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ADVANCES IN GLOBAL BUSINESS RESEARCH

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2012 Proceedings of the
Ninth World Congress
of the
Academy for Global Business Advancement (AGBA)
Held at the
Ajman University of Science and Technology
Ajman, United Arab Emirates
on
March 19-21, 2012

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This volume contains the proceedings of the 2012 Academy for Global Business Advancement (AGBA's) 9th World Congress held at the Ajman University of Science and Technology, Ajman, United Arab Emirates on March 19 – 21, 2012. Papers selected for presentation at the Congress and for inclusion in these Proceedings have been double-blind peer-reviewed and explore the cutting edge of knowledge and theory in their respective research domains and disciplines.

These proceedings are edited by David McArthur, Utah Valley University (USA), Mohamed Ali Al-Shami, Ajman University of Science & Technology, (UAE), Mohammed Naim Chaker, Ajman University of Science & Technology, (UAE) and Zafar U. Ahmed (University of Dammam, Saudi Arabia) assisted with patience, diligence, and professionalism by Silvia Lobendahn at Utah Valley University (USA).

These proceedings are prepared from material supplied by the authors. Manuscripts that were not sent to the editors on time for production may not appear in the proceedings. In accordance with editorial policy and under space constraints, some sections of text, 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.

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The editors of these Proceedings have tried to balance completeness with the space constraints inherent in a published volume of a global congress with more than 150 papers. Many authors are enthusiastic about their work and in that enthusiasm, some, after their papers were accepted to the conference, did not remember to or respond to repeated messages to submit final drafts for the proceedings whose bodies were 10 pages in length. Thus, many papers in this volume have had some sections of text, exhibits, charts, tables, or references omitted or shortened by the editors for space considerations.

Working papers and doctoral student papers have been published in abstract form in a separate volume.

Readers who would like to have complete copies (including any omitted elements) of any of the papers in these Proceedings are invited to contact the papers' authors.

Welcome to the 9th AGBA World Congress!

We would like to take this opportunity to extend a warm welcome to all delegates attending AGBA's 9th World Congress being held in collaboration with the Ajman University of Science and Technology located in the United Arab Emirates on March 19---21, 2012!

More than 300 AGBA delegates are participating in a wonderful program that includes more than 100 delegates hailing from different countries around the world.

The main theme of our conference is "Business and Entrepreneurship Development in a Globalized Era and the Rise of the UAE". Our conference will feature competitive papers and special sessions.

Our conference's primary goal is to provide a unique global platform to facilitate the exchange of leading-edge ideas for effective advancement of knowledge in business and entrepreneurship; where academics, professionals, consultants, government officials and entrepreneurs from both developed and developing countries are engaged in intellectual discourse for the generation and dissemination of knowledge to facilitate the globalization process for the betterment of humanity. This will be achieved through multidisciplinary presentations and discussions of current business and development issues in emerging and developed countries. Your participation in this great conference is helping us achieve these goals!!!!

Thank you for coming to the UAE, an emerging presence on the global stage.

We wish you good luck in your presentations and conference deliberations.

AGBA in brief

Academy for Global Business Advancement (AGBA) was established in the American State of Texas as a "Not-for-Profit" organization in 2000. It is proud to boast today a membership of more than 1000 members based in more than 50 countries that include scholars from reputed academic institutions, corporate leaders, governmental officials, entrepreneurs and consultants based in western and developing countries.

AGBA, as a global organization, aims to help academics and scholars at business schools across the developing countries to connect with the western (developed) world for mutual benefit. Such collaboration would accelerate the process of globalization by furnishing ample opportunities to scholars in emerging countries to get recognition, disseminate new knowledge and assert themselves on the global stage.

AGBA's Vision

To be globally recognized as a leading "not-for-profit" organization dedicated to serve the academic, professional, government, corporate and entrepreneurial sectors worldwide.

AGBA's Mission

Building on the dynamics of the ongoing globalization process, AGBA is committed to provide a global platform aimed at assisting academics, scholars, professionals, officials, entrepreneurs and consultants of emerging countries to assert themselves on the global stage for recognition, networking and dissemination of knowledge.

AGBA's Core Business:

- Nurture globally competitive talents; expertise and skills across the emerging countries;
- Arrange apprenticeship for academics, scholars, professionals, officials, entrepreneurs and consultants on the global stage;
- Provide advisory services to upcoming business schools across the world for accreditation by the Association to Advance Collegiate Schools of Business (AACSB);
- Provide advisory services to peers worldwide to acquire Fulbright Grants from the US government successfully;
- Offer customized training worldwide;
- Offer professional development programs; and
- Provide industry development services.

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2004 Inaugural World Congress in Delhi, India
2005 Second World Congress in Delhi, India
2006 Third World Congress in Kuala Lumpur, Malaysia - Management and Science University (MSU)
2007 Fourth World Congress in Kuala Lumpur, Malaysia - Universiti Sains Malaysia (USM)
2008 Fifth World Congress in the Kingdom of Bahrain
2009 Sixth World Congress in Malaysia - Universiti Utara Malaysia (UUM)
2010 Seventh World Congress in Malaysia – Universiti Putra Malaysia (UPM)
2011 Eight World Congress in Dalian, China - Dongbei University of Finance and Economics (DUFE)

CURRENT AND FUTURE CONFERENCES

2012 Ninth World Congress in Ajman (United Arab Emirates)
This conference will be held at the Ajman University of Science and Technology (AUST) in Ajman (United Arab Emirates) on March 19---21, 2012.

2013 Tenth World Congress in Bangkok, Thailand
This conference will be held at the Asian Institute of Technology, Bangkok, Thailand around mid-June, 2013.

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AGBA's two official journals are published in collaboration with Inderscience Publishers of UK/Switzerland (www.inderscience.com). Both peer-reviewed journals are listed in the Cables directory and numerous business databases:

(1) Journal for Global Business Advancement
ISSN (Online): 1746-9678 - ISSN (Print): 1746-966X
<http://www.inderscience.com/browse/index.php?journalCODE=jgba>

(2) Journal for International Business and Entrepreneurship Development
ISSN (Online): 1747-6763 - ISSN (Print): 1549-9324
<http://www.inderscience.com/browse/index.php?journalCODE=jibed>

AGBA Refereed Conference Proceedings:
Advances in Global Business Research (ISSN 1549 – 9332) are published in both hard copy and electronic forms for each conference.

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(1) "AGBA -- ASEAN Chapter" is Based at the "Management and Science University of Malaysia". Please visit <http://www.msu.edu.my> for details.

(2) "AGBA – Pakistan" is Based at the "COMSAT Institute of Information Technology, Islamabad, Pakistan". Please visit <http://www.agba.org.pk> for details.

(3) "AGBA – Malaysia Chapter" is Based at the "Faculty of Technology ” Universiti Malaysia Pahang (UMP). Please visit <http://www.ump.edu.my> for details.

