' treatments may strongly induce positive personal outcomes such as decrease job dissatisfaction, intention to leave organization as well as increase job performance (Greenberg, 1996, 2003; McGrath, 1994; Skarlicki & Folger, 1997; Summer & Miller, 2000). Finally, other personal outcomes of distributive justice such as turnover and deviant behaviors should be considered in future research because they are given more attention in considerable compensation research literature (see Sweeney & McFarlin, 1993; Tang & Chiu, 2003; Tang, Kim & Tang, 2000). The importance of these issues needs to be further explained in future research.

REFERENCES

Abdul Halim, Y. 2006. *Insentif khas pensyarah IPTA. Berita Harian*. Available at http://www.bharian.com.my/m/Bharian/Saturday/Nasional/20060819003434/Article/ (Accessed August 24, 2006)

Adams, J.S. 1963. Towards an understanding of inequity. *Journal of Abnormal and Social Psychology*, 67: 422-436.

Adams, J.S. 1965. Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology*, 2: 267-299. NY: Academic Press.

Ahmad Faizal, F. 1992. JPA punca pensyarah berhenti. Berita Harian. Available at

http://archives.emedia.com.my/bin/main.exe?state=in3u9t.1.1&f=arctoc&p_toc=archt (Accessed October 2, 1992).

Allen, R.S., & White, C.S. 2002. Equity sensitivity theory: A test of responses of two types of underreward situations. *Journal of Managerial Issues*, 14 (4): 435-152.

Anthony, W.P., Perrewe, P.L., & Kacmar, K.M. 1996. *Strategic human resource management*. NY: Harcourt Brace & Company.

Arof, R., & Ismai, N.A.R. 1986. Crisis in the university discipline. Paper presented at the *Seminar on Higher Education in Malaysia: A Reevaluation*, Kuala Lumpur, Malaysia.

Aryee, S. 1999. An examination of the moderating influence of breadwinner role salience on the pay-life satisfaction relationship. *Human Relations*, 52 (10): 1279-1290.

Barclay, D., Higgins, C., & Thompson, R. 1995. The partial least square (PLS) approach to causal modeling: Personal computer adoption and use as an illustration. *Technology Studies*, 2 (2): 285-309.

Baron, R.M., & Kenny, D.A. 1986. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51 (61): 1173-1182.

Belcher, D.W., & Atchison, T. 1987. *Compensation administration*. NJ: Prentice Hall Englewood Cliffs. Bender, K.A. 2003. Examining equality between public and private sector wage distributions. *Economic Enquiry*, 41(1): 62-80.

Berenson, L.M., & Levine, D.M. 1992. *Basic business statistics: Concepts and applications*. NJ: Prentice Hall Englewood Cliffs.

Blau, F.D., & Kahn, L.M. 2003. Understanding international differences in the gender pay group. *American Economic Review*, 21 (1): 106-145.

Bloom, M. (1999). The performance effects of pay dispersion on individuals and organizations. *Academy of Management Journal*, 42 (1): 25-40.

Bloom, M., & Milkovich, G.T. 1998. The relationship between risk, incentive pay, and organizational performance. *Academy of Management Journal*, 41 (3): 283-297.

Bretz, R.D., & Thomas, S.L. (1992). Perceived equity, motivation, and final-offer arbitration in major league baseball. *Journal of Applied Psychology*, 77: 280-287.

Chang, E., & Hahn, J. 2004. Does pay-for-performance enhance perceived distributive justice for collectivistic employees? *Personnel Review*, 35 (4): 397-412.

Cresswell, J.W. 1998. *Qualitative inquiry and research design: Choosing among five traditions*. London: SAGE Publications.

Cropanzano, R., Rupp, D.E., Mohler, C.J., & Schminke, M. 2001. Three roads to organizational justice. In G.R. Ferris (Ed.), *Research in personnel and human resources management*, 20: 269-329. NY: JAI Press.

Cowherd, D.M., & Levine, D.I. 1992. Product quality and pay equity between lower-level employees and top management: An investigation of distributive justice theory. *Administrative Science Quarterly*, 37: 302-320.

Davis, D. 1996. Business research for decision making. Belmont: Duxbury Press.

Dessler, G. 2005. Human resource management. Upper Saddle River, NJ: Pearson Education, Inc.

deCarufel, A. 1986. Pay secrecy, social comparison, and relative Deprivation in Organizations. In J.M. Olson, C.P. Herman, & M.P. Zanna (Ed.). *Relative deprivation and social symposium*, 4: 181-199. Hillsdale, NJ: Lawrence Erlbaum.

Drucker, J., & White, G. 2000. The context of reward management. In G. White & J. Drucker (Ed.) *Reward management: A critical text*. London: Routledge Studies in Employment Relations.

Easterby-Smith, M., Thorpe, R., & Lowe, A. 1991. *Management Research: An Introduction*. London: Sage Publications.

Foster, D.P., Stine, B., & Waterman, R. 1998. *Business analysis using regression: A casebook*. Verlag, Springer.

Gomez-Mejia, L.R., & Balkin, D.B. 1992a. *Compensation, organizational strategy, and firm performance*. Cincinnati, OH: South Western Publishing Co.

Gomez-Mejia, L.R. & Balkin, D.B. (1992b). The determinants of faculty pay: An agency theory perspective. *Academy of Management Journal*, 35 (5), 921-955.

Gomez-Mejia, L.R., Welbourne, T.M., & Wiseman, R.M. 2000. The role of risk sharing and risk taking under gainsharing. *Academy of Management Review*, 25 (3): 492-507.

Giacobbe-Miller, J.K., Miller, D.J., & Victorov, V.I. 1998. A comparison of Russian and U.S. pay allocation decisions, distributive justice judgements, and productivity under different payment conditions. *Personnel Psychology*, 51(1): 137-364.

Greenberg, J. 1996. *The quest for justice on the job: Essays and experiments*. Thousand Oaks, CA: Sage.

Greenberg, J. 2003. Creating unfairness by mandating fair procedures: The hidden words of a pay-for-performance plan. *Human Resource Management Review*, 13: 41-57.

Gupta, N., Ledford, G.E., Jenkins, G.D., & Doty, D.H. 1992. Survey-based prescriptions for skill-based pay. *ACA Journal*, 1(1): 50-61.

Guthrie, J.P. 2000. High involvement work practices, turnover, and productivity: Evidence

from New Zealand. Academy of Management Journal, 44 (1): 180-190.

Hair, J.F., Anderson, R.E., Tatham, R.L., & Black, W.C. 1998. *Multivariate data analysis*. New Jersey: Prentice-Hall International, Inc.

Harun Report. 1972. *Report of the royal commission on the remunerations and conditions of service in local authorities and statutory authorities*. Unpublished report, Public Services Department, Malaysia.

Henderson, R.I. 2005. Compensation management in a knowledge based-world. NJ: Prentice-Hall.

Hofstede, G. 1991. Cultures and organizations: Software of the mind. NY: McGraw-Hill.

Homans, G.C. 1974. Social Behavior in its Elementary Forms. NY: Harcourt, Brace and World.

Hulland, J. 1999. Use of partial least square (PLS) in strategic management research: A review of four recent studies. *Strategic Management Journal*, 20 (2): 195-204.

Hussey, J., & Hussey, R. 1997. Business research: A practical guide for undergraduate and postgraduate students. London: Macmillan Press Ltd.

Ibrahim Ali Report. 1975. *Revised report of the royal salaries commission*. Unpublished report, Public Services Department, Malaysia.

Jaccard, J., Turrisi, R., & Wan, C.K. 1990. *Interaction effects in multiple regression*, 72, Newsbury Park, California: SAGE Publications, Inc.

Jacques, E. 1961. *Equitable payment*. London: Heinemann.

James, L.R., Mulaik, S.A., & Brett, J.M. 1982. *Causal analysis: Assumptions, models and data*. Beverly Hills, California: Sage.

Jaques, E. 1990. In praise of hierarchies. Harvard Business Review, 68 (1): 127-33.

Janssen, O. 2000. Job demands, perceptions of effort-reward fairness and innovative work behavior. *Journal of Occupational and Organizational Psychology*, 7 (3): 287-308.

Kanter, R.M. 1989. When giants learn to dance mastering the challenges of strategy, management and careers in the 1990s. London: Routledge.

Lamb, S.W., & Moates, W.H. 1999. A model to address compression inequalities in faculty salary. *Public Personnel Management*, 28 (4): 689-700.

Lawler, E.E. 1990. *Strategic pay: Aligning organizational strategies and pay systems*. San Francisco: Jossey-Bass.

Lawler, E.E. 1994. From job-based to competency-based organizations. *Journal of Organization Behavior*, 15: 3-15.

Lawler, E.E. 1995. The new pay: A strategic approach. *Compensation & Benefits Review*:14-22.

Lawler, E.E., & Hall, D.T. 1970. Relationship of job characteristics to job involvement, satisfaction and intrinsic motivation. *Journal of Applied Psychology*, 54: 305-312.

Lazear, E., & Rosen, S. 1981. Rank-Order Tournaments as Optimum Labor Contracts. *Journal of Political Economy*, 89: 841-864.

Ledford, G.E., & Hawk, E.J. 2000. Compensation strategy: A guide for senior managers. *ACA Journal*, 9 (1): 28-38.

Lee, C., law, K., & Bobko, P. 1999. The importance of justice perceptions on pay effectiveness: A two-year study of a skill-based pay plan. *Journal of Management*, 25 (6): 851-873.

Lee, T.W., Locke, E.A., & Phan, S.H. 1997. Explaining the assigned goal-incentive interaction: The role of self-efficacy and personal goals. *Journal of Management*, 23 (4): 541-560.

Mahoney, T.A. 1989a. Employment compensation planning and strategy. In L.R. Gomez-Mejia (Ed.). *Compensation and benefits*: 1-28. Washington, D.C: Bureau of National Affairs.

Mahoney, T.A. 1989b. Multiple pay contingencies: Strategic design of compensation. *Human Resource Management*, 28 (3): 337 - 47.

Mani, B.G. 2002. Performance appraisal systems, productivity, and motivation: A case study. *Public Personnel Management*, 31 (2): 141-160.

Maurer, J.G., Shulman, J.M., Ruwe, M.C., & Becherer, R.G. (1995). *Encylopedia of business*. New York: Gale Research.

McGrath, T.C. 1994. How three screw machine companies are tapping human productivity through gain sharing. *Employment Relations Today*, 20 (4): 437-447.

Meyer, H.H. 1975. The pay for performance dilemma. *Organizational Dynamics*, 3 (3): 39-50.

McShane, S.L., & Von Glinow, M.A. 2005. *Organizational behavior: Emerging realities for the workplace revolution*. Burr Ridge, Illinois: McGraw-Hill/Irwin.

Miceli, M.P., & Lane, M.C. 1991. Antecedents of pay satisfaction: A review and extension. *Research in Personnel Resources Management*, 9: 235-309.

Milkovich, G.T, & Newman, J.M. 2005. Compensation. Boston: Irwin McGraw-Hill.

Milkovich, G.T., & Bloom, M.C. 1998. Rethinking International Compensation. *Compensation and Benefits Review*, 30 (1): 15-23.

Mahathir Report. 1976. Report on the Cabinet Committee appointed by Cabinet to examine

royal salaries commission, Vol. I & II on the remuneration and terms and conditions of service in the public sector. Unpublished report, Public Services Department, Malaysia.

Mahathir Report. 1991. Report of the special committee of the Cabinet on salaries for the

public sector (a translated version). Unpublished report, Public Services Department, Malaysia.

Mohd. Najib, A.R. 1995. Rang undang-undang Universiti Dan Kolej Universiti (pindaan)

1995, bacaan kali yang kedua dan ketiga di Dewan Rakyat. Kertas kerja tidak diterbitkan, Parlimen Malaysia.

Money, R.B., & Graham, J.L. 1999. Salesperson performance, pay and job satisfaction: Test of a model using data collected in the United States and Japan. *Journal of International Business Studies*, 30: 149-172.

Morris, D., Yaacob, A., & Wood, G. 2004. Attitudes towards pay and promotion in the Malaysian higher educational sector. *Employee Relations*, 26 (2): 137-150.

Mowday, R.T., Steers, R.M., & Porter, L.W. 1979. The measurement of organizational commitment. *Journal Vocational Behavior*, 14: 224-247.

Noe, R.A., Hollenbeck, J.R., Gerhart, B., & Wright, P.M. (2004). *Fundamentals of human resource management*. New York: McGraw-Hill Companies, Inc.

Nunally, J.C., & Bernstein, I.H. 1994. *Psychometric theory*. New York: McGraw-Hill.

O'Reily, C., Main, B.S., & Crystal, G. 1988. CEO compensation as tournaments and social comparisons: A tale of two theories. *Administrative Science Quarterly*, 33: 257-274.

Pekeliling perkhidmatan bil. 9 tahun. 1991. *Pelaksanaan Sistem Saraan Baru berdasarkan laporan Jawatankuasa Khas Kabinet mengenai gaji sektor awam 1991*. Jabatan Perkhidmatan Awam Malaysia. Pekeliling perkhidmatan bilangan 4 tahun 2002. *Jabatan Perkhidmatan Awam Malaysia*.

Sheikh Abdullah Report. 1972. Report of the commission set up to review the pay, allowances, pensions, gratuities and other terms of service of members of the Malaysian armed forces, Unpublished report, Public Services Department, Malaysia.

Pfeffer, J., & Langton, N. 1993. The effects of wage dispersion on satisfaction, productivity, and working collaboration: Evidence from a college and university faculty. *Administrative Science Quarterly*, 38: 382-407.

Redding, G., & Wong, Y.Y. 1993. The psychology of Chinese organizational behavior. In T.D. Weinshall (Ed). *Societal culture and management*: 243-270. Berlin: Walter de Gruyter.

Sekaran, U. 2000. *Research methods for business: A skill building approach*. NY: John Wiley & Sons, Inc.

Skarlicki, D., & Folger, R. 1997. Retaliation in the workplace: The roles of distributive, procedural, and interactional justice. *Journal of Applied Psychology*, 50: 617-633.

Statistik IPTA. 2006. *Kementerian Pengajian Tinggi Malaysia*. Available at http://www.mohe.gov.my/info_kpt_senarai.php?navcode=NAV004&subcode=SUB001 (Accessed July 27, 2006).

Sturman, M.C., & Short, J.C. 2000. Lump-sum bonus satisfaction: Testing the construct validity of a new pay satisfaction dimension. *Personnel Psychology*, 53 (3): 673-700.

Suffian Report. 1967. Report of the Royal Commission on the review of salaries and conditions of service in the public services. Unpublished report, Public Services Department, Malaysia.

Sulaiman, M., & Mamman, A. 1996. Managerial attitudes to pay system in the Malaysian public sector. *Malaysian Management Review*, 31 (1): 29-43.

Summer, T.P., & Miller, J.L. 2000. Intra-and inter-justice relationships: Assessing the direction. *Human Relations*, 53 (10): 329-1347.

Sweeney, P.D., & McFarlin, D.B. 1993. Workers' evaluation of the "ends" and the "means": An examination of four models of distributive and procedural justice. *Organisational Behavior and Human Decision Processes*, 55: 23-49.

Tabachnick, B.G., & Fidell, L.S. 2001. *Using multivariate statistics*. Sydney: Allyn & Bacon.

Tang, T.L.P, & Chiu, R.K. 2003. Income, money ethic, pay satisfaction, commitment, and unethical behavior: Is the love of money the root of evil for Hong Kong employees? *Journal of Business Ethics*, 46 (1): 13-23.

Tang, T.L.P., & Sarsfield-Baldwin, L.J. 1996. Distributive and procedural justice as related to satisfaction and commitment. *S.A.M. Advanced Management Journal*, 61 (3): 25-32.

Tang, T.L.P., Kim, J.K., & Tang, S.H. 2000. Does attitudes toward money moderate the relationship between intrinsic job satisfaction and voluntary turnover. *Human Relations*, 52 (2): 213-245.

Tata, J. 2000. Influence of role and gender on the use of distributive versus procedural justice principles. *The Journal of Psychology*, 134 (3): 261-268.

Warr, P.B., Cook, J., & Wall, T.D. 1979. Scales for the measurement of some work attitudes and aspects of psychological well-being. *Journal of Occupational Psychology*, 52: 129-148.

Watson Report. 1963. Report of the commission to examine the structure of the public services of Sarawak and North Borneo. Unpublished report, Public Services Department, Malaysia.

Wright, L.L. 1996. Qualitative international management research. In B.J. Punnett & O. Shenkar (Ed). *Handbook for international management research*: 63-81. Oxford, UK: Blackwell Publishers Inc.

Williams, M.L. 1995. Antecedents of employee benefit level satisfaction: A test of a Model. *Journal of Management*, 21 (6): 1097-1128.

Wong, C., Hui, C., & Law, K.S. 1995. Causal relationships between attitudinal antecedents to Turnover. *Academy of Management Journal*: 342-346.

Young, I.P. 1999. Salary discrimination: A test of the paradoxical female hypothesis. *Educational Administration Quarterly*, 35 (3): 379-397.

Zikmund, W.G. 2000. Business research methods. Fort Worth: The Dryden Press.

Offshore Staffing in the Asia-Pacific Region: Financial, Administrative, and Regulatory Impacts on Location Attractiveness

Stan Malos San Jose State University, USA Email: malos_s@cob.sjsu.edu

ABSTRACT

The practice of offshoring—staffing all or part of a business outside the home country—has proliferated to such an extent that the question for most multinational corporations (MNCs) is where, not if, some aspect of their labor force should be located across geopolitical borders. It remains an open question, however, where and under what conditions cost-savings and other advantages of offshoring are best realized. This paper examines financial, administrative, and regulatory effects that may impact the ongoing expansion of offshoring beyond established locations such as India, China, and Malaysia. Viewing investments in global labor markets as options on future employment sources, implications for achieving more sustainable competitive advantage with increased diversification of staffing locations throughout the Asia-Pacific region and elsewhere are considered. Likely effects of an apparent trend toward "nearshoring"—shifting overseas operations closer to home bases in more developed countries—are also discussed.

INTRODUCTION

Labor statistics indicate that hundreds of thousands of jobs in more developed countries such as the U.S. have been relocated overseas to India, China, Malaysia, and other countries since the turn of the century. When a firm replaces domestic human resources with overseas labor, those jobs are said to have been "offshored" (GAO, 2004). Originally concentrated in manufacturing, offshoring has now extended to service activities such as computer engineering, call center operations and I.T. support, accounting and payroll operations, medical records transcription, legal and paralegal services, and other business processes. While the reason most often presented is that overseas workers may cost only a fraction of the domestic wages paid to their home-country counterparts, improved quality in some sectors (e.g., software development) has also been cited as motivation for considering human resource suppliers in various locations around the globe. The evidence remains unclear, however, as to where and under what conditions outsourcing some or all of a company's labor force is most effective.

While companies typically focus on reduced offshore labor costs, it is possible to overlook hidden downsides related to communication and supply chain inefficiencies, host country political or regulatory dynamics, recruitment, training, and retention issues in the destination country, cultural differences in workforce attitudes, or labor displacement costs at home (Clark, 2004). Specific concerns include possible domestic customer dissatisfaction with offshore service centers; security and privacy concerns with remote labor sources; unexpected differences in labor laws, regulations, or industrial relations and human resource practices (Bowen, Galang, & Pillai, 2002; Kakumanu & Portanova, 2006); and weak or nonexistent trade secrets and intellectual property protection in jurisdictions overseas (Kshetri, 2007; Pai & Basu, 2007). Indeed, an increasing number of Western companies appear to be turning attention toward staffing their operations closer to home, with increased consideration given to domestic sites, locations in Latin America or Eastern Europe, and those in emerging African economies such as Botswana, Ghana, Kenya, and Senegal.

Taken together, these points make clear that the decision to source some or all of an organization's labor force offshore should not automatically lead a company to an established offshore location. For example, Bangalore, India offers a ready supply of workers who are trained for job-specific skills and can speak English with minimal or no accents, but has seen sought-after cost savings erode over time due to increased labor demand and accumulated training costs. It would thus seem sensible to take a more systematic and proactive approach to offshoring as part of one's overall human resource strategy, and to critically examine alternatives that could help achieve and sustain competitive advantage (Aron, Clemons, & Reddi, 2005).

One element of such an approach might be to make selective investments in emerging overseas labor markets that have not yet been as fully tapped for their potential to contribute valued human capital toward a company's business goals. The company would in essence be investing in a portfolio of strategic options (Leuhrman, 1998) on the future labor market potential of emerging economies in countries that still offer low labor costs relative to costs of living, and which could benefit from corporate investments in education, training, and related infrastructure improvements. Both academics (e.g., Aron et al., 2005) and practitioners (e.g., Farrell, Laboissiere, & Rosenfeld, 2005) now advise dividing work among multiple vendors in different countries and otherwise diversifying the risk of any particular labor market in order to guard against increasing costs in established markets, opportunistic behavior by sole-source contractors, and supply chain uncertainties. In fact, Landry (1997) has recommended that businesses invest resources in targeted countries while they strategize, rather than afterward, a perspective that supports the sampling of new labor markets at low cost and low risk (Janney & Dess, 2004) while creating the ability to enter new markets with personnel already prepared for different cultures in different parts of the world. This approach also reflects the notion of a flexibility option—one that allows the future choice to switch investment streams—and suggests the value of maintaining alternative labor markets that can be utilized should a current workforce at home or abroad cease to be cost-effective, provide necessary skills, or otherwise become sub-optimal.

HYPOTHESES

Costs, Skills, Infrastructure, and the Regulatory Environment

Much like other forms of outsourcing, offshoring generally involves the desire for savings in labor costs, access to external skills, innovation, or expertise, proximity to foreign markets, or some combination of all of these. The driving motivations are likely to vary in part based on what sorts of functions are to be offshored. For example, in their study of firms that outsourced HR practices, Lepak et al. (2005) found outsourcing administrative functions such as benefits and payroll to be driven largely by cost concerns, whereas operational functions were outsourced for access to external expertise, market proximity, and overall business infrastructure.

The extent to which any of these desired advantages can be realized may be impacted, however, by the burden of administrative and regulatory compliance associated with doing business in a given location. Pierre and Scarpetta (2004) reported that multinational employers often perceive tight labor regulations as severe constraints on their ability to do business, while Botero, Djankov, La Porta, Lopez-de-Silanes, and Shleifer (2004) found that labor-friendly national politics are often associated with more stringent labor regulations, more generous social security systems, and higher tax burdens on MNCs that could increase the difficulty or expense of starting or closing a business, hiring or firing workers, enforcing contracts or intellectual property rights, or moving products and information across borders.

These findings carry implications both for more developed country MNCs seeking to optimally source their labor supplies and for developing countries seeking to provide offshore staffing services to such companies. While more developed countries may have higher standards of living, a greater supply of educated and trained workers, better infrastructure, and a more favorable environment for doing business at home, these factors typically reflect higher wage and income levels or tax burdens that may lead to the desire to offshore. Meanwhile, developing countries that offer lower apparent labor costs may be undermined in attractiveness as offshore sites if administrative or regulatory burdens related to doing business are seen as too great.

Hypothesis 1: Offshore location attractiveness for companies outsourcing primarily for cost savings and financial advantage will relate negatively to higher tax, wage, and income levels, and negatively to administrative and regulatory burdens associated with employing workers and other aspects of doing business.

Hypothesis 2: Offshore location attractiveness for companies outsourcing primarily for skills availability and improved performance will relate positively to higher tax, wage, and income levels (which typically reflect higher standards of living and a greater supply of educated and trained workers), but negatively to

administrative and regulatory burdens associated with employing workers and other aspects of doing business.

Hypothesis 3: Offshore location attractiveness for companies motivated to outsource primarily for operational efficiency and market proximity will relate positively to higher tax, wage, and income levels (which typically reflect better infrastructure and a more favorable environment for doing business), but negatively to administrative and regulatory burdens related to employing workers and other aspects of doing business.

Offshoring, of course, is not without its risks, and concerns over geopolitical stability, regulatory and cultural differences, and supply chain reliability may counter potential benefits of individual offshoring arrangements. Further, some business functions may be stronger candidates than others for nearshoring rather than offshoring. Asia-Pacific countries such as Malaysia that wish to encourage their greater use as an offshore location by Western companies may thus want to consider how to counter possible competitive threats from emerging economies in the Western Hemisphere (e.g. Chile, Costa Rica, Mexico) with similar profiles and tradeoffs among cost, skill, and infrastructure dimensions but shorter supply chains to and from the home country. Of course, other offshore locations in the Asia Pacific region (e.g., the Philippines, Vietnam) that have also increased their overall offshore attractiveness ratings during the last several years (Kearney, 2005) likewise should not be ignored.

Proposition 1: Countries may be classified generally by degree of development and established levels of offshoring as follows: (1) more developed, offshoring user; (2) Less developed, established offshore location; and 3) Less developed, emerging offshore location.

Proposition 2: Established offshore locations such as India, China, and Malaysia can expect increased offshoring competition from less developed but emerging offshore locations in the Asia-Pacific region, Latin America, and elsewhere, as well as from nearshoring trends in more developed offshoring user countries such as Canada, the U.K., and the U.S.

REESEARCH METHODOLOGY

Aggregate survey data from two archival sources, A. T. Kearney's Global Services Location Index (2005) and World Bank ratings on various aspects of the ease of doing business internationally (2005 & 2006), were used to investigate relationships among levels of economic development, administrative and regulatory burdens on employing workers and other aspects of doing business, and perceived overall attractiveness of the top 40 offshore staffing locations. The data from both sources represent the latest years for which full information was available. Because overall attractiveness ratings may mask tradeoffs of interest among costs, skill availability, infrastructure, and other considerations, the A. T. Kearney data were broken down into separate component ratings for Financial Structure (compensation costs, overhead, tax and regulatory costs), People Skills and Availability (labor force availability, education and language ability, business process skills and experience, attrition rates), and Business Environment (economic and political stability, cultural adaptability, infrastructure quality, security of intellectual property). Because respondents have tended to favor cost advantages over other factors, these measures were assessed by Kearney using 4- or 3-point scales to reflect relative additive weights in overall offshoring attractiveness of 40%, 30%, and 30%, respectively.

To test Hypotheses 1-3, each of these measures was regressed on World Bank relative rankings for ease of starting a business, obtaining licenses, employing workers, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts, closing a business, and Gross National Income (GNI) per capita (as an indicator of overall country development, likely infrastructure quality, and labor quality and wage levels). Where significant relationships were found for these rankings, individual items representing sub-dimensions of the same ease-of-doing-business measures were also tested via regression to gain a better insight into which specific factors were driving the overall relationships.

To test Propositions 1 and 2, the attractiveness component measures of Financial Structure, People Skills and Availability, and Business Environment were used to cluster the top 40 offshore

locations into three general groupings: more developed offshore user countries (those with less favorable financial structures but more favorable people skills and availability and more favorable business environments), established offshore locations (those with more favorable financial structures but less favorable people skills and availability and less favorable business environments), and less developed but emerging offshore locations (those with relative profiles similar to those of the established offshore locations but with lower overall scores on each dimension, thus reflecting less offshore attractiveness to date). Because the measures used to cluster were from a sample of rather similar countries (in that all of them appeared in the top 40 rankings for offshore attractiveness), the data might not have been amenable to replication based on a well-separated cluster structure. The k-means algorithm, which has been shown to effectively recover poorly separated clusters in artificial data sets (Pollard, 1981), was therefore selected for use in conducting this part of the research study.

RESULTS

Correlations among the three Kearney offshore attractiveness dimensions and the 2006 World Bank ease of doing business rankings for which significant relationships were found in any of the subsequent regression analyses are shown in Table 1. As might be expected, there were significant intercorrelations among the attractiveness dimensions, with financial structure negatively related to both people and skills availability and business environment; in essence, the better the human capital and infrastructure quality, the more a company can expect to have to pay for it. Although conceptually distinguishable, people/skills availability and business environment were positively related; all else equal, better people and infrastructure seem to go hand in hand.

Table 1
Correlations Among the Offshore Attractiveness Dimensions and
World Bank Ease of Doing Business Rankings found Significant in Regression Analyses

	1	2	3	4	5	6	7
1) Financial Structure							
2) People/Skills Availability	669**						
3) Business Environment	889**	.561*					
4) Employing Workers	.238ns	246ns	561**				
5) Pay Taxes	.507**	138ns	655**	.527**			
6) Trade Across Borders	.678**	364*	702**	.246ns	.486**		
7) Close a Business	.704**	422**	656**	.351*	.366*	.438**	
8) GNI per capita (US \$)	900**	.648**	.801**	352*	614**	711**	639**

Note: ** p < .01; * p < .05

The overall agreement and cross-validity of the two data sources found general support. As might be expected, financial structure was strongly and negatively correlated with GNI per capita (i.e., higher levels of country development, infrastructure quality, labor quality, and wages cost money, thus corresponding with less favorable overall financial factors), and people and skills availability was positively correlated with GNI per capita, while business environment (political stability, security, and infrastructure) corresponded with less difficulty employing workers, paying taxes, trading across borders, or closing a business.

To test Hypothesis 1, Financial Structure was regressed on both the 2005 and 2006 World Bank ranking variables; the results were similar for both years' data (full results are omitted here due to space constraints but are available from the author upon request). As predicted, GNI per capita was strongly and negatively associated with favorable (low cost) financial structure. Administrative and regulatory burdens associated with difficulty of employing workers also related negatively to favorable financial structure as predicted, thus providing further support for Hypothesis 1. Difficulty of closing a business further reduced financial structure ratings, suggesting the possibility that employing larger numbers of low cost workers carries with it greater administrative burdens in ending the business enterprise.

To explicate these results, Financial Structure was also regressed on the World Bank individual sub-dimensions of the ranking variables for which significant relationships were found. Both higher GNI per capita and greater rigidity of employing workers (difficulty in ending the employment relationship) were negatively associated with favorable financial structure, although once again GNI (likely labor cost) explained the lion's share of overall variance. Difficulty closing a business also related significantly to financial structure.

To test Hypothesis 2, People Skills and Availability was regressed on the World Bank ranking variables. As predicted, GNI per capita was strongly and significantly related to the apparent quality and availability of an educated and language-capable work force, as was the tax system. The latter translated largely into actual tax rates on profits (vs. compliance burden), with reduced rigidity of employment—and thus, likely flexibility in acquiring or disposing of human capital when needed—also making a significant contribution to explained variance. Together, the administrative and regulatory compliance burden variables added 10% to the explained variance.

To test Hypothesis 3, Business Environment was regressed on the World Bank ranking variables. Again as predicted, GNI per capita was strongly and significantly related to a favorable business environment, with reduced levels of administrative and regulatory burdens in employing workers and trading across borders also adding significantly to overall business environment attractiveness. Lower costs, shorter times to import across borders, and lower hiring difficulty and firing costs formed the basis for the administrative and regulatory impacts that emerged.

To investigate Propositions 1 and 2, Financial Structure, People Skills and Availability, and Business Environment were used to cluster the top 40 offshore locations into three groupings. As expected, the results (Table 2) corresponded generally with profiles reflecting developed or offshore user countries, established offshore locations, and emerging offshore locations. On average, the more developed or offshore user countries (e.g., United States, France, Germany, United Kingdom, Canada, Australia, Spain, and Singapore) had less favorable financial structures (higher costs) but more favorable people skills and availability and more favorable business environments. Correspondingly, the established Asia Pacific offshore locations (India, China, Philippines, Indonesia, Thailand, and Malaysia) had more favorable financial structures (lower costs) but less favorable people skills and availability and less favorable business environments. Finally, like the established Asia Pacific offshore locations, the emerging Asia Pacific offshore locations (Vietnam, New Zealand) also had more favorable financial structures, less favorable people skills and availability, and less favorable business environments, but with lower overall scores on each dimension generally.

Table 2
Cluster Analysis Results:
Offshore Destination Attractiveness Profiles

	Profile 1:	Profile 2:	Profile 3:
	Developed Countries	Established Offshore	Emerging Offshore
	(Offshoring Users)	Locations	Locations
Financial Structure			
Score (1-4)	.79	3.36	2.72
People/Skills Availability			
Score (1-3)	1.89	1.30	.95
Business Environment			
Score (1-3)	2.25	1.27	1.36

Although there are no statistical tests for evaluating the "correctness" of cluster analysis results, the overall validity of the solution is supported by conceptual alignment of the three clusters along the profiles predicted, and by the fact that the U.S., Canada, and the U.K. were classified as developed offshore user countries; India, China, and Malaysia were classified as established offshore locations; and

Vietnam was classified as an emerging offshore location (results for other global regions are available from the author).

DISCUSSION

This research was designed to investigate financial, administrative, and regulatory impacts on the relative attractiveness of offshore staffing locations. Overall, the expected relationships were supported, although factors related most directly to cost still appear to predominate in the attractiveness equation overall. GNI per capita, as a general indicator of human capital quality, infrastructure quality, and wage and salary levels, clearly explained the most criterion variance in all of the analyses, and administrative and regulatory cost factors such as those related to paying taxes, importing across borders, and firing workers also added substantially to the variance explained. The importance of considering non-cost administrative and regulatory factors in the offshoring decision was also supported; variables representing those factors contributed significant explained variance as a group in all models tested.

Although the incremental variance explained by administrative and regulatory burdens was far less than that for more direct measures of cost, difficulties related to employing workers generally, and the rigidity of employment relationships and difficulty of hiring workers specifically, added significantly to the prediction of different aspects of offshore attractiveness. These results have implications for offshore service providers seeking to enhance their attractiveness in both established and emerging offshore markets. According to the analysis of A. T. Kearney (2005), India's overall lead in attractiveness has dwindled due to wage inflation and improvements by China along people skills and infrastructure dimensions, while the Philippines continues to benefit from improvements in education and the English language skills of its workforce. Meanwhile, Indonesia benefits from low wage, tax, and infrastructure costs, but education, language skills, and business environment remain ongoing concerns. Thailand continues to compete almost solely on cost advantage, while government promotion policies in Malaysia have augmented already substantial investments in infrastructure and continued improvements to the technical and English language skills of its labor pool.

This analysis is consistent with the cluster profiles of these countries, which can be used to diagnose and target for improvement those competitive dimensions on which a particular country may be lacking. For example, India now appears to lag behind the Philippines and Indonesia in cost advantage, and may wish to take action to stem rising wage levels that have accompanied its lead in people skills and availability in recent years. Malaysia on the other hand appears to lead the region in infrastructure and business environment, but needs to catch up with India and China in terms of people skills and availability if it wishes to compete more effectively. Likewise, the Philippines would also seem to pose a competitive threat; Malaysia compares almost as well on people skills and availability, but remains well behind in terms of cost advantage and financial structure. The prospect of trying to improve education and workforce skills while also becoming more competitive on wages and other labor costs may prove a daunting challenge, given that these factors typically move in opposite directions.

Meanwhile, the emergence of low-cost countries in Latin America and elsewhere continues to threaten the historical offshore dominance of the Asia-Pacific region. For example, Brazil, an emerging Latin American offshoring site, continues to score well on people skills and educational improvements, although it suffers in terms of financial attractiveness both because of the increasing wage levels that go along with such improvements and because of the relative inflexibility of its labor laws (Kearney, 2005). Brazil has a financial structure score similar to other Latin American contenders, but levels of people skills higher than all Asia-Pacific countries except India and China, along with a business environment score comparable to that of India, the top rated country in overall offshore attractiveness. Brazil thus might be able to improve its financial structure score by alleviating the rigidity of its administrative and regulatory burdens on employing workers in order to address the labor law issues raised by Kearney above.

Meanwhile, Chile and Costa Rica both exhibit profiles highly similar to that of Malaysia, with comparable scores on financial structure but somewhat lower scores on people skills and business environment. These countries could become viable competitors with Malaysia by improving their attractiveness on the latter two dimensions, perhaps through direct investments in education funded by

taxes or by easing administrative and regulatory burdens on employing workers and trading across borders. Because these countries are also located in the same hemisphere as the U.S., travel times to and from the home country to the offshore locations could be reduced from 15 hours or more to under 5 hours for most sites, further enhancing the competitive threat to Malaysia's offshoring market share.

Finally, there is the trend toward nearshoring more staffing back to less expensive locations within the home country itself, or to other more developed countries in the same region (Dawson, 2006; Frase-Blunt, 2007; Kearney, 2007). At the request of its consulting clients, A. T. Kearney began to examine lower cost cities in otherwise developed regions in North America and Europe. While no developed countries in this sample exhibited financial structure scores comparable to those of the Asia Pacific region, certain locations within them (e.g., San Antonio, Texas in the U.S.) came close, and outpaced most offshore locations in terms of breadth and depth of skill base, strong infrastructure, and positive business environment (Kearney, 2005). In any event, Western companies that seek to emphasize the production of higher value-added services (Sako, 2006) may increasingly choose to accept cost tradeoffs in return for more favorable human capital and infrastructure offerings, and locate closer to home to alleviate supply chain risks associated with more distant offshore alternatives. Because employment regulation is particularly pervasive in the U.S., U.K., and industrialized European countries, improving financial attractiveness by easing administrative and regulatory burdens, perhaps through legislative initiatives or negotiations with local governments, seems to offer a promising strategy for companies there, and underscores the importance of considering administrative and regulatory burdens that accompany the decision to locate in a particular country.

Perhaps due to the rise in demand for offshore staffing in software development, communications, information technology, and professional services, more companies appear to be accepting cost tradeoffs in favor of improved human capital supplies and favorable business environments. Indeed, Singapore's profile, similar in many ways to developed country offshore users, illustrates its deliberate emergence as a more secure location for sensitive high-end activities with an emphasis on intellectual property protection and data privacy (Kearney, 2005). While not as cost-effective an alternative as other offshore destinations in the region, Singapore boasts the highest overall business environment score in the top 40 offshoring countries, surpassing the U.S., Canada, the U.K., and Australia, among others. As its people skills continue their ongoing improvement, Singapore's overall attractiveness as an offshore location will no doubt also continue to improve. The growing relative emphasis on human capital quality, security, and other infrastructure elements suggests that weights currently assigned to the three attractiveness sub-dimensions may shift as well, perhaps leading to a considerable reshuffling in the current pecking order of offshore attractiveness for countries even as they stand

Today's emerging labor markets will likely continue to take the place of some or all established offshore destinations as political, demographic, and socio-economic patterns continue to evolve. Although it would be risky for a company to invest heavily in functional product production in a single developing country with limited political stability, it may make long term strategic sense to do so in an *array* of such countries to diversify or hedge the risk of labor supply disruptions and future cost increases in the domestic workforce. Over time, workers in numerous countries might be trained, developed, and maintained as a standing force of human capital at multiple levels of skill and sophistication; through investments in education, training, and development, tomorrow's managers and technical specialists might well come from today's unskilled, inexpensive workers in emerging global labor markets.