AGBA Membership

Regular Annual Membership Fee: \$ 100

Regular Annual Membership Fee for Students: \$ 50

Regular Annual Institutional or Corporate Membership Fee: \$1000

Regular Institutional or Corporate Membership Fee (LDCs): \$500

AGBA Regional Chapter Annual Fee: \$1,000

AGBA Sponsor and/or Partner: \$1000 (Annual Fee)

AGBA Fellow: Complimentary

AGBA Patron: Complimentary

AGBA Consulting

AGBA maintains a roster of more than 1000 members hailing from more than 50 countries, who offer their world-class expertise for consulting globally at a subsidized rate.

Their expertise, skills and competences range from entrepreneurship development to institution building, from AACSB accreditation to establishing new business schools, and from training to faculty development.

If you are interested to engage their services for the pursuance of any project, kindly contact AGBA President / CEO at the following address for details:

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AGBA Projects

AGBA is contemplating launching the following additional projects in the foreseeable future in order to assist academic institutions and professional bodies across emerging countries to assert themselves on the global stage:

- (1) Launch of a NEW "AGBA journal" in collaboration with a major global publisher;
- (2) Publication of an annual monograph consisting of best papers out of our conference proceedings by a reputed global publisher;
- (3) Upgrading a business school to the global standards in an emerging country;
- (4) Launch of a "global doctoral program in global management" jointly offered by 3 different universities based in 3 different continents (North America, Europe And Asia);
- (5) Establishment of a "global consulting wing" within the AGBA framework;
- (6) Establishment of additional "AGBA Chapters" across Brazil, Russia, India, China and Africa etc.
- (7) Selection of a business school in an emerging country for accreditation by AACSB;
- (8) Coaching and mentoring of selected academics to acquire Fulbright Grants, sponsored by the US Government;
- (9) Development of professional development programs for the training of policy makers on Indian, Chinese, Malaysian, And Brazilian Economic Miracles; and
- (10) Acquisition of grants from global organizations for the pursuance of global research.

2011 AGBA News

- (1) AGBA is inviting global citizens, and internationalists to join the organization by attending its upcoming global conferences annually.
- (2) AGBA is inviting proposals from academic institutions, professional organizations and governmental agencies to establish its regional chapters across Brazil, Russia, India, China, and Africa.
- (3) AGBA is inviting nominations to designate additional "AGBA Fellows" based in different regions across the world. "AGBA Fellow" is the highest honorary title conferred on a "world-class academic, scholar, entrepreneur, professional, or consultant" for his/her outstanding contribution to the advancement of the field of global business and entrepreneurship. This honor is conferred at its global conferences.
- (4) AGBA is inviting proposals from any business school based in an emerging country to seek its assistance for upgrading to the world-class standards.
AGBA Career Center

AGBA offers assistance to its members seeking information about career development as well as job placement. Delegates attending our annual global conferences are assisted in career counseling and job placement. Many universities have interviewed candidates at our previous conferences.

AGBA members are encouraged to browse through the following websites for career development:

- http://bizschooljobs.aacsb.edu/home/index.cfm?site_id=2849
- <http://www.academiccareers.com/>
- <http://www.academic360.com/faculty/listings.cfm?DiscID=90>
- <http://aib.msu.edu/careercenter/jobpost.asp?sort=1>
- <http://chronicle.com/section/Jobs/61>
- <http://www.jobs.ac.uk/jobtype/academic/>

<http://www.universityjobs.com/jobs/jobs1.php?catid=27>
<http://www.higheredjobs.com/>

AGBA Online Resources

AGBA is pleased to offer following online resources to assist members to augment their professional endeavors with world-class resources.

(1) World Bank Resources:

<http://web.worldbank.org/WBSITE/EXTERNAL/WBI/0,,contentMDK:20279028~menuPK:556285~pagePK:209023~piPK:207535~theSitePK:213799,00.html>

(2) BBC Resources:

http://www.bbc.co.uk/worldservice/business/review_globbus.shtml

(3) Governmental Resources:

<http://www.ed.gov/programs/iegpsgpa/index.html>

(4) Cultural Information:

<http://interculturalpress.com/store/pc/viewcategories.asp?idCategory=79&pageStyle=P>

(5) Global Videos:

<http://www.aperianglobal.com>

(6) Videos, DVDs and CDs

<http://www.bigworldmedia.com/>

(7) Films

http://ffh.films.com/Films_Home/Index.cfm

(8) International Trade Webcasts

<http://www.fita.org/webcasts.html>

(9) TV Archives and Film Library

<http://www.footage.net/>

(10) Interviews With Leaders:

<http://www.globalization101.org/ask>

(11) Educational Media:

<http://www.insight-media.com/IMHome.asp>

(12) Popular News:

<http://www.pbs.org/newshour/video/index.html>

(13) American Chamber of Commerce:

<http://www.uschamber.com/webcasts/default>

(14) United Nations Webcast Archives

<http://www.un.org/webcast/archive.htm>

(15) TV News Archives:

<http://tvnews.vanderbilt.edu/>

(16) Global Business Cases:

<http://hbsp.harvard.edu/product/cases>

http://www.thunderbird.edu/knowledge_network/case_series/index.htm

http://www.acrc.org.hk/case/case_showlist.asp?ct=popular

<http://www.ksgcase.harvard.edu/>

<https://store.darden.virginia.edu/>

http://www.dmi.org/dmi/html/publications/casestudy/casestudy_s.htm

<http://www.caseplace.org>

http://www.kellogg.northwestern.edu/Faculty/Kellogg_Case_Collection.aspx

http://casenet.thomsonlearning.com/casenet_global_fr.html

- <http://www.fasid.or.jp/english/training/case/casebook.htm>
<http://gsbapps.stanford.edu/cases>
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<http://www.bpg-businesspolicygame.com>
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- (19) Bridging Culture Assessment Program
<http://parkligroup.com/ELearning/BridgingCultures>
- (20) A Foreign Language Simulation Game
<http://www.nipporica.com/prod.htm#Redundancia>
- (21) A Multinational Management Game
<http://microbuspub.com/mmg.htm>
- (22) Global Business Strategy Game
<http://www.bsg-online.com>
- (23) Online Exercise for Students
<http://www.glo-bus.com>
- (24) Online Global Marketing Management System
<http://www.gmmso2.com>
- (25) Online Global Marketing Potential System
<http://www.globalmarketpotential.com>
- (26) Online Export and Import Management System
<http://www.eimso.com>
- (27) International Operations Simulation
<http://www.intopiainc.com/>
- (28) Interpretive Simulation
<http://www.interpretive.com/rd5/index.php?pg=cm2>
- (29) MIT Resources:
<http://web.mit.edu/newsoffice/2009/sloan-mstir-0126.html>
- (30) Miscellaneous Other Relevant Resources:
<http://www.fita.org/webcasts.html>
<http://www.academic360.com/general/US.cfm>
<http://www.nacra.net/nacra/>
<http://www.xanedu.com>
http://www.globalview.org/default_files/capstone.htm
http://www.bized.co.uk/virtual/vla/the_trade_balance/index.htm
<http://globalchallenge.cesim.com>
<http://www.marietta.edu/~delemeeg/expnom/Fall2001/mason1.html>
<http://www.culturaldetective.com>
<http://www.worldgameofeconomics.com>
<http://www.fekids.com/img/kln/flash/DontGrossOutTheWorld.swf>
<http://www.diversophy.com>

AGBA Reviewers

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Business and Entrepreneurship Development in the Context of Globalization and the Rise of the UAE

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Human Capital Development Trends in the MNCs in Japan: A Case Study Analysis

Keywords: human capital development, multinational companies, Japan

INTRODUCTION

The role of HR has changed significantly since medieval times and the paradigm shift to align people to the business enhances the role of HR as a strategic business partner. Management strategies must give due attention to producing fast, flexible and dynamic teams of enthusiastic, motivated, creative and fully self-expressed people. In the current era of globalization and change, the role of HR must parallel the needs of the changing organization. Companies have a role and responsibility to equip their own manpower for changing tasks that accompany changing technology. As competitiveness in the marketplace demands competitive human capital, adequate resource allocation to training, upgrading and retraining of skills and expertise within companies is necessary. A skilled, innovative and satisfied pool of workers provides the winning edge and competitive advantage for the company.

The main objective of this study is to understand the current HCD practices in the manufacturing MNCs and to identify best practices in HCD, which is applicable to the Asian environment. The research attempts to analyze the alignment of current HCD practices with global trends in HCD. A salient focus of the study is to assess if globalize MNCs are more likely to align their HCD policies with global trends rather than with conventional HCD practices. The study will focus on four main areas of HCD, which is believed to have a significant impact on the competitiveness of the industry, namely, responsibility for HCD, strategic metrics in HCD, training delivery, and training budgets. Ten companies in the chemical and petrochemical industry were identified for the study. Of these, two MNCs with subsidiaries worldwide would be used for comparison, as these companies are likely to have adopted global practices. The chemical industry was selected to study what drives employees to stay on in these companies despite the perilous nature of the job. Besides, the Far East is widely expected to see a strong upswing in chemicals demand as the regional economy recovers from the effects of the Asian crisis.

GLOBAL HUMAN CAPITAL DEVELOPMENT TRENDS

Of the 40 trends developed among HCD organizations in response to the demands of a sophisticated global market, 16 have unanimously emerged as the top global trends. For the purpose of this study, these trends are categorized into responsibility of training, strategic metrics in training, training delivery and training budgets.

This paper was submitted, reviewed, accepted, and presented at the 8th World Congress in 2011 (Dalian, China) but was inadvertently omitted from those proceedings. It is published here with apologies to the author.

Responsibility of Training

The responsibility of training is shared among several groups. Besides the training and development staff, the responsibility for training has shifted to trainees, key functional and line managers as well. In addition, training staff and line management are forming partnerships to achieve common goals. Both parties have equal responsibility to ensure that training programs are effective and jointly

evaluate its success. Besides these, more training is outsourced to contractors, as it elevates the status of the training and development professional. With outsourcing, organizations need only a minimum number of staff to coordinate the efforts of independent training providers. Overall employment is reduced and expenditures are kept low.

Strategic Metrics in Training

To accomplish competitive advantages, training is linked to the strategic direction of the organization. Training departments are developing and teaching other departments how to develop missions and strategic plans that fully support the overall strategic goals of the organization. The role of the HCD department is, therefore, shifting from implementing strategic plans to that of being an active participant in formulating plans. Hence, needs assessment and analysis is receiving more emphasis. More HCD departments are doing a thorough need analysis before a comprehensive management development program is implemented. To be more effective, training is shifting to a performance improvement role. Training professionals are shifting their focus from training delivery to performance of the company. Companies are also introducing systematic evaluation processes to measure the success of training.

Training Delivery

Training delivery is changing rapidly. Training today, such as just-in-time training, is delivered as the need arises. As new technology is rolled out, employees that need the skill must be trained. As corporate universities continue to gain acceptance, the trend to set up corporate universities has become so popular that most major organizations have changed the name of the training departments to include the word 'university'. Some corporate training universities are external profit centers as well. In addition, the learning organization concept is being adopted. By becoming a learning organization, dramatic progress could be achieved through the people who are perpetual learners. With the continued growth of MNCs, cross-culture programs are being designed and developed to adapt to the local country. Thus, more training is designed for global use.

Training Budgets

Generally, training and developing budgets are increasing in most industrialized and developing nations. In addition, the technology for training is developing rapidly. Though the use of technology for training is still in its early stage, its use would be enhanced as technology continues to develop and become more affordable. Besides, training and development functions are converting to a profit center concept. In a way, the training and development function adds value to the organization. It enhances the quality of training as line managers have the option of using the services offered internally or source for training providers externally. Also, measuring the return on investment in training is growing in use. A large number of organizations are now measuring business results and calculating the return on investment (ROI) of training and development. Moreover, training costs are monitored more accurately to manage resources and demonstrate accountability. Training departments are developing cost-tracking systems that calculate cost on a program-by-program basis and categorizing costs by different functional components of training. This enables true comparisons of effectiveness and efficiencies.

CHARACTERISTICS OF JAPANESE HUMAN CAPITAL DEVELOPMENT PRACTICES

Professional HCD in Japan is ongoing as part of the Japanese culture. It has traditionally taken place in a continuum across all layers and functions of corporations and is based on the assumption that employees will stay at one company throughout their careers (Carayannis & Jorge, 1998). Thus, Japanese firms invest heavily in training employees (Hashimoto, 1990; Kishita, 2006; McCormik, 1991; Mueller, 1992; Rayburn, 1999) and conduct detail analysis of their future skills requirements (Lorrinan, 1995). Apart from equipping employees with skills, training also integrates employees in the firms through socialization and the immersion of organizational culture (Pucik, 1984). Under the long-term employment system, in-house training of workers having a high level of broad skills and

techniques is best suited for business development. Senior workers are not reluctant to train their subordinates, since they are confident that the latter will not be promoted or given raises ahead of them; this, in turn, has reinforced teamwork within the workplace. This approach to HCD has proven to be a positive way for employees to refine their skills, and is also an aspect of Japanese corporate culture that makes Japanese companies so competitive. Many top executives prefer to share their offices with colleagues rather than having an office of their own. However, with the trend towards performance-based management of human resources, the anxiety of being superseded by junior staff discourages senior employees from educating and training younger people (Kishita, 2006).