Moreover, the ongoing proliferation of global telecommunications devices, which require fairly modest on-site expenditures and investment risks when compared with those for heavy plant and equipment (Pakti, 2007), will likely improve both the flexibility and cost/benefit ratios of remote investments in training, development, and I.T. infrastructure over time (Lee, 2002). Because we don't yet know which labor markets or which individuals will yield the best payoffs, investments in a portfolio of options on the future developmental potential of multiple candidates in multiple offshore locations would seem a sensible approach.

Limitations and Directions for Future Research

As a largely exploratory investigation, this study carries some limitations that should be noted. First, the sample of 40 countries representing top offshore locations in 2005 is clearly a convenience sample, in that data were available for those countries on both the Kearney attractiveness measures and the World Bank ease of doing business dimensions. It is also a biased sample, in that all of these countries made the top 40 list (unlike the other 135 countries included in the World Bank data). As such, it may be that the hypotheses and propositions investigated were subjected to relatively conservative tests, in that differences among 40 related countries should be harder to detect than those among a more diverse selection of countries from around the world. Nonetheless, future research should obtain and consider attractiveness ratings for more of those countries as the global economy continues to develop.

For related reasons, the results of analyses using the World Bank data should be viewed with some caution, as the measures were rankings—from 1 to 175—of each country along dimensions of various aspects of ease of doing business. Given that 77% of those countries were omitted from this sample, there is no way to assess the actual intervals between and among the 40 countries examined here, and it cannot be assumed that they are more than approximately equal. Further, as noted above, there is no statistical test for a "correct" cluster solution, and the analysis was designed to produce three clusters along the proposed dimensions without excessive iteration that might artificially capitalize on the specifics of this sample. While most of the results make sense, some countries could have been classified within different clusters. For example, New Zealand could easily have been classified as a developed country offshore user as well as an emerging offshore location, and in fact exhibits elements of both in its real-world economy.

Finally, the global economy is of course changing rapidly, and a study such as this can provide only an instant snapshot of the offshoring phenomenon. Indeed, 15 of the countries in the top 40 in 2005 were new entrants, and among the 25 that appeared in both 2004 and 2005, only seven—India (1), China (2), Malaysia (3), Singapore (5), Argentina (15), Australia (18), and Turkey (25)—held the same position in both surveys. Preliminary indications from the soon-to-be-released 2006 survey are for further modifications; those with implications for the Asia Pacific region include Sri Lanka as a probable new entrant, and Australia and New Zealand likely falling out of the top 40 rankings (Kearney, 2007). All of this suggests a rapidly changing global labor market, possible instability in the measurement methodology, or both.

CONCLUSIONS

While the reasons for present-day offshoring may seem fairly well known, long term performance in the fast-moving global environment will likely depend on successful investment strategies that preferentially position a company to take advantage of future opportunities if and when they emerge (Janney & Dess, 2004). A proactive approach to offshoring by corporations, and a systematic analysis of strengths and weaknesses of and by offshore locations, would seem fundamental to future success in the increasingly labor-intensive, service and information-based world economy. By systematically considering financial, administrative, and regulatory impacts on overall offshore attractiveness, a better match should be achieved among the needs of offshoring users and their offshore service providers.

REFERENCES

Aron, R., Clemons, E. K., & Reddi, S. 2005. Just right outsourcing: Understanding and managing risk. *Journal of Management Information Systems*, 22: 37-55.

Botero, J. C., Djankov, S., La Porta, R., Lopez-de-Silanes, F., Shleifer, A. 2004. *The regulation of labor*. World Bank.

Bowen, D. I., Galang, C. & Pillai, R. 2002. The role of human resource management: An exploratory study of cross-country variance. *Human Resource Management*, 41: 103-122.

Clark, R. 2004. The real cost of outsourcing. America's Network, 108: 32-35.

Dawson, K. 2006. Offshore trends and stats. Call Center Magazine, 19: 12.

Farrell, D., Laboissiere, M. A., & Rosenfeld, J. 2006. Sizing the emerging global labor market: Rational behavior from both companies and countries that can help it work. *Academy of Management Perspectives*, 20: 23-34.

Frase-Blunt, M. 2007. Call centers come home. *HR Magazine* (January).

GAO—Government Accountability Office 2004 (September). *International trade: Current government data provide limited insight into offshoring of services*. (GAO Publication No. GAO-04-932). Washington, DC: U.S. Government Printing Office.

Janney, J. J., & Dess, G. G. 2004. Can real-options analysis improve decision-making? Promises and pitfalls. *Academy of Management Executive*, 18: 60-75.

Kakumanu, P. & Portanova, A. 2006. Outsourcing: Its benefits, drawbacks, and other related issues. *Journal of American Academy of Business*, 9: 1-7.

Kearney, A. T. 2007. Destination Latin America: A near-shore alternative. Online report.

Kearney, A. T. 2005. Annual Global Services Location Index. Online report.

Kshetri, N. 2007. Institutional factors affecting offshore business process and information technology outsourcing. *Journal of International Management*, 13: 38-56.

Landry, J. T. 1997. Going global. *Harvard Business Review*, March-April: 13.

Lee, H. L. 2002. Aligning supply chain strategies with product uncertainties. *California Management Review*, 44: 105-119.

Lepak, D. P., Bartol, K., & Erhart, N. L. 2005. A contingency framework for the delivery of HR practices. *Human Resource Management Review*, 15: 139-159.

Leuhrman, T. A. 1998. Strategy as a portfolio of real options. *Harvard Business Review*, September-October, 89-99.

Pai, A. K., & Basu, S. 2007. Offshore technology outsourcing: Overview of management and legal issues. *Business Process Management Journal*, 13: 21-46.

Pakti, T. 2007. Innovative technological paradigms for corporate offshoring. *Journal of Electronic Commerce in Organizations*, 5: 57-76.

Pierre, G. & Scarpetta, S. 2004. Employment regulations through the eyes of employers: Do they matter and how do firms respond to them? World Bank.

Pollard, D. 1981. Strong consistency of k-means clustering. Annals of Statistics, 9: 135-140.

Sako, M. 2006. Outsourcing and offshoring: Implications for productivity of business services. *Oxford Review of Economic Policy*, 22: 499-512.

World Bank 2005. Ease of doing business rankings. Online report.

World Bank 2006. Ease of doing business rankings. Online report.

GOVERNANCE BY ETHICS: THE ROLE OF ORGANIZATIONAL VALUES, DECISION MAKING GUIDELINES, LEADERSHIP AND SUPPORT FOR ETHICAL PRACTICES

Mahmoud A. Elgamal Kuwait University, Kuwait Email:elgamal8@yahoo.co

ABSTRACT

The purpose of the study is to present and test an integrated framework for examining Governance By Ethics (GBE). The basic premise of the current study is that corporate reform can be achieved by establishing or reassessing their ethical climate. Effective corporate governance is one that is based on core set of ethical principles that guide the company's actions. The framework is presented in a causal format. It is hypothesized that the contextual variables-organizational values and the organizational decision making guidelines - will separately and jointly have an impact over the practice variables leadership practices and the ethical support practices. These latter two practice variables will have an impact over outcome variables of an organization- ethics strategy, goals and objectives and impact of ethical practices. The major objective of the study is to test the validity of the proposed framework by examining the relationships between these three levels variables; namely the contextual, practice and outcome variables. The data were collected from 25 Kuwaiti organizations (public and private organizations). Two hundred and fifty seven subjects working in these organizations filled in the study questionnaire. The reliability analysis show that the study measure are highly reliable. The reliability coefficients (Cronbach alpha) ranged from .79 to .91 .The results of the study lend considerable support to the proposed framework. The organizational values and decision making guidelines explained .30 of the variance in leadership practices (adjusted r square = .30), and explained .41 of the variance in ethical support practices (adjusted r square = .41). The leadership practices and the ethical support practices explained between .46 - .65 of the variance in governance practices (adjusted r square between .46-.65). It is argued that the ethical conduct will contribute to restoring the people trust in corporate governance. The implications, limitations and future research directions are discussed.

INTRODUCTION

Corporate governance is for sure a hot topic these days. We have all seen countless articles in newspapers and magazines discussing the subject. We have heard numerous proposals from the exchanges, public policy think tanks, shareholder advocacy groups, and individual scholars (Donaldson, 2003). Corporate scandals; however, have contributed to the \$ 7 trillion dollar loss in the aggregate market value of American corporations as of March 2003. We would expect significant losses happening in other countries due to the same reason. If significant steps are not taken to revisit and remodel corporate governance practices, corporation's world wide will continue to attract the anger and animosity not only of disillusioned shareholders, but also of a much broader cross-section of all societies. There must be a shift in focus on the part of directors and executive management from 'hitting the numbers' to a longer focus and a reassertion of strong ethical foundations for corporations.

This study contributes to the healthy dialogue and research about what companies can and should do to ensure that they are living up to the expectations of investors and serving as respectable participants in the world's business environment.

LITERATURE REVIEW

The premise of Governance By Ethics (GBE) is based on defining the parameters of an inviolate corporate culture, by answering simple questions: what kind of moral compass do we want guiding this corporation? What ethical standards do we want embedded in this corporation's DNA? How will we demonstrate it in our action? How can we protect the long term interests of our investors?

The definition of culture of what kind of company is wanted Will influence all the decisions made, including what criteria they use when selecting a CEO, the authority of each of the CEO and the board of director and what kind of leadership structure should be installed (Donaldson, 2003). Restoring

the public trust is an urgent economic imperative, not simply a noble objective. Furthermore, it is a cause that cannot be solved entirely, or even in major part, by prescriptive legislation or iron –tough rulemaking. Instead, it will take the sustained, cooperative, efforts of all participants who belong to our associations in building corporate cultures that demonstrate ethics, integrity, honesty and transparency.

The relationship between ethics and governance and organization performance is articulated in Micron corporation code of business conduct and ethics. In that code it is stated that the corporation pursue its business objectives with integrity and strict compliance with law. It is widely believed this is right thing to do and that it makes good business sense. By acting with integrity, the corporation earn the trust of their customers, shareholders, coworkers, regulators, suppliers and the communities in which they live and work-those whose trust they need to be successful(http://www.micron.com).

The Micron corporation developed a code of business conduct and ethics to be a key resource to their commitment to compliance and ethics. Today laws and standards of business conduct are complex. Developing appropriate code of conduct and ethics explains in a practical easy to understand many of the basic rules that apply to business, it also explains the personal responsibilities ethics (http://www.micron.com). Poor governance standards in both corporate and government are blamed for many of the crisis (Leng & Mansor, 2005). I believe it is essential to promote an open culture in which employees feel free to raise concerns without fear of retaliation. The open culture is vital to ensuring that employees understand that no one acting on behalf of his/her organization may use bribes, kickbacks or other corrupt practices in conducting the focal organization business.

In HP the longstanding values and standards indicate that all directors, officers and employees are expected to display the highest Standards of Ethical Behavior (SEB). These SEB should guide the actions, behaviors and decisions (http://www.hp.com). Most of the studies of corporate governance focused on the laws or the guide lines related to selection of the board members, the power vested on the CEO, the role of directors, the size of the board, the internal auditing and compensation schemes(http://www.hp.com; http://ww

While there are several specific issues that need to be addressed regarding corporate governance, corporations should not be so oriented toward a narrow compliance that larger ethical issues are neglected and flexibility and entrepreneurship are inhibited. Many scholars indicate that simply having ethical codes and policies does not guarantee ethical practices throughout the organization; in turn they advocate the introduction of ethical safeguards. The ethical safeguards are defined as the deliberate measures and programs used by an organization to prevent unethical behavior and/or to promote ethical practices (Der Embse, Desai, & Desai, 2005) These safeguards enforce the effective implementation of the ethical codes and they include training, written ethical guideline statements addressing specific practices, ready access to assistance in interpreting and reinforcing the guidelines, and promoting cohesive ethical culture. Organizations need mechanisms that translate the principles into prescribed actions for every organization member entrusted with an area of responsibility (Glodberg, 1997; McCabe, Trevino & Butterfield, 1996; Murphy, 1995; Petrovic-Lazarevic & Sohal, 2004; Schwartz, 2001).

As we move forward, companies, their management, their directors and the gatekeepers who serve them must look beyond just conforming to the letter of the new laws and regulations, or developing ethical codes. They must redefine corporate governance with practices that go beyond mere adherence to new rules and demonstrate ethics, integrity, honesty and transparency.

The purpose of the current study is to present an integrated framework for the examining GBE. The basic premise of the current study is that corporate reform can be achieved by establishing or reassessing their ethical climate. Effective corporate governance is one that is based on a core set of ethical principles that guide the company's actions, whether to rollout a new product or raise new capital. It establishes a working model for effectively assessing risk and detecting and preventing fraud and abuse by corporate insiders.

The framework is presented in a causal format. It is hypothesized that the contextual variablesorganizational values and the organizational decision making guidelines - will separately and jointly have an impact over the practice variables -leadership practices and the ethical support practices. These latter two practice variables will have an impact over outcome variables of an organization- ethics strategy, goals and objectives and impact of ethical practices. The major objective of the study is to test the validity of the proposed framework by examining the relationships between these three levels variables; namely the contextual, practice and outcome variables.

The study hypotheses are designed to test the proposed relationships among the study variables. The following are the study hypotheses:

Hypothesis 1: The relationship between contextual and practice variables.

Hypothesis 1-1: The contextual variables clarity of organization values and guidelines for ethical decision making will have a significant effect on ethical leadership practices.

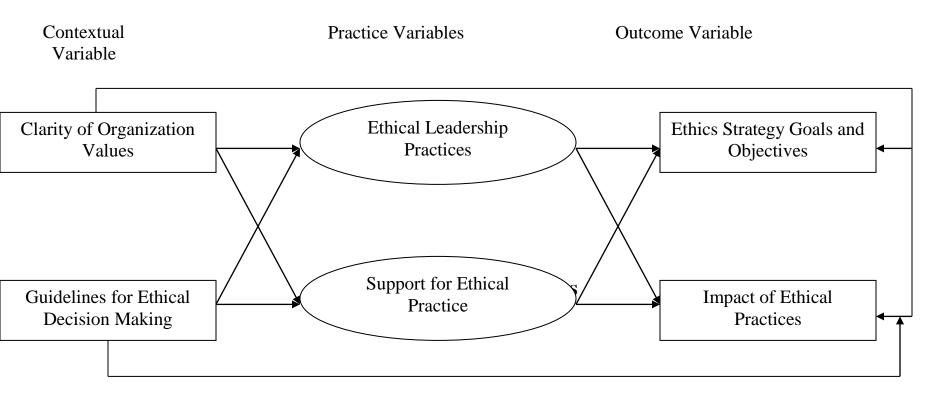
Hypothesis 1-2: The contextual variables clarity of organization values and guidelines for ethical decision making will have a significant effect on support for ethical practices.

Hypothesis 2(the relationship between practice and outcome variables)

Hypothesis 2-1: The practice variables ethical leadership practices and support for ethical practices will have a significant effect on ethics strategy, goals and objectives.

Hypothesis 2-2: The practice variables ethical leadership practices and support for ethical practices will have a significant effect on impact of ethical practices.

Figure 1
The Study Model



RESEARCH METHODOLOGY

Sample

The sample consisted of 257 middle, direct managers and specialists working in 25 Kuwaiti organizations. There were 181 subjects working for public organizations and 76 subjects working for private organizations. These organizations were in the areas of education, communication, oil and investment. Data were collected using a questionnaire. Each organization contributed about ten subjects. All respondents worked for their current organization for at least a year.

Questionnaire Measures

The data were collected using a questionnaire. The current study reports analysis of forty eight questions. There were 8 questions related to each of the following variables organization values, guidelines for ethical decision making, ethical leadership practices, support for ethical practices , ethics strategy, goals and objectives and the impact of organization practices All questions use a seven point Likert type scale.

The design of the questionnaire is based on two sources, namely the following:

- 1) An extensive review of the relevant literature and the instruments used to measure the different business dimensions and practices (e.g. Beresford, 2005; Calabro, 2002; Donaldson, 2003; Koh & Boo, 2001; Schumer, 2003).
- 2) The experience and the class discussions generated when I taught the graduate courses of business ethics and corporate governance.

Contextual Variables

Clarity of organization values: Eight items measured the clarity of organization values. The internal reliability coefficient for the items used in the current study –Cronbach Alpha- was .79. An example item is "The organization's values are consistent with each other so that its expectations are clear".

Guidelines for ethical decision making: Eight items measured the guidelines for ethical decision making. The internal reliability coefficient for the items used in the current study –Cronbach Alpha- was .86. An example item is "Guidelines exist to assist leaders at all levels in making appropriate decisions on ethics related matters".

Practice Variables

Ethical leadership practices: Eight items measured ethical leadership practices. The internal reliability coefficient for the items used in the current study –Cronbach Alpha- was .91. An example item is "Leaders understand the organization's ethical requirements and expectations".

Support for ethical practices: Eight items measured support for ethical practices. The internal reliability coefficient for the items used in the current study –Cronbach Alpha- was .89. An example item is "People at every level of the organization recognize their responsibility for supporting ethical practices".

Outcome Variables

Ethics strategy, goals and objectives: Eight items measured ethics strategy, goals and objectives. The internal reliability coefficient for the items used in the current study –Cronbach Alpha- was .81. An example item is "The organization's strategy clearly defines success in terms of its ethics values".

Impact of ethical practices: Eight items measured impact of ethical practices. The internal reliability coefficient for the items used in the current study –Cronbach Alpha- was .89. An example item is "Processes exist to gauge the impact of ethical behavior on employee commitment to organizational goals".

RESULTS

The descriptive Statistics

The reliability results, means, and standard deviations are reported in Table 1. The reliability coefficients (Cronbach alpha) are high and ranged from .79 to .91. These results suggest credence to the study results. The means of the study variables are all above four –on a seven point Likert type scale- so generally the values are above the mid point of the scale. The coefficient of variation indicate some variability in the responses. The coefficient of variation ranged from .21 to .30.

Table 1
The Mean, Standard Deviation and Reliability Coefficients of The study Variables

Variables	Mean	Standard	Cronbach's	Coefficient of
		deviation	Alpha	Variation
Contextual variable				
Clarity of Organizational				
Values	4.66	0.99	0.79	0.21
Guidelines for Ethical Decision				
Making	4.45	1.21	0.86	0.27
Practice variables				
Ethical Leadership Practices	4.38	1.33	0.91	0.30
Support for Ethical Practices				
	4.38	1.28	0.89	0.29
Outcome Variables				
Ethics Strategy Goals and				
Objectives	4.75	1.08	0.81	0.23
Impact of Ethical Practices	_			
	4.14	1.22	0.89	0.29

The Predictive Power of the Contextual Variable

The results of the standard regression analysis for the contextual variables —clarity of organization values and guidelines of ethical decision making predicting practice variables — ethical leadership practices and support for ethical practices- are depicted in Table 2. The results show that the beta coefficients of the predictors are significant for each of the practice variables. The clarity of organization values has significant beta coefficients with respect to ethical leadership practices and support for ethical practices (Beta coefficients of .21 p < .001, and of .21 p < .001 respectively). The guidelines for ethical decision making has significant beta coefficients with respect to ethical leadership practices and support for ethical practices (Beta coefficients of .42 p < .001, and of .51 p < .001 respectively). The contextual variables explained .30 of the variance in ethical leadership practices (adjusted R square = .30) and .41 of the variance in support for ethical practices (adjusted R square = .41). These results support to hypothesis 1-1 and hypothesis 1-2.

Table 2
Summary of Standard Regressing Analysis for Clarity of Organization values and Guidelines for Ethical Decision Making Predicting Ethical Leadership Practices and Support for Ethical Practices.

	Practice Variables						
Contextual variables (Predictors)	Ethical L	eadership	Practices	Support for Ethical Practices			
	В	SEB	Beta	В	SEB	Beta	
Clarity of Organization Values	0.28	0.82	0.21**	0.28	0.07	0.21**	
Guidelines for Ethical Decision							
Making	0.46	0.07	0.42**	0.54	0.06	0.51**	
	R=0.55	R2=0	0.31	R=0.64	R2=0.41		
	Adjusted R	2=0.30		Adjusted R2=0.41			
	F=55.9**			F=89.1**			
	*P<0.05	*P<0.05		*P<0.05			
	**P<0.001			**P<0.001			

The Predictive Power of the Practice Variables

The results of the standard regression analysis for the practice variables – ethical leadership practices and support for ethical practices- predicting the outcome variables -ethics strategy , goals and objectives and impact of ethical practices- are depicted in Table 3. The results show that the beta coefficients of the predictors are significant for each of the outcome variables. The ethical leadership practices has significant beta coefficients with respect to ethics strategy, goals and objectives and impact of ethical practices ethical leadership (Beta coefficients of ..17 p < .001, and of .29 p < .001 respectively). The support for ethical practices has significant beta coefficients with respect to ethics strategy, goals and objectives and impact of ethical practices ethical leadership (Beta coefficients of ..53 p < .001, and of .57 p < .001 respectively). The practice variables explained .45 of the variance ethics strategy, goals and objectives (adjusted R square = .45) and .65 of the variance in impact of ethical practices (adjusted R square = .65). These results support hypothesis 2-1 and hypothesis 2-2.

Table 3
Summary of Standard Regressing Analysis for Ethical Leadership Practices and Support for Ethical Practices Predicting Ethics Strategy, Goals and Objectives and Impact of Ethical Practices

Practice Variables (Predictors)	Ethics Strategy Goals and Objectives			Impact of Ethical Practices		
	В	SEB	Beta	В	SEB	Beta
Ethical Leadership Practices	0.14	0.05	0.17**	0.27	0.05	0.29**
Support for Ethical Practices	0.46	0.06	0.53**	0.54	0.05	0.57**
	R=0.67	R2=().46	R=0.81	R2=0.66	
	Adjusted R	2 = 0.45		Adjusted F	R2=0.65	
	F=107.3**			F=242.1**		
	*P<0.05		*P<0.05			
	**P<0.001			**P<0.001	-	

Additional Analysis

The power of contextual variable predicting outcome variables: The results of the standard regression analysis for the contextual variables – clarity of organization values and guidelines of ethical decision making predicting outcome variables – ethics strategy, goals and objectives and impact of ethical practices - are depicted in table 4. The results show that the beta coefficients of the predictors are significant for each of the outcome variables. The clarity of organization values has significant beta

coefficients with respect to ethics strategy, goals and objectives and impact of ethical practices (Beta coefficients of ..52 p < .001, and of .16 p < .001 respectively). The guidelines for ethical decision making has significant beta coefficients with respect to ethics strategy, goals and objectives and impact of ethical practices (Beta coefficients of ..33 p < .001, and of .46 p< .001 respectively). The contextual variables explained .56 of the variance in ethics strategy, goals and objectives (adjusted R square = .56) and .41 of the variance in impact of ethical practices (adjusted R square = .31).

Table 4
Summary of Standard Regressing Analysis for Clarity of Organization Values and Guidelines for Ethical Decision Making

Contextual Variables	Ethics Strategy Goals and Objectives			Impact of Ethical Practices		
(Predictors)	В	SEB	Beta	В	SEB	Beta
Clarity of Organization Values	0.57	0.05	0.52**	0.20	0.08	0.16*
Guidelines for Ethical Decision						
Making	0.30	0.04	0.33**	0.46	0.06	0.46**
	R=0.75	R2=().56	R=0.56	R2=0.31	
	Adjusted R	2 = 0.56		Adjusted F	R2=0.31	
	F=163.6**	F=163.6**		F=57.4**		
	*P<0.05	*P<0.05		*P<0.05		
	**P<0.001			**P<0.001	-	

The joint power of contextual and practice variable predicting outcome variables: The results of the standard regression analysis for the contextual and practice variables – predicting outcome variables – ethics strategy, goals and objectives and impact of ethical practices - are depicted in table 5. The results show that there are three significant predictors beta coefficients with respect to ethics strategy, goals and objectives; namely the clarity of organization values ,guidelines for ethical decision making and support for ethical practices (beta coefficients .44,p,.001, .15,p,.001 and .31 p,.001 respectively) the contextual and practice variables explained .64 of the variance in ethics strategy, goals and objectives (adjusted R square = .64) The results also, show that there are two significant predictors beta coefficients with respect to impact of ethical practices; namely guidelines for ethical decision making and support for ethical practices (beta coefficients .29,p,.001, and .54,p,.001 respectively) the contextual and practice variables explained .65 of the variance in impact of ethical practices (adjusted R square = .65) significant beta coefficients with respect to ethics strategy, goals and objectives and impact of ethical practices (Beta coefficients of ..52 p < .001, and of .16 p < .001 respectively). The guidelines for ethical decision making has significant beta coefficients with respect to ethics strategy, goals and objectives and impact of ethical practices (Beta coefficients of ..33 p < .001, and of .46 p < .001 respectively). The contextual variables explained .56 of the variance in ethics strategy, goals and objectives (adjusted R square = .56) and .41 of the variance in impact of ethical practices (adjusted R square = .31).

Table 5
Summary of Standard Regressing Analysis for Clarity of Organization Values, Guidelines for Ethical Decision Making, Ethical Leadership Practices and Support

Contextual and Practice	Ethics Strategy Goals and Objectives			Impact of Ethical Practices		
Variables (Predictors)	В	SEB	Beta	В	SEB	Beta
Clarity of Organization Values	0.48	0.05	0.44**	-0.02	0.0	-0.02
Guidelines for Ethical Decision Making	0.13	0.05	0.15*	0.07	0.05	0.07
Ethical Leadership Practices	0.07	0.05	0.08	0.26	0.05	0.29**
Support for Ethical Practices	0.26	0.05	0.31**	0.52	0.06	054**
	R=0.80		=0.64	R=0.81	R2=	0.66
	Adjusted F			Adjusted R2=0.65		
	F=112.9**			F=121.4**	:	
	*P<0.05			*P<0.05		
	**P<0.001			**P<0.001		

DISCUSSION

The results of the study lend general support for the study model and hypothesized relationships.. The contextual variables explained significant portions of the variance in the practice variables and as well the practice variables explained significant portion of the variance in the outcome variables. These results suggest that organizations should focus on building adequate ethical safeguards including clarity of organization values and guidelines for ethical decision making. These safeguards will induce ethical practices , which in turn will build for effective corporate governance. The implementation of the ethical practices is the only way that the we hope for effective corporate governance

The clarity of organization values have an indirect effect with the ethics strategy, goals and objectives through its relationship with the ethical practices. It also has direct effect on ethics strategy, goals and objectives(Table 4,Beta coefficient=.52 ,p<.001). The guidelines of ethical decision making have an indirect effect with the impact of ethical practices through relationship with the ethical practices. They also, have direct effect on impact of ethical practices (Table 4, Beta=.16, p<.05)

The guidelines for ethical decision making have an indirect effect with the ethics strategy, goals and objectives through its relationship with the ethical practices. It also has direct effect on ethics strategy, goals and objectives(Table 4,Beta coefficient=.33 ,p<.001). The guidelines of ethical decision making have an indirect effect with the impact of ethical practices through relationship with the ethical practices. They also, have direct effect on impact of ethical practices (Table 4, Beta=.46, p<.001).

The inclusion of both the contextual and practices variables as predictors of the outcome variables improved the predictive power of the regression model for ethics strategy goals and objectives. The variance explained increased form .45(table 3,adjusted R square =.45) to .64 (table 5,adjusted R square=.64). The inclusion of both the contextual and practices variables as predictors of the outcome variables did not improved the predictive power of the regression model for impact of ethical practices ethics. The variance explained increased form .65(table 3,adjusted R square =.65) and .65 (table 5,adjusted R square=.65)...

The implications of the current study includes the need to activate the notion of ethical safeguards through giving all employees and mangers access to interactive, web-based training and are through mandating taking business ethics training classes. Managers should also be encouraged to conduct regular discussions about the ethical conduct with their employees. Even top management officials should have ethical leadership materials to use in discussions with their staff. As there is no one perspective for corporate governance, there is no one correct way to train a new cohort of directors. I

encourage those who conduct director training programs to look beyond the traditional methodologies and include not only a study of law and business practices, but also an examination of the interpersonal human dynamics the influence a board and its decision making. One of the most interesting evaluations of a board that I ever read was not done by a lawyer or an MBA, but by an organizational behaviorist.

All businesses want to grow the company and thus need competent senior management. However competent management does not mean that the only criteria are knowledge about operations of the business and the ability to increase income, growth and profits. Competent management should also inculcate a culture of honest and ethical behavior. The board of directors and management should set appropriate ethical examples for all employees ,to bottom.(http://www.gcglaw.com).

It seems that the major contribution expected of the board members is to define the culture of ethics that they expect all aspects of the company to embrace .These aspects should afford a level of flexibility to create the appropriate organization structure ,programs and practices. It must be clear by now that boards of directors must demand the highest standards of integrity and dedication to investor interests in any candidate for Chief executive. The tone at the top of an organization is perhaps more vital than anything else and the chief executive will set that tone under the oversight of the board.

In addition each director and the board as a whole must make an honest assessment of how many boards and committees they and for that matter board candidates can serve on while maintaining the dedication and responsibility that is demanded of them these days. Any thing less would be a disservice to other board members, company employees, and of course the shareholders and stakeholders.

Although we must punish the wrongdoers, it is also important to recognize and reward the efforts of the vast majority of corporate executives, board members, and auditors who are honest, decent, conscientious and hardworking. There are upstanding, ethical individuals at all levels in the corporate ranks.

The study as it is very much expected has some limitations. These limitations include the use of a causal model, however the testing of the model used regression analysis. A better test of the validity of the model is amenable by using an appropriate statistical tool that can detect causality (ex. Structural equation modeling). The study is based on perceptual data, with all the limitations associate with such data. In addition the study is based on a small and diverse sample. It is not clear how the diversity of organizations will affect the results, however this is an issue that should be investigated.

The major theme of the study is that through the appropriate contextual variables and the ethical safeguards, we can have some assurance that our corporations will be effectively governed. It seems that the notion of Governance By Ethics (GBE) has a conceptual as well as an empirical appeals. The GBE approach is at lease a complementary approach to that of issuing laws and regulations (Sarbanes-Oxley Act 2002).

Future studies should use objective data in addition to perceptual data. As well these studies should develop appropriate hard measure for the impact of ethical practices on the bottom line results of corporations and the quality of organizational life. It goes without saying that future study will build for the external validity by adopting statistical techniques that test for causality and by having a longitudinal research design.

REFERENCES

Beresford, D. R.2005. Take a seat in the boardroom: A new role in corporate governance. *Journal of Accountancy* Available at http://findarticles.com.(Accessed September 19, 2007).

Calabro, L.2002. *Introducing the boardroom scoreboard-corporate governance- corporate governance practices, board –ratings systems introduced*. Available at http://findarticles.com. (Accessed August 28, 2007).

Clark, G., Baugh, C.Y. & Ampofo, A.2005.Sarbanes-Oxley Act of 2002. *SAM Proceedings*. Donaldson, W. H.2003. *Corporate governance: What has happened and where we need to go*. Available at http://findarticles.com (Accessed December 28, 2006).

Ethics & Governance. Available at http://www.cinergy.com.(Accessed January 15, 2007)

HP. Business ethics.2006. Available at http://www.hp.com.((Accesed January 15,2007))

Glodberg, B.1997. Creating an ethical culture. *Executive Excellence*, 14(6):11-12.

Koh, H. C. & Boo, E.H. 2001. The link between organizational ethics and job satisfaction: A study of managers in Singapore. *Journal of Business Ethics*, 29:309-324.

Leng, A., Chang, A., & Mansor, S.2005. Can good corporate governance practices contribute to firm's financial performance?-evidence from Malaysian companies. *International Journal of Business Governance and Ethics*, 1(4): 350-362.

Macrovision. 2006. *Corporate governance and ethics*. Available at http://www.macrovision.com (Accessed January 17, 2007).

McCabe, D. L., Trevino, L.K. & Butterfield, K.D.1996. The influence of collegiate and corporate code of conduct on ethics-related behavior in the workplace. *Business Ethics Quarterly*, 6:461-476.

Micron.2006. *Code of business conduct and ethics*. Available at http://www.micron.com. (Accessed January 31, 2007).

Murphy, P.E.1993. Corporate ethics statements: Current status and future prospects. *Journal of Business Ethics*, 14:727-7440.

Pertovic-Lazarevic, S. & Sohal A. 2004. Nature of e-business ethical dilemmas. *Information Management and Computer Security*, 12,(3 &4):167-177.

Schwartz, M. 2001. The nature of the relationship between corporate codes of ethics and behavior. *Journal of Business Ethics*, 32:247-262.

Schumer, C. E.2003. Strengthening corporate governance: corporate leaders-executives, directors and auditors-need to work together now and in the years ahead to restore trust in public corporations. Available at http://findarticles.com. (Accessed January 26, 2007).

Yahoo. *Corporate governance guidelines*. Available at http://www.yahoo.client.(Accessed December 28,2006).

THE IMPACT OF ETHICAL PERCEPTIONS IN ADVERTISING ON CONSUMERS' BEHAVIORAL AND ATTITUDINAL RESPONSES: FINDINGS FROM THAI CONSUMERS

SOMPHOL VANTAMAY

Kasetsart University, Bangkok, Thailand Email: pon genious@hotmail.com

ABSTRACT

With increasing social awareness of unethical advertisements in today's advertising, this study is aimed to examine the impact of ethical perceptions in advertising on consumers' behavioral and attitudinal responses in Thailand. It focuses upon responses on attitude toward the advertisement (A_{ad}), attitude toward the brand (A_b), and purchase intention (PI) of consumers. Based on reviewing relevant literatures, nine key issues of the unethically perceived advertising were examined in this study; advertising to children, the use of fear appeal, the use of sex appeal, advertising harmful products, advertising that leads to social and cultural consequences negatively, deceptive advertising, ridicule and discrimination, negative stereotyping, and comparative advertising. The results show that ethical perceptions in advertising significantly affect attitude toward the advertisement (A_{ad}), attitude toward the brand (A_b), and purchase intention (PI) of consumers in all issues examined in the study. That is, there are positive correlations of ethical perceptions in advertising with attitude toward the advertisement (A_{ad}), attitude toward the brand (A_b), and purchase intention (PI) of consumers. These findings suggest that the advertisers should be careful in the use of unethically perceived advertising for Thai consumers, especially for breaking through media clutter.

INTRODUCTION

Nowadays, due to the violent business competition's condition, many advertisers try to use various tactics in advertising to draw the attention from consumers, especially for breaking through media clutter. Among these tactics, most of them are often judged as unethical issues having potentially harmful effects for society. A variety of ethical criticisms in advertising reviewed can be divided into the following categories: advertising to children (O' Guinn, Allen, & Semenik, 2006; Wells, Burnett, & Moriarty, 2000), the use of fear appeal (Snipes, LaTour, & Bliss, 1999), the use of sex appeal (Henthorne & LaTour, 1995; LaTour & Henthorne, 1994; Tai, 1999), advertising harmful products (Hyman, Tansey, & Clark, 1994; Park, Weigold, & Treise, 1999), advertising that leads to social and cultural consequences negatively (Pollay, 1986; Treise, Weigold, Jenneane, & Garrison, 1994), deceptive advertising (Davis, 1994; Simpson, Brown, & Widing II, 1998), ridicule and discrimination (Brinkmann, 2002; Wells et al., 2000), negative stereotyping (Belch G. & M. Belch, 2004; Wells et al., 2000), and comparative advertising by making a false charge to competitors' products (Brinkmann, 2002; Semenik, 2002). As a result, research on advertising ethics has increasingly been recognized as an important topic in advertising research conducted and discussed among academics and practitioners in Western countries (Hyman et al., 1994). Among studies on advertising ethics, a number of studies (Henthorne & LaTour, 1995; LaTour & Henthorne, 1994; Simpson et al., 1998, Snipes et al., 1999; Tinkham & Weaver-Lariscy, 1994) were conducted to examine the impacts of ethical perceptions on consumer responses; attitude toward the advertisement (A_{ad}), attitude toward the brand (A_b), and purchase intention (PI).

Nevertheless, few studies have been conducted regarding these impacts in Thailand. Therefore, the purposes of this study were (1) to examine the correlations of ethical perceptions in advertising with attitude toward the advertisement (A_{ad}), attitude toward the brand (A_b), and purchase intention (PI) of consumers; (2) to examine the correlations of attitude toward the advertisement (A_{ad}) with attitude toward the brand (A_b) and purchase intention (PI) of consumers; (3) to examine the correlations between attitude toward the brand (A_b) and purchase intention (PI) of consumers; and (4) to examine the multiple correlations of ethical perceptions in advertising, attitude toward the advertisement (A_{ad}), and attitude toward the brand (A_b) with purchase intention (PI) of consumers. From this study, the advertisers and

advertising agencies will know how the unethically perceived advertising affects their consumer responses.

LITERATURE REVIEW

Theories of Ethics

The issue of ethics generally focuses on whether the conduct of an individual, group, or advertiser is deemed as morally "right" or "wrong", as determined by the inner values of an individual based on his/her moral philosophy (Snipes et al., 1999). Two normative ethical theories in moral philosophy often incorporated in the discussion of ethics are deontology and teleology. Deontology suggests that the rightness or wrongness of actions and behaviors should be judged by the actions themselves without regard to the outcome. Teleology, on the other hand, suggests that a particular behavior should be considered ethical if it produces the greatest balance of "good" over "bad" when compared with all alternative actions (Hunt & Vitell, 1986). The fundamental component in teleology is the amount of good or bad that is in the consequences of an action whereas the significant component in deontology is the inherent rightness of an individual action. However, Reidenbach and Robin (1988) supported that it was not realistic to believe that individuals make ethical decisions or judgments strictly on the basis of either teleology or deontology. They contended that individuals don't use the clearly defined concepts of ethical philosophies in making specific ethical evaluations, but they will use a mixing or combining of these philosophies. Besides, LaTour and Henthorne (1994) supported this belief and they suggested that we should resist viewing teleology and deontology as two totally independent philosophies. We should view that the use of a controversial ad may evoke an array of related teleology-and deontology-based responses on a single dimension of ethical evaluation.