Managers play a crucial role in facilitating the learning process in Japanese organizations; the prime role of a Japanese manager is to coach and develop his subordinates (Lorriman, 1995). Under the seniority-based system, taking on the role of mentor constitutes a criterion of promotion, therefore, senior employees are inclined to train novice recruits (Sato, 1997). Managers are also strongly influenced by the philosophy that new graduates who are trained in-house are more likely to fit into the corporate culture. Lorriman (1995) posits that the Japanese excel in sharing their visions of the future and individuals understand where their activities fit within their organizations. In-house development of human capital at Japanese companies takes place over a long period, probably throughout the entire career of the employee in the company. In-house training consists primarily of on-the-job training (OJT), which emphasizes development of skills through actual business experience. OJT fulfills an important role in educating both blue- and white-collar workers. Lorriman (1995) asserts that the Japanese maximize their learning opportunities on the job itself. OJT was seen as the most effective method of developing individual capability (Zhu, 2004). On the shop floor, for instance, employees not only learn about the production process, but also how to repair malfunctioning machinery and perform maintenance work through OJT. The workers can step into one another's thoughts, not just shoes. When a worker finds a defect in a product caused by someone else's error, he feels obligated to correct it, and has the know-how to do so. For clerical workers in accounting and other departments, OJT is used to teach personnel how to combat unreliability by, for example, analyzing divergences between budgeted and actual results. Training is an internal responsibility to produce general practitioners for the organization rather than specialists, based on the specific needs of the organization (Maurice, 1997; Tremblay & Rolland, 1997). Little emphasis is placed on self-training and self-training is employee initiated.

METHODOLOGY

Site and Subjects

The study was carried out in ten leading chemical and petrochemical MNCs in Japan. Of these, two MNCs in Japan with subsidiaries worldwide would be used in the analysis, namely Company A and Company B. The two MNCs were selected for the analysis to reflect the contrasting current HCD policies in Japan. Company A is a leading chemical company in Japan with subsidiaries in Europe, Asia/Oceania and U.S.A. while Company B has subsidiaries in six Asian countries. At Company A, four HR executives and one Senior Manager were interviewed while for Company B, most of the information was provided by the Senior HR Manager. The respondents were informed in advance the objectives and benefits of the study. Confidentiality to the research participants was assured and respondents have given their informed consent before participating in the research.

Procedure

Primary data was collected from in-depth interviews with the staffs of the HR Department and were done face-to-face. In Company A, all the five participants were interviewed separately. Follow-up discussions were carried out electronically through e-mails, facsimile and telephone. However, all the five participants were interviewed again on two other visits to seek clarification and to obtain more in-depth data on some of the policies. Similarly, three interviews were conducted in Company B with the Senior HR Manager. Documents related to HCD policies were received from Company B through e-mails.

Measures

Qualitative data were collected through semi structured interviews. Thirty two questions were designed to tap data related to HCD policies of the organizations. The interview methodology involves interviewing each participant for an hour to an hour and a in a private room.

Analysis

A set of items was identified as current global HCD trends for the analysis. These items were grouped into four categories, namely responsibility for HCD, strategic metrics in HCD, training delivery, and training budgets. Data obtained from the interviews were analyzed and tabulated to identify the HCD policies that are aligned with the four categories. The number of HCD policies that are aligned with global trends for each company were identified and then converted as a percentage of the total global HCD trends to understand the alignment rate.

HUMAN CAPITAL DEVELOPMENT POLICIES IN JAPAN

Responsibility for HCD

As far as global trends in HCD are concerned, Company A has adopted most of the current trends while it is not so aggressive in Company B. It has always been the policy of both the MNCs to provide extensive training. In Company A, employees take the initiative to acquire higher skills for carrying out difficult tasks. Employees seem interested in the training and absenteeism and turnover is not a hindrance to training. Both the MNCs do not face any major problems in training and development. Training is carried out as long as there are employees who are interested. In addition, the MNCs encourage its employees to take up correspondence courses. On successful completion of the course, Company A reimburses half of the course fees. All full time employees are eligible for this benefit. Thus, the responsibility of training is shared among several groups to achieve common goals in both the MNCs.

Outsourcing of training and development is not carried out in Company A. Most training is provided in-house with much emphasis on OJT and the companies have no plans to outsource more training to contractors. Similarly, in Company B very limited training is outsourced to contractors. External training is mainly for managers to acquire knowledge on management skills, legal compliance, and other areas of expertise, which are not available in-house. In both the MNCs, the HC Department and line departments conduct induction training. After the initial induction training, employees progress systematically through OJT conducted by the line departments. Occasionally, off-the-job (Off-JT) is conducted to supplement OJT programs. These are summarized in Table 1.

Table 1 omitted but would have been here

Strategic Metrics in HCD

In both the MNCs, training is linked to the strategic direction of the organization. In Company A, everyone has an opportunity to attend training and employees can self-nominate to attend training programs carried out by the company. However, in Company B, there is no equal opportunity to go for training and the immediate superiors must approve all training. Employees in both the MNCs can also go for self-development through company sponsorship though there is no great necessity for this, as training is conducted continuously throughout the entire career of the employees. Currently, Company B does not provide any education grants to its employees. R & D staffs that are seconded to the universities can continue with the education at the university. Besides, the amount of training undergone bears no relation to promotion. Thus, there is no necessity to really prove that one has acquired certain skills in order to gain promotion. However, both the MNCs encourage continuous learning and development among the employees. No certificates are awarded on completion of an in-house training program. For external training, the training company sometimes award certificates on successful completion of the training program. Furthermore, there is no difference in pay and position on acquiring another academic qualification. Further education is more towards grooming the individual for future roles in the organization. Nevertheless, generally, employees could see their

career path – they know where they would be after a certain number of years of service though ability and performance is also important.

In Company A, there are two programs under the ‘Career and Life Development Support Program’ – Total Assessment and Career Counseling Systems, and Refreshment Holiday System. Both programs are specially designed for employees in their early 40’s and early 50’s. The first program supports future career and life planning through the process of helping these employees to review their career to date, analyze their surrounding environment and obtain guidance in interviews with a counselor. Employees need to attend Total Assessment Program once in their forties and another time in their fifties. Each training program is about three days and after these trainings, the employees can ask for a change of department. The opinions of these employees are taken into consideration and employees who want a change can discuss with their superiors. The second program allows these employees to take a company-sponsored holiday for seven days. Whether it is a local or an overseas holiday depends on the age of the employee. In their tenure with the company, employees are given a refreshment holiday once in their forties and another in their fifties. It is offered as an opportunity for employees to think in a relaxed environment about one’s past and future life plans.

In Company A, training needs assessment and analysis has always been emphasized. As training need analysis is carried out before drafting the training plan for the year, training programs in Company A are tailored to meet the needs for the year. Training needs are not incorporated in the performance appraisal of the employees and are drafted by the HC Department. In Company B, there is no training needs analysis or a systematic training program. However, the executive officers, the HC Department and line managers are in the process of planning a training system incorporating job rotation. One of the major problems faced by the company is that there is no systematic job rotation system with long-term perspective even though the parent company has job rotation system that was established in 1986. The main reason is that the company has been developing since it was established. In the progressing period, it is very important to stay in the same department and to develop each business scheme. Managers want to keep high performers in the same departments and tend to push out low performers to another department. Changing job roles and department is viewed as non-performing. As the company is more stabilized now, it is trying to come up with a more systematic training program for all its employees.