Ethical Issues in Advertising

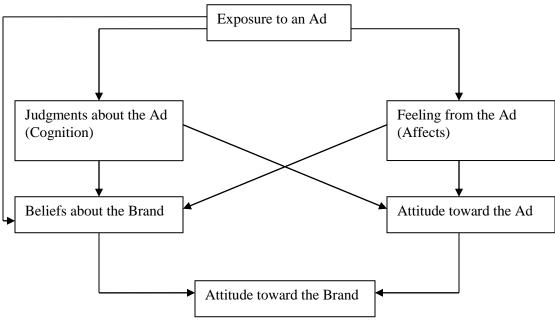
Reviewing literatures about ethical issues in advertising, the researcher found nine key ethical issues in advertising. 1) Advertising to children: Advertising to children has been and continues to be one of the most controversial topics in advertising (O' Guinn et al., 2006; Wells et al., 2000). The children's inability to evaluate advertising messages and making purchase decisions without enough proper consideration is still the ethical problem. 2) The use of fear appeal: Some critics feel that fear appeals are unethical because they can expose a person against his or her will to harmful or seriously offensive images (Snipes et al., 1999). In fact, previous research has indicated that the use of fear appeals can evoke unintended negative reactions from individual consumers (Duke, Pickett, Carlson, & Grove, 1993). 3) The use of sex appeal: Since the 1970s, feminists and other critics have spoken out against the portrayal of woman in advertising (Treise et al., 1994). The most particular trouble is the focus on woman as sex objects even though female roles have substantially changed to more professional depictions. Whereas, nowadays, the use of female nudity or erotic stimuli in advertising has become quite commonplace, there are a number of studies show that the use of strong overt sexual appeal in advertising will produce more negative consumer responses significantly (Henthorne & LaTour, 1995; LaTour & Henthorne, 1994; Tai, 1999). 4) Advertising harmful products: Advertising harmful products has not been received acceptance by the majority of consumers yet. These products (tobacco, alcohol beverage, or even gambling) are often considered unsuitable to advertise (Hyman et al., 1994; Park et al., 1999). 5) Advertising that leads to social and cultural consequences negatively: Advertising that affects society and culture negatively was usually condemned by a lot of people in society. This point includes broad societal issues: advertising's effects on values, religion, culture, literacy, or materialism (Pollay, 1986; Treise et al., 1994). 6) Deceptive advertising: Deceptive advertising is always viewed by consumers as unethical advertising. It may be defined as the advertising that contain intentionally false or misleading claims or that may lead reasonable consumers to act in a detrimental manner (Davis, 1994; Simpson et al., 1998). 7) Ridicule and discrimination: The use of humor appeal by using certain groups that are shown in the basis of a joke in the advertisements is often viewed as bad taste advertising and judged as unethical advertising (Brinkmann, 2002; Wells et al., 2000). 8) Negative stereotyping: Critics claim that many advertisers stereotype large segments of our population, particularly woman, minorities, and the elderly. In advertising, stereotyping involves presenting a group of people in an unvarying pattern that lacks individuality. The issue of stereotyping is connected to the debate about whether advertising shapes society's values or simply mirrors them (Belch G. & M. Belch, 2004; Wells et al., 2000). and 9) Comparative advertising by making a false charge to competitors' products: The advertising that an advertiser makes a comparison between the firm's brand and competitors' brands explicitly by making a false claim to competitors' products is completely unethical (Brinkmann, 2002). Additionally, if an advertisement is carried out in such a way that the comparison is not a fair one, then there is an undesirable competitive effect for the firm of an advertiser that uses this type of advertising inevitably (Semenik, 2002).

The Impact of Ethical Perceptions in Advertising

There have been a lot of studies to explore the impacts of ethical perceptions in advertising on consumer responses. Vitell, Lumpkin, and Rawwas (1991) and Whalen, Pitts, and Wong (1991) conducted studies of consumers' ethical perceptions and their responses to potentially unethical scenarios. Both studies found that consumers' ethical perceptions are important constructs in mediating consumers' behavioral and attitudinal responses and deserve further investigation. More recently, Henthorne and LaTour (1995), LaTour and Henthorne (1994), Simpson et al. (1998), Snipes et al. (1999), Tai (1999), Tinkham and Weaver-Lariscy (1994) have examined consumer responses to ethical issues in advertising. Their findings consistently upheld the notion that ethical perceptions affect consumer responses. That is, the more unethical advertising is judged to be, the more negative is the consumer responses. Besides, Simpson et al. (1998) propose that the system of personal ethics guides moral judgments and actions in the face of moral or ethical dilemmas. When consumers view an ad they perceive to be unethical, they may be faced with an ethical dilemma – to purchase or not purchase the brand advertised in the light of the perceived unethical ad content. There have been numerous situations in the last few years where consumers have been faced with ethical or moral dilemmas. Often times the resolution of the dilemma has affected purchases of a particular brand. For example, some consumers consider the practice of harvesting tuna at the expense of the lives of dolphins highly unethical. Consequently, these consumers are faced with the ethical dilemma of boycotting the tuna products of those companies that fail to adopt tuna-safe practices (Simpson et al., 1998). Resolution of the ethical dilemma may result from individual ethical judgments. Among consumers' response variables, attitude toward the advertisement (A_{ad}), attitude toward the brand (A_b), and purchase intention (PI) have been emphasized in the previous studies. In general, the findings strongly indicate that the ethical perceptions in advertising have the positive correlation with these constructs. In other words, the more ethical an advertising is judged to be, the more positive are attitude toward the advertisement, attitude toward the brand, and purchase intention. On the other hand, the more unethical advertising is judged to be, the more negative are attitude toward the advertisement, attitude toward the brand, and purchase intention (Henthorne & LaTour, 1995; LaTour & Henthorne, 1994; Simpson et al., 1998; Snipes et al., 1999; Tai, 1999; Tinkham & Weaver-Lariscy, 1994). Additionally, some researchers have collectively examined the relationships among attitude toward the advertisement, attitude toward the brand, and purchase intention to provide an enhanced understanding of consumer responses. These efforts have consistently found the linkage of these variables under various situations. Research by Edell and Burke (1987) supports the Attitude-toward-the-Ad Models that expressing the influence of the exposure to an ad on attitude toward the advertisement and attitude toward the brand as shown in Figure 1.

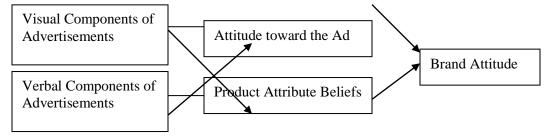
As the model depicts, the consumer forms various feeling (affects) and judgments (cognitions) as the result of exposure to an ad. These feelings and judgments in turn affect the consumer's attitude to the ad and beliefs about the brand. Finally, the consumer's attitude toward the ad and beliefs about the brand influence his or her attitude toward the brand (Edell & Burke, 1987; Schiffman, & Kanuk, 2000). Moreover, research by Mitchell (1986) also supports the effect of verbal and visual components of advertisements on brand attitude. A model of these effects, called the Dual Component Model, is presented in Figure 2.

Figure 1
Attitude-toward-the-Ad Model



Source: Schiffman, L. G., & Kanuk, L. L. 2000.

Figure 2
Effects of Verbal and Visual Components of Advertisements on Brand Attitudes

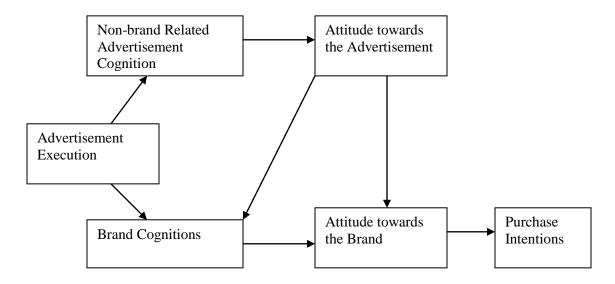


Source: Mitchell, A. A., 1986.

In this model, the visual elements and the verbal elements can affect brand attitudes in at least two ways. First, these two elements may result in the formation or change of product attribute beliefs. Second, these two elements may also affect attitude toward the advertisement. Then, product attribute beliefs and attitude toward the advertisement have independent effects on brand attitudes (Mitchell, 1986). Most notably, research by Laczniak, and Teas (2001) and Mackenzie, Lutz, and Belch (1986) support the Dual Mediation Hypothesis (DMH) which includes direct effects of attitude toward the advertisement on attitude toward the brand and of attitude toward the brand on behavioral intention as shown in Figure III. In this model, the advertisement execution not only affects brand cognitions, but also affects non-brand related advertisement cognitions. Specifically, non-brand related advertisement cognitions including ethical cognitions can affect attitude toward the advertisement. Then, attitude toward the brand that is affected by attitude toward the advertisement can result in purchase intentions (Laczniak & Teas, 2001; Mackenzie et al., 1986). In addition, under the uni-dimensionalist view of attitude, there are the causal linkages among beliefs (cognition), attitude (affect), intentions (conation), and behaviors (conation). As presented in Figure IV, beliefs are seen as the immediate causal antecedents of attitude, while intentions and behaviors are the immediate casual consequences of attitude (Lutz, 1991). Under

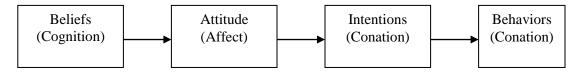
reviewing these relevant literatures mentioned above, the researcher may hypothesize that the ethical perceptions in advertising have the positive correlation with attitude toward the advertisement, attitude toward the brand, and purchase intention. Additionally, the researcher also finds that there are the relationships among these dependent variables: attitude toward the advertisement, attitude toward the brand, and purchase intention, as stated above.

Figure 3
Dual Mediation Hypothesis Model



Source: Laczniak, R. N., & Teas, R. K. 2001.

Figure 4
The Uni-dimensionalist View of Attitude



Source: Lutz, R. J. 1991.

The Reidenbach-Robin Multidimensional Ethics Scale

The Reidenbach-Robin multidimensional ethics scale was developed by Reidenbach and Robin in 1988. It is based on the normative ethical philosophy which encompasses several overlapping theoretical ideals (teleological and deontological philosophies). The Reidenbach-Robin multidimensional ethics scale has been shown to have a relatively high level of validity in comparison with single univariate measures of ethical evaluation (Reidenbach & Robin, 1988, 1990). In addition, the scale has consistent and fairly high construct validity (LaTour & Henthorne, 1994). The scale is composed of three dimensions of ethical decision-making: (1) the "moral equity" dimension which is related to issues of fairness and what is right and wrong. According to Reidenbach and Robin (1990), this dimension is believed to be based on lessons from early in life gained through basic institutions (such as family and religion) regarding such element constructs as fairness, equity, or rightness and wrongness. It is composed of four items: fair, just, morally right, and acceptable to family; (2) the "relativistic" dimension which is concerned with the social

guidelines and influences as they impact the individual (Snipes et al., 1999). It is composed of two items: culturally acceptable and traditionally acceptable; and (3) the "contractualism" dimension which is a purely deontological dimension that concerns implied obligations, social contracts, duties, and rules (Snipes et al., 1999). This dimension is centered on the concept of a social contract between the individual and society. It is composed of two items: violation of an unspoken promise and violation of an unwritten promise.

RESEARCH HYPOTHESES

Based on the theoretical background and the previous empirical evidence, the following relationships concerning ethical perceptions in advertising and consumer responses are hypothesized:

 H_1 : There are positive correlations between ethical perceptions in advertising and attitude toward the advertisement (A_{ad}).

 H_2 : There are positive correlations between ethical perceptions in advertising and attitude toward the brand (A_b) .

H₃: There are positive correlations between ethical perceptions in advertising and purchase intention (PI).

 H_4 : There are positive correlations between attitude toward the advertisement (A_{ad}) and attitude toward the brand (A_b) .

 H_5 : There are positive correlations between attitude toward the advertisement (A_{ad}) and purchase intention (PI).

 H_6 : There are positive correlations between attitude toward the brand (A_b) and purchase intention (PI).

 H_7 : There are multiple correlations of ethical perceptions in advertising, attitude toward the advertisement (A_{ad}) , attitude toward the brand (A_b) with purchase intention (PI) of consumers.

REESRACH METHODOLOGY

From reviewing literatures, nine ethical issues in advertising ethics were found and drawn into this study: 1) advertising to children (O' Guinn et al., 2006; Wells et al., 2000), 2) the use of fear appeal (Snipes et al., 1999), 3) the use of sex appeal (Henthorne & LaTour, 1995; LaTour & Henthorne, 1994; Tai, 1999), 4) advertising harmful products (Hyman et al., 1994; Park et al., 1999), 5) advertising that leads to social and cultural consequences negatively (Pollay, 1986; Treise et al., 1994), 6) deceptive advertising (Davis, 1994; Simpson et al., 1998), 7) ridicule and discrimination (Brinkmann, 2002; Wells et al., 2000), 8) negative stereotyping (Belch G. & M. Belch, 2004; Wells et al., 2000), and 9) comparative advertising by making a false charge to competitors' products (Brinkmann, 2002; Seminik, 2000). A self-administered questionnaire was used an instrument to collect survey data in this study. Two dimensions of the Reidenbach-Robin multidimensional ethics scale (Reidenbach & Robin, 1990) was used to measure the ethical perceptions in advertising: moral equity and relativism. Specifically, the "moral equity" and "relativistic" dimensions have frequently shown to combine into a single comprehensive dimension, often called "morel". According to Reidenbach, Robin, and Dawson (1991), an explanation of this two-dimensional structure may be "the natural relation expected between what people perceive to be culturally acceptable and what is just". Additionally, previous research indicates that the "contractualism" dimension is ill-suited for advertising research and may be more applicable to evaluating the ethicality of sales scenarios (Henthorne & LaTour, 1995; Snipes et al., 1999). Therefore, this dimension was excluded from this study. In addition, questions to measure attitude toward the advertisement, attitude toward the brand, and purchase intention of consumers were drawn from previous studies in this area (Henthorne & LaTour, 1995; LaTour & Henthorne, 1994). All of the items were measured using a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). Pretest was conducted with forty consumers living in Bangkok, the city of Thailand, before the final modification of questionnaire to check content validity. Furthermore, the reliability analysis by Cronbach alpha tests was conducted to evaluate the internal consistency of summed scales. The items of "ethical perceptions in advertising", "attitude toward the advertisement", and "attitude toward the brand" in all nine issues were tested. The results show that alpha levels ranged from the lowest of 0.71 to the highest of 0.99 (Table 1). Scores within this range are considered as an adequate indication of internal consistency of the data.

TABLE 1 Reliability Analysis-scale (Alpha)

Variables	Items	Reliability coefficients (alpha)		
Ethical perceptions in advertising	 Fair Just Morally right Acceptable to family Culturally acceptable Traditionally acceptable 	0.89 - 0.99 (Summed scale)		
Attitude toward the advertisement	 High quality Interesting Appropriate 	0.71 - 0.92 (Summed scale)		
Attitude toward the brand	 High quality Distinctive Appealing 	0.80 - 0.96 (Summed scale)		

1 = strongly disagree, 5 = strongly agree

A multi-stage random sampling process was used in this study. First, the researcher randomly sampled eight out of 16 business districts of Bangkok metropolitan to be potential survey areas. Then, 400 working people, aged 25-59 years old, in such areas were conveniently requested to participate in this study during August 2006. They were 225 females (56.3%) and 175 males (43.7%). About forty-one percent of them (162) were 25- 29 years old. Thirty-five percent of them have income per month ranging from 10,000 to 20,000 baht. Most of them (65.8%) hold bachelor's degrees while about thirty-six percent of them (143) work for private companies. Additionally, means, standard deviations, Pearson's product moment correlation coefficient, and multiple correlation coefficients were used in statistical analysis at 0.05 level of significance.

RESULTS

Preliminary Analysis of Descriptive Results

Means and standard deviations of consumers' ethical perceptions in advertising among nine ethical issues are shown in Table 2. From these results, it may suggest that Thai consumers tend to perceive the use of ridicule and discrimination (M = 2.03), negative stereotyping (M = 2.05), deceptive advertising (M = 2.12), advertising that leads to social and cultural consequences negatively (M = 2.18), sexual appeal (M = 2.27), and comparative advertising (M = 2.43) to be strongly unethical. However, advertising to children (M = 3.36), the use of fear appeal (M = 3.01), and advertising harmful products (M = 2.70) are perceived to be moderately unethical.

Means and standard deviations of consumers' attitude toward the advertisement among nine ethical issues are shown in Table 3. Among different kinds of ethical issues, Thai consumers tend to have the strongly negative attitude toward the advertisement which use negative stereotyping (M=2.20), ridicule and discrimination (M=2.23), advertising that leads to social and cultural consequences negatively (M=2.32), and deceptive advertising (M=2.38).

TABLE 2
Consumers' ethical perceptions in advertising among nine ethical issues

_		a =
Issues	Means	S.D.
Advertising to children	3.36	0.89
The use of fear appeal	3.01	0.86
The use of sex appeal	2.27	1.04
Harmful products	2.70	0.97
Negatively social and cultural consequences	2.18	1.00
Deceptive advertising	2.12	0.99
Ridicule and discrimination	2.03	1.04
Negative stereotyping	2.05	1.02
Comparative advertising	2.43	0.99

1 =strongly disagree, 5 =strongly agree

TABLE 3
Attitude Toward the Advertisement Among Nine Ethical Issues

Issues	Means	S.D.
Advertising to children	3.36	0.82
The use of fear appeal	3.04	0.86
The use of sex appeal	2.56	1.04
Harmful products	2.90	1.00
Negatively social and cultural consequences	2.32	0.95
Deceptive advertising	2.38	1.02
Ridicule and discrimination	2.23	1.00
Negative stereotyping	2.20	0.99
Comparative advertising	2.59	0.98

1 = strongly disagree, 5 = strongly agree

Means and standard deviations of consumers' attitude toward the brand among nine ethical issues are shown in Table 4. From these results, it may suggest that Thai consumers tend to be strongly unsatisfied with the brand that use negative stereotyping, ridicule and discrimination (M=2.32), advertising that leads to social and cultural consequences negatively.

TABLE 4
Attitude Toward the Brand among Nine Ethical Issues

Issues	Means	S.D.
Advertising to children	3.28	0.97
The use of fear appeal	2.99	0.86
The use of sex appeal	2.80	1.04
Harmful products	2.87	1.06
Negatively social and cultural consequences	2.44	0.98
Deceptive advertising	2.53	1.02
Ridicule and discrimination	2.32	0.98
Negative stereotyping	2.28	0.96
Comparative advertising	2.70	1.04

1 = strongly disagree, 5 = strongly agree

Means and standard deviations of consumers' purchase intention among nine ethical issues are shown in Table 5. It can indicate that Thai consumers have the lower intention to buy products which use negative stereotyping (M = 1.99), ridicule and discrimination (M = 2.04), deceptive advertising (M = 2.11), advertising that leads to social and cultural consequences negatively (M = 2.16), and sexual appeal (M = 2.40).

TABLE 5
Purchase Intention Among Nine Ethical Issues

Issues	Means	S.D.
Advertising to children	3.12	1.05
The use of fear appeal	2.80	1.05
The use of sex appeal	2.40	1.20
Harmful products	2.74	1.28
Negatively social and cultural consequences	2.16	1.14
Deceptive advertising	2.11	1.10
Ridicule and discrimination	2.04	1.10
Negative stereotyping	1.99	1.03
Comparative advertising	2.57	1.13

1 = strongly disagree, 5 = strongly agree

From the descriptive findings as shown in Table 2–5, it is interesting to note that the ethical issues in advertising on negative stereotyping, ridicule and discrimination, deceptive advertising, advertising that leads to social and cultural consequences negatively, the use of sex appeal, and comparative advertising tend to be perceived as strongly unethical actions for Thai consumers. As a result, these ethical issues in advertising should be considered for decision making in marketing plans, marketing communication plans, and advertising plans by advertisers and advertising agencies to advertise their products and services for Thai consumers effectively.

Results of the Test of Hypotheses

The findings indicate that there were positive correlations of ethical perceptions in advertising with attitude toward the advertisement (A_{ad}), attitude toward the brand (A_b), and purchase intention (PI) of consumers in all ethical issues examined in this study as shown in Table 6. Therefore, hypotheses I, II, and III are supported. That is, the more ethical an advertising is judged to be, the more positive are attitude toward the advertisement, attitude toward the brand, and purchase intention. On the other hand, the more unethical advertising is judged to be, the more negative are attitude toward the advertisement, attitude toward the brand, and purchase intention. These results are consistent with previous studies (Henthorne & LaTour, 1995; LaTour & Henthorne, 1994; Simpson et al., 1998; Snipes et al., 1999; Tai, 1999; Tinkham & Weaver-Lariscy, 1994). This is because ethical perceptions in advertising is considered as a cognitive construct that can strongly affect the affective constructs, including attitude toward the advertisement and attitude toward the brand, and that can affect the behavioral constructs including purchase intention according to the Attitude-toward-the-Ad Models (Edell & Burke, 1987) and the unidimensionalist view of attitude (Lutz, 1991). Furthermore, ethical perceptions in advertising can be considered as non-brand related advertisement cognitions that can affect attitude toward the advertisement, attitude toward the brand, and purchase intention (Laczniak & Teas, 2001; Mackenzie et al., 1986). Ethical perceptions in advertising should be more emphasized by both marketers and advertisers because ethical perceptions in advertising can emerge whenever consumers expose the advertising stimuli. Consequently, this study shows that the impacts of ethical perceptions in advertising on consumers' behavioral and attitudinal responses have strongly existed.

TABLE 6 Correlations of Ethical Perceptions with Attitude toward the Advertisement (A_{ad}), Attitude toward the Brand (A_b), and Purchase Intention (PI)

Issues	Correlations Coefficients (r) of ethical perceptions with			
	\mathbf{A}_{ad}	$\mathbf{A_b}$	PI	
Advertising to children	0.54	0.39	0.44	
The use of fear appeal	0.53	0.47	0.48	
The use of sex appeal	0.63	0.49	0.54	
Harmful products	0.58	0.45	0.47	
Negatively social and cultural consequences	0.59	0.53	0.46	
Deceptive advertising	0.60	0.54	0.42	
Ridicule and discrimination	0.64	0.56	0.53	
Negative stereotyping	0.71	0.64	0.57	
Comparative advertising	0.66	0.57	0.52	

Note: All correlations are statistically at the 0.01 significance level

The findings indicate that there were positive correlations of attitude toward the advertisement (A_{ad}) with attitude toward the brand (A_b) and purchase intention (PI) of consumers in all ethical issues examined in this study as shown in Table VIII. Therefore, hypotheses IV and V are supported. That is, the more ethical an attitude toward advertisement is judged to be, the more positive are attitude toward the brand and purchase intention. On the other hand, the more unethical an attitude toward advertisement is judged to be, the more negative are attitude toward the brand and purchase intention. These results are consistent with the existing research evidences (Edell & Burke, 1987; Laczniak & Teas, 2001; Lutz, 1991; Mackenzie et al., 1986; Mitchell, 1986; Schiffman & Kanuk, 2000; Simpson et al., 1998; Snipes et al., 1999; Tai, 1999). Specifically, these findings support that attitude toward the advertisement can strongly affect attitude toward the brand according to the Attitude-toward-the-Ad Models (Edell & Burke, 1987), the Dual Component Model (Mitchell, 1986), and the Dual Mediation Hypothesis (DMH) (Laczniak & Teas, 2001; Mackenzie et al., 1986), and the uni-dimensionalist view of attitude (Lutz, 1991). Furthermore, when considering the level of correlations coefficients, the researcher also finds that attitude toward the advertisement tends to have an effect on attitude toward the brand more strongly than purchase intention in all ethical issues examined in this study as shown in Table 7.

Correlations of Attitude toward the Advertisement (A_{ad}) with Attitude toward the Brand (A_b) and Purchase Intention (PI)

Issues	Correlations Coefficients (r)		
Issues	A _{ad} and A _b	A _{ad} and PI	
Advertising to children	0.55	0.42	
The use of fear appeal	0.54	0.49	
The use of sex appeal	0.58	0.59	
Harmful products	0.61	0.45	
Negatively social and cultural consequences	0.66	0.51	
Deceptive advertising	0.64	0.46	
Ridicule and discrimination	0.65	0.52	
Negative stereotyping	0.69	0.59	
Comparative advertising	0.69	0.58	

Note: All correlations are statistically at the 0.01 significance level

The findings for hypothesis 6 indicate that there were positive correlations between attitude toward the brand (A_b) and purchase intention (PI) of consumers in all ethical issues examined in this study as shown in Table 8. Therefore, hypothesis VI is supported. That is, the more ethical an attitude toward the brand is judged to be, the more positive is purchase intention. On the other hand, the more unethical an attitude toward the brand is judged to be, the more negative is purchase intention. These results are consistent with the existing research evidences (Laczniak & Teas, 2001; Lutz, 1991; Mackenzie et al., 1986; Schiffman & Kanuk, 2000; Simpson et al., 1998; Snipes et al., 1999; Tai, 1999). Therefore, marketers and advertisers should evaluate their brands in the eye of consumers regularly. If an undesirable attitude toward the brand happens, this attitude should be corrected urgently to prevent the negative impacts on purchase intention.

The findings for hypothesis 7 indicate that there were positive multiple correlations of ethical perceptions in advertising, attitude toward the advertisement (A_{ad}), attitude toward the brand (A_{b}) with purchase intention (PI) of consumers in all ethical issues examined in this study as shown in Table 9. Therefore, hypothesis 7 is supported. These results are consistent with the existing research evidences (Henthorne & LaTour, 1995; Laczniak & Teas, 2001; LaTour & Henthorne, 1994; Lutz, 1991; Mackenzie et al., 1986; Schiffman & Kanuk, 2000; Simpson et al., 1998; Snipes et al., 1999; Tai, 1999; Tinkham & Weaver-Lariscy, 1994). Additionally, based on adjusted- R^2 values, the findings also show that these independent variables (ethical perceptions in advertising, attitude toward the advertisement, attitude toward the brand) can predict purchase intention (PI) of consumers. Especially for the use of sex appeal, ethical perceptions in advertising, attitude toward the advertisement, and attitude toward the brand can predict purchase intention (PI) of consumers at 45 % (the highest adjusted- $R^2 = 0.45$). However, in the issue on advertising to children, ethical perceptions in advertising, attitude toward the advertisement, and attitude toward the brand can predict purchase intention (PI) of consumers at only 29.1 % (the lowest adjusted- $R^2 = 0.291$). This may result from other factors affecting purchase intention of consumers such as family, friends, products, prices, or distribution channels (Kotler, 2000).

Torres	Correlations Coefficients (r)
Issues	A _b and PI
Advertising to children	0.45
The use of fear appeal	0.44
The use of sex appeal	0.56
Harmful products	0.50
Negatively social and cultural consequences	0.49
Deceptive advertising	0.47
Ridicule and discrimination	0.48
Negative stereotyping	0.57
Comparative advertising	0.59

Note: All correlations are statistically at the 0.01 significance level

 $TABLE\ 9$ Multiple Correlations of Ethical Perceptions in Advertising, Attitude toward the Advertisement (Aad), and Attitude toward the Brand (Ab) with Purchase Intention (PI)

Issues	Multiple Correlations Coefficients (R)	Adjusted-R ²
Advertising to children	0.545	0.291
The use of fear appeal	0.573	0.323
The use of sex appeal	0.674	0.450
Harmful products	0.574	0.325
Negatively social and cultural consequences	0.571	0.321
Deceptive advertising	0.533	0.279
Ridicule and discrimination	0.600	0.355
Negative stereotyping	0.655	0.424
Comparative advertising	0.649	0.417

Note: All multiple correlations are statistically at the 0.01 significance level

DISCUSSION

As the key question of this study was to investigate the correlations of ethical perceptions in advertising with attitude toward the advertisement, attitude toward the brand, and purchase intention, the findings indicate that there are positive correlations of ethical perceptions in advertising with attitude toward the advertisement, attitude toward the brand, and purchase intention. These results are consistent with the previous studies (Henthorne & LaTour, 1995; LaTour & Henthorne, 1994; Simpson et al., 1998; Snipes et al., 1999; Tai, 1999; Tinkham & Weaver-Lariscy, 1994). This is because ethical perceptions that are considered as a cognitive construct play an important role in determining consumers' affective responses (attitude toward the advertisement and attitude toward the brand), and consumers' behavioral responses (purchase intention). Additionally, these findings are also consistent with the Attitude-toward-the-Ad Models (Edell & Burke, 1987), the Dual Component Model (Mitchell, 1986), the Dual Mediation Hypothesis (DMH) (Laczniak & Teas, 2001; Mackenzie et al., 1986), and the uni-dimensionalist view of attitude (Lutz, 1991) that have a same agreement that supports the effects of consumers' cognition on consumers' attitude and purchase intention. Consequently, the consumers' ethical perceptions in advertising should be considered as the significant variable that an advertiser shouldn't abandon. In other

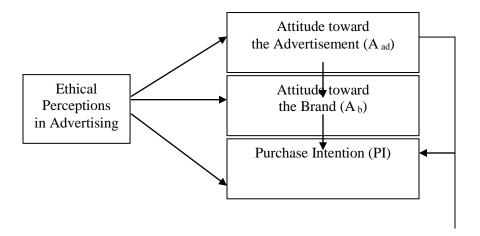
words, it is clear that undesirable consumer responses may result from using the unethically perceived advertising. Therefore, based on the findings of this study, both advertisers and advertising agencies should recognize the advertising ethics deeply and should be careful in creating the advertisements to capture the Thai consumer's attention since the use of unethically perceived advertising may result a negative effect on consumer responses and even violate the normative rules of the Thai markets. Especially, Thai consumers tend to perceive the issues of the use of ridicule and discrimination, negative stereotyping, deceptive advertising, advertising that leads to social and cultural consequences negatively, sexual appeal, and comparative advertising to be strongly unethical. As a result, the marketers and advertisers should be more careful in the use of these unethically perceived advertising issues. Besides, although the issues of advertising to children, the use of fear appeal, and advertisers should be also more careful in the use of these moderately unethical issues, especially for breaking through media clutter.

Additionally, this study also examines the correlations among the dependent variables (attitude toward the advertisement, attitude toward the brand, and purchase intention) to obtain the further understandings on consumers' attitudinal and behavioral responses. The findings as shown in Table VII -X show that 1) there are positive correlations of attitude toward the advertisement with attitude toward the brand and purchase intention of consumers; 2) there are positive correlations between attitude toward the brand and purchase intention of consumers; and 3) there are the multiple correlations of ethical perceptions in advertising, attitude toward the advertisement, and attitude toward the brand with purchase intention of consumers and these variables (ethical perceptions, A_{ad}, A_b) can collaboratively predict purchase intention of consumers. These results are consistent with the existing research evidences (Edell & Burke, 1987; Henthorne & LaTour, 1995; Laczniak & Teas, 2001; LaTour & Henthorne, 1994; Lutz, 1991; Mackenzie et al., 1986; Mitchell, 1986; Schiffman & Kanuk, 2000; Simpson et al., 1998; Snipes et al., 1999; Tai, 1999; Tinkham & Weaver-Lariscy, 1994). Specifically, these findings supports the Attitude-toward-the-Ad Models (Edell & Burke, 1987), the Dual Component Model (Mitchell, 1986), the Dual Mediation Hypothesis (DMH) (Laczniak & Teas, 2001; Mackenzie et al., 1986), and the unidimensionalist view of attitude (Lutz, 1991) which consistently indicate that there are the relationships among attitude toward the advertisement, attitude toward the brand, and purchase intention and also suggest that the cognitive variable (ethical perceptions in advertising) and the affective variables (attitude toward the advertisement and attitude toward the brand) can collaboratively predict the behavioral variables (purchase intention). That is, it can conclude that if unethically negative feelings to the advertising, the advertisement, and the brand are formed, a negative intention to buy the products can be formed. On the other hand, if ethically positive feelings to the advertising, the advertisement, and the brand are formed, a positive intention to buy the products can be formed significantly.

Lastly, the researcher can propose the figure that shows effects of ethical perceptions in advertising on attitude toward the advertisement, attitude toward the brand, and purchase intention as shown in Figure V. In this model, it not only shows the correlations of ethical perceptions in advertising with attitude toward the advertisement, attitude toward the brand, and purchase intention, but also shows the correlations among attitude toward the advertisement, attitude toward the brand, and purchase intention as mentioned above. Therefore, this study can be valuable to companies and entrepreneurs by providing an empirical evidence to show the impacts of ethical perceptions in advertising on Thai consumers' behavioral and attitudinal responses, and this study can be an important evidence to foster companies and entrepreneurs to have more ethics and social responsibility. However, this study had some limitations. First, consumers were asked to judge the ethical perceptions in advertising, attitude toward the advertisements, attitude toward the brand, and purchase intention by without using the actual advertising stimuli. Further research would be more needed to use the actual ad stimuli that were perceived to be unethical in various issues. This will get the picture of the real situation faced by consumers more accurately. Second, the proposed figure that shows effects of ethical perceptions in advertising on attitude toward the advertisement, attitude toward the brand, and purchase intention as shown in Figure V is just the basic model of the relationships among ethical perceptions in advertising,

attitude toward the advertisement, attitude toward the brand, and purchase intention for the better understandings of the results in this study. This figure should be further developed, refined, and validated by researchers to derive a more validated model. Finally, the current research limited the sampling areas only in Bangkok with a small number of samples. Further research should be broadening to get the picture of the whole country more representatively.

Figure 5 Effects of Ethical Perceptions in Advertising on Attitude toward Advertisement (A $_{ad}$), Attitude toward Brand (A $_{b}$), and Purchase Intention (PI)



For managerial implications, advertisers, advertising agencies, other marketing communications agencies, and even multinational enterprises (MNE) deciding to enter the Thai markets can utilize the findings as the empirical data to understand Thai consumers' behavioral and attitudinal responses to the unethically perceived advertising. In addition, nine key ethical issues in advertising examined in this study; advertising to children, the use of fear appeal, the use of sex appeal, advertising harmful products, advertising that leads to social and cultural consequences negatively, deceptive advertising, ridicule and discrimination, negative stereotyping, and comparative advertising, should be taken to inform, educate, and persuade the advertising practitioners in organizations to avoid the use of the unethically perceived advertising. These actions can have long-term potential for reducing unethical advertising practices. Additionally, investigating the impacts of ethical perceptions in advertising found in this study will also assist a number of global businesses in maximizing advertising effectiveness. Finally, research on advertising ethics is still needed to seek the efficient ways to avoid and resolve ethical problems in advertising effectively.

Acknowledgments:

The author wishes to thank Faculty of Humanities, Kasetsart University in Thailand for its financial support on this research.

REFERENCES

Belch, G. E., & Belch, M. A. 2004. Advertising and promotion: An integrated marketing communications perspective (6th ed.). New York: McGraw-Hill/Irwin.

Brinkmann J. 2002. Business and marketing ethics as professional ethics, concepts, approaches and typologies. *Journal of Business Ethics*, 41: 159-177.

Davis, J. J. 1994. Ethics in advertising decision making: Implications for reducing the incidence of deceptive advertising. *The Journal of Consumer Affairs*, 28(2): 380-403.

- Duke, C. R., Pickett, G. M., Carlson, L., & Grove, S. T. 1993. A method for evaluating the ethics of fear appeals. *Journal of Public Policy and Marketing*, 1(1): 120-129.
- Edell, J. A., & Burke, M. C. 1987. The power of feelings in understanding advertising effects. *Journal of Consumer Research*, 14: 421 -433.
- Henthorne, T. L., & LaTour, M. S. 1995. A model to explore the ethics of erotic stimuli in print advertising. *Journal of Business Ethics*, 14 (7): 561-569.
- Hunt, S. D., & Vitell, S. 1986. A general theory of marketing ethics. *Journal of Macro-marketing*, 6 (Spring): 516.
- Hyman, M. R., Tansey, R., & Clark, J. W. 1994. Research on advertising ethics: Past, present, and future. *Journal of Advertising*, 23 (3): 5-15.
- Kotler, P. 2000. Marketing management (10th ed.). Upper Saddle River, NJ: Prentice-Hall.
- Laczniak, R. N., & Teas, R. K. 2001. An examination of measurement context effects in empirically based advertising research. *Journal of Marketing Communication*, 7: 65-87.
- LaTour, M. S., & Henthorne, T. L. 1994. Ethical judgments of sexual appeals in print advertising. *Journal of Advertising*, 23 (3): 81-90.
- Lutz, R. J. 1991. The role of attitude theory in marketing. In H. H. Kassarjian & T. S. Robertson (Eds.), *Perspectives in consumer behavior* (4th ed.): 317-339. Englewood Cliffs, NJ: Prentice Hall.
- Mackenzie, S. B., & Lutz, R. J., Belch, G. E. 1986. The role of attitude toward the ad as a mediator of advertising effectiveness: A test of competing explanations. *Journal of Marketing Research*, 23: 130-143.
- Mitchell, A. A. 1986. The effect of verbal and visual components of advertisements on brand attitudes and attitude toward the advertisement. *Journal of Consumer Research*, 13: 12-24.
- O' Guinn, T. C., Allen, C. T., & Semenik, R. J. 2006. *Advertising and integrated brand promotion* (4th ed.). OH: Thomson Higher Education.
- Park, H., Weigold, M. F., & Treise, D. M. 1999. Advertising ethics: South Korean and American perceptions and ideology. *Journal of Mass Media Ethics*, 14(2): 95-106.
- Pollay, R. W. 1986. The distorted mirror: Reflections on the unintended consequences of advertising. In Hovland, R. & Wilcox, G. B. (Eds), *Advertising in society: Classic and contemporary reading on advertising's role in security*. IL: NTC Publishing Groups.
- Reidenbach, R. E., & Robin, D. P. 1988. Some initial steps toward improving the measurement of ethical evaluations of marketing activities. *Journal of Business Ethics*, 7 (July): 871-879.
- Reidenbach, R. E., & Robin, D. P. 1990. Toward the development of a multidimensional scale for improving evaluation of business ethics. *Journal of Business Ethics*, 9: 639-653.
- Reidenbach, R. E., Robin, D. P., & Dawson, L. 1991. An application and extension of a multidimensional ethics scale to selected marketing practices and marketing groups. *Journal of the Academy of Marketing Sciences*, 19 (Spring): 83-92.
- Schiffman, L. G., & Kanuk, L. L. 2000. *Consumer behavior* (7th ed.). Upper Saddle River, NJ: Prentice-Hall
- Semenik, R. J. 2002. *Promotion and integrated marketing communications*. Cincinnati, OH: South-Western Thomson Learning.
- Simpson, P. M., Brown, G., & Widing II, R. E. 1998. The association of ethical judgment of advertising and selected advertising effectiveness response variables. *Journal of Business Ethics*, 17(2): 125-136.
- Snipes, R. L., Latour, M. S., & Bliss, S. J. 1999. A model of the effects of self-efficacy on the perceived ethicality and performance of fear appeals in advertising. *Journal of Business Ethics*, 19(3): 273-285.
- Tai, S. 1999. Advertising ethics: The use of sexual appeal in Chinese advertising. *Teaching Business Ethics*. 3(1): 87-100.
- Tinkham, S. F., & Weaver-Lariscy, R. A. 1994. Ethical judgments of political television commercials as predictors of attitude toward the ad. *Journal of Advertising*, 23(3): 43-58.
- Treise, D., Weigold, M. F., Conna, J., & Garrison H. 1994. Ethics in advertising: Ideological correlates of consumer perceptions. *Journal of Advertising*, 23(3), 59-69.