Training is also shifting to a performance improvement role. As training is shifting to a performance improvement role, training is carried out not only for immediate application on the job, but also for employee development in the long run. In addition, the MNCs do not expect the employees to leave during their tenure with the company. Employees learn progressively on the job and enhancement of skills is expected in the long run. The stringent recruitment process of the MNCs also ensures that the best candidates were recruited for the job. Company A emphasizes much on eagerness and affinity with the company and as such effective continuous training could be carried out. Besides, employees are normally assigned tasks that they have learnt at the training. Thus, employees have to apply what they have learnt on the job. The immediate superiors will follow up occasionally and note the progress of the employee. Thus, even without much evaluation of training, transference of skills acquired to the workplace is observable.

In addition, the employees in Company A undergo job rotation to widen their scope of workload. Job rotation can be within the same department or in other departments at the discretion of the superiors. This adds variety to their job and motivates them to learn more on the job. In the process, all employees are better equipped with various skills needed for any job in the company. Besides, they have a better overview of the company and adapts easily if they are transferred to another department. It is very useful in identifying the suitability of an employee for the job. The company actually benefits in the long run, though productivity of the employee may be lower in the initial learning stage. However, despite the current changes in the global market, the company does not see the need to provide more training and development programs now. The current programs are enough to motivate and improve the competencies of the employees. Generally, the performance and motivation

of the employees improved after training.

Both the MNCs have not set up systematic evaluation processes to measure the success of training. Not much evaluation of training is carried out in Company A, as the company's training programs are designed for the acquiring of ability and skills over a five-year period. In these trainings, the employees are not only given guidance by the superior, but also feedback every six months. Company B has yet to come up with systematic evaluation processes to measure the success of training, as the system is still new, but evaluation may be introduced in the future. Table 2 summarizes some of the strategic metrics in HCD of the two MNCs.

Table 2 omitted but would have been here

As the technology for training is developing rapidly, training delivery is changing in line with the changes in technology and more training is designed for global use. Company A places great emphasis on OJT, Off-JT and self-development in developing its human resources. Off-JT refers to capacity building that occurs away from the workplace, such as group training. OJT emphasizes on capacity building that occurs in the process of work while self-development is capacity building pursued independently using systems provided by the company. The company believes that the effective linking of these three elements is essential for employees' growth. On recruitment, the HC Department will conduct induction training for all new recruits. After 10 days of induction training, the new recruits will be sent to the plant for further training. At the plant, new recruits will undergo OJT for two months. In these two months, they learn everything about the plant and even have to work on shifts. There are three eight-hour shifts a day. At this time, the positions of the new recruits have not been determined. Then, the new recruits will be sent to the various departments and further OJT will be carried out to help them get on with their job. Occasionally, Off-JT is carried out - about once every two months, each for about three days. The new recruits are also given a mentor (*sempai*) who will oversee the progress of the mentee (*kohai*) over a one-year period. The system has proven effective and mentors do not feel intimidated by the system.

In Company B, even with the rapid advancement of technology and globalization, training and development has not changed much over the years. Though there is correspondence course by mail, training is mainly on the job and at the initiative of the immediate superiors or supervisors. All new general staff are given comprehensive training on joining the organization. Generally, the new recruits are more competent and motivated after training. Under the new system, on recruitment the HC Department will conduct induction for all new recruits. After two weeks of induction, new area staff (office clerks, production technicians, and R & D technicians) will be sent to the departments of their official assignment and start working through OJT. New general staff (managers) for the Production Division and the R & D Division will undergo training at the plant while new recruits for the Sales and Marketing Division and Corporate Support Division will be placed in the Logistics Department for two years. Training is mostly on the job and occasionally they attend Off-JT such as lectures. In the Logistics Department, new recruits are trained in production planning and domestic distribution. After this training, they will be posted to the assigned departments where they undergo continuous OJT.

Previously, all new recruits went through two weeks of induction training by the HC Department and then three months of intensive training at the plants before they were sent to the department of their official assignment. In-house training, which comprises mainly of lectures, will be given to all new recruits. They are mainly brief on the company system and safety matters in the plant. During these three months, the new recruits are not given any job responsibilities, but are expected to attend training full time. At the department, skills were acquired in their daily work through OJT. After one year, they would be given one month of training in sales and marketing where they were introduced to the customers by sales personnel, after which they would return to their department. The process was repeated throughout the entire career of the employee. The reason for such comprehensive training is that the President felt that it is important for the new recruits to know the *genba* (actual place, the

spot, the scene) or have an overview of the company.

Mid-career hires in Company B are given only half to one day's guidance and soon after that they will be sent to the departments of their official assignment. As of now, the company does not have any special programs for them. New managers are given five days training. They attend two days of training conducted by external consultants, mainly on strategic management thinking. The Finance and Accounting Department, General Administration Department, and the Human Resource Department provide the other three days of training. In recent years, the company has introduced some training programs for the middle-aged employees (those in their 30's) in the company. The main purpose is not only to retrain, but also to motivate and to review the objectives of the employees. Their points of view are taken note of. No time frame has been set for the training of these middle-aged employees. Besides, learning new things add variety to the jobs. Many of the staffs are very interested to learn new jobs.

In both the MNCs, Off-JT programs are tailored according to occupational types and job category and are normally conducted in-house. In-house trainers are not given any allowance and it is carried out at the initiative of the HC Department. HC Department will do the planning and suitable in-house trainers will be appointed to conduct the training. In-house trainers are not given a better evaluation during the annual performance appraisal even though they may conduct more training than others. In Company A, Off-JT is normally given to employees after promotion and is carried out three times a year, each for about two to three days. For sales, accounting and human resource staff, 'Business College' training is conducted for them to understand the mechanism of corporate accounting and make the best use of it for the business. 'Researcher's Training' helps researchers to acquire knowledge, technology and skills needed to conduct research and development effectively. Engineers undergo 'Production Engineer's Training' to learn the basic knowledge and skills that relate to manufacturing and equipment.

Accordingly, Company A works to promote HCD by establishing long-term capacity building programs such as 'Professional Capacity and Business Skill Building Program', 'Career and Life Development Support Program' and 'Self Development Support Program', which aim to focus on the voluntary efforts of each individual and provide capacity building opportunities according to each individual's career stage. The 'Professional Capacity and Business Skill Building Program', which helps employees build on the necessary competencies to perform their daily work, offers various kinds of training according to the individual's work type and career stage. Furthermore, the 'Self Development Support System' supports the independent efforts of individuals to increase their competency. The company provides a video library, overseas scholarships and incentives for taking up corresponding courses and acquiring certificates. There is no bond attached, as the company does not expect the employees to leave after receiving sponsorship from the company. In the case of Company B, there is a bond and employees who leave on completion of their studies have to pay a penalty, but they will not be asked to return the salary they had received.