Vitell S., Lumpkin J. R., & Rawwas, M. Y. 1991. Consumer ethics: An investigation of the ethical beliefs of elderly consumer. *Journal of Business Ethics*, 10 (May): 365-375.

Whalen J., Pitts R. E., & Wong, J. K. 1991. Exploring the structure of ethical attributions as a component of the consumer decision model: The vicarious versus personal perspective. *Journal of Business Ethics*, 10 (April): 285-293.

IIM, Lucknow, India

Email: dsengar@iiml.ac.in

ABSTRACT

Industrialization- a striking feature of modern civilization- has led to an explosive growth of industries. Industrial development is believed to be essential for rapid economic growth of the country by maximum use of all its resources. However, the industries, predominantly chemical in nature, have been identified as the major centers which adopt hazardous process, use hazardous substances and produce toxic wastes. They have not only exploited the natural resources to their maximum for economic gain but also have disrupted the ecological balance and degraded the environment resulting in huge human health hazards, including the loss of life. They have virtually created killer environment, destroying overnight what nature had taken thousands of years to create, as exhibited by the Bhopal Gas Tragedy. As industrial accidents causing environmental pollution and health hazards have become routine occurrences, it calls for determination of liability and fixing the responsibility on wrongdoer to redress the wrongs done to the victims. The environmental liability regime is also important for deterring the potential hazardous activities of enterprises. The Indian environmental liability regime mainly relies on specific environmental statutes. However, the statutory liability regime failed due to inherent weaknesses of laws, excessive reliance on 'command and control system' and ineffective enforcement and compliance mechanism. The long-drawn court proceedings and meager amount of relief in comparison to the loss incurred made the common people reluctant to adopt the recourse of common law remedies. The paper focuses on how the higher judiciary in India has came forward and played vital role in rectifying the shortcomings of the existing statutory and common law liability regime for damage caused to environment and human health from hazardous industries. It examines the Shriram Chemical case to understand the basis for and significance of new doctrine of absolute liability for hazardous and dangerous activities. It also makes an analysis of the judicial pronouncements in order to understand further development and the future scope of the doctrine to deal with an unusual situation which may arise on account of hazardous or inherently dangerous activities- concomitant to an industrial economy.

INTRODUCTION

Industrialization- a striking feature of modern civilization-is believed to be essential for rapid economic growth of the country by maximum use of all its resources. It is aimed at increasing the production of better quality goods by an application of modern science and sophisticated technology. But man, prompted by his avaricious nature and quite often unreasonable behavior, has considered it as a license to exploit the natural resources and pollute the natural environment.

Industries, predominantly chemical in nature, have been identified as the major centers which adopt hazardous process, use hazardous substances and produce toxic wastes. They have not only exploited the natural resources to their maximum for economic gain but also have disrupted the ecological balance and degraded the environment resulting in huge human health hazards, including the loss of life. The hazardous industries pose potential as well as real health hazards. They have virtually created killer environment, destroying overnight what nature had taken thousands of years to create, as exhibited by the Bhopal Gas Tragedy. It is also evident from the accidents which happened in Chernobyl (former USSR now Ukraine), Exxon Veldez (USA), Seveso (Italy) and Toulouse (France). However, these are only few among the hundreds of industrial disasters responsible not only for polluting the environment but also for causing mass destruction and irreparable loss to life and property.

As industrial accidents and disasters causing environmental pollution and health hazards have become routine occurrences, it calls for determination of liability and fixing the responsibility on wrongdoer. The environmental liability regime is also important for deterring the hazardous activities of enterprises and providing relief to the pollution victims. The Indian environmental liability regime mainly relies on specific environmental statutes. However, the statutory liability regime failed due to inherent weaknesses of laws, excessive reliance on 'command and control system', ineffective enforcement and

compliance mechanism, non-deterring effect of the penal provisions and inadequate provisions to provide adequate and immediate relief to the victims of pollution accidents.

We are confronted with the problem of fixing personal liability for wrongfulness of actions causing severe damage to the environment. The worst incident of Bhopal disaster and other similar events raise the question of who should pay for the costs involved in the clean up of the pollution and the restoration of the damage. Should the cost for this be paid by society at large, i.e. the tax payer, or should it be the polluter who has to pay, in cases where he can be identified? This concern results in a call for liability of responsible parties. One way to ensure that better cautions are applied to avoid the occurrence of damage to the environment is indeed to impose liability on the party responsible for the activity that bears the risks of causing such damage. In other words, when an activity really results in damage, the party in control of the activity or the one who is the actual polluter must pay the cost of repair. However, an excessive environmental liability may affect industrial sector adversely and hamper the economic growth of the country whereas the liberal liability regime may fail to provide the adequate relief to the victims. Therefore, a balanced environmental liability regime is the need of the hour. It may be either through the appropriate statutory measures or timely judicial intervention and interpretation.

The paper focuses on the common law liability regime for damage caused to environment and human health from hazardous industries. It makes an analysis of the pollution accidents in order to know the basis for and significance of new doctrine of absolute liability for hazardous and dangerous activities. It also makes a critical study of the judicial pronouncements to understand further development of the principle of absolute liability and its future scope to deal with an unusual situation which may arise on account of hazardous or inherently dangerous activities- concomitant to an industrial economy.

THEORETICAL BACKGROUND

Environmental Responsibility and Liability Regimes

Liability for damage to environment is a prerequisite for making economic actors feel responsible for the possible negative impacts of their operations on the environment as such. So far, the industry and other operators appear to feel such responsibility for other people's health or property rather than for the environment. They consider the environment 'a public good' for which society as a whole should be responsible, rather than the polluter. Liability is a certain way of making persons realizes that they are responsible for the consequences of their acts with regard to environment. This expected change of attitude should result in an increased level of prevention and precaution on the part of persons involved in hazardous and harmful activities. Environmental liability regime aims at making the polluter pay for remedying the damage that he has caused. Environmental regulation lays down norms and procedures for protecting and preserving the environment. In absence of liability regime, failure to comply with existing norms and procedures may result only in administrative and penal sanctions. However, if liability provisions are added to regulation, the potential polluters may also have to pay for restoration or compensation of the environmental damage they caused. However, the liability regime may not provide remedy for all forms of environmental damage as for its effectiveness the polluters should be identifiable and the environmental damage should be tangible and quantifiable. It is also necessary to establish an informal linkage between the damage caused and the polluters identified. The liability regime can be effectively applied in those cases where damage results from accidental or gradual pollution caused from identifiable sources like hazardous industries. Thus, liability regime is not suitable instrument to deal with pollution of widespread and of diffuse characters. It is also not workable in those cases where it is impossible to link the negative environmental effects with the activities of certain polluters as in case of climate change which is brought about by CO2 and other emissions, forests dying as a result of acid rain and air pollution caused by traffic.

Under a responsibility regime, the duty to restore the harm done exists only when a wrongful act is committed and there are certain circumstances which prohibit wrongfulness. Under liability regime, liability falls on the person who benefits from or control the activity and the compensation may be due even if there is no wrongfulness. In such cases the amount of compensation is limited in order to cover

damage without jeopardizing the activity itself. Thus, the environmental responsibility applies only when the wrongfulness of actions is established, while a liability regime is applicable whenever causation of damage exists, even in the absence of wrongful actions. However, there is a need to develop other system to deal with damage if the source of damage can not be identified.

Environmental Liability: An Obligation

Liability is a present obligation to make expenditure or to provide a product or service in the future. It is a legally enforceable obligation and law both establishes liabilities and determines who is responsible for discharging them.

An environmental liability is an obligation to make a future expenditure due to the past or ongoing manufacture, use, release, or threatened release of a particular substance, or other activities that adversely affect the environment. A potential environmental liability is a potential legal obligation to make a future expenditure due to the ongoing or future manufacture, use, release, or threatened release of a particular substance, or other activities that adversely affect the environment. A "potential environmental liability" differs from an "environmental liability" because an organization has an opportunity to prevent the liability from occurring by altering its own practices or adopting new practices in order to avoid or reduce adverse environmental impact.

The term "environmental liabilities" refer to the potential for fines, penalties, and jail terms for violations of environmental laws. It also refers to the clean-up obligations under various central and state laws for contaminated sites. Generally, it is considered to tag the costs involved in complying with regulations as environmental liabilities. Thus, environmental liability may arise from a variety of sources such as central and state environmental statutes, rules and regulations enforced by public agencies or through private citizens' suits. The other legal source of these liabilities is common law. Environmental liabilities may be broadly categorized as follows:

- Compliance obligations related to laws and regulations that apply to the manufacture, storage, use, disposal, and release of chemical substances and to other activities that adversely affect the environment
- Redemption obligations related to existing and future obligations to clean up of the sites contaminated by companies
- Obligations to pay civil and criminal fines and penalties for statutory or regulatory noncompliance
- Obligations to compensate private parties for personal injury, property damage and the economic losses
- Obligations to pay fine i.e., punitive damages for grossly negligent behaviour
- Obligations to pay for natural resource damages.

Statutory Environmental Liability Regime

India has adopted the "command and control" system to deal with environmental issues. It consist of a legislative framework for setting up various rules, regulation and standards to be followed by the polluters as well as an administrative mechanism for ensuring strict enforcement and compliance of these rules, regulation and standards. An ideal "command and control" system recognizes statutory tools to punish the violators either by imposing fines, penalties in mild cases of violations while severe violations calls for imprisonment. The Environment (Protection) Act 1986, The Water (Prevention and Control of Pollution) Act, 1974 and The Air (Prevention and Control of Pollution) Act, 1981 are specific legislation dealing with the environmental pollution and hazardous substances and processes, whereas the Public Liability Insurance Act, 1991 and National Environment Tribunal Act, 1995 provides for the compensation in case of harm from hazardous substances and chemical accidents. These environmental statutes have liability and penalties provisions and provides for the obligations to be complied with, by persons participating in any activity restricted or regulated by the statutes. The Water Act, 1974 obliges

the persons to comply with the emergency orders issued by the Pollution Control Board, in case of any accidental or unforeseen discharge of poisonous, noxious or polluting matter into a stream, well or on land. It also provides an extended liability for offences committed by the companies and makes the persons who at a time of the offence were in-charge of or responsible for conducting company's business liable along with the company. Any director, manager, secretary or other officer would also be held responsible for the offence committed by company if such offence has been attributed to his consent, connivance or negligence. The fact of being managing director of a company is by itself sufficient to attract the provision of the Act and the vicarious liability specified therein and it is not necessary to plead specific allegations. The Act also make the Head of the Government Department's liable for an offence committed with his knowledge or for failure to exercise all due diligence to prevent the commission of such offence. Similar provisions are also provided under the Air Act, 1982.

The Environment (Protection) Act, 1986 has laid down the obligations for the person carrying any activities which is hazardous to environment and provides that no person would be allowed to emit or discharge pollutants in excess to the prescribed standards and obliges the persons to take measures to prevent, mitigate and report any excessive emission or any apprehended emission of environmental pollutants from premises due to any accident or other unforeseen act or event to the Board. The Act imposes a liability to comply with procedural safeguards in the disposal of hazardous wastes. The Act makes the corporate officials, directly managing company's business liable for the offence, unless the offence was committed without their prior knowledge or they exercised all due diligence to prevent the commission of the offence. If an offence is committed with the consent or connivance of, or attributes to any neglect on the part of such officers, along with company, the officials shall also be liable for the offence.

Thus, a good number of the laws and regulations are in existence to prevent and control the hazards of environmental pollution. However, in spite of penal and pecuniary liabilities and responsibilities for environmental offences, the current state of statutory liability regime is not effective to curb both regular as well as accidental pollution in India and it can be judged from Greenpeace report on industrial pollution. Non-deterring effect of the statutory liability regime and callousness on the part of environmental authorities has often been taken as a great motivation for offenders to continue their polluting activities. The two consecutive industrial devastations in the form of Bhopal gas tragedy and Shriram gas leakage had taken aback the confidence of the people in the environmental statutes and the respective enforcement agencies.

The ineffectiveness of the statutory liability system forced the peoples to take recourse of the judiciary even for the enforcement of statutory provisions by the regulatory agencies. A victim of environmental hazards can initiate a judicial proceeding for damages in civil court under common law.

Environmental Liability under Common Law Regime

The Common law is primary legal source to deal with the environmental pollution and in fact was the only recourse to the victims before the enactment of specific environment legislation. Under the law of torts, the damages and the compensation are provided to the victims of pollution caused by any other person under the wrong of negligence, nuisance, and strict liability and now under the new doctrine of absolute liability. Private and public nuisance, trespass and negligence belongs to 'fault based liability', while strict liability and absolute liability falls under 'no-fault' category and in such case a person is liable for his act, which caused harm to other person or environment in general, even in absence of any fault on his part.

Strict liability: Rylands case: It is most widely accepted principle of common law while dealing with the environmental pollution and chemical hazards cases. The modern doctrine of strict liability to pay the damages to the victims of escape of dangerous substances has its genesis in the English case Rylands v. Fletcher (1866). In this case, the court held that:

"...a person who for his own purposes brings on his lands and collects or keeps there anything likely to do mischief if it escapes, must keep it at his peril, and, if he does not do so, is prima facie answerable for all

the damage which is the natural consequence of its escape. He can not excuse himself by showing that the escape was owing to the plaintiff's default; or perhaps that the escape was the consequence of vis major, or the act of God..."

The liability arises not because there was any fault or negligence on the part of person, but because he kept some thing dangerous on his land and the same has escaped from there and caused damage. Since in such cases the liability arises even without any negligence on the part of the defendant, it is known as the rule of Strict Liability.

This strict liability rule laid down a principle of liability that if a person who brings on his land and collects and keeps there anything likely to do harm and such thing escapes and does cause damage to another, he is liable to compensate for the damage caused. However, there are two qualifications to the *Rylands principle*: (i) the activity on the defendant's land must be a "non-natural" use of land; and (ii) the risk of damage to the plaintiff must be "reasonably foreseeable." Thus, if any escape of such things from defendant's land causes harm to the plaintiff, the plaintiff has to just show of that his sufferings are because of activity on the defendant's land and it satisfies the above mentioned conditions. Once the defendant is held "strictly liable" he has to pay the damages to the victim. Strict liability is subjected to a number of exceptions, which limits its scope. However, the offender can plea the following exceptions as defence: act of God (i.e. such escape of the things from defendant's possession was because of some natural disasters such as earthquake, flood etc.); act of third party (such as enemy's attack, sabotage etc.); thing escaped from defendant's premises because of plaintiff's own fault; thing escaped from defendant's premises with plaintiff's consent; natural use of land (the particular use of the premises was a natural use of land), and that the premises belong to a statutory authority.

The principle has been widely accepted among the major jurisdictions world-wide and played an important role in defining the liability of the offenders in environmental matters and pollution accident cases. But, the civil liability regime for environmental cases under law of torts has not been preferred in India due to cumbersome judicial processes, delay in getting justice and inadequacy of compensation amount. However, the higher judiciary has tried to overcome the shortcomings of existing statutory and tortious liability as well as compensatory regime in order to address the miseries of the pollution victims.

Absolute liability- Shriram Chemical case: In Shriram Chemical case, the Supreme Court of India pronounced a more stringent form of liability regime known as "Absolute Liability" for the enterprises which are engaged in hazardous or inherently dangerous activities and pose potential threat to environment and human health and safety.

On the morning of the December 4, 1985, just a day after the first anniversary of the Bhopal Gas Tragedy, a major Oleum gas leakage occurred in one of the caustic chlorine plant of the Shriram Chemical industry in Delhi. Fairly good amount of the hazardous Oleum gas created thick fumes in the affected area of Tis Hazari Court. A few people passing through site at the time of accident were severely affected and death of an advocate was also reported because of the gas leakage.

A writ petition about the safety of communities residing in the surrounding areas of this hazardous industrial enterprise was filed just before one month of Oleum gas leak from Shriram chemical plants and a pray for closure and relocation of Shriram's Caustic soda and Sulphuric acid plants was made. After the occurrence of Oleum Gas leak, an application for compensation to the victims was also filed under the same petition. The Supreme Court accepted the writ petition as well as an application for compensation and a closure order was passed.

However, the Supreme Court analyzed the performance of the Shriram Industry by going through its environmental performance under the provisions of the Water Act, 1974 and Air Act, 1982 before taking the issue of re-starting the caustic soda plant. Only after the satisfactory record as well as an assurance of compliance with the measures for further improvement, the Court with a set of strict safety measures, a rigorous observation mechanism and an undertaking form the management in the form of guarantee to ensure its personal liability for payment of compensation to the victim, in case of reoccurrence of the such incident in future, allowed the Shriram chemicals to re-start its caustic chlorine

unit. In this case, important legal issues from the point of view of liability and responsibility were: (a) Extent of liability of the enterprise, and (b) Personal liability of management.

Extent of liability of enterprise: In the year 1987, a new concept of "absolute liability" of hazardous industrial enterprises was evolved by Supreme Court of India, by overruling the exemptions of the existing doctrine of strict liability as pronounced in 1886 in Ryland v. Fletcher case. The rational behind absolute liability was that any corporate dealing in hazardous and poisonous substances undertakes an implied condition to take care of the society in case of any escape of such chemicals. As they are making profit from carrying out the business activities, therefore, in case of any such mishap they would have to bear the responsibility to compensate the victims as a social cost of these operations.

Regarding the application of rule in Rylands in case of Shriram Chemicals, the Supreme Court observed that the rule was evolved in the 19th Century at a time when much development in science and technology had not taken place. The rule also did not help much in view of the constitutional norms and the needs of the present day economy and social structure. The Supreme Court observed:

"We have to evolve new principles and lay down new norms which would adequately deal with the new problems which arise in a highly industrialized economy...... We are certainly prepared to receive light from whatever source it comes but we have to build up our own jurisprudence and we cannot countenance an argument that merely because the new law does not recognize the rule of strict and absolute liability in cases of hazardous or dangerous liability or the rule as laid down in Rylands v. Fletcher as is developed in England recognizes certain limitations and responsibilities".

The Court felt that the law cannot afford to remain static and accordingly observed:

"I venture to evolve a new principle of liability which English Courts have not done. We have to develop our own law and if we find that it is necessary to construct a new principle of liability to deal with an unusual situation which has arisen and which is likely to arise in future on account of hazardous or inherently dangerous industries which are concomitant to an industrial economy." Furthermore,

".... An enterprise which is engaged in a hazardous or inherently dangerous industry which poses a potential threat to the health and safety of the persons working in the factory and residing in the surrounding areas owes an absolute and non-delegable duty to the community to ensure that no harm results to anyone on account of hazardous or inherently dangerous nature of the activity which it has undertaken. The enterprise must be held to be under an obligation to provide that the hazardous or inherently dangerous activity in which it is engaged must be conducted with the highest standards of safety and if any harm results on account of such activity, the enterprise must be absolutely liable to compensate for such harm and it should be no answer to the enterprise to say that it had taken all reasonable care and the harm occurred without any negligence on its part".

Regarding the basis of enterprise liability, the Court held that it must be strictly liable for causing harm as a part of social cost for carrying on the hazardous or inherently dangerous activity. The Court observed: "If the enterprise is permitted to carry on an hazardous or inherently dangerous activity for its profit, the law must presume that such permission is conditional on the enterprise absorbing the cost of any accident arising on account of such hazardous or inherently dangerous activity as an appropriate item of its overheads. Such hazardous or inherently dangerous activity for private profit can be tolerated only on condition that the enterprise engaged in such hazardous or inherently dangerous activity indemnifies all those who suffer on account of the carrying on of such hazardous or inherently dangerous activity regardless of whether it is carried on carefully or not".

The principle of liability is also sustainable on the ground that the enterprise alone has the resources to discover, guard against and provide warning against the potential hazards. Thus, any industrial unit engaged in hazardous processes is certainly aware of the consequences of any escape of the same. As dealing with the hazardous substance and process is certainly not a natural use of the property, therefore it is the duty of an enterprise to protect the local communities and in case of any mishap; they are liable to compensate the victims as the social cost of their profit making.

The doctrine of strict liability is being used by most of the jurisdictions around the world for holding a polluter liable for escape of any substance from its possession resulting into environmental or

industrial devastation. A good number of the exceptions such as act of god, act of third party, victim's involvement and natural use of property provide escape gates to the offenders. But the principle of absolute liability denies any such exceptions provided under the principle of strict liability. It seems that the failure of the legislative system in providing the effective environment legislation, executives in enforcing them properly and the polluters in complying with the statutory provisions and the standards forced the judiciary to take such a harsh step in making the enterprise absolutely liable for the escape of hazardous chemicals and substances.

Thus, in Shriram Chemical case the requirement of "non- natural user" or the condition of "escape" of a dangerous substance, which are commonly regarded as essentials for liability under rule in Rylands, need not be proved in matters of hazardous industries endangering environment. Similarly, the use of the term "absolute" is deliberate and may eliminate at least some of the exceptions commonly recognized by the rule in Rylands. However, the future developments alone will show which of the exceptions have been dropped and to what extent.

Personal Liability of Management

The Social changes have affected the rules of the tort law too. Earlier, the Courts in India did not recognize the principle of vicarious liability in pollution cases.

In case of M/s.Gwalior Rayon Silk Manufacturing Co, the petitioner contended that the chief executives were vicariously liable for pollution since they were responsible for conducting and managing the business of an enterprise run by the Company. But the Madhya Pradesh High Court took the view that the chairman, directors, president, chief executives and other authorities were not vicariously liable for the alleged offence of discharging effluents injurious to public health. The Court further observed that men's reaction (guilty intention) being an essential ingredient of a criminal offence, the defendants could not be held liable. The Court observed that mere fact that the objectives of a statute were to promote welfare activities or to eradicate a grave social evil, by itself, was not sufficient to exclude the element of mens rea. It might be excluded from a statute only where it was absolutely clear that the implementation of the objectives of the statute would otherwise be defeated. However, the above view is no longer valid since it has been overruled by the Supreme Court by its decision in Shriram Chemicals case. Although the judgment of the Supreme Court in Shriram case cannot be taken as the final word in relation to settlement of the principles and norms for determining and quantifying the liability of enterprises engaged in the manufacture and sale of hazardous products, yet it focuses on tortuous civil liability of responsible officers of a company.

Regarding the personal responsibility of chairman and others, the Court directed the management of Shriram chemicals to provide an undertaking, from the chairman and managing director of the Delhi Cloth Mills Ltd., and also from the officers who are in actual management of the caustic chlorine plant that in case there is any escape of the chlorine gas resulting in death or injury to the workmen or to the people living in the vicinity, they will be personally responsible for payment of compensation for such death or injury.

The direction, thus, reflects that compensation is recoverable by all those who are affected by the escape of chlorine gas and the liability to pay such compensation is enforceable against the owner and the top executives of the plant engaged in hazardous process. However, it was urged on behalf of Shriram Chemicals that if they are insisted upon for an undertaking to be given by any such officer it would be impossible to secure the services of any competent officer due to absolute and unlimited liability were to be imposed on any such officer. The Court accepted the above contention and put a limit on personal responsibility of concerned officer provided he shows that such escape of gas took place as a result of act of God or vis major or sabotage or that he had exercised all due diligence to prevent such escape of gas. However, the Supreme Court rejected the contention that chairman and/or managing director should not be required to give an undertaking for personal liability as they were not responsible for day to day management of the units. The situations when the chairman and managing director may be exempted from liability was also clarified by the Supreme Court in following words: "....[T]he undertaking to be given by the Chairman and/or Managing Director may provide that no liability shall attach to the

Chairman and/or Managing Director if he can show that the escape of chlorine gas was due to an act of God or vis major or sabotage. But in all other cases the chairman or managing director must hold himself liable to pay compensation".

Thus, the Supreme Court tried to put limit on absolute and unlimited liability to be imposed on the officers in case of death or injury arising on account of possible escape of hazardous gas to encourage the competent person to accept job in hazardous industries but at the same time it confirmed personal liability of the chairman and/or managing director for payment of compensation to gas victims in all situations except in cases of escape of hazardous gas due to an act of God or vis major or sabotage. Though this case was decided with reference to Articles 32 and 21 of the Constitution of India, it seems that the principles applicable to constitutional litigation for imposing liability to compensate victims are similar to those principles applicable in the law of torts. In this case, the Supreme Court for the first time has imposed personal tort liability on directors and other officers for corporate torts.

Thus, the Supreme Court, with the objective to ensure the highest degree of the attention of the managers/ supervisors towards the safety measures in a hazardous plant, evolved the principle of personal liability of the management to pay compensation to victims. However, keeping in mind the deterrent effect of principle of unlimited personal liability on the business community as a whole, the court relaxed it and finally held that such erring employee would be personally liable to the extent of his annual pay including allowances. However, such employee can be indemnified by the employer provided he has taken all care and due diligence to prevent and control any such incident in the industry.

The Supreme Court held that damages or compensation in cases similar to Shriram Chemical case must be correlated to the wealth of the enterprise, as any such scale of determination of compensation carries a deterrent effect on the industries and also provide a better redress to the victims. The deterrent effect of higher compensation may provide an incentive to the potential offenders to become more cautious about their responsibility towards the potential victims and the environment. Thus, the general rule established is richer the enterprise, greater the compensation payable by it for the harm caused to the victims on account of an accident in hazardous industry. Though industry may criticize it as an excessive measure but under the prevailing situations where courts are reluctant to grant adequate compensation to the victims, such guidelines will certainly help the judiciary in assessing the suffering of the victims and determining the corresponding damages. Thus, development of absolute liability principle for chemical accidents and the deterrent principle of determining damages according to the wealth of polluter have developed a strong foundation of liability regime and compensatory regime for chemical accidents in India.

Shriram Doctrine of Absolute Liability: Further Developments

Bhopal Disaster case: The environmental liability regime has been greatly influenced by the Indian Judiciary by way of developing the principle of absolute liability. However, the absolute liability principle pronounced by the Supreme Court in Shriram Chemical case could not be followed by the Supreme Court itself rather it helped in reaching a compensation settlement between Government of India and the Union Carbide Corporation and awarded interim compensation to the Bhopal victims in the year 1988. This was a great set back for the infant principle of absolute liability as well as to Bhopal victims' hope for a speedy and adequate remedy in the case of industrial environmental disaster.

In Bhopal case, the Madhya Pradesh High court, supported the substantive law of torts and observed that the decision of the Supreme Court in Shriram Chemical case pronouncing the principle of absolute liability was applicable in this case as both the cases were of much similarity in term of occurrence and consequences. However, Justice Venkatachaliah, of Supreme Court in Bhopal Review case set aside the High Court's views and recognized Union Carbide's right to get an opportunity to present defence. Thus, Supreme Court moved back from the 'without-exception' absolute liability principle as established in the Shriram chemical case and later on, some exceptions such as; act of God and act of third party or war were also allowed under the principle of absolute liability with a notion of

fairness in justice. Thus, the principle of absolute liability could not be applied in Bhopal case, however, the Supreme Court affirmed the principle in following environmental damage cases:

The Bichhari case: Bichhari is the first case in which the Supreme Court had successfully applied the principle of absolute liability against the polluting industries for restoration of contaminated sites and compensation to the pollution victims. While determining the extent of the liability against the accused industrial units, the court considered the production of the H-acid without proper approval, avoidance of the directions issued by the Rajasthan State Pollution Control Board, irresponsible disposal of the hazardous wastes and the non-compliance of the orders issued by the Court itself, as offences of severe nature. The court emphasized on the principle of "Polluter Pays" and held the group head of the industrial units liable to bear the cost of the restoration of the degraded environment. The court also held that damages/ compensation in such cases must be correlated to the magnitude and capacity of the enterprise so as to have a deterrent effect. The court issued the direction to the Central Government to the effect that head of several units and agencies should be made personally accountable for any lapses and/or negligence on the part of their units and agencies. Though the court had not awarded the compensation to any of the victims directly but it directed the victims to file their claims with the appropriate civil court. Through this case, the apex court tried to re-institute the principle of absolute liability and it was an important development. The scope of absolute liability gained a broader dimension in the following case by holding the defendants absolutely liable not only for the compensating the victims but also to bear the cost of restoration of the environmental damage.

The Vellore Citizens's case: The Vellore Citizen is another case in which the Indian judiciary has applied the concept of absolute liability for restoration of the damaged environment. The Court issued the closure order due to non-compliance of emission standards by the polluting tanneries. This case is also an example of adoption of international principles of sustainable development in India. Thus, the Court approved the principle of "absolute liability" and also advocated the importance of the universally accepted principles of sustainable development as proactive step towards environmental protection for better co-ordination of the commercial objectives with social responsibilities of industrial enterprise. It is good effort to develop a sustainable balance between development of society as well as the preservation of the environment. The concept of sustainable development appreciated by the Supreme Court in the Vellore Citizen's case has been adopted by the Government of India as a fundamental objective of government policy for abatement of pollution. Thus, the post-Shriram developments of the principle of absolute liability are full of ups and down. However, in Bichhari and Vellore Citizens' cases the concept of the absolute liability gained a broader dimension by holding the defendants absolutely liable not only for providing the compensation to the victims but also to bear the cost of restoration of the damaged environment.

In order to provide immediate relief to the public affected by an accident in an enterprise while handling hazardous substances, the Parliament enacted The Public Liability Insurance Act, 1991. It has granted statutory recognition to the concept of the absolute liability as stated in the *Shriram Chemical Case* and made the victims of a hazardous industrial accident entitled to get the maximum compensation of Rs. 25,000 without any proof of negligence on the part of polluter. However, the compensation contemplated under the Act is for an injury to a human being and the damage caused to private property but it does not provide compensation for environmental harm whereas it is also likely that an accident may occur without any harm caused to an individual. In such cases, the State should claim compensation for the environmental harm based on impact assessment of the accident.

CONCLUSIONS

India has adopted a command and control system to deal with environmental matters, but the statutory as well as common law liability regimes are not effective to curb both regular and accidental pollution. It forced people to take recourse of higher judiciary. Keeping in view, the industrialization, globalization and new socio-economic conditions of the country, the Supreme Court of India has

extended the scope of existing strict liability regime and evolved a new principle of absolute liability to make for the hazardous industrial units absolutely liable to pay compensation to the victims of pollution accidents according to its paying capacity. Although the doctrine of absolute liability could not be applied in case of Bhopal disaster but same has been effectively applied in subsequent cases of Bechari and Vellore Citizens' to compensate the loss caused to human health and environment. Thus, an innovative legal tool of absolute liability seems to be a preferred choice of Indian courts in future while addressing environmental matters.

It is a fact, the even by deploying the latest safety and precautionary technologies available, one can not rule out the occurrence of environmental accidents completely. Therefore, it is a wise step to take proactive measures to prevent any such activity which causes any harm, whether or not any such apprehension is supported by the scientific principles, as a precautionary step.

REFERENCES

Alberini, A., Austin, D.H. *Strict Liability as a deterrent in toxic waste management: Empirical evidence from accident and spill data*. Available at: http://www.rff.org/CFDOCS/disc_papers/PDF_files/9816.pdf Bell, S. & McGillivoray, D. 1999. *Environmental law*: 257-290.

Chandran.S. *Locus Standi in environmental litigation; The Indian scenario*. Available at http://www.geocities.com/sarathdhanusha/paper2.htm

Divan, S., & Rosencranz, A. 2001. Environmental law and policy in India.

Leelashakharan, P. 1999. Environmental law in India.

Pande, B.B. 1990. Penal law as an instrument for environmental protection in India. In S. N. Singh (Ed.), *Law and social change*: 139-171.

Saldanha, .F. *Peoples' initiatives and judicial activism as a catalyst of Institutional reform*. Available at http://www.inece.org/5thvol1/saldanha.pdf

Shaman, D. India's pollution regulatory structure and background. Available at

http://www.worldbank.org/nipr/india/india-back.htm

Swamy, N Maheswara. 1988. Law relating to Pollution and Protection.

Thakur, K. 1999. Environmental law and policy in India.

Tsekouras, K. *Civil liability for environmental damages: Tort Law, fund solution and role of courts*. Available at http://www.iue.it/WGES/Iss16/tsekour.htm

Wheeler, D. *The economics of industrial pollution control an international perspective*. Available at http://www.worldbank.org/nipr/work paper/wheeler92/index.htm

INVESTIGATING MACROECONOMIC VARIABILITY USING A VECTOR AUTO-REGRESSION MODEL: THE CASE OF YEMEN

MOHAMMED ALWOSABI

University of Bahrain, Kingdom of Bahrain E-mail: malwosabi@yahoo.com

ABSTRACT

This paper investigates the sources of macroeconomic variability of Yemeni economy using Vector Autoregression (VAR) model. The analysis is based on quarterly data from1990 to 2003 of five key macroeconomic variables. Monetary policy variable is found to be exogenous and is unaffected by any other macroeconomic variable There is an evidence that GDP and export have direct influence on inflation. There is also evidence that monetary policy has its impact on government expenditure and export. Impulse response and variance decomposition analysis suggest that GDP is influenced by monetary policy in the short run and long run. Fiscal policy has a very moderate impact on GDP and only in the long run. Also, in the long run GDP has a big impact on CPI while M2 has a moderate impact on the same. GDP and M2 are the main variables that affect CPI in the long run. Export has a big impact on government spending in the short run but government spending is affected by the monetary side of the economy (CPI and M2) in the long run. The result also suggests that fiscal policy does not have the expected impact on economic variables.

INTRODUCTION

After the reunification of North and South Yemen in 1990, the Republic of Yemen has experienced dramatic internal and external difficulties which results in a poor economic performance. At the time of the first Gulf war, the country had to deal with the return of around 800,000 Yemenis working in the Gulf countries and a temporary suspension of most foreign aid as well as other security and political problems. Following the civil war of 1994, government initiated a macroeconomic stabilization and structural reform program with the support of international organizations. The reform program focused on inflation control, price and trade liberalization, reduction in subsides, unification of the exchange rate regime and financial sector reforms. The existence of a greater domestic market, resulting from the reunification and an increase in oil production as new oil wells coming fully on line in 1994, resulted in slight improvement in economic performance in this period.

However, the drop in oil prices since 1997 reduced government oil-related receipts in 1998 by 9.6 percentage points of GDP, complicated macroeconomic management, and contributed to a weakening of domestic and external balances in 1998. Since 2000 GDP growth has steadily begun to slip as the government became distracted from maintaining the momentum of reforms. Macroeconomic performance weakened further in 2004. Oil production declined by 5.9 percent, reducing overall growth to 2.7 percent. Core inflation increased to 14.5 percent by yearend because of expansionary macroeconomic.

The oil sector accounted for about 13 percent of real GDP in 2005. It also contributed about 67 percent of government budgetary revenue and 88 percent of exports during the same year. However, Yemen is likely to become a net fuel importer by 2011, and to fully exhaust its reserves of crude oil by 2018. Other economic activities in Yemen consist of services (38 percent of GDP); agriculture (15 percent); manufacturing, utilities and construction (10 percent); and Government services (10 percent).

GDP growth in Yemen has been driven mainly by factor accumulation rather than productivity. The production structure in Yemen is dominated by sectors that are dependent on external factors such as oil industry or on natural factors such as agricultural sector, which has low level of productivity. Therefore, the economy is highly sensitive to any external or natural changes and has limited response to many development policies. This low economic growth has been reflected in the rise of the

unemployment rate to 16.8% in 2005 and actual unemployment rates are likely to be even higher. Yemen ranks 151st out of 177 countries on the 2005 Human Development Index (HDI). Recent developments point generally to deterioration in macroeconomic indicators.

The objective of this paper is to investigate macroeconomic variability in Yemen economy using Vector Autoregressive (VAR) model. To my knowledge, this study represents the first attempt to estimate a macroeconomic variability of the economy of the Republic of Yemen over the period 1990 to 2003 using VAR technique proposed by Litterman (1984) and Sims (1980, 1982 and 1986). The main focus of this study is to analyze empirically the strength of the short-run and long-run impacts of anticipated and unanticipated macroeconomic policies and shocks on the macro economy of Yemen. The paper contributes to macroeconomic literature in a way it provides policy implication for the policy maker in charge of monetary and fiscal policy.

The paper is structured into five sections. The next section outlines data description and model specification. Section 3 discusses the VAR model estimation and empirical results. Summary and conclusion are provided in Section 4.

RESEARCH ETHODLOGY

Data Description and Model Specification

The data for the study is obtained from IMF International Financial Statistics (IFS) and from World Bank's World Development Indicators (WDI, 2005). The data for Republic of Yemen is available only from 1990, the year of the reunification of North and South Yemen. Because of the limited annual data, quarterly data were generated for all variables except for money supply, which was taken from IFS.

The variables included in the model are gross domestic product (GDP) as a measure of economic activity, consumer price index (CPI) as an inflation variable, money supply (M2) as the monetary policy variable, government expenditures (G) as fiscal policy variable, and, since the value of oil export constitutes the major portion of the total export in Yemen, value of exports (X) is used as a proxy for oil export.

The objective here is to study the inter-relationship between these key macroeconomic variables, in particular, the influence of policy variables, such as Government expenditures or money supply and exports on economic activities using Vector Autoregression (VAR) model. All the variables in the model are in real terms and are expressed in logarithms.

Pioneered by Sims (1980) and popularized by researchers such as Litterman (1984) and Doan (1984), VAR model does not require any explicit economic theory to estimate a model. It uses only the observed time-series properties of the data to forecast economic variables.

The VAR models have many applications (see Cooley and Leory, 1985). They are used to determine how each endogenous variable responds over time to a shock in that variable and in every other endogenous variable. They are useful for the analysis of the effect of alternative monetary or fiscal policies (Sims, 1982). They also provide a straightforward way of predicting the values of set of economic variables at any given point in time.

The estimated reduced form of VAR model can be written as the following:

$$Y_t = A + B(L)Y_t + E_t \tag{1}$$

Where, Y_t is a (n x 1) vector of system variables, A is a (n x 1) vector of constants, B(L) is a (n x n) matrix of polynomials in the lag operator L, and E_t is a (n x 1) vector of serially uncorrelated white noise error with constant variance and zero mean. The standard Sims (1980) VAR is unrestricted reduced form approach and uses a common lag length for each variable in each equation. The VAR model presented above indicates that the current innovations (E_t) are unanticipated but becomes part of the information set in the next period. The implication is that the anticipated impact of a variable is captured in the coefficients of lagged polynomials while the residuals capture unforeseen contemporaneously events. The impact of the unanticipated shocks to one variable on other economic variables of the model can be analyzed by employing the impulse response function (IRF) and variance decomposition (VDC) that are obtained from a moving average representation of the VAR model. To implement the reduced form VAR

model into a structural model whose dynamics are determined by economically interpretable shocks we used EViews econometric software (version 5).

RESULTS AND DISCUSSION

VAR is a technique that facilitates to capture both the dynamic and interdependent relationships of variables. As a pre-requisite, certain properties of the variables in the model must be checked in order to determine the appropriate specification for VAR estimation. Unit root test is the logical first step to check whether the time series data are stationary or non-stationary.

Tests for Unit Root

Stationary time series data is necessary to have valid statistical tests. The order of integration for each variable is determined using Augmented Dickey and Fuller (ADF) (1979) and Phillips and Perron (PP) (1988) tests. The results of these tests are reported in table 1.

Table 1 Unit Root Tests

		ADF		PP		
Variable	Constant	Constant & Trend	No Constant & No Trend	Constant	Constant & Trend	No Constant & No Trend
Log Level						
GDP	1.190805	-0.329422	-2.389036	7.712729	1.028893	-3.348964**
G	0.800553	-1.209045	-2.236953	1.431318	-1.217128	-1.864952
СРІ	1.467539	-0.036428	- 2.689363***	3.948158	0.440107	-2.004395
X	-0.326510	-2.231900	-1.870727	0.074041	-1.682989	-1.329750
M2	2.353550	2.049016	0.895852	22.56515	12.63511	3.766231
Log First Difference						
GDP	-0.042044	-2.089825	-1.787860	-1.628632	-4.275743*	-4.272256*
G	- 3.291488**	-3.420671**	-3.396137**	-3.277017**	-3.439069**	-3.398286**
СРІ	-1.247436	- 2.622960***	- 2.628510***	-1.145327	- 2.658225***	- 2.681178***
X	- 3.136647**	-3.156222**	-3.397784**	-3.188983**	-3.214300**	-3.401095**
M2	1.017270	-0.356708	-1.698286	- 2.867762***	-5.692494*	-8.204329*

^{*} reject null hypothesis (unit root) at 1% level; **reject null hypothesis (unit root) at 5% level; *** reject null hypothesis (unit root) at 10% level

With the exception of ADF test with constant and trend for CPI and PP test with constant and trend for GDP, all other ADF and PP tests for variables in log levels indicate that they are non-stationary. When first differenced in log, we find the evidence that the variables are stationary. All models of ADF test and PP test with constant indicate the presence of two unit roots in GDP and M2. Since the results, overall, tend to suggest non-stationarity in log levels of the variables but stationarity in their log first differences, we proceed by contending that the variables are integrated of order I(1).

Cointegration Analysis

Since the five variables are noted to be I(1), there exists the possibility that they share a long-run equilibrium relationship, as was pointed out by Engle and Granger (1987). We test this long-run equilibrium using cointegration tests based on the methodology developed in Johansen (1991, 1995). In formulating the dynamic model for the test, the question of whether an intercept and trend should enter the short- and/or long-run model is raised (Harris, 1995, p.95). We used all five deterministic trend models considered by Johansen (1995, pp. 80, 84). The number of cointegrating relations from all five models, on the basis of trace statistics and the maximal eigenvalue statistics using critical values from Osterwald-Lenum (1992) at 1 and 5 percent levels are summarized in table 2.

Table 2
Tests of Selected Number of Cointegrating Relations by Model

Test Type	Critical Value	Model 1	Model 2	Model 3	Model 4	Model 5
Two as	1%	3	2	1	1	0
Trace	5%	5	5	2	4	0
Maximum	1%	0	0	0	0	0
Eigenvalue	5%	1	1	1	0	0

Notes: The selection of cointegrating relations is based on 0.01 and 0.05 level critical values from Osterwald-Lenum (1992)

As can be seen from table 2, there is convincing evidence in favor of no-cointegrating relations. While trace test suggests cointegrating relations in all models but model 5, maximum eigenvalue test, which is superior to trace test (Banerjee et al, 1993), indicates that at 1 percent there is no cointegrating vector for all model specifications, and only 1 cointegrating relation at 5 percent level in the first four models but zero cointegrating relation for model 5. Hence, it is safe to conclude that there is no strong evidence of cointegrating vector relations.

Lag Length

In specifying a VAR model, number of lags to be included can not be determined arbitrarily. Various criteria are available to choose proper lag length for the VAR model. We used five criteria, as discussed in Lutkepohl (1991, section 4.3) in deciding the lag length for our model. The results from all criteria are summarized in table 3. After trying different lag length, three of the five criteria indicated a maximum lag length equal to six.

We estimated a five variable-VAR with a lag length of six. One of the diagnostic views, inverse roots of the characteristic AR polynomials, indicated our estimated model to be stable (stationary) and lie inside the unit circle, and, thus, supporting our choice of lag length of six. If the VAR is not stable, certain results (such as impulse response standard errors) are not valid (Lutkepohl, 1991).

VAR Granger Causality and Block Exogeneity

VAR model can be used to test Granger causality among the variables of the model and also that an endogenous variable can be treated as exogenous. We used Chi-square (Wald) statistics for the joint significance of each of the other lagged endogenous variables in each equation of the model and also for joint significance of all other lagged endogenous variables in each equation of the model. The results are reported in table 4.

Table 3
Tests for Model Lag Length

Lag	Log L	LR	FPE	AIC	SC	HQ
0	-4428.257	NA	7.10e+70	177.3303	177.5215	177.4031
1	-3965.405	814.6186	1.77e+63	159.8162	160.9634 *	160.2531
2	-3928.016	58.32684	1.11e+63	159.3206	161.4239	160.1216
3	-3917.612	14.14890	2.16e+63	159.9045	162.9637	161.0695
4	-3883.698	39.34041	1.77e+63	159.5479	163.5632	161.0770
5	-3775.705	103.6738*	8.54e+61	156.2282	161.1995	158.1213
6	-3731.583	33.53228	6.46e+61 *	155.4633	161.3906	157.7205

Notes: * indicates lag order selected by the criterion

LR: sequential modified LR test statistic (each test at 5% level); **FPE:** Final prediction error; **AIC:** Akaike information criterion; **SC:** Schwarz information criterion; **HQ:** Hannan-Quinn information criterion

Chi-square test statistics in row 1 indicates that null hypothesis can not be rejected for individual lagged coefficients except for export of 20.396 (column 5) which has some effects on GDP. The test indicates that the inflation variable (CPI) is influenced by all other variable except money supply (M2). The republic of Yemen depends heavily on imports; and hence, inflation is an external, not monetary, phenomenon. This suggests that exchange rate might have more influence on prices than M2. The test results for M2 equation indicates that null hypothesis can not be rejected for individual lagged coefficient. This suggests that the monetary policy variable

(M2) is not influenced by any of the variables in the model and that it can be treated as pure exogenous in this specific model. Government expenditure was affected by all individual variables except income. Oil exports and the monetary side of the economy have major impact on the fiscal policy variable (G). The test result indicates that CPI has no influence on export while the other three variables have.

Export is affected by income (GDP) as well as by fiscal policy variable (G) and monetary variable (M2). The null hypothesis of block exogeneity is rejected for all equations indicating that all variables are jointly influenced by all other variables together and can not be treated as pure exogenous.

There is also an evidence of bi-directional causality between GDP and X, and between G and X. Both income and export are influenced by each other, and both government expenditure and export affect each other. This is in line with theory and reality since the main source of income other than international aid is exports especially oil exports. Government spending depends on export revenues and when government increases its spending that result is a rise in export to cover this increase in spending.

Table 4
VAR Granger Causality/Block Exogeneity (Chi-Square-Wald Tests)

		Block Exogeneity				
Dependent Variable	GDP (1)	CPI (2)	M2 (3)	G (4)	X (5)	All Variables Together
GDP (Row 1)		2.613719 (0.8555)	3.336742 (0.7655)	4.959866 (0.5490)	20.39604* (0.0024)	42.26001** (0.0121)
CPI (Row 2)	12.90455* * (0.0446)		8.393092 (0.2107)	19.11372* (0.0040)	11.58536** (0.0719)	54.66641** (0.0003)
M2 (Row 3)	6.576986 (0.3617)	5.199416 (0.5185)		5.540052 (0.4766)	5.179424 (0.5210)	34.67046*** (0.0734)
G (Row 4)	6.050352 (0.4176)	80.33989* (0.0000)	23.64679* (0.0006)	10.0700044	31.89408* (0.0000)	140.8868* (0.0000)
(Row 5)	53.42673* (0.0000)	2.157623 (0.9046)	23.46428* (0.0007)	13.37000** ()0.0375		97.61479* (0.0000)

Notes: The value in each box represents chi-square (Wald) statistics for the joint significance of each other lagged endogenous variables in that equation. The statistics in the last column is the chi-square statistics for joint significance of all other lagged endogenous variables in the equation.

The critical values (for individual excluded variables) with 6 df at 1%, 5% & 10% are 16.8119, 12.5916, & 10.6446 respectively. The critical values (for all excluded variables) with 24 df at 1%, 5% & 10% are 42.9798, 36.4151, & 33.1963 respectively.

The Dynamic Behavior of VAR Model

Although the results of table 4 enabled us to analyze the impact of anticipated policies they do not give us clear understanding of the dynamic behavior of the model. The dynamic behavior of VAR model can be analyzed using two approaches: impulse response function and variance decomposition. To identify orthogonalized innovations in each of the variables and the dynamic responses to such innovations, variance-covariance matrix of the VAR was factorized using Choleski decomposition method suggested by Doan (1989). This method imposes an ordering of the variables in the VAR and attributes all of the effect of any common component to the variable that comes first in the VAR system. The responses can change dramatically if ordering of the variables in the VAR system is changed. We tried several orderings keeping most endogenous variable last and most exogenous first. Although, the results were marginally sensitive to the ordering but general findings were similar in each case. The results reported here are based on ordering of the variables as: M2, GDP, CPI, X, and G.

Impulse Response Function (IRF)

The impulse response functions provide information to analyze the dynamic behavior of a variable due to a random shock or innovation in other variables. The impulse response traces the effect on current and future values of the endogenous variables of one standard deviation shock to the variables. As Runkle (1987) pointed out that impulse response functions or variance decompositions without confidence intervals (standard error bands) is similar to reporting regression coefficients without t-statistics. Therefore, we obtained the error bands for impulse responses by using a Monte Carlo simulation procedure with 100 replications for all five variables. Due to the page number constraints, I will not present all five figures that illustrate the impulse response to a one standard deviation shock. Only figures related to the two target variables (GDP and CPI) are shown in this paper.

^{*:} significant at 1 percent; **: significant at 5 percent; ***: significant at 10 percent

Figure 1 illustrates the dynamic response of GDP to a one standard deviation shock in monetary policy variable (M2) and fiscal policy variable (G). While M2 has negative impact in the short run and long run, the impact of government expenditure on GDP appears to be a positive long run phenomenon. The shock in the other three variables (GDP, CPI, and X) has a positive impact on the GDP only after few quarters. Their impact increases gradually in the long run.

Figure 2 illustrates the dynamic response of CPI to a one standard deviation shock in itself and in all other variables. Monetary policy variable (M2) has a positive impact on the inflationary variable (CPI) in the short run then this effect turns to be negative in the long run. Monetary policy seems to be effective in reducing inflation in the long run. A shock to income, exports, and government expenditure has an insignificant effect on CPI in the short run but all three variable lead to a rise in inflation in the long run.

Figure 1
Impulse Responses of Log (GDP) to One Standard Deviation Shock of Log (M2, GDP, CPI, X, and G)



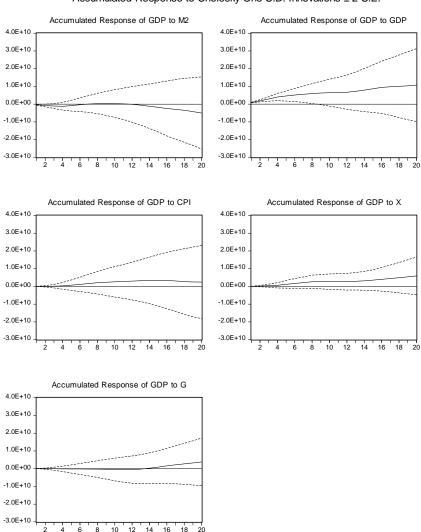
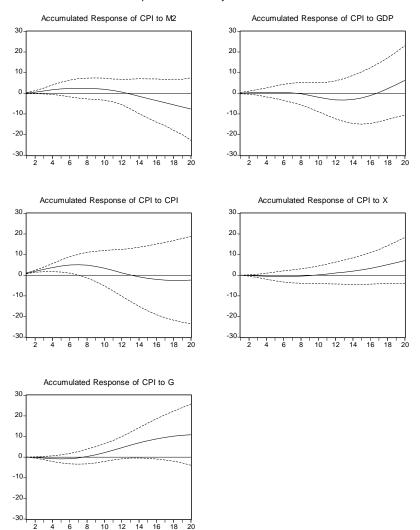


Figure 2
Impulse Responses of Log (CPI) to One Standard Deviation Shock of Log (M2, GDP, CPI, X, and G)

Accumulated Response to Cholesky One S.D. Innovations ± 2 S.E.



Based on figures that are not shown in the paper, shock in M2 has a positive and increasing effect on itself as time passes while GDP affects money supply positively only in the long run. The inflation variable (CPI) has no significant effect on M2 in the short run but has negative effect in the long run. A one standard deviation shock in export shows a positive influence on the monetary variable in the long run. This is in line with macroeconomic theory. Shock in government expenditure results in small and negative impact on M2 but has a minimal impact in the long run.

M2 and CPI have negative impacts on exports, Yemeni currency suffered in the last two decade of depreciation in its value relative to all international and regional currencies. The main objective of monetary authorities in the country is to stabilize the exchange rate of Yemeni Rial. This explains the response of exports to the control of deterioration in the domestic currency. A one standard deviation shock to GDP, X, and G has insignificant impact on export in the short run but they have positive impact in the long run.

Finally, the responses of G to shocks in GDP, M2, and X are negative in the short run but positive in the long run. However, the response of G to the value exports (X) is not strong. This may show that

government expenditure depends more on political considerations rather than on economic ones. Government spending responds to inflation negatively.

It is noticeable that both fiscal and monetary policies have effect on GDP and CPI mainly in the long-run. However, their effects on CPI are in opposite directions. The effect of G on CPI is initially negative but becomes positive in long-run, while the effect of M2 on CPI is initially positive but becomes negative in long-run. A shock in export has a consistently positive effect on GDP and CPI.

Yemen economy depends heavily on oil exports and foreign aid. As discussed in the introduction section, these two factors experienced ups and downs movement during 1990-2003 which are reflected in the results discussed above. In addition, decision making process in Yemen, as in most of LDCs, may contradicts in many instances the economic rationale.

Variance Decompositions

The impulse response functions illustrate the qualitative response of every variable in the system to shocks to itself and to all other variables in the model. To indicate the relative importance of these shocks require variance decomposition. In this technique, each variable is explained as linear combinations of its own current innovations and lagged innovations of all variables in the system. Table 5 reports the variance decompositions of the forecast errors for each variable in the model at horizons up to 20 quarters (5 years). The results of the variance decompositions seem to be consistent with impulse responses.

Variance decomposition for M2: Other than itself, a shock to all other variables is insignificant in the first quarter, and it is not important in the long run as well. In the 20^{th} quarter, a shock to CPI, GDP, and X accounts for 19.45, 14.77, and 11 percent variation. A shock to G accounts for only 3.8 percent variation in the 20^{th} quarter.

Variance decomposition for GDP: A shock to GDP accounts for almost 85 percent variation in the first quarter and gradually decreases to 41 percent in the 20th quarter. A shock to M2 accounts for almost 15 percent which gradually increases to almost 25 percent in the 5th quarter. Shocks to all other variables are insignificant in the first quarter and increases only to almost 14 percent variation for X and G and it is almost only 7 percent variation at the end of the 5th year. The indication of these results is that monetary policy is more effective than fiscal policy or export in both short run and long run. The effect of exports on GDP is moderate even in the long run.

Variance decomposition for CPI: A shock to variables in the model shows that all variables, other than itself, have insignificant influence on the inflation variable (CPI). However, results indicate that GDP is the important source of variations in CPI in the long run.

Variance decomposition for Export: The source of variation in exports is mainly due to a shock in export variable itself in the short run. However, the long run source of variation in export is mainly a result to GDP and M2. These results indicate that increase in production and the right monetary policy give a big boost to export in the long run.

Variance decomposition for government expenditure: Initially, the source of variation in government expenditure is explained by shocks in government expenditure and export but in the long run, variation in G is influenced by inflation and monetary policy variables as well as government expenditure itself.

Table 5
Variance Decompositions Proportion of Variance Explained by Shocks

variance Decompositions Proportion of Variance Explained by Snocks											
Variance Decomposition	Period	S.E.	M2	GDP	CPI	X	G				
	1	9694.720	100.0000	0.000000	0.000000	0.000000	0.000000				
	5	13741.17	86.96735	4.335855	1.134734	1.173825	6.388240				
M2	9	17716.42	83.54751	4.776384	3.828562	3.356809	4.490732				
	13	21103.41	67.80508	5.505377	18.42821	3.958850	4.302484				
	20	27777.62	50.96336	14.76979	19.45706	11.01405	3.795736				
	1	9.25E+08	15.04381	84.95619	0.000000	0.000000	0.000000				
	5	2.36E+09	10.30720	77.52845	3.528441	8.439310	0.196595				
GDP	9	2.85E+09	13.20187	61.55606	11.07728	13.93879	0.226009				
	13	3.03E+09	15.38144	58.51214	11.80578	12.97823	1.322418				
	20	4.26E+09	23.92773	41.10242	7.416216	13.89552	13.65811				
	1	0.899265	0.586893	0.070228	99.34288	0.000000	0.000000				
	5	2.347489	20.01579	1.942804	72.58803	1.666713	3.786658				
CPI	9	2.929566	13.36286	11.68526	55.13085	2.113179	17.70785				
	13	4.745625	13.74025	11.67682	40.01381	3.817896	30.75122				
	20	7.520716	18.83272	32.38346	19.10747	9.911954	19.76439				
	1	2.01E+09	9.114173	7.813612	2.969593	80.10262	0.000000				
	5	3.95E+09	11.70834	6.977162	2.710556	66.18392	12.42002				
X	9	6.71E+09	42.30765	10.63043	6.305158	23.18204	17.57472				
	13	1.17E+10	45.69638	23.02561	5.338437	10.97282	14.96675				
	20	1.78E+10	32.21193	32.31768	19.54861	6.811236	9.110535				
	1	2.69E+08	5.958007	0.006739	18.29708	30.88516	44.85301				
	5	8.96E+08	6.299985	0.815666	45.38567	6.101524	41.39715				
G	9	1.24E+09	5.327372	2.711913	61.03315	7.753868	23.17369				
	13	1.88E+09	18.65370	13.16724	41.43019	4.604232	22.14464				
	20	2.25E+09	22.90889	14.54588	34.52409	3.885024	24.13612				

CONCLUSIONS

This study applied VAR technique to study the macroeconomic variability in the Yemeni economy using data of five key macroeconomic variables, GDP, CPI, M2, G, and X. The results of the study indicated that all key macroeconomic variables are interlinked and influenced by each other. The monetary policy variable (M2) is found to be exogenous and is not affected by any other macroeconomic variable. There is an evidence of bi-directional causality between GDP and X, between G and X, and between G and CPI.

There is an evidence of uni-directional causality from GDP to CPI and from X to CPI. Income and export have direct influence on inflation. There is also an evidence of uni-directional causality from M2 to G and X. Monetary policy has its impact on government spending and export.

Impulse response and variance decomposition analysis suggest that GDP is influenced by monetary policy in the short run and long run and is affected moderately by fiscal policy in the long run.

In the long run GDP has a big impact on CPI while M2 has a moderate impact. GDP and M2 are the main variables that affect CPI in the long run. Export has a big impact on government spending in the short run. In the long run, government spending is affected by the monetary side of the economy (CPI and M2).

The results suggest that monetary policy is more influential on Yemeni economic variables than fiscal policy, which did not show the expected impact on the economic variables. This is may be explained by the fact that fiscal policy is rudimentary and ad hoc in nature. A big portion of the Yemeni government spending is unproductive and directed towards buying loyalty in a highly unstable tribal system.

REFERENCES

Banerjee, A., J. Dolado, J.W. Galbraith & Hendry, D.F. 1993. *Cointegration, error-correction, and the econometric analysis of non-stationary data*. Oxford: Oxford University Press.

Chami, S., T Schneider, F Ahmed, and Latifa, N. B. 2007. Yemen: Exchange rate policy in the face of dwindling oil exports. *IMF Working Paper WP/07/5*. Washington DC: International Monetary Fund

Chami, S. Elekdag, T.Schnedider, and Latifa, N. B. 2007. Can a rule-based monetary policy framework work in a developing country? The case of Yemen. *IMF Working Paper WP/07/6*. Washington DC: International Monetary Fund

Cooly, T.F. & Leroy, S.F. 1985. A theoretical macroeconomics: A critique. *Journal of Monetary Economics*, 16 (3): 283-308.

Dickey, D.A. & Fuller, W.A. 1979. Distribution of the estimators for autoregressive time series with unit root. *Journal of the American Statistical Association*, 74 (366): 427-31.

Doan T., R. Litterman & Sims, C. 1984. Forecasting and conditional projection using realistic prior distribution. *Econometric Review*, 3 (1): 1-100.

Engle, R.E. & Granger, C.W.J. 1987. Cointegration and error-correction: Representation, estimation, and testing. *Econometrica*, 55 (2): 251-76.

Engle, R.E. & Yoo, B.S. 1987. Forecasting and testing in co-integrated systems. *Journal of Econometrics*, 35 (1): 143-59.

EViews. 2004. EViews5 user's guide. QMS.

Faust, J. & Leeper, E. 1997. When do long-run identifying restrictions give reliable results? *Journal of Business and Economic Statistics*, 15 (3): 345-53.

Greene, W. H. 2003. *Econometric analysis*, 5th ed. NJ: Prentice-Hall.

Haris, R. 1995. Cointegration analysis in econometric modeling. NJ: Prentice Hall.

Hoffman, D.L.& Rasche, R.H. 1996. Assessing forecast performance in a cointegrated system. *Journal of Applied Econometrics*, 11 (5): 495-517.

International Development Assistance (IDA). 2006. Country assistance strategy for the development of Yemen, May 2006. *Report no. 36014-YEM*. Washington DC: IDA

International Monetary Fund. 2006. *International financial statistics*. Washington DC: International Monetary Fund

International Monetary Fund. 2004. Staff report for the 2004 Article IV consultation. *IMF Country Report No. 051111*. Washington DC: International Monetary Fund

Johansen, S. 1991. Estimation and hypothesis testing of cointegration vectors in gaussian vector autoregression models. *Econometrica*, 59 (6): 1551-580.

Johansen, S. 1995. *Liklihood-based inference in cointegrated vector autoregressive models*. Oxford: Oxford University Press.

Litterman, R. 1984. Forecasting and policy analysis with baysian vector autoregression models. *Federal Reserve Bank of Minneapolis Quarterly Review*, fall, 30-41.

Lukepohl, Helmut 1991. Introduction to multiple time series analysis. NY: Springer-Verlag

Naka, A. & Tufte, D. 1997. Examining impulse response functions in cointegrated systems. *Applied Economics*, 29 (12): 1593-603.

Osterwald-Lenum, M. 1992. A note with quintiles of the asymptotic distribution of the maximum likelihood cointegration rank test statistics. *Oxford Bulletin of Economics and Statistics*, 54: 461-72.

Phillips, P. & Perron, P. 1988. Testing for a unit root in time series regression. *Biometrica*, 75: 335-46.

Runkle, D.E. 1987. Vector autoregression and reality. *Journal of Business and Economic Statistics*, 5 (4): 437-42.

Sims, C.A. 1980. Macroeconomics and reality. *Econometrica*, 48 (1): 1-48.

Sims, C.A. 1982. Policy analysis with econometric models. *Brookings Papers on Economic Activity*, 1: 107-52.

Sims, C.A. 1986. Are forecasting models usable for policy Analysis? *Federal Reserve Bank of Minneapolis Quarterly Review*, Winter, 2-16.

World Bank. 2005. World development indicators 2005. Washington DC: World Bank

EXAMINATION OF THE CAUSES OF IT PROJECTS FAILURE WITHIN THE PUBLIC SECTOR: STATE OF OATAR

Firend A. Rasheed Walden University Adel H. Salih Qatar University

ABSTRACT

Information technology (IT) project management is a crucial issue for organizations today due to the time, resources, and high budgets. This paper examines the causes of IT projects failure within the public sector in State of Qatar. The paper investigates the primary reasons causing IT projects to fail, delayed, and goes over budget. The paper attempts to determine what causes management fail to foresee project failure. This is achieved by surveying government branches and government owned Oil & Gas companies in an attempt to outline the primary reasons causing IT projects to fail. Analysis of the surveyed sample shows that lack of communications, constant change in projects requirements, lack of clarity in projects scope, lack of individual skills in project management, are the leading factors causing IT projects to fail in the Qatari public sector.

INTRODUCTION

Consensus among information technology managers and people involved in IT project suggests that IT project in the state of Qatar has a high tendency of failure in the public sector. This high rate of failure is creating waste of resources, and dissipation of public funds (Bryde, 2003). It is the objective of this paper to examine this phenomenon in an attempt to determine the causes leading to such high failure rate. IT projects in the public sector occurs primarily in government branches such as ministries and oil and gas companies owned by the state of Qatar. To understand the nature of the problem, a survey was developed and distributed to employees in the oil and gas companies such as Qatar Gas, RUS Gas, and Qatar Petroleum. The survey was an English-language and consistent of nine questions asking participants to choose the main reasons contributing to projects failure. Thus, wide array of government employees from different branches of the government are participating in determining why IT projects tends to fail.

The oil and gas industry which is the largest public sector government represents an excellent testing ground for surveying the causes of IT projects failure. In addition, some key government ministries were chosen to provide a representation of typical government environment where IT projects take place. The object is to convert all the data obtained and run statistical analysis to determine if a pattern exists between IT projects failure in the oil and gas industry and other government branches. However, the main objective of this research paper is to determine the main causes contributing to the higher rate of IT projects failures.

Better understanding of such causes will contribute significantly to the body of knowledge in the field of project-management, by sharing the lessons learned (Liebowitz, 1999). This is especially true in the case of the State of Qatar and the surrounding region, which enjoys similar economic and cultural characteristics, and where high economic development and mega projects are taking place. The results of this research paper will be shared with the participants in this study in an effort to create greater understanding of the nature of projects and the contributing factors causing IT projects to fail in hope to increase the likelihood of future projects successes.

This paper will start by introducing the literature review, then the research methodology followed by statement of the problem, the research questions, data collection, data analysis, then findings and summary.

LITERATURE REVIEW

Information technology (IT) projects are vital to organizations in both public and the private sector. Extensive literature has been written on this subject examining the causes and the processes of project-management failures across all industries. However, little literature has been written on the subject examining the causes for projects failure in State of Qatar. Whittaker (1999) examined projects failure in Canada. In both public and the private sector and found that the three main reasons for IT projects failure are poor project planning, lack of management supports, and weak business case. Whittaker (1999) added that poor understanding of business needs actually leads to weak business case, which makes it harder to gain top management support for IT projects. Whittaker's research also found that running over budget wasn't as important to management as projects running overtime.

Brennan, & Orwig, (2000) stated that many projects lacks good understanding of scope definition, project objectives, stakeholders taking interest in the project, information collection and gathering, distribution of information gathered, and information and management. What Brennan & Orwig referring to is the importance of collecting information to gain better understanding of the project scope, and building business case for project initiation, that reflects business needs. Cicmil, (1997) argued that organization lack good understanding of the requirements of projects management, and project management. Cicmil clearly indicates that such lack of understanding among staff in modern organizations may lead to high rate of project failure. Elonen & Artto, (2003) however, argued that project failures are caused by lack of resources allocated between different projects within the organization. While Engwall & Jerbrant, (2003) perceived that the focus of projects management should be on defining organizational objectives, which leads to a better understanding of project objectives. This confirmed Dooley, (2000) argument that proper understanding of project objectives is a key factor in determining projects success.

Khalfan, and Alshawaf (2003) assert that social and cultural factors are key ingredients of a successful implementation of IT projects in the Gulf states, which includes countries like Qatar, Kuwait, Saudi Arabia, UAE, Oman, and Bahrain. Although cultural values, plays a role in determining the interactions and the outcome of a project, yet the characteristics and principles of project management remains the same worldwide, Kerzner, (2004), Ghattas and Mckee (2001).

Most project managers in the oil and gas industry in Qatar and surrounding region are either Western educated or certified managers by Western standard institutions. Khalfan and Alshawaf (2003) do emphasize that point. Outsourcing for IS/IT will continue to increase in these countries in the coming years making it one of the most important regions for IT project, Powl & Skitmore (2005). Finally, keeping track of projects performance and projects successes or failures is rare phenomena in Qatar and the surrounding region. Only mega projects are recorded in terms of completion time. In many instances, actual cost for such large projects is not properly recorded or intentionally inflated. This is caused by lack of transparency or corruption. Record keeping regarding government spending on various projects will most definitely help in better understanding the actual causes for projects failure and IS/IT projects, Marquez & Herguedas (2004).

RESEARCH METHODOLOGY

The main purpose of this section is to present the specific methodology procedures employed in testing the IT people perceptions. This section consists of several main items. The first item will deal with statement of problem then the objectives of the study. The research questions will be developed in the third section. The fourth and fifth sections will be appropriated to the scope of the study and the study's limitations. The sample and the questionnaire, which is considered to be the main tool for gathering data, will be discussed in the last section.

Statement of problem

IT projects in the state of Qatar is experiencing higher rate of failure. Projects are either terminated before deadline, exceed deadlines, or go way beyond allocated budgets. Therefore, a study

needed to be conducted to determine the causes contributing to failure of IT projects by examining key content contributing factors that are known to be on long the main reasons for projects failure

Objectives of the study

The objective of this study is to determine what specific factors causing IT project to fail in the public sector in State of Qatar. Revealing the core causes for project failure will expand knowledge on the nature of projects and will help better understand what is contributing to such high rate of failure in the public sector in an effort to create awareness among people involved in IT projects within the public sector. Additionally, exposing employees involved in public IT projects to the problems of other government institutions facing in similar projects, in hope to reduce future projects failure by creating greater awareness of the key contributing factors to IT projects failure.

Research Questions

This study attempts to answer the following questions;

- 1. Is poor understanding of project scope and requirements leads to IT projects failure?
- 2. Is time and resources that is required to accomplish assigned projects are not properly allocated?
- 3. Is lack of commitment and communications causing IT projects to fail?
- 4. Is changing requirements and lack of experience in project management skills causing IT projects to fail?

Scope of the study

This study examines only IT projects within the public sector in the state of Qatar. The scope of the study does not go beyond the public sector and does not examine all government branches. However, key government institutions including oil and gas companies are surveyed and where IT projects are known to take place frequently and employees are known to participate regularly in IT projects. The scope for this project is limited to determining the key factors that cause public IT projects to go beyond budgets and overtime.

Value of Study

The study provides unique contribution to the body of knowledge in project management in regards to this part of the world. Furthermore, the paper provides some indications to better understand the business environment and cultural drives that largely contribute to projects successes and failure in State of Qatar and the surrounding region.

Data Collection

A survey was developed that constitutes nine questions regarding the main cases of IT projects failure in the public sector. All variables are measured with questionnaire data. Most of the items used here have been borrowed partly or wholly from other research instruments which have demonstrated reliability and validity. These items were used in the questionnaire in order to give this study a comparative base with other previous research.

Items and scales were tested through a pilot study carried out in two ways: Firstly, the researchers contacted two associate professors and two assistant professors in management area. Secondly, the questionnaire was pilot tested among sixteen employees involved in IT project in one government institution and one main Oil and Gas Company (eight employees from each). The sample for pilot study was obtained in the same manner as for the main study. They were asked to complete the questionnaire according to the instructions and then to carefully review all the items from a critical perspective to seek out problems such as ambiguity or redundancy.

The results of the pre-test suggested that there was little need for version. In additions, none of the respondents involved with the pre-test indicted any degree of difficulty in interpreting the questions as presented. Feedback from these two government institutions was taken into consideration and helped to shape the final draft of the survey. Subsequently, a website was created that includes all

nine questions of the survey. An e-mail was sent to all employees in the oil and gas companies with a link to the survey to make the process of participating in the study fast and easy. Participants are able to click the corresponding answer to each question why they click of their mouse. Furthermore, semi structured interviews were conducted with managers in government branches including oil and gas companies, who are involved regularly in IT projects. Their feed back was highly valuable to the construction of the survey.

The non-oil and gas government institutions participated in this study by filling out a paper copy of the survey. This is because employees of government institutions in Qatar tend to hesitate in participating in online surveys. Unlike employees in the oil and gas sector, where the nature of their job requires them to be heavily involved in electronic communications, this is also due to the size of their organizations. While employees in traditional government institutions enjoys closer contacts among themselves and physically located within the same building, which makes the process of distributing and collecting paper surveys much easier and more effective.

The data collected from both the paper survey and the electronic survey was entered into the SPSS statistical data analysis software to run statistical analysis for the purpose of this study. The total survey collected both electronically and paper surveys mounted to 102 however, only 98 surveys were usable. 4 surveys were missing values in more than half of the questions asked and some of the answers were unclear therefore, it was decided to leave them out and not to include them in the analysis.

ANALYSIS

Descriptive Statistics

All 98 surveys have 0 missing values. That means that all field in the 98 surveys we filled and not one missed. The first set of analysis to run is the frequency analysis to determine patterns of occurrence in the answers provided. The survey asks participants to rate the main reasons for project's failure by using five points scale, ranging from strongly agree to strongly disagree. Variable 1 of the questionnaire deals with the defining of the project scope. Table 1 showing, that a substantial majority of replies (77.6%) rated this factor as a reason for IT projects failure which reflects a problem in projects scope definition.

Turning to question two of the survey, which asks whether project requirements are not clearly defined, the same general pattern emerges. It is observed that (74.5%) of the respondents agree or strongly agreeing with the statement reflecting a high percentage relating to unclear defined project requirements as a reason for IT projects failure. Variable 3 of the survey asks participants whether they think IT projects they took part of were unrealistic. Only (24.5%) thinks that the IT projects were unrealistic, however (59.2%) of participants believe that projects were realistic. Perhaps this is the most striking result shown in Table 1.

Variable 4 of the survey asks whether not enough time was allocated to projects, which contributed to project failure. (61.2.8%) Of the replies believed that this could be one of the contributing factors to IT projects failure. Only (17.3%) thinks that there was enough time allocated to the projects. Variable 5 of the survey asks whether not enough resources were allocated to projects. Only (39.8%) of participants agree or strongly agreeing with the statement, whereas (45.9%) of the replies reported that this issue was not a reason for the IT projects failure. Variable 6 of the survey asks whether there is lack of commitment for the project by the people involved, (61.2%) agree or strongly agree that there is a lack of commitment by people involved in projects. Only (31.6%) of the respondents indicted that lack of commitment did not contribute to the failure of the IT projects in Qatari public sector.

Table 1 also show that changing deliverables and requirements were seen as the most frequent reason for the project failure, the considerable majority of replies (81.6%) agree or strongly agree with the statement, while only (5.1%) considered this factor as not reason for the failure of the IT projects.

Variable 8 of the survey asks whether lack of communications is contributing to project failure. As with the previous factor, respondents agree or strongly agree that the item used to measure this factor was influential cause of IT projects failure (81.6%), while only (1%) strongly disagree with the

statement. Variable 9 of the survey asks whether lack of experience by people involved in projects is contributing to project failure. (70.4%) of the respondents agreeing or strongly agree with the statement, while only (12.2%) strongly disagree. Therefore, it seems clear that the majority of the responses shown in Table 1 indicate that lack of experience by people involved in projects is a leading factor in IT projects' failure.

Correlation analysis

Although frequencies analysis was perform, it is worthwhile looking at correlation coefficients between these variables to investigate their relationships and how they related to each other.

Table 1
Factors Affecting IT project's Failure

			raci	UIS AIIC	cung 11	i projeci	o Famu	1 C		
Factors	Strongly agree		Agree		Uncer	Uncertain		ee	Strong disagr	
Project scope is not well defined	49	50.00	27	27.6	9	9.2	8	8.2	5	5.1
Project requirements are not clearly defined	59	60.2	14	14.3	6	6.1	5	5.1	14	14.3
Project is not realistic	16	16.3	8	8.2	16	16.3	18	18.4	40	40.8
Not enough time allocated	38	38.8	22	22.4	21	21.4	12	12.2	5	5.1
Not enough resources allocated	25	25.5	14	14.3	14	14.3	12	12.2	33	33.7
Lack of commitment by people involved	50	51.0	10	10.2	7	7.1	2	2.00	29	29.6
Changing deliverables and requirements	70	71.4	10	10.2	13	13.2	2	2.00	3	3.1
Lack of communications	66	67.3	14	14.3	15	15.3	2	2.00	1	1.00
Lack of experience by people involved in the project	56	57.1	13	13.3	14	14.3	3	3.1	12	12.2

Left column represent Frequencies. Right column represent Percentages.

Table 2 Correlation Matrix among Variables for the Responses of People Involved in IT Projects in Qatari Public Sector

Corre	anon manna	among vari	abics for the	responses of	i i copic invo	ived in 11 11	ojects in Qa	tarr r ubiic b	ccioi
	1	2	3	4	5	6	7	8	9
Project scope is not well defined	1								
2. Project requirements are not clearly defined	.427(**)	1							
3. Project is not realistic	.243(*)	.322(**)	1						
4 Not enough time allocated.	.107	.348(**)	.292(**)	1					
5. Not enough resources allocated	.282(**)	.242(*)	.280(**)	.468(**)	1				
6. Lack of commitment by people involved	.265(**)	.291(**)	.300(**)	.371(**)	.662(**)	1			
7. Changing deliverables and requirements	.165	.143	.014	.274(**)	.349(**)	.438(**)	1		
8 Lack of communications.	.263(**)	.432(**)	.208(*)	.269(**)	.419(**)	.628(**)	.527(**)	1	
9. Lack of experience by people involved in the project	.119	.210(*)	.119	.233(*)	.326(**)	.434(**)	.432(**)	.533(**)	1

^{*}p <.05. **p <.01.