Off-JT in Company A is also divided according to the seniority level (job category) of the employees. For example, new recruits are provided training to learn manners, English, IT knowledge, and matters relating to the company. Employees who have been with the company for some time will be provided training to learn the main duties of their job role. Those in higher management attend executive training to learn not only their role as an executive, but also the trend of business environment change and mission of the company. The company also supports employees who actively seek learning opportunities in order to improve their expertise in their field of work. The company has a scholarship fund for the improvement of technical specialty, and under this fund, employees who meet the selection criteria will be given an opportunity to study overseas and visit overseas research institutions. Awards are also given for outstanding research results. Knowledge obtained through Off-JT would be applied at the workplace for more effective work. Besides all the above training programs, Company A places great emphasis on OJT. The main components of OJT are the mentor-mentee system, job rotation and group training. Extensive OJT programs are available to help

employees get on with their work. On the average, employees are required to attend about 50 hours of training a year. These programs are designed on the assumption that employees will work up to the retirement age. As such, capacity building through OJT has programs that enhance ability progressively over a five-year period.

Training and development programs have not changed much over the years and changes are made to accommodate technological advancement. Some new technologies have been adopted in the delivery of training, but the company does not conduct any e-learning. However, there are videos for employees who are interested in self-learning. The company has set up a center especially for self-learning which can only be undertaken outside office hours. Similarly, there is no e-learning at Company B. However, the company is in the process of introducing e-learning. The company thinks that e-learning system would be a very effective method for global training, especially for sales and marketing personnel. At the moment, there is also no regional training in collaboration with the other subsidiaries in other countries. Both the MNCs however, do not have a corporate university though this trend continues to gain acceptance. Company A has its own training center and employees look forward to attending training there where accommodation is also provided. Trainers in this training center provide most of the training for the company. Generally, Company A provides more training for younger employees and some of the programs are also designed for global use. For example, training programs for quality control and ISO can be applied to other overseas subsidiaries as well. There are no quality control circles now as the company feels that it has achieved the targeted level of quality. Currently, the company maintains a quality control management system. Similarly, in Company B, more training is now designed for global use, especially in sales and marketing.

Though the learning organization concept is being adopted in Company B, there are no incentives to encourage its workers to embark on lifelong learning. The company does not have any incentives to motivate employees to acquire higher skills for carrying out difficult tasks. The training and development programs provided by the company are enough for the employees to get on with their jobs. Though the company has a quality management system managed by the Quality Assurance Department, there are no voluntarily quality control circles in the company. Like all other companies, the company worked towards attaining ISO, as it is important for its business. So far, the company has achieved ISO 9001 and ISO 56001. Generally, superiors do not feel intimidated of being superseded by imparting knowledge and skills to subordinates. The road to the managerial class is clear and everyone has an opportunity to be promoted to be managers. However, the career path of non-performers and female workers may be uncertain. The career paths of female employees were rather short in the earlier years as most of them quit after getting married. Though female workers continue working after marriage now, their career path is still lacking clarity. Besides, most female workers are either temporary or area workers where there is little training for them. Training delivery in the two MNCs is summarized in Table 3.

Table 3 omitted but would have been here

Currently, in both the MNCs, there is no measuring system on the return of investment in training. The cost of training programs are subsidized by the government and the companies can claim on a half yearly basis. For example, Company B asks for a reimbursement for external training from the Employment Insurance Scheme, which is a government insurance scheme. In this scheme, the company contributes 1.95 per cent of the payroll for the insurance. The scheme covers education payment and unemployment payment. A contribution of 0.35 per cent of the payroll is for education payment while the balance is for unemployment payment. For unemployment payment coverage, the company contributes 0.8 per cent and the employees contribute another 0.8 per cent. On retirement, employees are entitled to 90-360 days pay depending on the reason for turnover, age, and length of service. In the case of termination or bankruptcy, they are highly paid but for normal retirement it is about 90-150 days pay. Employees who lost their jobs could also claim under this insurance scheme. As for education payment, the company can claim for all training costs that involved external consultants and the personal cost of the employees. For justification of training, training costs are also

monitored more accurately to manage resources and demonstrate accountability. Though training and development budgets had remained the same over the years, training and development functions are converting to a profit center concept. The company has to pay the training center run by the company for courses conducted by their trainers. Though training and development functions are converting to a profit center concept in Company A, Company B does not practice this as there is no formal systematic training in the company. Training and development budgets in Company B are the same as before as 90 per cent of the training is on the job and carried out in-house. Table 4 outlines the training budgets of the two MNCs.

Table 4 omitted but would have been here

CONCLUSIONS

Based on the results, it can be concluded that HCM policies in Company A are more aligned with global trends compared to Company B though the disparity is not too great. Both the MNCs seemed to have adopted more of the global trends in HCD. In Company A, 62.5 per cent of its HCD policies are aligned with global trends while Company B has adopted about half of the policies. No single model in HCD policies could be observed in the MNCs. Company A does not outsource training at all while there is limited outsourcing of training in Company B. Unlike Company B, Company A does training needs analysis annually to identify competency gaps. HCD is also more systematic in Company A. Employees in Company B do not have equal opportunities for training and no evaluation of training is carried out. Limited job rotation is carried out in Company B and there is no mentor-mentee system. While Company A provides grants for employees to go for self-development and is adopting a profit center concept, it is not the case in Company B. In short, HCD practices in both the MNCs differ and in general, most of the companies in Japan are following either one of the systems.

REFERENCES

- Carayannis, E.G., & Jorge, J. 1998. Bridging government-university-industry technological learning disconnects: a comparative study of training and development policies and practices in the U.S., Japan, Germany, and France. *Technovation*, 18(6/7): 383-407.
- Hashimoto, M. 1990. *The Japanese labour market in a competitive perspective with the United States*. Kalamazoo, MI: Upjohn.
- Kishita, T. 2006. The HRM of Japanese firms in the days to come of global competition, *Research and Practice in Human Resource Management*, 14(1): 29-48.
- Lorrigan, J. 1995. Lifelong learning in Japan. *Journal of European Industrial Training*, 19(2): 8-14.
- Maurice, M. 1997. L'arrimage entre l'entreprise et le système d'éducation en matière de formation professionnelle: le cas de la France, de l'Allemagne et du Japon. In D.G. Tremblay (Ed.), *Formation et compétitivité économique: perspectives internationales*: 173-197. Sainte-Foy: Université du Québec, Éditions Saint-Martin.
- McCormik, K.S. 1991. Japanese engineers, lifetime employment and in-company training: Continuity and change in the management of engineering manpower resource. In P. Ryan (Ed.), *International comparisons of vocational education and training for intermediate skills*: 159-184. London: Falmer Press.
- Mueller, F. 1992. Designing flexible teamwork: Comparing German and Japanese approaches. *Employee Relations*, 14(1): 5-16.
- Pucik, V. 1984. Human capital management in large Japanese manufacturing firms. *Human Capital Management*, 23(3): 257-276.
- Rayburn, K. 1999. IT world view: Japan. http://articles.techrepublic.com.com/5100-10878_11-1029824.html Accessed 2 June 2006.

The remainder of the references and all of the tables cited in this paper are omitted due to space considerations. Interested parties are invited to contact the author for a complete copy of the paper.

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Risk reporting by UAE listed corporations: The influence of organizational culture

INTRODUCTION

The last few years have witnessed a considerable number of studies investigating risk reporting (Solomon et al., 2000; Cabedo and Tirado, 2004; Ahmed et al., 2004; Linsley and Shrivess, 2006; Abraham and Cox, 2007; Linsley and Lawrance, 2007; Hassan, 2009, 2011). Despite having these numerous risk reporting studies, no attention has been paid to investigate whether organizational culture influences risk reporting or otherwise. This paper addresses this research gap and investigates the effect of organizational culture on the level of risk reporting for a sample of UAE listed corporations. Another key aspect in the literature is that it mainly pays attention to the effect of national culture on accounting practices through testing Gray's (1988) and/or Hofstede's (1980) models of culture (Mir et al., 2009; Taskumis, 2007; Noravesh et al., 2007; Hwang et al., 2008; Jaggi and Low, 2000). Yet very few studies drew on the literature of organizational culture to consider its effects on accounting practices, particularly, level of risk reporting.

LITERATURE REVIEW

Hofstede (2001, p375) argued that "...Organizations function according to implicit models in the minds of their members, and these models are culturally determined". The importance of dominant organizational culture stems from being the glue that holds the organization together to achieve certain predetermined objectives (Hansen and Wernerfelt, 1989, Trice and Beyer, 1993, Denison, 1990, Cameron and Quinn, 1999). In the context of financial reporting, Gibbins et al. (1990) argue that firms' history, knowledge and predetermined norms contribute to the formation of a disclosure position whereby "...firms' traditions, taken for-granted ways of doing things, may establish how disclosure is managed". Disclosure position, Gibbins et al., (1990) argue, is defined as "a relatively stable preference for the way disclosure is managed".

In the context of risk reporting, several studies examined the stock price reaction to risk disclosure (Rajgopal, 1999; Linsmeier et al., 2002; Jorion, 2002; Wong, 2000; Uddin and Hassan 2011), while others investigated the relationships between corporations' characteristics and risk-related information published in the annual reports (e.g. Lajili, and Zéghal, 2005; Linsley and Shrivess, 2006; Lopes and Rodrigues, 2007; Abraham and Cox, 2007; Amran et al., 2009; and Hassan, 2009). Some scholars examined risk narrative disclosure (Deumes, 2008; Amran et al., 2009). This study extends on the risk reporting studies by investigating the impact of several dimensions of organizational culture on level of risk reporting.

Hypotheses development

In the context of this study organizational culture is defined as the "shared perceptions of organizational work practices within organizational units that may differ from other organizational units" (Van den Berg and Wilderom, 2004). Although several models of have used various dimensions of organizational culture (See Trice and Beyer, 1993, Beyer and Cameron, 1997; Yazici, 2007), this paper utilizes Cameron and Quinn (1999) model. Cameron and Quinn (1999) presented

four dominant organizational culture dimensions which include: Clan, Adhocracy, Market, and Hierarchy.

In Clan organizational culture, companies focus on internal climate, flexibility and concern for people. They are characterized by a sense of “we-ness” attitude, shared values and goals cohesion, teamwork, participation, and consensus (Cameron and Quinn, 1999). Hofstede (2001, p.380) suggested that Clans is close to the family type organization, which are characterized by high concentration of authority, less formalization of activities, and more tolerance for ambiguity in structure and procedures that can constrain information disclosure. Therefore, the paper hypothesizes that:

H₁: “There is a negative relationship between organizational culture of Clan and risk reporting”.

The Adhocracy organizational culture is characterized by a dynamic, entrepreneurial, creative, and risk taking work place (Cameron and Quinn, 1999). There are more emphasis on flexibility, innovation, aggressive strategies, initiative and system openness. Sejjaka (2004, p.7) argued that more specialized or functional companies should have high disclosure level as many employees are involved in the disclosure process, hence the paper hypothesizes that:

H₂: “There is a positive relationship between organizational culture of Adhocracy and risk reporting”.

An organizational Market culture focuses on transactions with external parties such as supplies, customers, and contractors, etc. (Cameron and Quinn, 1999). The long term concern is on competitive actions, achieving stretch goals, and leadership in the market place. These companies usually have decentralization of authority, and less formalization of activities (Hofstede, 2001, p.375-377). The former can encourage openness with information (Hofstede, 2001, p.108), while the latter can have an opposing effect. Therefore, the paper hypothesizes that:

H₃: “There is a relationship between the organizational culture of Market and risk reporting”.

The organizational culture of Hierarchy focuses on the internal climate and control. It is a well formalized and structured work place in order to control the expanding responsibilities (Cameron and Quinn, 1999). The long term concern is on stability, predictability, efficiency, and smooth-running operations. Sejjaka (2004, p.7) argued that tight control means that the organization is highly structured and therefore is likely to disclose more information than loose control structures. Therefore, the paper hypothesizes that:

H₄: “There is a positive relationship between organizational culture of Hierarchy and corporate risk reporting.”

METHODOLOGY AND VARIABLES MEASUREMENT

For the purpose of this study financial annual reports are collected and analyzed for 41 listed companies in the Dubai Financial Market (DFM) and the Abu Dhabi Stock Exchange (ADSE) for the year 2005. The paper depends on a quantitative technique to operationalize organizational culture dimensions using secondary data which can provide high level of objectivity and stimulate more systematic comparative studies (Lim, 1995). Risk reporting (*CRD*) is defined as the “financial statements incorporation of general, specific and potential circumstances that may cause corporations assets and/or liabilities value fluctuates, decreases or otherwise” (Hassan, 2009). It is measured using an index derived from the extent of risk reporting following the methodology in Hassan (2009). Finally, several exogenous control variables such as firm size (Alssaed, 2006, Lopes and Rodrigues, 2007), industry type (Cooke, 1992, Lopes and Rodrigues, 2007), debt to equity ratio (Jaggi and Low, 2000) are incorporated in the regression model based. The paper uses the regression analysis model

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(OLS) to investigate the relationship between corporate risk reporting index (endogenous variable) and several exogenous variables, the full estimation model is as follows:

$$CRD = \alpha + \beta_1 CL + \beta_2 \ln AD + \beta_3 ROI + \beta_4 TC + \beta_5 D/E + \beta_6 IND + \beta_7 \ln ASSET + \varepsilon.$$

Where:

CRD= Risk Reporting Index

CL= Total employees compensation to operating expenses

AD= Natural logarithm of fluctuations in operating income

ROI=Return on Investment

TC=Total transaction costs to net income (wages of employees who provide transaction service within the company)

D/E=Debt to Equity Ratio

IND=Industry type (Dummy variable: 1 for financial, 0 for nonfinancial)

Size = Natural logarithm of Total Assets

EMPIRICAL RESULTS

Table 1 presents the descriptive statistics of the paper sample of the 41 corporations while table 2 shows the correction between the paper's regression model variables.