Pearson's correlation test has revealed that there is a strong correlation between variable's one and two as a correlation coefficient r=.427 and p<0.01, this indicates that project scope and project requirements are significantly contributing to project failure. Furthermore, there is a significant correlation between requirements being not clearly defined (variable 1) and project being not unrealistic (variable 3) as r=.322 and p<0.01. Another significant correlation exists between (variable 4) and (variable 3) as r=.292 and p<0.01, which is the relationship between projects being enough realistic and not enough time allocated to complete the projects. This indicates that when projects are not realistic, they contribute significantly to the time projects take to complete. The two factors are contradicting factors to produce failure as well.

There is a positive correlation exists between (variable 5) and (variable 1), which is project scope being not well defined and the resources allocated to the project as r=.282 and p<0.01, this indicates that when project scope is not well defined it is highly related to the resources associated with the project. This also point out that when project scope is miss defined, resources are not properly allocated to the project. The correlation between (variable 2) and variable 5) r=.242 and p<0.05, which indicates that there is a strong relationship between project requirements are not clearly defined, and not enough recourses allocated to projects. The same relationship exist between (variable 5) and (variable 3) resources allocation and projects not being realistic as r=.280 and p<0.01. Also, not enough resource allocation is impacting the time projects take as the relationship between (variables 5) and (variable 4) r=.468 and p<0.01.

Furthermore, the lack of commitment by people involved in projects is causing projects to fail as the correlation between variable nine and several other variables are as follows. Variable six and variable one is correlated at r=.265 and p<0.01, which indicated that when project scope is not well defined, higher lack of commitment occurs by the people involved in projects. The lack of commitment also occur when project requirements are not clearly defined, as the relationship between (variables 6) and (variable 2) at r=.291 and p<0.01. Lack of commitment by projects participants is reduces when the project is not being realistic as the relationship between (variable 6) and (variable 3) at r=.300 and p<0.01. Lack of commitment to projects occurs also when not enough time is allocated as the relationship between (variables 6) and (variable 4) at r=.371 and p<0.01. Not enough recourse allocation is also reducing the commitment to projects by participants as the relationship between (variables 6) and (variable 5) at r=.662 and p<0.01.

In addition, the change in deliverables and projects requirements is significantly impacting several variables as follows. Change in deliverables and project requirements is impacting project time allocation as the relationship between (variables 7) and (variable 4) at r=.274 and p<0.01. Not enough resources allocated to project also impacting changing deliverables and project requirements as the relationship between (variables 7) and (variable 5) at r=.349. Change in deliverables and project requirements is significantly impacting the level of commitment by project participants as the relationship between (variables 7) and (variable 6) shows r=.438 and p<0.01.

Correlation analysis also shows that a strong relationship exists between lack of communications and project scope not being well defined as r=.263 and p<0.01, in (variable 8) and (variable 1). This relationship seems to be natural and highly correlated in project management. There is a high impact of luck of communications on project requirements being not clearly defined as the relationship between (variable 8) and (variable 2) at r=.432 and p<0.01. Lack of communications is causing not enough time to be allocated to projects as the relationship between (variable 8) and (variable 4) is r=.269 and p<0.01. Furthermore, lack of communications is also closing insufficient resources to be allocated to projects as a relationship between (variables 8) and (variable 5) at r=.419 and p<0.01. Lack of communications is also causing lack of commitment by people involved in projects as the relationship between (variables 8) and (variable 6) r=.628 and p<0.01, and the lack of communications is impacting the changing deliverables and project requirements as a relationship between (variables 8) and (variable 7) at r=.527 and p<0.01.

Additionally, lack of experiences of IT projects personal is causing insufficient resources to be allocated to projects, which is also contributing to projects failures as the relationship between

(variables 9) and (variable 5) is r=.326 and p< 0.01. Lack of experience of the people involved in IT projects is also causing lack of commitment by people involved in these projects. This is shown in the relationship between (variables 9) and (variable 6) is r=.434 and p< 0.01, and lack of experience by the people involved in projects is causing a continuous change in project deliverables and project requirements. This is shown in the relationship between (variables 9) and (variable 7) as r=.432 and p< 0.01. The relationship between variables nine and variable eight shows that lack of experience by project participants is causing the lack of communications. This is verified in the relationship as r=.533 and p< 0.01.

DISCUSSION

The results of the study shows that strong lack of communications exist between the people involved in IT projects is significantly contributing to projects failure. Continuous change in project requirements by adding and dropping deliverables throughout the project is sought to be attributed to the high rate of project failures, which confirms Loo's (2003) and Kerzner's (2004) findings. The analysis further shows that lack of clarity in project's objectives strongly contributes to IT projects failure. This also corresponds with Kerzner (2004) findings and supports Bryde's (2003) findings. Additionally, new IT projects initiation tends to have poor scope, which is causing projects to be extended way beyond the time frame set for the project and way beyond allocated budgets.

Moreover, analysis of the population sampled further shows that individuals involved in IT projects in State of Qatar lacks essential project management skills, which is significantly plays a part in projects failures. This finding corresponds with Cicmil (1997). Better preparation of people involved in IT project in project management skills may contribute significantly to improving communications and project success. Analysis of the data collected indicates that high-level management involved in public projects need to recognizing the importance of project scope and clear project requirements.

Furthermore, public sector organizations need to develop better project management skills, policies procedures, training, improving the individual capabilities of people involved in project, and by conducting better project estimation. The findings of this research also affirm previous research findings by Khalfan and Alshawaf (2003), both findings asserts that essential skills such as general project management, legal understanding, project monitoring and control can significantly contribute to projects success.

This paper is limited to the investigation of the issues involved in projects failure within the public sector in the State of Qatar. Moreover it is largely comprised of oil and gas industry and government organizations that are highly involved in project initiation, monitoring and project control. The scope of this paper does not include the private sector and does not attempt to do so.

Further comparative research should be conducted to determine whether projects in the public sector in Qatar fail for the same reasons as in other parts of the world. Understanding whether the public sector in Qatar enjoys unique characteristics that separate it from other public sectors in other countries will be beneficial to the general project management body of knowledge.

REFERENCES

Brennan, L., Orwig, R. 2000. An integrated view of project and quality management or project-based organizations. *National Journal of Quality & Reliability Management*, 17(4/5): 351-363.

Bryde, D. 2003. Project management concepts, methods and application. *International Journal of Operations & Production Management*. 23(7): 775 – 793.

Cicmil, S. 1997. Critical factors of effective project management. *The TQM Magazine*. 9(6): 390-396.

Dooley, L. 2000. *Systems innovation management*, PhD thesis, National University of Ireland, Galway. Elonen, S., & Artto, K.A. 2003. Problems in managing internal development projects in multi-project environments. *International Journal of Project Management*, 21(6): 395-402.

Engwall, M., & Jerbrant, A. 2003. The resource allocation syndrome: the prime challenge of multiproject management. *International Journal of Project Management.*, 21(6): 403-9.

Ghattas, R., & Mckee, S. 2001. *Practical project management*. NJ: Prentice Hall.

Kerzner, H. 2004. Advanced project management (2 ed.). NJ: John Wiley & Sons.

Khalfan, A., & Alshawaf, A. 2003. IS/IT outsourcing practices in the public health sector of Kuwait: a contingency approach. *Logistics Information Management Journal*, 16(3/4): 215 – 228.

Liebowitz, J. 1999. A look at why information systems fail. *Kybernetes Journal*, 28(1): 61-67.

Loo, R. (2003) A multi-level causal model for best practices in project management, *Benchmarking International Journal*. 10(1): 29-36.

Marquez, A., & Herguedas, A. 2004. Learning about failure root causes through maintenance records analysis, *Journal of Quality in Maintenance Engineering*, 10(4): 254-262.

Powl, A. & Skitmore, M. 2005. Factors hindering the performance of construction project managers. *Construction Innovation*, 5(1): 41-51.

Whittaker, B. 1999. What went wrong? Unsuccessful information technology projects. *Journal of Information Management & Computer Security*, 7(1): 23-30.

INFORMATION SYSTEMS PERFORMANCE ANALYSIS

Nur Haryati Hashim Ainin Sulaiman

University of Malaya, Malaysia Email: ainins@um.edu.my

ABSTRACT

Information Systems (IS) have been said by many to be one of the critical success factors for the success and sustainability of a business organization. It is stated that the better the IS performance, the better the organization would be particularly in terms of profit. IS performance can be measured in many ways and end user satisfaction has been stated by many as the surrogate measure. Using the end user satisfaction survey, this study analyses IS attributes perceived to be important and whether the current IS performance is up to expectations. A questionnaire survey was distributed to IS end users of a local Information Technology company. Generally, it was discovered that the end-users were satisfied with the company's IS performance. Nevertheless, the end users perceived that the company's IS performance was below the end-users' expectations (based on importance ratings). Further analysis indicated that the users perceived security of data as the most important attribute for IS performance. The gaps between importance and performance varies between each attribute, however the three attributes with highest gap scores were "understanding of systems", "documentation" and "high availability of systems". The Importance Performance Analysis mapping indicates the company has high importance and high performance ratings which mean that their system meets or exceeds the service quality standards. Nevertheless steps must be taken to maintain the existing standards in order to remain satisfactory.

INTRODUCTION

Information technology (IT) and information systems (IS) continue to be hotly debated in the corporate corridors of today's organization. As IT spending matures and has become commoditized to the point that it is as essential as electricity and running water, many organizations continue to wonder if their IT spending is justified (Farbey, Land and Targett, 1992) and whether their IS functions are effective (DeLone & McLean, 1992). IT and IS has evolved drastically, from the heyday of mainframe computing to the environment that has reached the end-users. Previously end-users interact with systems via the system analyst or programmer who translate the user requirements into system input in order to generate the output required for the end-users' analysis and decision-making process. However, end-users are now more directly involved with the systems as they navigate themselves typically via an interactive user interface, thus assuming more responsibility for their own applications. As such, the ability to capture and measure end-user satisfaction serves as a tangible surrogate measure in determining the performance of the IS function, services and application deployed within an organization (Ives, Olson & Baroudi, 1983). Recognizing the importance of measuring IS performance, a study was undertaken. As it is not possible to measure the performance of all organizations in Malaysia, this study was carried out on a well-known local IT company that has been in existence for more than 10 years. In addition, this paper aims to demonstrate the usage of the importance performance analysis to measure the IS performance (end user satisfaction).

Importance-Performance (IP) Analysis

The Importance Performance Analysis (IPA) framework was first introduced by Martilla and James (1977) to assist in understanding customer satisfaction as a function of both expectations concerning the significant attributes and judgments about their performance. Analyzed individually, importance and performance data may not be as meaningful as when both data sets are studied simultaneously (Graf, Hemmasi & Nielsen, 1992). Hence, importance and performance data are plotted on a two dimensional grid with importance on the y axis and performance on the x axis. The data are then mapped into four quadrants (Martilla & James, 1977 & Bacon 2003). In quadrant 1 importance is high but

performance is low. This quadrant is labeled as "Concentrate Here", indicating the existing systems require urgent corrective action and thus should be given top priority. Items in quadrant 2 indicate high Importance and high performance, which indicates the strength of the existing systems and they should be maintained as it is. Low importance and low performance items is placed in the third quadrant which actually indicates that the systems do not pose a threat however they may be considered for discontinuation. This quadrant is labeled "Low Priority". Finally quadrant 4 represents the low Importance but high performance which suggests insignificant strengths and the possibility that the resources invested here are better off diverted elsewhere. The four quadrants matrix helps organizations to identify areas that need to be improved and efforts that need to be taken to minimize mismatches between importance and performance. Many studies have extended the IP Map to include an upward sloping, 45-degree line to highlight regions of differing priorities. It is also known as the iso-rating or iso-priority line, where importance equals performance. Any attribute below the line must be given priority whereas attribute above the line indicates otherwise (Bacon 2003).

Many researchers have applied IPA (Eskildsen. & Kristensen, 2006). Slack (1994) used it to study operations strategy while Sampson and Showalter (1999) evaluate customer and Ford, Joseph & Joseph (1999) use it for marketing strategy. IPA is also popularly used in many environments such as in health (Skok et al 2001, Dolinsky & Caputo 1991), banking (Joseph, Allbrigth, Stone, Sekhon & Tinson 2005, Yeo 2003), hotel (Weber, 2000) and tourism (Duke and Mont 1996). The IPA has also been applied in the IS/T area. Magal and Levenburg (2005) employed IPA to study the motivations behind e-business strategies among small businesses while Shaw, DeLone and Niederman (2002) used it to analyze end user support. Skok et al (2001) mapped out the IP analysis using the DeLone and McLean IS success model. DeLone and McLean (1992) adopted the end-user satisfaction as a construct. Firstly, it has high face validity since it is hard to deny the success of a system which is favored by the users. Secondly, the development of the Bailey and Pearson instrument (1983) and its derivatives provided a reliable tool for measuring satisfaction which also facilitates comparison among studies. Thirdly, it is relatively more popular compared to the other constructs since the other measures have performed poorly. This is caused by those constructs being empirically weak or empirically hard to obtain, making their use in the field of IS research problematic and prone to many theoretical shortcomings.

RESEARCH METHODOLOGY

Based on the reasons mentioned above, this study adapted the measurement tool developed by Bailey and Pearson (1983) to evaluate end-user satisfaction. The measures used are: system quality, information quality, service quality and system use. System quality typically focuses on the processing system itself, measuring its performance in terms of productivity, throughput and resource utilization. On the other hand, information quality focuses on measures involving the information system output, typically the reports produced. If the users perceive the information generated to be inaccurate, outdated or irrelevant, their dissatisfaction will eventually force them to seek alternatives and avoid using the information system altogether. System use reflects the level of recipient consumption of the information system output. It is hard to deny the success of a system that is used heavily, which explains its popularity as the "MIS measure of choice". Although certain researchers strived to differentiate between voluntary and mandatory use, DeLone and McLean noted that "no systems use is totally mandatory". If the system is proven to perform poorly in all aspects, management can always opt to discontinue the system and seek other alternatives. The inclusion of the service quality dimension recognizes the service element in the information systems function. Pitt, Watson and Kavan (1995) proposed that service quality is an antecedent of use and user satisfaction. Because IS now has an important service component, IS researchers may be interested in identifying the exact service components that can help deliver user satisfaction.

New and modified items were added to suit the current issues which are pertinent to the IS development and performance evaluation, specific to the organization's IT environment. The newly added factors were included to suit the current issues that are of main concern to the organization IS

environment. High-availability directly affects the employees' ability to be productive. Frequent downtimes mean idle time since employees are not able to access the required data or email for their communication needs. The senior management has raised concerns on this issue since it affects business continuity and can potentially compromise its competitive position. Thus, the IS department is exploring measures to provide continuous access to the company's IT systems including clustering technology which provides real-time replication onto a backup system. The second new factor is the implementation of latest technology as part of the office productivity application. Being a leading IT solutions provider, the company needs to keep itself abreast of the recent technologies and solutions available in the market. This is aided by strategic partnerships with various partners who provide thought leadership, access to their latest development and skill transfer to equip the employees with the relevant expertise. Additionally, in order to formulate better solutions for its customers, the company needs to have firsthand experience in using the proposed technologies. To realize this strategy, the company has embarked on a restructuring exercise which sees the formalization of a R&D think tank and deployment unit to facilitate rapid roll-out of the latest technologies for internal use. The third factor included in this study is ubiquitous access to IT applications to enable productivity anytime and anywhere. The main aim is to provide constant connectivity for the employees who are often out of the office, enabling them to stay in touch with email and critical applications hosted within the organization's network. Combined with the application features which are compatible with wireless protocols e.g. 3G and EDGE, email and calendar access can already be made available on selected handheld devices.

Sample

A convenience sampling method was used for data gathering, which is convenient and economical. The targeted respondents were the organization's end users (employees) who had access to its IT facilities and services (email, internet browsing and a host of office automation systems which were developed in-house). They were chosen as they would be able to provide reasonable feedback and judgment pertaining to the subject matter. The survey was converted into an online format to expedite the process, providing easy access to all potential respondents. An email broadcast was sent out to explain the research objectives and a brief instruction on how to complete the survey was also included.

The survey questionnaire was deposited on the organization's Lotus Note database which was accessed by 680 users. The questionnaire comprises of 2 sections which contained an identical set of IS attributes. A total of 20 attributes were selected out of the 39 items proposed by Bailey and Pearson (1983). The rationale for this was essentially to reduce the complexity of the survey questionnaire. Also, the survey questionnaire did not include any negative questions for verification purposes again for the sake of simplification and to reduce the total time taken to provide a complete response. It is foreseeable that including other factors may provide a different insight or improve the internal reliability of the variables studied. However, to perform a vigorous test to qualify the best set of variables would take too much time and could possibly shorten the duration required for data gathering.

In the first section, the respondent is asked to evaluate the degree of importance placed upon each attribute. In the second section, they are required to evaluate the actual performance of the same attributes. A five-point Likert scale was utilized to quantify their responses. All completed questionnaires were automatically deposited into a Lotus Notes database. The security settings on this database were modified to allow anonymous responses to ensure complete anonymity. Subsequently, 163 questionnaires were returned which is equivalent to a response rate of 24%.

RESULTS AND DISCUSSION

In general, it can be seen that the respondents are satisfied with the IS performance as the mean scores for almost all attributes are above 3 except 'degree of training' (Table 1). The result also illustrated the respondents are very satisfied with the 'relationship with the EDP staff' and 'response/turnaround time'. The detail discussion on user satisfaction is discussed in another paper. In terms of importance, it is interesting to note that the mean score for 'security of data' and 'response/turnaround time' were the top two highest mean scores indicating that the respondents placed greater importance on the quality of the

information and system. The Table also illustrates that the respondents perceived that all attributes are performing well below their expectations or level of importance (negative values for gap).

The degree of differences however varies, some more than others. Although 'degree of training' was rated lowest in terms of performance, it was not rated lowest in terms of importance hence the gap between performance and importance was only 1. From the gap scores, it is easy to see that the IS department needs to work harder at improving end-users' understanding of the systems, documentation, system availability, ubiquitous access and training provided to the end-users. These five items has the highest gap scores indicating biggest discrepancy between importance and performance. On the other hand, the items with the lowest gap scores (relationship with EDP staff, relevancy, time required to complete new development) suggest that the current performance levels are manageable, even if they are still below end-users' expectations. These include relationship with the EDP staff, relevancy, time required for new development, feeling of control and feeling of participation.

Mean scores for both importance and performance data were plotted as coordinates on the IP map. The resulting positions on the grid are shown in Figure 1. As mentioned previously, performance and importance scores provide more meaning when they are studied together. It is not enough to know which attribute was rated most important, or which one fared the best or worst. Mapping these scores against the iso-rating line the line shows whether focus and resources are being deployed adequately, insufficiently or too lavishly. All the attributes fall in the second quadrant thus showing that existing systems are efficient. Nevertheless the distribution of the items above the iso-rating indicates importance exceeds performance hence there are opportunities for the company to improve.

Table 1
IS Attributes Means and Gap Scores

IS Attributes	Performance (X)	Importance (Y)	Gap (P-I)
Understanding of systems	3.27	4.36	-1.09
Documentations	3.06	4.14	-1.08
High availability of systems	3.1	4.16	-1.06
Ubiquitous access to applications	3.05	4.07	-1.02
Degree of training	2.95	3.95	-1.00
Security of data	3.53	4.49	-0.96
Integration of systems	3.09	3.99	-0.90
Top management involvement	3.35	4.19	-0.84
Flexibility of systems	3.28	4.07	-0.79
Implementation of latest technology	3.03	3.81	-0.78
Confidence in the systems	3.44	4.22	-0.78
Attitude of the EDP staff	3.55	4.31	-0.76
Job effects	3.51	4.24	-0.73
Response/turnaround time	3.76	4.46	-0.70
Technical competence of the EDP staff	3.65	4.23	-0.58
Feeling of participation	3.25	3.79	-0.54
Feeling of control	3.27	3.74	-0.47
Time required for new development	3.36	3.8	-0.44
Relevancy	3.54	3.97	-0.43
Relationship with the EDP staff	3.82	4.05	-0.23

CONCLUSIONS

Organizations are nowadays compelled to analyze its Information Systems relevance (importance) and the actual value (performance) it brings into an organization as it normally involves a huge amount of the company resources. IS departments everywhere should measure the satisfaction level amongst their end-

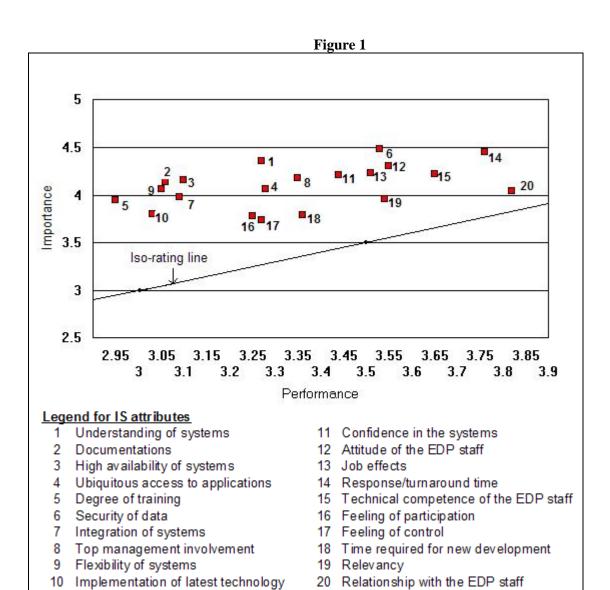
users to evaluate the performance of their IS systems and services. Despite some people branding it nothing more than a popularity contest, end-users' input can reveal insights as to which areas deserve special attention and more resources. Using tested tools such as Bailey and Pearson's instrument helps ensure a highly consistent, reliable and valid outcome which is when deployed over time, can help measure the performance of the IS department to ensure its continual alignment between its operational goals and the underlying business objectives.

As concluded by this study, key IS attributes pertaining to service quality ('relationship with the EDP staff') and system quality ('response/turnaround time') are critical in delivering end-user satisfaction i.e. performance. On the other hand, Data security is deemed to be the most important IS attribute determining IS performance, echoes today's concern about rampant security threats. These threats range from virus and worm attacks which could lead to data loss, identity theft, hacking by unscrupulous hackers and security breaches leading to access by unauthorized individuals. As such, IS department needs to be more proactive in handling these threats and continually demonstrate to the endusers on its ability to secure the system and its information repositories. Confidence in the system is partly related to data security, but more inherently it concerns the quality of the information. The data presented to the user must be reliable, accurate and timely; otherwise it will be meaningless and hinders the end-users from making sound decisions. Additionally, flexible systems allow the end-users to be more creative and where possible, apply some degree of personalization to suit their roles and job functions. Also, systems which can flex with changing business demands, to incorporate more features and accommodate new reporting requirements, help maximize its return on investment and relevance to the business operations.

The IP map (Figure 1) revealed that all twenty IS attributes were performing below the end-users' expectations. The three variables with highest gap scores were "Understanding of systems", "Documentation" and "High availability of systems". Mapping the mean scores for both data sets onto a scatter plot and analyzing the distance of the scores plotted against the iso-rating line gave much insight to help guide the prioritization of resources and management intervention. For starters, to improve end-users' understanding, the IS department could also strive to improve its documentation and training effort to help the users' become more savvy in using the IT applications provided. This may include the use of computer-based training, applying multimedia and video to conduct online demos and conducting IT "open days" to invite end-users to approach IS personnel with whatever queries they might have regarding the systems deployed. It is striking to note that the three attributes are significantly related by virtue of reasoning, although further statistical analysis may be required to support this notion.

Similarly, the items with the lowest gap scores are also somewhat related. Based on the gap analysis, the IS department has already fostered good relationships with the end-users, encouraging high user involvement in the development of new applications and IT solutions. This leads to a higher feeling of control and participation amongst the end-users and with that they are assured that the solutions developed are highly relevant to their tasks objectives. The IS department would be wise to maintain their healthy relationship with the end-users while they pursue the enhancement of the other IS attributes identified with the highest gap scores, as mentioned previously.

The limitation of this study is the use of a convenient sample rather than a random systematic sampling, since convenient method may have introduced sampling bias. Additionally, end-user responses on the perceived importance may suffer from their desire to rank everything as "Very Important" to suggest a highly concerned outlook on the overall state of the factors presented.



REFERENCES

Bacon, D.R. 2003. A comparison of approaches to importance performance analysis. *International Journal of Market Research*, 45(1): 55-71.

Bailey, J. E. & Pearson, S.W. 1983. Development of a tool for measuring and analyzing computer user satisfaction. *Management Science*, 29(5): 530-545.

DeLone, W.H. & McLean, E.R 1992. Information systems success: The quest for the dependent variable. *Information Systems Research*, 3(1): 60-95.

Dolinsky, A.L. & Caputo, R.K. 1991. Adding a competitive dimension to importance-performance analysis: An application to traditional health care systems. *Health Marketing Quarterly*, 8(3/4): 61-79.

Duke , C.R & Mont A.S. 1996. Rediscovery performance importance analysis of products. *Journal of Product and Brand Management*, 5(2): 143-54.

Eskildsen, J.K. & Kristensen, K. 2006. Enhancing importance performance analysis. *International Journal of Productivity and Performance Management*, 55(1): 40-60.

Farbey B, Land F & Targett D. 1992. Evaluating investments in IT. *Journal of Information Technology*, 7: 109-122.

- Graf, L.A., Hemmasi, M. & Nielsen, W. 1992. Importance satisfaction analysis: A diagnostic tool for organizational change. *Leadership and Organization Development Journal*, 13(6): 8-12.
- Ives, B, Olson, M & Baroudi, J.J. 1983. The measurement of user information satisfaction. *Communication of the ACM*, 26(10): 785-793.
- Joseph, M. Allbrigth, D., Stone, G., Sekhon, Y. & Tinson, J. 2005. Importance-performance Analysis of UK and US Bank Customer Perceptions of Service Delivery Technologies. *International Journal of Financial Services Management*, 1(1): 66 88.
- Magal, S & Levenburg N.M.. 2005. Using importance performance analysis to evaluate e-business strategies among small businesses. Paper presented at the 38th Hawaii International Conference on System Sciences, Hilton Waikoloa Village Island of Hawaii, January 3-6.
- Martila J.A. & James, J.C.1977. Importance-performance Analysis. *Journal of Marketing*, 2(1): 77-79.
- Pitt, L.F., Watson R.T & Kavan, C.B.1995. Service quality: A measure of information systems effectiveness. *MIS Quarterly*, 19(2): 173–185.
- Sampson, S.E. & Showalter, M.J. 1999. The performance importance response function: Observation and implications. *The Services Industries Journal*, 19(3): 1-25.
- Shaw, N.C., DeLone, William H., & Niederman, F. 2002. Sources of dissatisfaction in end-user support: An empirical study. *Data Base for Advances in Information Systems*, 33(2): 41–56.
- Skok, W., Kophamel, A. & Richardson, I. 2001. Diagnosing information systems success: Importance performance maps in the health club industry. *Information & Management*, 38: 409-419.
- Slack, N. 1994. The importance-performance matrix as a determinant of improvement priority. *International Journal of Operations & Production Management*, 14(5): 59-76.
- Weber, K. 2000. Meeting planners' perceptions of hotel-chain practices and benefits: An importance-performance analysis. *Cornall Hotel and Restaurant Administration Quarterly*, 41(4): 32-38.
- Yeo, A.Y.C. 2003. Examining a Singapore bank's competitive superiority using importance-performance analysis. *Journal of American Academy of Business*, 3(1/2): 155-161.

METHODS OF IDENTIFYING NEED FOR PRIMARY HEALTH CARE ON THE BASIS OF GEOGRAPHICAL EQUITY FOR SMALL AREAS: A CASE STUDY IN THATTA DISTRICT OF PAKISTAN

Mohammad Ishfaq College of London, UK Email: mishfaq60@hotmail.com

ABSTRACT

Economic of healthcare favors strong primary care to lessen the burden from secondary care. This paper examines the possibility of applying rational planning tools to strengthen primary care. Application of rational planning tools for equitable need identification in any developing country is mainly restricted by non-availability of reliable and adequate data. Reliable demographic and socioeconomic data based on census are hard to obtain in most of the developing countries as decennial data collection is quite irregular. To overcome such difficulties by making use of alternate data elements, this paper sets an example by using data collected by the Community Health Sciences (CHS) Department of the Agha Khan University (AKU), Karachi Pakistan. This data has been collected in a survey on demographic, socio-economic and health situation in Thatta district of Pakistan. Although this data was collected over a decade ago, which might be rather old, however it helps the present Paper to develop need identification model for the sake of demonstration.

INTRODUCTION

In the era of globalization every nation is competing for inward flow of capital. Developing countries with abundant raw material and cheap labor have competitive advantage. Nevertheless health and health care facilities play vital role, among other things, in attracting multinational businesses. Economic of healthcare argues in favors of strong primary care to lessen the burden from secondary care. Social planners have difficult task on hand to distribute resources within the social sector and appropriate subdivision between primary and secondary care. Task becomes easier if need and supply scenario is envisaged. Health care need is influenced by a number of demographic and socio-economic factors. This has been argued by several studies including World Bank's Health Sector Reports published regularly. In this context there is no shortage of evidence from across the world and theory is very well proven. We agree with one of the social scientists who worked very close to the developing country's situation and explained that disease is a function of various socio-economic factors such as; water, sanitation, housing, education, nutrition, sex differences, and access to health facilities (Zaidi 1985). The study of impact of these factors on health status in developing countries however does not clarify their use for planning purpose.

On the other hand in case of industrially developed countries methods of health care need identification are well established which take into account both demographic as well as socio-economic conditions. The British National Health Services (NHS) for example in 1975 established a Resource Allocation Working Party (RAWP) to devise a system of allocating resources rationally among its Regional Health Authorities (DHSS, 1976). The prime objective was to move away from historical incremental system to a rational method in order to achieve geographical equity. RAWP formula included demographic structure, health service utilization pattern, mortality rates (as a proxy for morbidity), and socio-economic conditions including elasticity of mortality rates (DHSS, 1989).

To take into account socio-economic conditions in Britain there has been wide support for Townsend Deprivation Index (Townsend *et al*, 1986). Townsend deprivation index adds together the 'Z-scores' of four census variables to represent material deprivation. These are; 1) the percentage unemployed, 2) the percentage of household without car, 3) the percentage of households which are not owner occupied, and 4) the percentage of household which are overcrowded. Each of these variables is standardized to have a mean of 0 and standard variation of 1 by means of the transformation.

The deprivation index is then transformed to have a mean of 1 and utilized in the model of identifying relative need for different geographical areas. The model of identifying relative need is given below.

 $N_{jk} = \Sigma_s EP_{jks} * (CL_{ks}/P_{ks}) * SMR_{sj}^a * U_j$

where

 N_{jk} is the relative need for service in area j age group k. EP_{iks} is the estimated population in area j, age k, and sex s.

CL_{ks} is the total number of cases treated by health personnel in age group k and sex s.

 P_{ks} is the total population of the area in age group k sex s.

SMR_{sj}^a is the standardized mortality rate of sex s in area j with an elasticity a (a=0.5), and

U_j is the Townsend deprivation index scores for area j.

The above model has been in use over the yeas in the NHS for allocation of resources among regions. Although from April 1990 new arrangements for funding regions replaced the use of RAWP formula, however the government made it clear that the principle of an equitable geographical distribution of financial resources will be retained (Mays, 1989). In this context the model was extended and applied for primary health care resources planning at sub-district level (for decentralized planning) in a District Health Authority of the British NHS (Ishfaq, 1993). In this research RAWP formula has been extended for district health authority aiming at electoral ward level.

The underlying objective of the present paper is to examine the possibility of applying such need model for the planning of primary health care resources in developing countries with reference to Pakistan. Major restrictions in applying such rational models, in Pakistan or any other developing country are mainly attributed to the non-availability of reliable and adequate data. However in Pakistan the Community Health Sciences (CHS) department of the Agha Khan University (AKU), Karachi has been engaged in developing database for primary health care MIS. In this regard its main concern is squatter settlements (kachi abadies) of Karachi and Thatta district. In Thatta district the CHS department carried out a demographic, socio-economic and health situation survey in 1987 (Karim, 1987).

Thatta district of Sind province is located in the southern most part of Pakistan. Thatta District had a population of 761,039 according to 1981 Census (the nearest to Karim's survey), with a fairly large portion (90.4%) of population living in rural areas. For the organization of administrative convenience and data presentation district is divided into three ecological zones i.e. Rural South, Rural Central, and Urban. Each Zone comprises of smaller units called talukas. For analysis purposes we have used Karim's (1978) classification of twelve talukas into three ecological zones as follows.

Rural South: Kati Bunder, Kharo Chan, Jati, Shah Bunder,

Rural Central: Mirpur Sakro, Ghora Bari, Thatta Rural, Sujjawal Rural, Mirpur Bathoro, and

Urban: Gharo, Thatta Urban, Sujjawal Urban.

Due to the thin spread of population the sample design was based on 'cluster sampling'. The district was grouped into 250 rural and 25 urban clusters each containing about 500 households. The quality of data, which has been collected as a result of a carefully organized and adequately supervised survey by a well established institute i.e. AKU, seems to be reliable. This survey establishes a close link between the demographic, socio-economic and health situations-which is quite in line with the findings of similar studies elsewhere (Zaidi, 1988; World Bank, 1980). However it remains to be clarified how health planners can use this information to identify need and plan health care resources.

We have been able to utilize AKU's data to show how rational planning methods using the RAWP formula could be applied to identify need for areas at sub-district levels. As explained earlier that the RAWP formula is based on four principle variables, of these variables the availability of data representing deprivation and mortality statistics are major problems in terms of developing countries. AKU's data however helps us in Thatta district to analyze a number of socio-economic variables in order

to construct a deprivation index and to work out SMRs. Our analysis to construct deprivation index is explained below.

Deprivation Index

We have already argued that health care need is influenced by a number of demographic and socio-economic factors. In this respect in order to develop deprivation index, we examined eleven socio-economic variables for the twelve talukas of Thatta district. These variables, together with abbreviations to be used in the present Paper, are given in Table 1.

Table 1
Socio-economic Variables and their Abbreviation

	Abbreviation	Variables
CH:	Population that had no schooling,	
GR:	Population having agriculture profession,	
ST:	households having problems of accessibility to health	institutions in terms of distance,
ST:	households having problems of accessibility to health	institutions in terms of cost,
CH:	households living in kutcha houses or huts,	
LC:	households without electricity,	
VTR:	households without piped water,	
LT:	households without toilet amenities,	
ND:	households without land ownership,	
ISE:	households without house ownership, and	
OM:	households living in one room.	

Data on these variables for each taluka is presented in Table 2.

Table 2
Data List for Each "Taluka"

	Z	ones/Tal	ukas			Variables %					_
	SCH	AGR	DST	CST	KCH	ELC	WTR	TLT	LND	HSE	ROM
				<u>F</u>	Rural Sou	<u>th</u>					
Kati Bunder	82.3	23.3	43.2	40.3	94.5	95.3	60.6	93.2	72.9	8.9	58.1
Kharo Chan	94.7	24.8	84.6	55.7	96.0	99.9	99.2	97.6	67.5	4.9	87.0
Jati	93.3	19.3	38.6	82.2	90.6	99.6	98.8	79.4	74.2	58.8	63.1
Shah Bunder	94.0	17.8	47.2	88.5	97.8	99.3	97.7	66.9	83.6	42.8	83.6
				<u>R</u>	ural Cent	<u>ral</u>					
Mirpur Sakro	73.3	1.8	75.7	82.2	56.5	65.2	37.0	95.3	97.8	4.3	78.6
Ghora Bari	88.7	26.6	90.6	90.2	86.8	98.9	89.5	98.5	44.0	3.0	54.9
Thatta Rur	90.0	18.4	96.0	96.0	96.4	95.3	64.9	98.2	72.9	1.1	81.2
Sujjawal Rur	89.3	22.7	80.3	78.1	94.4	99.6	99.7	68.2	44.6	2.6	73.8
Mirpur Bathoro	97.2	15.4	88.3	87.2	95.1	98.5	89.1	80.4	93.2	3.0	78.5
					<u>Urban</u>						
Gharo	76.7	1.5	17.4	38.7	18.7	34.9	1.3	17.0	94.9	9.8	39.1
Thatta Urban	59.6	1.1	63.4	42.7	13.2	14.5	0.4	5.7	95.2	12.8	23.8
Sujjawal Urban	79.2	1.6	25.6	77.1	37.1	46.6	0.0	16.4	90.1	9.5	46.2

Source: Community Health Services Agha khan University. This data is quite old and has been used for demonstration purposes.

From this table it is evident that the variables in each zone depict a fairly uniform socio-economic situation. It may be noted that the percentage of population with agriculture profession in Mirpur Sakro, as compared to other areas in the rural zones, is quite low and resembles that of urban areas. Indeed Mirpur Sakro is a growing taluka adjacent to Karachi district where the population's profession tends to be different than those in rural areas. It may also be noted that in many cases in the district the percentage of households without house ownership is fairly low. Indeed house ownership in rural areas of Pakistan is not a problem but the quality of housing stock is generally very poor. This is reflected in the case of Thatta district in substantially high percentages of household living in kutcha huts.

Generally Thatta district is one of the least developed districts in Pakistan (Karim, 1987). In this regard it was believed that the socio-economic variables given in Table 1 were likely to have considerable influence on the health status of such an area. However in many cases these variables are highly correlated. Our first step, therefore, was to reduce the number of variables and choose a subset that represents deprivation adequately and independently. We have used the technique of Principal Component Analysis (PCA) of Factor Analysis to identify such a sub-set. Pasha and Hassan (1982) have also applied this method for the development ranking of districts of Pakistan.

REESEARCH METHODOLOGY

Factor Analysis

The general purpose of factor analysis is to find a way of condensing (summarizing) information contained in a number of variables into a small set of new composite factors with a minimum loss of information. More specifically (Hair *et al*, 1987) factor analysis can perform the following four functions:

- a) Identify a set of factors that are latent (not easily observed) in a large set of variables; this is also referred to as R factor analysis,
- b) Devise a method of categorizing individuals into distinctly different groups within a large population; this is also referred to as Q factor analysis,
- c) Identify surrogate variables for subsequent analysis from a much larger set of variables, and
- d) Create a smaller set of variables to partially or completely replace the original set of variables for inclusion in subsequent analysis.

Our objective in using factor analysis in the present Paper is mainly concentrated on the third objective i.e. to identify surrogate variables, which could then be used to develop a deprivation index. The procedure and results of analysis are explained below.

Steps in factor analysis: Factor Analysis to extract factors usually proceeds in the following six steps:

- 1) Deriving correlation matrix,
- 2) Initial estimation of factors,
- 3) Criteria for the number of factors to be extracted,
- 4) Extraction of un-rotated factors,
- 5) Deriving rotated factor matrix, and
- 6) Using factor matrix results for subsequent analysis.

Step by step discussion of the process and results of factor analysis follows in the next section.

RESULTS AND DISCUSSION

Correlation Matrix

Factor analysis procedures begin with the computation of inter-correlation among the variables. The correlation matrix provides an initial indication of the relationships among variables. For the socioeconomic variables used in our analysis, the correlation matrix is given in Table 3.

Table 3 Correlation matrix

Variables	SCH	AGR	DST	CST	KCH	ELC	WTR	TLT	LND	HSE	ROM
SCH	1										
AGR	76	1									
DST	30	47	1								
CST	56	28	47	1							
KCH	.87	89	50	53	1						
ELC	.90	89	46	55	99	1					
WTR	86	88	51	50	93	94	1				
TLT	.64	74	63	47	85	86	76	1			
LND	-47	.82	-43	-26	-59	-62	-64	-49	1		
HSE	21	07	-48	13	13	15	26	-08	11	1	
ROM	76	54	53	58	81	80	75	78	-25	01	1

From inspection of the correlation matrix, we see that most of the variables are related at ± 0.50 or above. It is therefore difficult to derive complete and clear understanding of their relationships. To overcome this difficulty the set of variables is reduced to a smaller set of derived variables called factors as explained below.

Initial Estimation of Factors

This correlation matrix is then transformed to obtain a factor matrix F (with elements a_{ij} also known as factor loadings). Before the extraction of factors an initial estimate of factors is obtained in order to observe the amount of variance accounted for by each factor. This estimate helps to decide about the number of factors to be extracted - which is discussed later in this Paper. Using the SPSS package for principal component solutions we first obtained the initial factor estimates given in Table 4.

Table 2 shows that it is possible to compute as many factors as there are variables, factors are always arranged in descending order of variance explained. The second column, of eigenvalues, gives a measure of the total variance explained by each factor. Column three contains the percentage of the total variance attributable to each factor. The last column gives information about the cumulative variance. Based on initial factor statistics, the analyst next decides about the number of factors to be extracted-this indeed depends upon the examination of total variance explained by each factor as follows.

Table 4
Initial Factors Statistics

Factors	Eigenvalue	% Variance	Cumulative %
1	7.00	63.6	63.6
2	1.53	13.9	77.6
3	1.09	9.9	87.5
4	0.60	5.4	92.9
5	0.35	3.2	96.1
6	0.22	2.0	98.1
7	0.12	1.1	99.2
8	0.05	0.5	99.7
9	0.02	0.2	100.0
10	0.00	0.0	100.0
11	0.00	0.0	100.0

Number of factors to be extracted: Several procedures have been proposed for determining the number of factors to be extracted (see Hair *et al*, 1987). One criterion suggests that only those factors be extracted whose eigenvalue is greater than 1. Based on this criterion, Table 4 shows that only three factors are of interest. We have therefore extracted three unrotated factors in the following step.

Extraction of unrotated factors: After deciding the number of factors to be extracted (three in the present case), the unrotated factor matrix F with its elements a_{ij} is derived as follows:

 $\mathbf{F} = \mathbf{V} * \mathbf{A}^{1/2}$

In equation above 'V' is the transformed correlation matrix of original variables normalized to unity. This is also called the principal component transformation matrix. 'A' is the diagonal matrix with eigenvalues of factors as diagonal elements (for details please see Hotelling's Iterative Eigenvalue Solution in Tatsuoka, 1971). Using the SPSS package for principal component solutions we obtained the unrotated factors matrix given in Table 5.

The factor matrix in Table 3 provides the relationship between each factor and the original variables, represented by factor loadings a_{ij} (ith coefficient of jth factor). Factor loadings are the coefficients that make a linear combination of the variables and these coefficients are chosen so as to maximize the total variation accounted for by the first factor. Table 5 shows that the eigenvalue is the sum of the squares of the factor loadings (a_{ij}) down the corresponding column i.e. $\Sigma_i a_{ij}{}^2 = E_j$. The eigenvalue represents the amount of variance accounted for by a factor.

Table 5 Unrotated Initial Factor Matrix

Variables Communality	Factor 1	Fa	ctor 2	Factor 3
SCH	.87	.27	.06	.84
AGR	.89	.01	44	.98
DST	.61	68	.18	.86
CST	.61	.03	.56	.69
KCH	.97	.09	02	.96
ELC	.98	.12	04	.98
WTR	.95	.17	09	.94
TLT	.87	18	09	.80
LND	66	.19	.60	.83
HSE	.07	.94	.02	.88
ROM	.83	01	.42	.85
Eigenvalues	7.00	1.53	1.09	-
Variation	63.60	13.90	9.90	-

Communality, on the other hand, is the proportion of the variation of the corresponding variable explained by the three factors. Communality is the sum of squares of the factor loadings along a row i.e. $\Sigma_j a_{ij}^2 = C_i$. After deriving the initial factor matrix (Table 5) the final factor matrix is extracted applying rotation, as explained in the following step.

Deriving factor matrix after rotation: Factor rotation is the process of rotating the reference axes about the origin to achieve a simpler and pragmatically more meaningful factor solution (Hair *et al*, 1987). The most common method of rotation is known as varimax rotation. Table 6 shows the factor loading matrix after applying varimax rotation.

Table 6
Final Factor Loading Matrix after Rotation

Variables	Factor	l Commu	Factor 2 nality	Factor 3
SCH	0.60	0.66	0.20	0.84
AGR	0.95	0.29	-0.04	0.98
DST	0.30	0.49	-0.73	0.86
CST	0.06	0.82	-0.04	0.69
KCH	0.73	0.65	0.02	0.96
ELC	0.75	0.65	0.05	0.98
WTR	0.76	0.59	0.10	0.94
TLT	0.57	0.64	-0.24	0.80
LND	-0.89	-0.00	0.22	0.83
HSE	0.06	0.13	0.93	0.88
ROM	0.32	0.87	-0.08	0.85

As we can see from Table 6, although the factor matrix changes, the communality does not change. However, on the other hand, the percentage of variance accounted for by each factor does change. This is because rotation redistributes the explained variance between the individual factors. The final step in the process of factor analysis is to utilize the results of Table 4 for further analysis according to the researcher's objective.

Using factor matrix results for subsequent analysis: We have already explained that factor analysis can be applied for various purposes. According to Hair *et al* (1987), having derived the factor matrix if the researcher's objective is to identify appropriate variables for subsequent analysis, the researcher could examine the factor matrix and select the variable with the highest factor loading as a surrogate representative for a particular factor dimension. Since our objective in this research is to reduce the number of variables to be used in the construction of a deprivation index on the lines of those of Townsend (Townsend, Phillimore, &Beattie, 1986) we have, therefore, selected three variables from the results in Table 6 as follows.

From Table 6 it is obvious that in factor one "agriculture profession" has the highest positive loading and households without land ownership the highest negative loading. This factor therefore represents a population that is agriculturist by profession but does not own land. This is a reflection of the true socio-economic condition in Sind province as well as in Pakistan. We can therefore select "agriculture profession", because of its high factor loading, as a surrogate variable that represents the particular dimension of factor one.

Similarly we have selected "households living per single room" as a surrogate variable to represent factor two and "households without house ownership" as a surrogate variable to represent factor three because of their highest factor loadings.

From the foregoing analysis we can now recommend that only three variables i.e. "population with agriculture profession", "households living per single room" and "households without house ownership" represent material deprivation and may be used to construct a deprivation index.

It may be that in some situations data on these variables may not be available. In such cases another possibility would be to use "population without schooling" alone as an indicator for deprivation. This is recommended because: a) these data are regularly available from census and other sources, b) as we can see from Table 3, "agriculture profession" and "households living per single room" are equally highly correlated with "population without schooling" (although only slightly correlated with "households without house ownership"), and c) Thunhurst (1991) also recommends that in the case of developing countries where detailed data on socio-economic conditions are not available literacy rates alone could be used as a scale for deprivation.

However in the present Paper we will use the three variables identified above to derive a deprivation index based on the Townsend Z-scores method (Townsend *et al*, 1986). The Townsend deprivation index adds together the 'Z-scores' of four census variables to represent material deprivation already mentioned above. Each of these variables are given equal unit weight and standardized to have a mean of 0 and standard variation of 1 by means of the transformation

$Zi = (Xi - X) / \sigma I$

where X and σi are the mean and standard deviation of Xi.

Before developing Z-scores, Townsend transforms the unemployment and overcrowding variables because of their skewness towards the lower percentages using the log transformation Y = ln(X+1) where X is an untransformed variable.

Likewise we have carried out an examination of the extent of skewness in the three variables chosen to construct our deprivation index. One method of doing this is 'the third-moment method'. This is defined as the mean of the cubed deviations from the arithmetic mean (Parsons, 1974). Due to limitation on the number of pages for this Paper we would not be able to go into details of calculations, which may be seen in Ishfaq (93). What we found that there was a problem of negative skewness in variable 'ROM' with α_3 value at -0.7, and a substantial positive skewness problem in the variable 'HSE' with α_3 value of 1.8.

Normally in order to treat a problem of -ve skewness variables are raised by some power function, whereas in order to treat +ve skewness the log of variables is taken. So in order to handle the -ve skewness problem of variable 'ROM' it was transformed by $(X)^2/100$, where X is the untransformed variable, and 100 is an arbitrary constant to keep the transformed figures reasonably small. On the other hand the variable 'HSE' was treated by means of the log transformation $\ln(X)$.

The third variable, i.e. 'AGR', with its α_3 value -0.42 does not present any significant skewness problem so we have employed this variable to develop the deprivation index without further treatment.

In Table 5 the derivation of the resulting Z-index is shown. Z-scores for the variables "households living in single room", "population with agriculture profession" and "households without house ownership" for the corresponding area presented in columns labeled as Z1, Z2, and Z3. Z's values of each variable have been calculated using X and 's' values of 'ROM', 'HSE', and 'AGR'. The average z-score, which has, mean zero has been transformed into a Z-index with an average value of 1 as follows.

$U = \{(Z \text{ index } / 3 * \text{ standard deviation}) + 1\}$

In Table 5 we have ranked talukas in increasing order of deprivation index score. As already explained, the Community Health Sciences (CHS) department of Agha Khan University (AKU) had divided the whole district into three ecological zones i.e. Rural South, Rural Central, and Urban. In Table 8 Rural South comprises the first four talukas, Rural Central comprises the second five talukas, and Urban comprises the last three talukas. According to Karim (1987) Rural South is the most deprived zone, Rural Central less deprived, and Urban is better then the rest. Our ranking of talukas on the deprivation index confirms this situation. We can see in Table 7 that the first four talukas, which belong to the Rural South zone are the most deprived. The second five talukas belonging to the Rural Central zone are less deprived, while the last three talukas, which are least deprived, belong to the Urban zone. Our analysis has the advantage over AKU's report, that it provides explicit analytical support; it also indicates relative deprivation at taluka level, which can be used for planning purposes.

Table 7
Calculation of Z-index

Talukas	Z	Z1 Z	Z 2	Z3 Avera	ige	Z-index	Ranks
Kati Bunder	-0.49	0.91	0.21	0.21	1.12	9	
Kharo Chan	1.39	1.06	-0.33	0.71	1.39	10	
Jati	-0.21	0.49	1.92	0.73	1.41	11	
Shah Bunder	1.13	0.34	1.64	1.03	1.57	12	
Mirpur Sakro	0.77	-1.32	-0.44	-0.33	0.82	4	
Ghora Bari	-0.65	1.25	-0.77	0.06	0.97	6	
Thatta Rural	0.95	0.40	-1.68	-0.11	0.94	5	
Sujjawal Rural	0.44	0.84	-0.90	0.13	1.07	8	
Mirpur Bathoro	0.76	0.09	-0.77	0.03	1.01	7	
Gharo	-1.31	-1.35	0.30	-0.79	0.56	2	
Thatta Urban	-1.74	-1.39	0.54	-0.86	0.52	1	
Sujjawal Urban	-1.04	-1.34	0.27	-0.70	0.61	3	

SMRs and Other Data Elements

Having derived a deprivation index another element required for the operationalization of a planning method based on RAWP principles is a set of values for standardized mortality rates (SMRs). The CHS department of AKU while conducting a demographic and socio-economic survey in Thatta district in 1987 also collected mortality data. Based on these data calculated SMRs for each taluka of Thatta district are shown in the Table 8.

Table 8
Calculation of SMRs for each Taluka

Talukas SMRs	Population		Observed deaths		Expected deaths				
	M	F	M	F	M	F	M	F	
Wati Dan Ian	722	<i>(</i> 20)	1.0	1.5	12.22	0.02	1 21	1.70	
Kati Bunder	723	639	16	15	12.23	8.82	1.31	1.70	
Kharo Chan	741	579	16	15	12.53	7.99	1.28	1.88	
Jati	822	711	16	9	13.90	9.81	1.15	0.92	
Shah Bunder	790	662	10	8	13.36	9.14	0.75	0.88	
Mirpur Sakro	896	795	17	9	15.15	10.97	1.12	0.82	
Gharo Bari	933	806	13	9	15.78	11.12	0.82	0.81	
Thatta Rural	703	636	15	5	11.89	8.78	1.26	0.57	
Sujjawal Rural	662	606	13	4	11.19	8.36	1.16	0.48	
Mirpur Bathoro	641	585	8	7	10.84	8.07	0.74	0.87	
Gharo	737	671	12	9	12.46	9.26	0.96	0.97	
Thatta Urban	844	831	13	16	14.27	11.47	0.91	1.40	
Sujjawal Urban	793	739	8	8	13.41	10.20	0.60	0.78	
Total	9285	8260	157	114					

Source: CHS, AKU 1987

An SMR for any population group is calculated by dividing the actual number of deaths suffered by the group in a year, by the number of deaths that would be expected in the group if the national death rate were to prevail. In this respect SMR_{si} in each sex s and taluka j has been calculated as follows;

$$ED_{si} = P_{si} * (TD_s/TP^s)$$

$$SMR_{sj} = OD_{sj} / ED_{sj}$$

where

 ED_{sj} is expected deaths in taluka j sex s,

 $P_{sj} \qquad \text{ is population in taluka j sex s},$

 TD_s is total deaths in the district in sex s,

TP_s is total population of the district in sex s, and

OD_{sj} is observed deaths in taluka j sex s.

It may be noted that SMRs in Table 6 have been calculated using Agha Khan University's sample survey data of 1987. We can see from Table 6 that SMRs in most of the talukas belonging to Rural South zone are substantially higher than those for talukas in the Rural Central and Urban Zones. These results by and large show a great deal of harmony between high mortality stricken areas and the areas with high deprivation scores in Table 8. We have used SMRs to operationalize a formula based on RAWP principles for need identification.

In case mortality data are not available, one possibility, according to Thunhurst (1991) is to apply morbidity rates. Morbidity rates are normally published by governments through surveys. These survey results could be helpful to indicate comparative morbidity rates between regions. However such survey do have limitations such as may not consider morbidity below regional levels, which in turn renders the survey results unsuitable for planning below that level.

Other data available from governments includes that on the incidence of diseases. This data is quite useful for estimating service utilization rates, which will be discussed later in this paper. Within the context of proxy indicators for morbidity for analysis at sub-district levels, another possibility is to construct an index involving demographic characteristics. The most appropriate demographic characteristics for this purpose appear to be population under five, population over sixty-five, and female population of child bearing age. This view is based on a recent workshop on "Health management information system for first level care facilities" in Sind province at which participants from the medical profession argued strongly that these categories of population generate most of their workload.

On the basis of their views we carried out statistical tests on the mortality and demographic data of Thatta district collected in the 1987 survey by the CHS department of AKU. In order to explore the statistical relationship between deaths and the three demographic variables i.e. population under five, population over 65, and female population of childbearing age, deaths were regressed upon the three demographic variables in three steps. The data elements and regression output are given in Ishfaq (93) and the resulting regression parameter estimates (regression coefficients) are given in Table 9.

Table 9
Regression Coefficients for Variation in Deaths

	(X coef	fficients)			
$R^2 *100$	<5		65+	FCBA	
59		-0.22	-0.19	0.00	
59		-0.22	-0.19	-	
53		-0.18	-	-	
	R ² *100 59 59	59 59	R ² *100 <5 59 -0.22 59 -0.22	R ² *100 <5 65+ 59 -0.22 -0.19 59 -0.22 -0.19	R ² *100 <5 65+ FCBA 59 -0.22 -0.19 0.00 59 -0.22 -0.19 -

In Table 7 in step one death is treated as the dependant 'Y' variable whereas population under five, population over 65 and population of female of child bearing age are treated as independent (predictors) X_1 , X_2 , and X_3 variables respectively. The multiple regression model applied is as follows;

$$Y = C + b_1 X_1 + b_2 X_2 + b_3 X_3$$

(where C is the regression constant, and the b's are regression coefficients corresponding to the independent X variables.)

The coefficient of determination i.e. R^2 obtained as a result of multiple regression in step one shows that substantial variation i.e. 59% in the dependent variable is explained by all the three variables. However, in Table 7, the zero regression coefficient of variable FCBA clearly indicates that it is insignificant in the regression model and must be dropped. We therefore, in step two, carried out regression analysis without FCBA. As would be expected we can see in Table 9 that the value of R^2 remained unchanged.

We next need to examine the significance of b_1 and b_2 - the coefficients of the variables populations <5 and 65+. Using the standard t-test (for detail please see Hamburg, 1983) we found that the value for b_1 is significant at the 5% level, but b_2 is not significant. Indeed we can see from the regression model results in step three that 53% of the variance in deaths is explained by population <5 alone as compared to 59% variance explained in step two by both variables. Although we have observed that b_2 is not significant, we would however recommend that, in cases where mortality data are not available, population under five and population over 65 may be used to construct an index as a proxy for mortality-which is itself a proxy indicator for morbidity. The inclusion of population over 65 in the proposed index is recommended on the commonsense grounds that deaths in elderly population are a natural phenomenon which in turn affects health service utilization.

Moving away from the discussion of the alternative methods of deriving proxy indicators for morbidity we now concentrate on two other data elements;

- a) population estimates,
- b) and service use rates.

These data elements are required for a RAWP-based method. These data elements have been explained, calculated and presented in a fair detail in Ishfaq (93). For the sake of time and space saving we have used these data for forecasting future health care needs say for year X.

The age and sex specific population estimates have been derived for each taluka for the year X using World Bank's age and sex specific national projections. To subdivide World Bank's national population projections for provinces the 1981 census based age and sex specific ratios of provincial to the national population have been used assuming that these ratios remained unchanged. The population estimates have been derived using linear interpolation, as described in UN, 1983.

Similarly the service use rates, in order to operationalize a method of health care need identification based on RAWP principles, have been taken from Ishfaq (93). Methods of deriving services use rates and their sources are given in full details in Ishfaq (93) using data regularly published in the annual report of the Director General Health. Based on these data sex-specific outpatient service use rates were calculated using the number of cases treated in Thatta district. It should be mentioned that the data regarding number of cases treated are not age specific therefore in the present case the RAWP model would be limited to forecast need only on the basis of sex and not age groups.

Need Model

Having established all these data sets we were then able to apply the RAWP model to derive relative need for each taluka as follows. The mathematical expression of the model is

$$N_j = \Sigma_s TP_{sj} * (CL_s/P_s) * SMR_{sj}^a * U_j$$

where

N_i is the relative need for outpatient service in taluka j for the year 1993.

TP_{si} is the estimated population of sex s in taluka j for the year 1993.

CL_s is the total number of outpatient cases treated in the district by health personnel in sex group s during 1989.

P_s is the total population of the district in sex s in 1989.

SMR_{si}^a is the standardized mortality rate of sex s in taluka j with an elasticity a (a=0.5), and

U_j is the deprivation index score for taluka j.

Calculation of the relative male and female specific need for each taluka for the year X and related explanations are given in Ishfaq (93). Sex-specific expected need, weighted by mortality and deprivation, are derived. Firstly the sex-specific expected need of each taluka has been multiplied by the respective male and female SMR^{0.5} (SMR_{sj}^a in the model). We thus obtained sex-specific need for each taluka taking into account mortality. This is presented for both sexes in columns under Need*SMRs.

The sex-specific need figures of each taluka are then adjusted according to the district's total sex-specific expected need. This is done because we assumed that the total district's SMR is 1. The method of adjustment is as follows;

$$\label{eq:weighted need} Weighted need = \\ \{\Sigma_s \, TP_{sj} * (CL_s/P_s) * SMR_{sj}{}^a / \Sigma_s \Sigma_j \, TP_{sj} * (CL_s/P_s) * SMR_{sj}{}^a \} * \\ \{\Sigma_s \Sigma_j \, TP_{sj} * (CL_s/P_s) \}$$

This operation gives us sex-specific need weighted by SMRs, and is presented in columns under Weighted Need A for M and F. The male and female need weighted by $SMR^{0.5}$ have then been multiplied by deprivation scores (U_j in the need model). This operation gives us each taluka's need by sex taking into account both mortality and deprivation. This is present in columns under Need*Dep. These need figures are then adjusted according to the total expected district's need as follows;

$$\label{eq:weighted need} Weighted need = \\ \{\Sigma_s \, TP_{sj} * (CL_s/P_s) * SMR_{sj}{}^a * U_j \, / \, \Sigma_s \Sigma_j \, TP_{sj} * (CL_s/P_s) * SMR_{sj}{}^a * U_J \} \\ * \{\Sigma_s \Sigma_j \, TP_{sj} * (CL_s/P_s) \}$$

This operation gave us sex-specific need weighted by SMRs as well as deprivation U_j for each taluka. Finally combined weighted need of both male and female is aggregated. The identification of need based on RAWP principles has thus been operationalized for the first time in Thatta district of Pakistan.

CONCLUSIONS

Whether it is a question of planning in the developed country or in a developing country, planners always face a challenge of fair and equitable resource allocation. Within the health planning sector, we have mentioned that developing nations are competing for in flow of capital. There is an interest in the application of rational health planning methods however data availability is considered the main limitation. To help planners we have shown analysis based on areas at sub-district level i.e. talukas and developed methods to identify relative need for primary health care in case of Pakistan. We have through statistical evidence suggests alternate data elements to be used in cases where detailed census or data on lines those of AKU are not available. Finally we argue that globalization will only favor those who think logically and plan rationally. All we can say rational planning can be applied in less developed countries as is applied in developed countries.

REFERENCES

DHSS. 1976. Sharing resources for health in England: Report of the resource allocation working party. London: HMSO.

DHSS. 1987. Integrated analysis for the review of RAWP: Technical working group

Papers. London: Coopers and Lybrand Associates.

DHSS. 1989. Review of the resource allocation working party formula: Final report by the NHS management board. London: DHSS.

FBS. 1986. National health survey 1982-83. Islamabad: FBS Government of Pakistan.

Government of Pakistan. 1991. *Director General's annual health report*. Islamabad: Ministry of Health Special Education and Social Welfare.

Hair, Jr. J.F., Anderson, R.E., & Tatham, R.L. 1987. *Multivariate data analysis*. NY: Macmillan Publishing Co.

Hamburg, M. 1983. Statistical analysis for decision making. NY: HBJ.

HMSO. 1989. Working for patients. London: HMSO Cmnd. 555.

Ishfaq, M. 1992. Decentralized resource allocation in primary health care: Formal methods and their application in Britain and Pakistan. Ph.D. thesis submitted at LSE, London.

Jarman, B. 1983. Identification of under-privileged areas. *British Medical Journal*, 286: 1705-1709.

Karim, M.S. 1987. *Demographic and socio-economic survey of Thatta District*. Karachi: Agha Khan University.

Lippeveled T. 1991. *Health management information system for first level care facilities*. Child survival project, Karachi, Pakistan.

Mays, N. 1989. NHS resource allocation after the 1989 white paper: A critique of the research for the RAWP Review. *Community Medicine*, 11(3): 173-186.

Murphy, P. 1990. Personal discussion on population forecast for Pakistan during research dissertation. London: LSE.

Parsons R. 1974. Statistical analysis: A decision making approach. NY: Harper and Row.

Pasha, H.A., & Hassan, T. 1982. Development ranking of districts of Pakistan. *Pakistan Journal of Applied Economics*, 1(2): 157-192.

Scott-Samuel, A. 1984. Need for primary health care: An objective indicator. *British Medical Journal*, 287: 457-458.

Tatsuoka M.M.1971. *Multivariate analysis: Techniques for educational and psychological Research*. NY: John Willy and Sons.

Thunhurst, C. 1985. The analysis of small area statistics and planning for health. *The Statistician*, 34: 93-106.

Thunhurst, C. 1991. *Discussion with the author of this thesis during the course of examination* on 2nd May 1991.

Towsend, P., Phillimore, P., & Beattie, A. 1986. Inequalities in health in the North Region:

An interim report. Northern Regional Health Authority and University of Bristol, Bristol.

Towsend, P., Phillimore, P., & Beattie, A. 1988. *Health and deprivation: Inequalities and the North*. London: Croom Helm.

UN. 1983. *Manual X: Indirect techniques for demographic estimation*. Department of International Economic and Social Affairs, New York.

World Bank.1980. *Health sector policy paper* (second edition). Washington, DC.

Zachariah, K.C., & Vu, M.T. 1988. *World population projections*. World Bank, Washington D.C.

Zaidi, S.A. 1988. Poverty and disease: Need for structural change. In The political economy of health care in Pakistan: 131-161. Lahore: Vanguard Books.

NEXUS BETWEEN EXTERNAL DEBT AND GROWTH IN FIJI

T.K. Jayaraman
The University of the South Pacific
Chee-Keong Choong
Universiti Tunku Abdul Rahman

ABSTRACT

This paper examines the relationship between external debt and economic growth in Fiji during a 30-year period (1970-2005). Applying the bound testing approach by Pesaran, *et al.* (2001), it is found that the long-run relationship runs from external debt to economic growth; and while both external debt and budget deficit had a negative impact on economic growth, exports of goods and services positively influenced growth. The Granger causality test results reveal the existence in the short-run of a bi-directional linkage between external debt and growth. This implies that while external debt influenced to economic growth, economic growth in turn enhanced the credibility of the country as a debtor, encouraging further external borrowing. The study conclusion is that Fiji should do well channeling its future external borrowings into those activities promoting exports of goods and services, in which the country has a clear comparative advantage rather than for consumption of non-traded goods so that the likelihood of any debt overhang can be avoided.

INTRODUCTION

For the first time in its history as an independent nation, in October 206 Fiji carried out a bond issue in the international capital market for raising US\$150 million. It also marked a departure from its two-decade old policy of keeping the external debt level low. In the immediate years after 1987, which witnessed two military coups, the interim government and the elected governments took deliberate efforts towards reducing the external debt level by prematurely retiring country's outstanding debt owed to multilateral funding institutions with advanced payment of installments of principal and interest due. Consequently, external debt as a ratio of country's gross domestic product was brought down from 32.1 percent in 1990 to 8.4 percent in 2000.

External borrowing through international bond issue for meeting the 2007 budget deficit had another objective as well, namely diversification of sources of financing (Reserve Bank of Fiji 2006a: 12). Further, it was defended by the government that (i) nearly two decade old conditions of excess bank liquidity since 1987, which were favorable for domestic borrowing without exercising any upward pressures on interest rate, ceased to exist by mid 2006; and (ii) the economy began to show signs of overheating by mid 2006, resulting in trade deficits and steady depletion of foreign exchange reserves. External borrowing, thus, came to be looked upon as a convenient way of augmenting not only international reserves but also to real resources of the country, thus contributing to both interest rate and price stability. This raises the legitimate question whether overseas borrowing had helped Fiji. There has been increasing concern in regard to intended increase in external debt level, especially when the country was facing a decline in exports in the wake of discontinuance of garment import quotas into by the United States in early 2006 and the impending withdrawal of preferential treatment for Fiji's sugar exports to European Union by 2008. Hence, the concern is with regard to the implications of increasing debt service obligations, resulting in transfer of greater real resources to creditors and in eventual reduction in domestic investment and growth.

The objective of this paper is to undertake an analysis of the nexus between external debt and growth in Fiji. The paper is organized on the following lines. The second section presents a brief review of the literature on the subject, while the third section reviews the trends; the fourth section outlines the modeling methodology employed for the study and reports the results; and the fifth and final section presents some conclusions with policy implications.

LITERATURE REVIEW

External debt can be categorized into two: one is the government and public sector agencies debt, which is guaranteed by government; and the other is private sector debt, which is generally non-guaranteed. If the government and public sector agencies behave like business enterprises, external borrowing will be resorted to only when the rates of return of projects so financed are expected to be higher than the estimated cost of borrowing. In such circumstances, the loans can be serviced by returns from those investments. There is yet another condition, which has to be fulfilled. The project must contribute to foreign exchange earnings such that payments to overseas creditors in terms of interest and principal, which would necessarily be in foreign exchange, can be made. Viewed in this light, a country should borrow from overseas only when the projects to be financed are expected to be both productive as well as capable of generating foreign exchange through incremental increase in exports.

It might be argued that such an approach is restrictive, since macroeconomic management is more important, since even if some of the projects fail, the better managed economies with relatively higher international resaves would be able to service the debt. The defense of this approach lies in the argument that in those economies with poor macroeconomic management, success of the externally funded projects by itself would not mean much, since lack of adequate external reserves would still lead to debt crisis (Gilis, *et al.* 1992)

A debt crisis would occur when the government does not have the resources in terms of international reserves to service the external debt incurred by the government and the public sector agencies' loans, which were guaranteed by the government. The crisis is further compounded when the country does not have enough foreign reserves to enable the private sector to convert its external debt service payments, from domestic to foreign currency, on its non-guaranteed external debt. Thus, there are two clear dimensions: first, the government should be able to generate revenue for annual debt service payments and should have adequate international reserves for effecting conversion of incremental revenue for payment. As noted earlier, even if the investments have failed, a well-managed economy would be able to meet its debt-servicing burden in case it happens to have abundant foreign reserves. In the case of non-guaranteed private sector loans, if investments funded by them fail, the consequences have to be squarely faced by the investors concerned. In the case of guaranteed private sector external debt, the consequences of failure of investments have to be fully borne by the government and the impact on the scarce foreign reserves is obvious. In such circumstances, the opportunity costs of such transfers of valuable external are severe.

High debt levels would lead to a problem of grave consequences, known as debt overhang. When a country has a high external debt, private investors would be reluctant to invest further, fearing the likely imposition of additional taxes on businesses for servicing the debt. Further, the government would hesitate to invest because returns would rather go largely to service the debt (Kenen 1990, Sachs 1990). Hence, high debt can impair future investment and hurt growth through creating uncertainty and disincentives, which in turn discourage capital formation, causing repatriation of capital (Krugman 1989). The only way then open would be to reduce debt to jump-start growth Arguments on these lines have helped undertaking many initiatives by international funding agencies to explore ways and means ranging from re-scheduling of debt repayments to total forgiveness. However, Rajan (2005) argues rescheduling would be more appropriate for the emerging economies, but not for certain other countries on the ground that investors in those countries face more significant impediments to investment such as a discouraging business climate and uneven regulation.

Economic analysis of debt crisis would naturally take us to discuss the controversial relationship between external debt and economic growth (Cohen 1995). While, as noted earlier, Kenen (1990), Sachs (1990) and Krugman (1989) believed high repayments of external debt would be a major reason for long-term slow economic growth, Dornbusch (1988) turned his attention to the strain on the balance of payments caused by capital fight fearing government inability to meet high debt payments. The net effects of devaluation, as remedy for meeting the impact of capital flight would be negligible for small economies. Currency devaluation would only raise the domestic currency costs of servicing external debt,

worsen the budget deficit and raise the growth of money supply; and this would result in higher price levels and might lead to deterioration in the terms of trade and consequently the economy would register low growth (Dornbusch 1988). Bulow and Rogoff (1990) argued that external debts of developing countries were symptoms of poor economic management, rather than a primary cause of stifled growth. Poor economic management mainly consists of persistent fiscal deficits and inflationary financing and overvalued exchange rates, which would scare away both domestic and foreign investors.

Empirical studies have produced mixed results. Chowdhury (1994) rejected the Bulow and Rogoff proposition that external debt crisis was just a symptom of poor economic management. The study also did not find support for the Dornbusch (1988) and Krugman (1989) proposition that external debt leads to economic slow down. Scott (1994) in a study of 31-Sub Saharan African counters for the period of 1980-87 that debt crisis was due to low productivity of capital. Hojman (1986) in a study of Chile for the period of 1960-1982 found that external debt's contributions to output, productivity and employment were low and that it released more resources for consumption rather than for capital formation.

Trends in External Debt Of Fiji

Among the Pacific island countries (PICs) (Table 1), aid received by Fiji in terms of percentage of GDP is the least, being less than 2%. On the other hand, aid flows to Kiribati, Tuvalu and Vanuatu were in the range of 35% to 40% of GDP, providing them much needed budgetary support. Fiji's budget deficits were, therefore, financed through a mix of domestic and overseas borrowing. There were two distinct phases in the financing of domestic resource gaps. During the early years (1970-80) of the newly independent nation, public sector investments relating to physical infrastructures, such as roads and power projects, were financed through external borrowing, mostly from international funding agencies, including Asian Development Bank. Since, Fiji has been categorized as a lower-middle income country, it was not eligible for loans on concessional terms, such as low interest rate of 1% known as service charge and long years of maturity period, which are applicable to other poor developing countries.

During the first ten years of independence, external debt was less than 10% of GDP. As the investment momentum picked up in the second half of the 1980s, external debt rose in the next five years. This was the period when domestic investment increased from an earlier five-year (1971-75) average of 21% of GDP to 30.1% of GDP in 1979 and reached a historically high figure of 34.3% of GDP in 1981. Table 2 presents a summary of trends in total government debt and external debt as proportions of GDP and other macroeconomic indicators.

Table 1
Fiji: General Key Indicators

Surface Area (sq km)	18,270
Population (2005)	835,000
Total GDP at current prices (US \$ million) 2002	1,750
Per capita GDP in current price (US\$)	2,360
Human Development Index (Rank)	90
Aid per capita (US\$) 2002	41
Aid (% of GDP) 2002	1.8

Source: ADB (2004, 2006), UNESCAP (2004), UNDP (2006)

The two military coups of 1987, which marked a watershed in the nation's history, also signified a change in borrowing policy. The forced isolation of Fiji, due to international economic sanctions against the nation, led the policy makers to gradually reduce the external debt level. There were two favorable factors at work: one by mid 1980s most of the major infrastructure projects, such as Monasavu hydropower project funded by external financing had been either completed or nearing completion; and secondly, Fiji had then accumulated comfortable international reserves level, which were around six months equivalent of imports of goods. The decision of the interim military dominated government in 1987 to reduce the external debt by premature retirement of debt, by advanced payment of installments

was implemented with vigor by the later elected governments as well. The external debt level, defined as the outstanding debt stock (EDT) was reduced from about US\$ 443.7 million or 40% of GDP in 1985 to US\$ 246.1 million or 12.8% in 1990. Eventually, the external debt burden was reduced, as the ratio of EDT to GDP decreased to less than 10% in 2000 and later (Table 2).

There are many dimensions of external debt burden, which are exemplified by various debt indicators as shown in Table 3. First, EDT consists of two parts, long term and short term. Fiji's external debt is dominated by long-term debt, which accounted for two thirds of total debt, signifying the emphasis on use of loans for investment projects, as short-term loans are mostly for temporary accommodation. Secondly, loans on concessional terms comprise less than 20% of total EDT. Further, loans from multilateral, which were once two-thirds of EDT, are now about 45%. Since EDT level came down, total debt service cost (TDS), comprising interest and installment payments also decreased over time. The TDS, which were about US\$ 105.6 million in 1995, decreased to US\$ 14.6 million in 2004. Since debt-servicing ability is influenced by foreign exchange capacity of the country, reflected in the country's total exports of goods and services (XGS), TDS is expressed as a ratio of XGS. In Fiji's case the debt-servicing ratio was at the highest level in 1990. It was 12.2% and it decreased steadily to less than 6% in subsequent years.

As Table 3 shows, economic growth has been uneven, displaying high volatility. The major reasons have been periodical natural disasters as well as political uncertainty since 1987. Exports of goods and services, comprising the traditional sugar and the newly emerging tourism were the backbone of the economy. The ratio of XGS to GDP has, however, been subject to variability. In recent years, the ratio has been declining, causing concern to policy makers (Reserve Bank of Fiji 2000b). For jumpstarting the economy, the elected government after the 2000 civilian coup, resorted to aggressive fiscal policy measures, resulting in annual budget deficits during 2001-2005, which were financed by domestic borrowing. During this period, external debt level remained low unlike in the earlier years when the economy grew at a higher average rate.

RESEARCH METHDOLOGY

Since external borrowing adds to real resources of the country, use of loan proceeds in productive investment projects is expected to result in higher growth. Further, as growth enhances the image of the country in the eyes of the creditors in particular, higher growth might enable the country to borrow more and on better terms, resulting in further rise in debt level. Growth is also positively associated with rise in exports of goods and services in many ways, as the latter brings in foreign exchange by utilizing domestic resources more gainfully and creating additional jobs in export oriented activities. Hence, it is posited that higher exports contribute to growth. However, debt servicing has to be effected in foreign exchange. Therefore, debt servicing obligations associated with higher debt stock would lead to lower availability of foreign exchange for domestic investment. Therefore, it is likely higher debt level might hurt growth. Thus, the relationship between debt and growth is uncertain as it might well be negative. Since the decision to borrow overseas is influenced by domestic budget deficits, it is hypothesized that budget deficits lead to rise in external debt. As a corollary, lower budget deficits might lead to higher growth, as there might be fall in upward pressure on domestic interest rates, which would promote private sector growth.

Arguing on the lines, the debt-growth relationship has been modeled as in equation (1).

$$GR_{t} = f(ED_{t}, BD_{t}, EXP_{t}) \tag{1}$$

In equation (1), the subscript *t* refers to the years 1970-2005. *GR* is the growth rate (in percent); *ED* refers to the external debt (as percent of GDP); *BD* is the budget deficit (as percent of GDP); and *EXP* represents exports of goods and services (as percent of GDP). The study uses annual data, covering a 35-year period (1970-2004), which are drawn from *Global Development Finance*, an annual publication of World Bank (2006a) and *World Development Indicators*, another annual publication of World Bank (2006b).

Table 2 External Debt and Debt Servicing: 1970-2004

	1970	1975	1980	1985	1990	1995	2000	2001	2002	2003	2004
Total Debt Stock (US\$ Million: EDT)	11.7	59.3	281.1	443.7	403.1	246.1	134.2	114.3	140.1	203.1	201.8
Debt Service (US\$ Million: TDS)	2.7	11.7	35.8	63.6	105.6	66.3	29.7	22.9	21.7	18.3	14.6
EDT (% of GDP)	5.6	8.8	23.7	40.4	31.3	12.8	8.4	7.3	8.1	9.4	8.1
EDT (% of Exports of Goods and											
Services)	NA	NA	47.1	81.7	45.7	21.6	40.7	40.2	44.4	NA	NA
Short Tern Debt (as % of EDT)	0.0	0.0	12.9	4.3	2.9	5.9	11.6	13.9	26.2	42.4	37.3
Concessional Debt (as % of EDT)	14.5	18.4	21.4	4.5	7.4	8.5	14	15.2	18.7	16.5	17.9
Multilateral Debt (as % of EDT)	0.0	32.4	23.2	37.5	50.1	60.8	66.1	66.3	55.8	41.5	45.1
TDS (% of Exports of Goods and											
Services)	NA	NA	NA	11.7	12.2	5.8	6.3	5.5	5.9	NA	NA
Int.(% of GDP)	0.5	0.4	1.4	2.5	2.6	0.8	0.6	0.3	0.3	0.2	0.3
Int.(% of Exports of Goods and											
Services)	NA	NA	2.7	5.0	3.7	1.4	1.8	1.7	1.6	Na	NA

Source: World Bank (2006a)

Table 3
Fiji: Selected Key Economic Indicators

Years				Total				International	Exports of
	Annual Growth	Annual Inflation	Budget Deficits	Government Debt	External Debt	Current Account	BOP overall Balance	Reserves (months	Goods and Services
	(percent)	(percent)	(% of GDP)	(% of GDP)	(% of GDP)	(% of GDP)	(% of GDP)	of imports)	(% of GDP)
1975-1984									
(Average)	2.6	9.0	5.8	24.2	10.1	-3.80	-1.3	6.2	45.1
1985-1994									
(Average)	1.9	6.1	5.3	39.7	20.2	-6.64	2.1	6.1	46.9
1995-1999									
(Average)	3.1	3.3	5.5	44.7	17.1	-0.15	2.1	6.4	56.9
2000	-1.7	3.0	6.6	41.2	8.4	-2.87	-0.9	7.1	60.2
2001	2.0	2.3	9.4	45.5	7.3	-7.74	1.2	6.2	72.6
2002	3.2	1.6	8.7	47.8	8.1	-0.14	2.3	6.1	59.7
2003	1.0	4.2	9.2	50.3	9.4	-7.79	-1.0	5.7	60.0
2004	5.3	3.3	6.9	50.2	8.1	-17.12	-2.2	5.0	54.0

2005	0.7	2.7	4 3	53.4	9 1	-16.65	4 7	4.0	58.3
2005	0.7	2.7	11.5	3	/···	10.05	,	1.0	50.5

Source: UNESCAP (2006), RBF (2006a, b), IMF (2006), ADB (2006)

For examining the existence of possible long-term relationships amongst *GR*, *ED*, *BD* and *EXP*, we resort to the autoregressive distributed lag (ARDL) bounds testing approach proposed by Pesaran *et al.* (2001). This approach has several advantages: (i) it allows testing for the existence of a cointegrating relationship between variables in levels irrespective of whether the underlying regressors are I(0) or I(1); (ii) it is considered more appropriate than the Johansen-Juselius multivariate approach for testing the long run relationship amongst variables when the data are of a small sample size (Pesaran *et al.*, 2001); and (iii) ARDL covers both the long-run and short-run relationships of the variables tested. For these reasons, the ARDL procedure has become increasingly popular in recent years and we begin the empirical analysis with this procedure.

The test for cointegration is based on the following unrestricted error correction model (UECM) of the ARDL model pertaining to the four variables of interest:

$$\Delta GR_{t} = \beta_{1}GR_{t-1} + \beta_{2}ED_{t-1} + \beta_{3}BD_{t-1} + \beta_{4}EXP_{t-1} + \sum_{i=1}^{n_{1}}\beta_{5}\Delta GR_{t-i} + \sum_{i=0}^{n_{2}}\beta_{6}\Delta ED_{t-i} + \sum_{i=0}^{n_{3}}\beta_{7}\Delta BD_{t-i} + \sum_{i=0}^{n_{4}}\beta_{8}\Delta EXP_{t-i} + \varepsilon_{t}$$
(2)

where ε_t is the disturbance term. The null hypothesis of testing the long-run relationship of this model is $\beta_1 = \beta_2 = \beta_3 = \beta_4 = 0$, and the alternative hypothesis is at least one β_j (j = 1,2,3,4) does not equal to zero. If the computed *F*-statistic of ARDL bound testing is higher than the upper bound value, then we reject the null and conclude that there is a long-run equilibrium relationship among variables. In contrast, if the *F*-statistic is lower than the lower bound value, we cannot reject the null of no long-run equilibrium relationship among variables. However, if the *F*-statistic lies within the upper bound value and lower bound value, then the results are inconclusive.

The cointegration technique developed and pioneered by Granger (1986), and Engle and Granger (1987) contributed a significant breakthrough towards testing short-run Granger-causality direction. Based on this framework, if two variables (or more) are cointegrated, the finding of no-causality in either direction can be ruled out. In other words, as long as the two variables share a common trend, causality (in the Granger sense), must exist at least in one direction (Granger, 1986). If we exploit the idea that there may exist co-movements between external debt and economic growth of Fiji and possibilities that they will trend together in finding a long-run stable equilibrium, by the Granger representation theorem we may posit the following testing relationships within the vector error-correction model:

$$\begin{pmatrix}
\Delta GR_t \\
\Delta ED_t \\
\Delta BD_t \\
\Delta EXP_t
\end{pmatrix} = \begin{pmatrix}
d_{11}(L) & d_{12}(L) & d_{13}(L) & d_{14}(L) \\
d_{21}(L) & d_{22}(L) & d_{23}(L) & d_{24}(L) \\
d_{31}(L) & d_{32}(L) & d_{33}(L) & d_{34}(L) \\
d_{41}(L) & d_{42}(L) & d_{43}(L) & d_{44}(L)
\end{pmatrix} \begin{pmatrix}
\Delta GR_t \\
\Delta ED_t \\
\Delta BD_t \\
\Delta EXP_t
\end{pmatrix} + \begin{pmatrix}
\delta_1 ECT_{t-1} \\
\delta_2 ECT_{t-1} \\
\delta_3 ECT_{t-1} \\
\delta_4 ECT_{t-1}
\end{pmatrix} + \begin{pmatrix}
c_1 \\
c_2 \\
c_3 \\
c_4
\end{pmatrix} + \begin{pmatrix}
u_{1t} \\
u_{2t} \\
u_{3t} \\
u_{4t}
\end{pmatrix} (3)$$

where Δ is a difference operator, ECT represents the error-correction term derived from long-run cointegrating relationship via the ARDL model, c_i (i = 1,2,3,4) are constants, and u_{ii} (i = 1,2,3,4) are serially uncorrelated random disturbance terms with mean zero.

Through the ECT, the VECM opens up an additional channel for Granger-causality to emerge. The long-run causality can be exposed through the statistical significance of the lagged ECTs, δ_i (i = 1, 2.3, 4) by a t-test while the short-run causality can be examined through the statistical significance of a joint test applied to the significance of the sum of the lags of each explanatory variable by a joint F- or Wald test.

DISCUSSION

As a starting point, all four variables in levels and their first differences were subjected to unit root examination using both Dickey-Fuller (ADF) (Dickey & Fuller, 1979) and Ng & Perron (2001) unit root tests. Table 4 presents the results of the tests for the levels and first differences of GR, ED, BD and EXP. It can be seen that all level variables are non-stationary at the 95 per cent level of confidence, except for budget deficit (BD) if ADF test is used. On the other hand, all variables are stationary in their first differences. Therefore, one concludes that all variables are integrated of an order less than 2 since the first differences are I(0). The different results indicated by both ADF and Ng-Perron unit root tests for ED have convinced us to use the bound test proposed by Pesaran, $et\ al.\ (2001)$ as this technique does not require the same order of each explanatory variable.

Looking at the unrestricted error correction model (UECM) reported in Table 5, the calculated F-statistic of GR equation is statistically significant. Hence, the null hypothesis of no cointegration relationship is rejected. On the other hand, the calculated F-statistic in the equations of ED, BD and EXP is respectively smaller than the respective lower bound value (either using both Pesaran, $et\ al$.'s (2001) or Narayan's (2005) critical values), thus leading us to conclude that there is only one cointegration equation. The long run estimated equation of GR is as follows:

$$GR = 0.021 - 0.158ED ** -1.360BD ** * +0.232EXP **$$

$$(0.45) \quad (-2.59) \qquad (-3.55) \qquad (2.59)$$

Note: ** and *** indicate significance at 5 and 1 per cent levels. Figures in parentheses are calculated "t" values.

Table 4
Results of Unit Root Tests

Variable	ADF		Ng-Perron		
	Level	First Difference	Level	First Difference	
GR	-3.0879 (2)	-8.0153** (1)	-16.5495 (0)	-8.6292** (0)	
ED	-1.2588 (0)	-4.6717** (0)	-2.6447 (1)	-16.8339** (0)	
BD	-4.7612** (0)	-7.3014** (2)	-16.3781 (0)	-15.7497** (0)	
EXP	-3.3811 (2)	-6.7437** (0)	-11.2334 (0)	-17.5694** (0)	

Note: The ADF critical value at 5% level is -2.9640 and -3.5629 for constant without trend (first difference) and constant with trend regressions (level), respectively. These critical values are based on Mckinnon. The optimal lag is selected on the basis of Akaike Information Criterion (AIC). The Ng and Perron critical value is based on Ng and Perron (2001) critical value and the optimal lag is selected based on Spectral GLS-detrended AR based on SIC. The null hypothesis of the test is: a series has a unit root. The asterisk ** denotes the rejection of the null hypothesis at the 5% level of significance. The figures in brackets denote number of lags.

Table 5
Bound Test for Cointegration Analysis

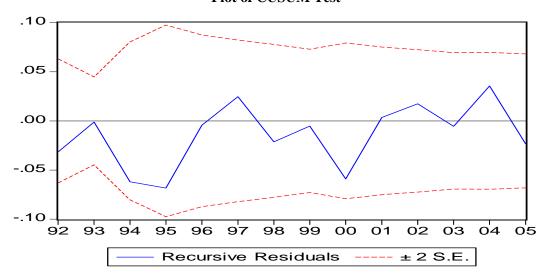
Bound Test for Connection finallysis							
Dependent	t Variable	Computed F-statistic					
GDPGR			29.68***				
DEBTGDP			3.01				
BUDDEF			1.17				
EXPO		0.24					
Critical Value	Pesaran et	al. (2001) ^a	Narayaı	n (2005) ^b			
	Lower bound	Upper bound	Lower bound	Upper bound			
	value	value	value	value			
1 per cent	3.41	4.68	4.54	6.37			
5 per cent	2.62	3.79	3.13	4.44			
10 per cent	2.26	3.35	2.58	3.86			

^a Critical values are obtained from Pesaran, et al. (2001), Table CI(iii) Case III: Unrestricted intercept and no trend, p. 300.

As can be seen from equation (4), the estimated coefficient of exports (*EXP*) is significant and it has a significant and positive effect on economic growth. This finding is consistent with our early discussion that a high level of export earning capacity raises the availability of foreign exchange in Fiji, thereby facilitating economic growth. In contrast, both external debt and budget deficit seem to have had negative effects on economic growth.

Figures 1 and 2 plot the CUSUM and CUSUMSQ statistics when real GDP growth rate (GR) is the dependent variable. The results indicate absence of instability in the coefficients as the plot of the CUSUM and CUSUMSQ statistics are confined within the 5% critical bounds of parameter stability. This indicates that the structure of the parameters have not diverged abnormally over the period of the analysis. Besides, various diagnostic tests – tests of normality, autocorrelation, heteroskedasticity in the error term and misspecification error – have been conducted to examine the validity and reliability of the short-run regression models (Table 6).

Figure 1
Plot of CUSUM Test



^b Critical values are obtained from Narayan (2005), Table case III: unrestricted intercept and no trend, p. 1988.

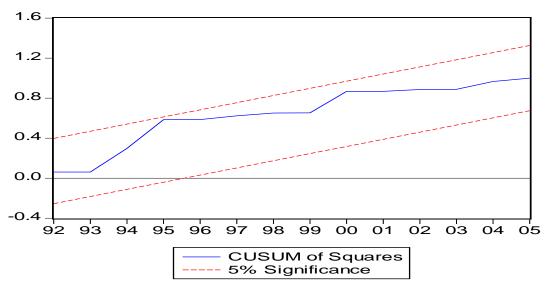
^{***} indicates significance at 1% level.

Table 6
Diagnostic Tests for Equation (4)

Diagnostic Tests for Equation (1)						
Diagnostic Test	Null Hypothesis	Equation (4)				
Jarque-Bera test	H ₀ : Normality of error term	$\chi^2 = 0.3809 [0.8265]$				
Breusch-Godfrey Serial	H ₀ : No autocorrelation	F(1) = 0.5141 [0.4861]				
Correlation LM Test						
ARCH Test	H ₀ : Homoskedasticity	F(1) = 0.4583 [0.5047]				
Ramsey RESET Test	H ₀ : The model is correctly	F(2) = 1.9088 [0.1907]				
	specified					

Note: Figures in square brackets are probability values of the test statistics. Figures in parentheses are the lag lengths used for the appropriate diagnostic tests.

Figure 2
Plot of CUSUM of Squares Test



In order to examine the direction of causality, we now turn to the results based on the VECM formulation presented in Table 7. As shown in the last column of Table 7, the results indicate that the ECT for GR and EXP equations is significant respectively at 5 and 1 percent levels and it has a correct sign. This implies that when there is a deviation from any long-run equilibrium cointegrating relationship, each explanatory variable endogenously adjusts to clear the disequilibrium. The speed of adjustment in GR equation (0.4454), however, is faster than the corresponding one in EXP equation (0.0562). In contrast, the ECT is not significant in other equations.

Table 7
Granger Causality Tests

Dependent		ECT			
Variable	ΔGR	ΔED	ΔBD	ΔΕΧΡ	(t-statistics)
ΔGR	-	5.17**	6.18**	0.97	-0.4454**
					(-2.63)
ΔED	5.41**	-	0.98	0.49	-0.0051
					(-0.06)
ΔBD	0.50	0.27	-	1.10	-0.0035
					(-0.03)
ΔΕΧΡ	2.75*	3.19**	13.58***	-	-0.0562***
					(-3.59)

Note: *, ** and *** indicate significance at 10%, 5% and 1% levels, respectively. Figures in parentheses are calculated t-statistics.

Looking at the short-run causality, it is found that there is unidirectional causality from both *ED* and *BD* to *EX*, and *BD* to *GR*. Besides, the results reveal that the growth-driven export hypothesis holds in Fiji, but not vice versa. Referring to the short-run causality, it is reported that both ED and BD Granger cause economic growth and high rate of economic growth leads to high rate of exports growth. Although the export variable does not Granger cause economic growth in the short-run, it does promote economic growth in the long run, as indicated by the ECT for *EXP* equation. This is consistent with the finding reported in equation (4). The results also indicate the existence of a bi-directional linkage between external debt and growth in the short-run. While external debt results in growth, growth also enhances the credibility of the country as a debtor and leads to higher level of debt.

CONCLUSIONS

This paper investigated the relationship between external debt and economic growth in Fiji during a 30-year period (1970-2005). Applying the bound testing approach by Pesaran, *et al.* (2001), it is found that there is a long-run relationship running from external debt, budget deficit, exports to economic growth. The long-run estimated parameters indicate that both external debt and budget deficit have negative impact on economic growth while exports of goods and services have a positive effect on growth. As Borenzstein (1989: 55) argues, the impact of budget deficit on foreign debt depends primarily on its effect on the productive capacity of the traded sector in the long run. If the external borrowing had been for investment in export activities, the effect of debt on growth would be positive. It is apparent that Fiji's past external loan proceeds were not properly employed in productive areas.

Policy implications are clear: It is imperative that Fiji needs to channel its future external borrowings into those activities promoting exports of goods and services, in which the country has a clear comparative advantage rather than for consumption of non-traded goods. This would enable Fiji to service its debt through export growth rather than by import compression. Since Fiji's current external debt level is not high, there are no immediate concerns. The fears of a debt overhang would become real only when export earnings become increasingly insufficient to service the debt, which would eventually lead to higher debt. Debt overhang theories suggest that large external debt causes a negative effect on investment (Kenen, 1990; Sachs, 1990; Borenzstein, 1990). Implementing a prudent debt management policy now, therefore, becomes more urgent and critical, along with maintaining macroeconomic stability and favorable business climate.

The limitations of the study are obvious. The external debt data used by the study are in aggregate form. There is a lack of disaggregated data on external debt in terms of funds utilized for projects covering physical infrastructure, such as roads and communications, and social infrastructure, such as education and health. While social infrastructure projects have a longer gestation period and take years to impact on economic growth through rise in productivity unlike physical infrastructure projects, employment of aggregated data distorts the outcome. Secondly, our study focused only on Fiji. For a greater understanding of the relationship between external debt and economic growth in the region, the study should be expanded to cover all Pacific Island Countries. Empirical studies undertaken other regions show that panel data analyses provide additional insights into intermediate causal mechanisms that explain the relationship between external debt and economic growth with greater clarity.

REFERENCES

Asian Development Bank (ADB). 2004. Key Indicators of Asian and Pacific developing countries 2004. Manila: Asian Development Bank.

Asian Development Bank (ADB). 2006. *Key indicators 2006*. Manila: Asian Development Bank.

Atkins, F.J. & P.J. Coe. 2002. An ARDL bounds test of the long-run Fisher effect in the United States and Canada. *Journal of Macroeconomics*, 24: 255-266.

Bahmani-Oskooee, M. & G.G. Goswami. 2003. A disaggregated approach to test the J-curve phenomenon: Taiwan versus her major trading partners. *Journal of Economics and Finance*, 27: 102-113.

Bahmani-Oskooee, M. &R. Ng. 2002. Long-run demand for money in Hong Kong: An application of the ARDL model. *International Journal of Business and Economics*, 1: 147-155.

Borensztein, E.R. 1989. Fiscal policy and foreign debt. *Journal of International Economics*, 26: 53-75.

Borensztein, E.R.1990. Debt overhang, credit rationing, and investment. *Journal of Development Economics*, 32: 315-335.

Bulow, J & K. Rogoff. 1990. Cleaning up the Third World debt without getting taken to the cleaners. *Journal of Economic Perspectives*, 4: 31-42.

Choong, C.K., Z. Yusop & S.C. Soo. 2005. Foreign direct investment and economic growth in Malaysia: The role of domestic financial sector. *The Singapore Economic Review*, 50: 245-268.

Chowdhury, K. 1994. A structural analysis of external debt and economic growth: Some evidence from selected countries in Asia and Pacific. *Applied Economics*, 26: 1121-1131.

Cohen D. 1995. Large external debt and (slow) economic growth: A theoretical analysis. *Journal of Economic Dynamics and Control*, 19: 1141-1163.

Dickey, D.A. & W.A. Fuller. 1979. Distribution of the estimation for autoregressive time series with a unit root. *Journal of the American Statistical Association*, 74: 427-431.

Dornbusch, R. 1988. Our LDC debts. In Felsitic, M. (Eds.), *The United States in the World Economy*. Chicago: Chicago University Press

Engle, R.F. & C.W.J. Granger. 1987. Cointegration and error correction: Representation, estimation, and testing. *Econometrica*, 55: 251-276.

Ghatak, S. & J. Siddiki. 2001. The use of the ARDL approach in estimating virtual exchange rates in India. *Journal of Applied Statistics*, 28: 573-583.

Gilis, M., D. Perkins, M. Romer & D.R. Snodgrass. 1992. *Economics of Development*. New York: Norton Company.

Granger, C.W.J. 1986. Developments in the study of cointegrated economic variables. *Oxford Bulletin of Economics and Statistics*, 48: 213-228.

Hojman, D.E. 1980. The external debt contribution to output, employment, productivity and consumption: A model and an application to Chile. *Economic Modeling*, 5: 53-71.

International Monetary Fund (IMF) 2006. *International Financial Statistics*, *CD ROM March* 2006. Washington: IMF.

Kenen, P.B. 1990. Organizing debt relief: The need for a new institution. *The Journal of Economic Perspectives*, 4: 7-18.

Krugman, P.R. 1989. Market base debt reduction schemes. In Frenkel, J., Dooley, M.O. and Wickham, P. (Eds.), *Analytical issues in debt*. Washington D.C: International Monetary Fund.

Liu, X.H. & C. Shu. 2004. Consumption and stock markets in Asian economies. *International Review of Applied Economics*, 18: 483-496.

Narayan, P.K. 2005. The saving and investment nexus for China: Evidence from cointegration tests. *Applied Economics*, 37: 1979-1990.

Narayan, P.K. & R. Smyth. 2005. The determinants of aggregate import demand in Brunei Darussalam: An empirical assessment using a cointegration and error correction approach. *The Singapore Economic Review*, 50: 197-210.

Nieh, C.C. & Y.S. Wang. 2005. ARDL approach to the exchange rate overshooting in Taiwan. *Review of Quantitative Finance and Accounting*, 25: 55-71.

Nowak, B. & R.C. Williams. 1981. *External Indebtedness of Developing Countries*. Washington D.C.: International Monetary Fund.

Pattichis, C. & M. Kanaan. 2004. The Balassa-Samuelson hypothesis and oil price shocks in a small open economy: Evidence from Cyprus. *Open Economies Review*, 15: 45-56.

Pesaran, M.H., Y. Shin & R. Smith. 2001. Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics*, 16: 289-326.

Rajan, R. 2005. Debt relief and growth. *Finance and Development*, 42: 56-57.

Reserve Bank of Fiji (RBF) 2006a. *Monetary Policy Statement November 2006*. Suva: Reserve bank of Fiji.

Reserve Bank of Fiji (RBF) 2006b. *Monetary Policy Statement May 2006*. Suva: Reserve Bank of Fiji.

Sachs, J.D. 1990. A strategy for efficient debt reduction. *The Journal of Economic Perspective*, 4: 19-30.

Tang, T.C. 2004. Demand for broad money and expenditure components in Japan: An empirical study. *Japan and the World Economy*, 16: 487-502.

UNDP 2006. *Human Development Report 2006*. New York: United Nations

United Nations Economic and Social Commission for Asia and the Pacific 2004. *Economic and Social Survey 2004*. Bangkok: UNESCAP.

United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) 2006. *Economic and Social Survey 2006*. Bangkok: UNESCAP.

Vita, G. D. & A. Abbott. 2002. Are saving and investment cointegrated? An ARDL bounds testing approach. *Economics Letters*, 77: 293-299.

World Bank. 2006a. *Global Development Finance*, Vol. 2: Country Tables. Washington D.C.: World Bank.

World Bank. 2006b. World Development Indicators 2006, CD-ROM. Washington D.C.: World Bank.

INTERNATIONAL MARKET BREAK-THROUGH FOR FLEXIBLE-FUEL VEHICLES: A COMPARISON OF SWEDISH AND SPANISH DATA ON ECOLOGICAL WORLDVIEW AND PURCHASE INTENTIONS

Johan Jansson Annika Nordlund Agneta Marell Umeå University, Sweden

Email: johan.jansson@usbe.umu.se

ABSTRACT

Sweden is a so called lead market for flexible-fuel vehicles and Spain has just recently introduced the first vehicles on their market. This paper focuses on describing the car owners in each market especially pertaining to ecological worldview and purchase intentions. Results from a survey conducted in Sweden and in Spain are presented. The Swedish sample shows higher support for the new ecological paradigm and also higher levels of purchase intentions for flexible-fuel vehicles. The preliminary conclusion of this working paper is that support for an ecological worldview has an effect on purchase intentions of flexible-fuel vehicles. Lastly it is argued that further research needs to focus on other factors as well when studying the international market break-through of environmentally friendly technologies such as flexible-fuel vehicles.

INTRODUCTION

During the last decade the emissions of fossil carbon dioxide has steadily decreased for all sectors except transportation in the European Union (OECD, 2002). One of the reasons is that the amount of private cars is growing every year. Although efforts are being made to increase the use of public transportation and make people walk and ride bicycles more, few policy makers and researchers believe that this will decrease the number of private cars on the streets and thus the high dependency on oil in society (Gärling & Steg, 2006). Developers and marketers have recently started to introduce cars that run on alternative fuels such as electricity (hybrids) natural and/or biogas, and cars that run on ethanol as an alternate solution. Currently Sweden has one of the worlds largest fleets of flexible-fuel vehicles (Five's) running on a mixture of ethanol and gasoline (E85), calculated as the percentage of total car fleet. This number is steadily increasing and Sweden can be viewed as a lead market (Beise & Rennings, 2005) in the transition from an oil based car fleet to a biofuel based one.

One of the most important factors for this transition to take place is the consumer. Without consumer demand for FFV:s the transition to a fossil fuel free society will be hard to achieve. Prior research has found that the consumer's attitudes and worldview influence proenvironmental behavior both in general and in relation to specific products (Fraj & Martinez, 2006; Stern, 2000; Ölander, 1995). Our understanding of this link between attitudes and behavior, often referred to as the attitude-behavior gap (Carrigan & Attalla, 2001; Roberts & Bacon, 1997), is still limited concerning pro-environmental attitudes and behavior. No previous research has focused on investigating the link between an ecological worldview and purchase intentions on cars in two different countries that are in different stages of adopting a new, more environmentally friendly technology.

The purpose of this paper is therefore to present preliminary data on ecological worldview and purchase intentions of FFV:s in two different countries. One country with a relatively high penetration of FFV:s and one country with fewer FFV:s. In order to develop a

measurement instrument, previous research on ecological worldview and purchase intentions were used.

LITERATURE REVIEW

Due to major environmental problems and increased awareness of the fragility of our physical environment it can be argued that we are in the midst of a reevaluation of our fundamental worldview of our environment. Several researchers are arguing that we are moving from the Dominant Social Paradigm (DSP) to a more ecological worldview sometimes referred to as a New Ecological Paradigm (NEP) (Dietz et al., 1998; Dunlap et al., 2000; Stern, 2000). This worldview has been operationalized in the NEP-scale measuring generalized beliefs about the biophysical environment and the human relationship to it (Dunlap et al., 2000; Stern et al., 1995). Several studies have incorporated the new revised NEP-scale and report on positive correlations to other proenvironmental constructs (e.g. Johnson et al., 2004; Nordlund & Garvill, 2002; Vikan et al., 2007).

Purchase intentions are widely used by academic researchers as measures for actual purchase behavior and have been so for a long time (e.g. Namias, 1959). Most studies find a significant positive relationship between intent and behavior (e.g. Bemmaor, 1995; Marell et al., 2004; Newberry et al., 2003). It has also been argued that intentions predict future behavior better than attitudes do (Ajzen & Fishbein, 1974). Just as pro-environmental behavior is related to a specific attitude-behavior set, and not easily generalized, purchase intentions also need to be studied in correspondence to the specific area. Therefore intentions to purchase Five's, which are marketed as more environmentally friendly than conventional cars, can be theorized to be influenced by a support for an ecological paradigm.

RESEARCH METHOLODGY

Two surveys were conducted on car-owners, one in Sweden and one in Spain. The one in Sweden was a mail-in survey were 4023 car owners were randomly sampled from the Swedish Road Administration vehicle database. By using telephone reminders and an incentive to win cinema tickets, 1854 usable surveys were returned (response rate of 46%). The surveys were collected during November and December 2006. The Spanish data was gathered using a convenience sample of car owners during an event called Science week in Madrid. A total of 228 car-owners completed the survey which was administered by trained research assistants. The data was gathered during the 20-21 November 2006. The survey instrument for both countries consisted of the 15 questions measuring the NEP. Purchase intentions were measured by using six questions relating to the replacement of the old car in different time horizons and with different options. Apart from these questions, background factors such as gender, age, occupational status and employment status were measured. The demographic profile of the two samples is presented in Table 1.

RESULTS

The result of the NEP-scale for the two samples is presented in Table 2. From the table it is apparent that Swedes have a higher endorsement of the new ecological paradigm scoring higher on 9 of 15 items. The total mean values were also higher for Sweden (2.49 and 2.10 respectively). The alpha value was 0.77 (Sweden) and 0.42 (Spain). This indicates that there might be some problems with the Spanish sample that need further testing and analysis. Therefore this analysis here focuses on the specific items and the grouping of variables that is suggested by Dunlap et al. (2000). The item with the largest mean difference was 12 (Humans were meant to rule over the rest of nature) with a difference of 2.55. The item with the smallest difference between the samples was 8 (The balance of nature is strong enough to cope with the impacts of modern industrial nations).

Table 1 Demographic Profile

		Demographic 1 i
	Sweden	Spain
	n=1853	n=228
Variable	%	%
Gender		
Male	33	74
Female	67	26
Age (years)		
18–25	2	8
26–35	14	25
36–45	21	27
46–55	21	17
56–65	25	12
66–	17	9
Education (years)		
Less than 9	20	4
9 - 12	32	29
More than 12	45	67
(missing)	3	-
Occupational status		
Working full time	53	73
Working part time	7	10
Self-employed	9	0
Studying	1	4
Household work	1	0
Unemployed	2	2
Retired	23	11
Sick-listed	2	0
(missing)	2	-

The results of the six questions on purchase intentions are presented in Table 3. These results indicate that intention to trade in the current car within 12 months and to trade it in for a new one is similar across the samples. Swedes seem to be more brand loyal than the Spaniards. The two items measuring purchase intention for a more environmentally friendly car running on an alternative fuel indicate that Swedes are more likely to trade in their cars for a more environmentally friendly one. The opposite is true when comparing to the intention of purchasing a car running mainly on gasoline.

Table 2 Mean Scores on the NEP Scales for the Two Samples

	Mean Scores on the NEP Scales for the Two Samples									
		Mean Sweden	Mean Spain	Subscale (e.g.	Pro-NEP					
		(n=1853)	(n=228)	Dunlap et al. 2000)	indication					
1	We are approaching the limit of the	3,83	3,59	Limits	Sweden					
	number of people the earth can support									
2	Humans have the right to modify the	4,31	3,35	Anti-anthro	Sweden					
	natural environment to suit their needs									
3	When humans interfere with nature it	4,21	4,75	Balance	Spain					
	often produces disastrous									
	consequences									
4	Human ingenuity will insure that we	3,31	2,40	Anti-exempt	Sweden					
	do NOT make the earth unlivable									
5	Humans are severely abusing the	4,25	4,73	Eco-crisis	Spain					
	environment									
6	The earth has plenty of natural	2,44	1,53	Limits	Sweden					
	resources if we just learn how to									
	develop them									
7	Plants and animals have as much right	4,38	4,63	Anti-anthro	Spain					
	as humans to exist				~ .					
8	The balance of nature is strong enough	4,22	4,09	Balance	Sweden					
	to cope with the impacts of modern									
_	industrial nations		4.70		g .					
9	Despite our special abilities humans	4,34	4,59	Anti-exempt	Spain					
1.0	are still subject to the laws of nature	2.72	2.26	- · ·	0 1					
10	The so-called "ecological crisis"	3,73	3,36	Eco-crisis	Sweden					
	facing humankind has been greatly									
1.1	exaggerated	4.00	2.70	T 1 14 .	C . 1					
11	The earth is like a spaceship with very limited room and resources	4,00	3,79	Limits	Sweden					
12	Humans were meant to rule over the	4,08	1,53	Anti-anthro	Sweden					
12	rest of nature	4,00	1,33	Anu-anuif0	Sweden					
13	The balance of nature is very delicate	4,10	4,25	Balance	Spain					
13	and easily upset	7,10	7,43	Datatice	Spain					
14	Humans will eventually learn enough	3,37	1,71	Anti-exempt	Sweden					
14	about how nature works to be able to	3,37	1,/1	Anti-exempt	5 WEUEII					
	control it									
15	If things continue on their present	3,83	4,35	Eco-crisis	Spain					
13	course, we will soon experience a	3,03	1,55	200 011515	Spain					
	major ecological catastrophe									
1 0		<u> </u>		<u> </u>						

1=Strongly disagree to 5=Strongly agree

The eight even-numbered items were reversed so that increasingly high scores on all items mean increasing endorsement of the NEP.

Table 3
Purchase Intentions for the Two Samples

1 di chase intent	ions for the Tw	o Dampies	
	Mean Sweden (n=1853)	Mean Spain (n=228)	
How likely is it that you will			
trade in your car within the next 12 months?	1,98	1,88	
trade in your old car for a brand new car (factory new), next time?	2,59	2,31	
trade in your old car for a new car of the same brand, next time?	3,34	2,12	
trade in your old car for an environmentally friendly car, next time?	3,36	3,22	
trade in your old car for a car fueled mainly by gasoline, next time?	2,13	2,76	
trade in your old car for a car fueled mainly by ethanol, next time?	2,70	1,00	
1=Not likely at all, to, 5=Very likely			

DISCUSSION

This is a first preliminary description and analysis of the gathered data. From the sample descriptives it can be noted that there are significant differences between the two samples, which makes them hard to compare. Especially the differences in gender and education is striking. Since this is a preliminary study it is still judged worth-while to compare the NEP and purchase intentions between the two samples. From the analysis of the NEP-scale it is obvious that Sweden score higher on items measuring the reality of limits to growth (1, 6, 11). This indicates that the Swedish sample is more negative towards population and resource use. It is an interesting fining considering the population density is much higher in Madrid, than in any part of Sweden. On antianthropocentrism (the domination of humans over the rest of the natural world) the score is higher for the Swedish sample on two items (2, 12) and only a small difference in favor of the Spanish sample on item 7. On the subgroup fragility of nature's balance the differences are small on all three items, with two scoring higher for the Spanish sample (3, 13) and one for Sweden (8). The next subgroup, rejection of exemptionalism which gives support for the worldview that man is separate from nature Sweden scores significantly higher on two items (4, 14) and Spain scores only slightly higher on item 9. The last subgroup, the possibility of an ecocrisis, Spain scores higher on two items (5, 15) and Sweden on one (10).

The analysis of purchase intentions show overall that Swedes are more likely, when trading in their cars, to switch to FFV:s. There can be several explanations behind this. One being that Swedes can be hypothesized to have more knowledge on alternative cars since several laws and regulations in the last few years have made it more financially sound to own a FFV. Overall the data on NEP and purchase intentions for FFV:s indicate that a higher endorsement for an ecological worldview also has the potential to influence intended behavior. Obviously there are many other factors influencing this intended behavior that need to be analyzed in order to arrive at a sound conclusion. These preliminary results will serve as a step in that direction.

REFERRENCES

Ajzen, I., & Fishbein, M. 1974. Factors Influencing Intentions and the Intention-Behavior Relation. *Human Relations*, 27(1): 1-16.

- Beise, M., & Rennings, K. 2005. Lead markets and regulation: A framework for analyzing the international diffusion of environmental innovations. *Ecological Economics*, 52(1): 5-17.
- Bemmaor, A. C. 1995. Predicting behavior from intention-to-buy measures: The parametric case. *Journal of Marketing Research*, 32(2): 176-91.
- Carrigan, M., & Attalla, A. 2001. The myth of the ethical consumer: do ethics matter in purchase behavior? *Journal of Consumer Marketing*, 18(7): 560-77.
- Dietz, T., Stern, P. C., & Guagnano, G. A. 1998. Social structural and social psychological bases of environmental concern. *Environment and Behavior*, 30(4): 450-71.
- Dunlap, R. E., Van Liere, K. D., Mertig, A. G., & Jones, R. E. 2000. Measuring endorsement of the new ecological paradigm: A revised NEP scale. *Journal of Social Issues*, 56(3): 425-42.
- Fraj, E., & Martinez, E. 2006. Environmental values and lifestyles as determining factors of ecological consumer behavior: an empirical analysis. *Journal of Consumer Marketing*, 23(3): 133-44.
- Gärling, T., & Steg, L., (Eds.) 2006. Threats from car traffic to the quality of urban life: Problems, causes, and solutions. Amsterdam: Elsevier.
- Johnson, C. Y., Bowker, J. M., & Cordell, H. K. 2004. Ethnic variation in environmental belief and behavior: An examination of the new ecological paradigm in a social psychological context. *Environment and Behavior*, 36(2): 157-86.
- Marell, A., Davidsson, P., Gärling, T., & Laitila, T. 2004. Direct and indirect effects on households' intentions to replace the old car. *Journal of Retailing & Consumer Services*, 11(1): 1-8.
- Namias, J., 1959. Intentions to Purchase Compared with Actual Purchases of Household Durables. *Journal of Marketing*, 24(1): 26-31.
- Newberry, C. R., Klemz, B. R., & Boshoff, C. 2003. Managerial implications of predicting purchase behavior from purchase intentions: a retail patronage case study. *Journal of Services Marketing*, 17(6/7): 609-18.
- Nordlund, A. M., & Garvill, J. 2002. Value Structures behind Proenvironmental Behavior. *Environment and Behavior*, 34(6): 740-56.
- OECD., 2002. *Towards sustainable household consumption? Trends and policies in OECD countries*. Paris: Organization for Economic Co-operation and Development (OECD).
- Ölander, F., & Thøgersen, J. 1995. Understanding of consumer behavior as a prerequisite for environmental protection. *Journal of Consumer Policy*, 18(4): 345-85.
- Roberts, J. A., & Bacon, D. R. 1997. Exploring the Subtle Relationships between Environmental Concern and Ecologically Conscious Consumer Behavior. *Journal of Business Research*, 40(1): 79-89.
- Stern, P. C., 2000. Toward a Coherent Theory of Environmentally Significant Behavior. *Journal of Social Issues*, 56(3): 407-24.
- Stern, P. C., Dietz, T., & Guagnano, G. A. 1995. The new ecological paradigm in a social-psychological context. *Environment and Behavior*, 27(6): 723-43.
- Vikan, A., Camino, C., Biaggio, A., & Nordvik, H. 2007. Endorsement of the New Ecological Paradigm: A Comparison of Two Brazilian Samples and One Norwegian Sample. *Environment and Behavior*, 39(2): 217-28.