Table 1: Descriptive Statistics for study variables

	N	Minimu		Mean	S.D.
		m	Maximum		
Risk Reporting (<i>CRD</i>)	41	8.00	34.0	20.43	6.38
Clan (<i>CL</i>)	41	1.98	50.51	20.03	13.54
Adhocracy (<i>AD</i>)	41	1.79	7.56	4.42	1.24
Return on Investment (<i>ROI</i>)	41	-17.00	47.00	20.13	11.79
Transaction Costs (<i>TC</i>)	41	-61.62	169.39	54.62	40.93
Debt to Equity ratio (<i>D/E</i>)	41	.06	10.42	2.08	2.57
Industry type (<i>IND</i>)	41	.00	1.00	.585	.498
Firm Size	41	6.61	11.36	9.34	1.04

Table 3 presents the multiple regression model results which show that the organizational cultures of *CL*, *AD*, and *ROI* have insignificant standardized beta coefficients of (-.004), (.200), and (.167) respectively (Table 3). This provides no support for the study hypotheses (*H1*), (*H2*), and (*H3*) despite that their signs are in the right directions. By contrast, the estimation model shows a significant positive relationship between the organizational culture of Hierarchy (*TC*) and corporate risk reporting (*CRD*) with a standardized beta coefficient of (.363) at 10% level, which provide support to the study hypothesis (*H4*).

Table 2: Cross Correlation Matrix for study variables using Pearson correlation coefficients.

	<i>CRD</i>	<i>CL</i>	<i>AD</i>	<i>ROA</i>	<i>ROE</i>	<i>ROI</i>	<i>TC</i>	<i>D/A</i>	<i>D/E</i>	<i>IND</i>	<i>Size</i>
<i>CRD</i>	1										
<i>CL</i>	.166 (.301)	1									
<i>AD</i>	.155 (.335)	.111 (.489)	1								
<i>ROA</i>	-.191 (.231)	-.037 (.816)	.050 (.754)	1							
<i>ROE</i>	.144 (.369)	.091 (.572)	-.067 (.675)	.690** (.000)	1						
<i>ROI</i>	.214 (.178)	-.038 (.813)	-.166 (.299)	.576** (.000)	.797** (.000)	1					
<i>TC</i>	.564** (.000)	.216 (.175)	-.070 (.664)	-.504** (.001)	-.141 (.381)	.088 (.584)	1				
<i>D/A</i>	.501** (.001)	.206 (.195)	.134 (.403)	-.626** (.000)	-.029 (.857)	.057 (.725)	.647** (.000)	1			
<i>D/E</i>	.537** (.000)	.212 (.183)	-.001 (.996)	-.515** (.001)	.107 (.506)	.121 (.450)	.631** (.000)	.817** (.000)	1		
<i>IND</i>	.443** (.004)	.376* (.015)	.119 (.459)	-.224 (.160)	.164 (.306)	.191 (.230)	.556** (.000)	.551** (.000)	.423** (.006)	1	
<i>Size</i>	.252 (.112)	-.038 (.112)	-.023 (.885)	-.084 (.602)	.084 (.603)	.068 (.675)	.183 (.251)	.226 (.155)	.391* (.012)	.108 (.501)	1

P-values are in brackets. (**) and (*) indicate correlation is significant at the 1% and 5% confidence levels (2-tailed) respectively.

Table 3: Multiple regression analysis (OLS).

	<i>CRD</i>					
	Unstandardi zed	<i>S.E.</i>	Standardized (Beta)	<i>t</i>	Sig.	VIF
<i>Constant</i>	4.68	8.95		.522	.605	
<i>CL</i>	-.002	.067	-.004	-.028	.978	1.20
<i>AD</i>	1.02	.691	.200	1.47	.149	1.09
<i>ROI</i>	.090	.074	.167	1.22	.228	1.10
<i>TC</i>	.057	.029	.363	1.94	.060*	2.08
<i>D/E</i>	.546	.450	.220	1.21	.234	1.97
<i>IND</i>	1.08	2.19	.085	.496	.623	1.74
<i>Size</i>	.508	.867	.083	.587	.561	1.20
F-statistic			3.82***			
Durbin-Watson			1.81			
R ²			.448			
Adjusted R ²			.331			
N			41			

Table 3 also shows that the overall model has a significant *F* statistic of (3.82) at 1% level; and an Adjusted *R*² of (.331). The estimation model shows no significant sign of multicollinearity above 5 degrees using the Variance Inflation Factor (VIF).. This implies that corporations with the organizational culture of Hierarchy are more likely to disseminate risk information in their annual financial report. The importance of the organizational culture of Hierarchy stems from the need to control high transaction costs especially in the banking sector, which is heavily regulated by the United Arab Emirates central bank, and constitutes a large proportion of the sample size. This highlights the important role of local policy makers and regulators to enforce more disclosure requirements for the benefit of the whole economy.

CONCLUSIONS

The paper empirically tests the relationship between dimensions of organizational culture and risk reporting. The findings indicate that the organizational culture of Hierarchy has a significant effect on the UAE companies' risk disclosure. Since the culture of hierarchy focuses on the internal control, and formalized work procedures in order to control and organize work, we conclude that these UAE companies are undergoing a formal (De-jure) accounting practices harmonization (Ali, 2005). In contrast to Hassan (2009), the results show that industry type, whether financial or non-financial, is an unimportant factor affecting level of risk disclosure. One possible explanation behind this result is that industry type has been used in this paper as a controlling variable in a regression model that regress cultural dimensions against level of risk disclosure, yet Hassan (2009) relies on industry type as a main factor in explaining the variation of risk reporting across different industries.

REFERENCES

- Abraham, S. and Cox, P., 2007, Analyzing The Determinants Of Narrative Risk Information In UK FTSE 100 Annual Reports, *The British Accounting Review*, Vol. 39, pp. 227-248
- Ahmed, A. S., Beatty, A. and Bettinghus, B., 2004, Evidence On The Efficiency Of Interest Rate Risk Disclosures By Commercial Banks, *The International Journal of Accounting*, Vol.39, pp.223-251
- Ali, M.J., 2005, A Synthesis Of Empirical Research On International Accounting Harmonization And Compliance With International Financial Reporting Standards, *Journal of Accounting Literature*, Vol. 24, pp.1-52

- Al-Razeen, A. and Karbhari, Y., 2004, Interaction between Compulsory And Voluntary Disclosure In Saudi Arabian Corporate Annual Reports, *Managerial Auditing Journal*, Vol. 19, No.3, pp. 351-360.
- Alsaeed, K., 2006, The Association Between Firm-Specific Characteristics and Disclosure: The Vase of Saudi Arabia”, *Managerial Auditing Journal*, Vol. 21, No. 5, pp.476-496.
- Amran, A., Bin, A.R., Hassan, B.M., 2009, Risk Reporting: An Exploratory Study On Risk Management Disclosure In Malaysian Annual Reports, *Managerial Auditing Journal*, Vol.24, No. 1, pp.39-57
- Beretta, S. and Bozzolan, S., 2004, A Framework For The Analysis Of Firm Risk Communication, *The International Journal of Accounting*, Vol.39, pp. 265-288.
- Beyer, J., and Cameron, K., 1997, *Enhancing Organizational Performance*, Washington, DC: National Academy Press
- Cabedo, J. D. and Tirado, J. M., 2004, The Disclosure Of Risk In Financial Statements, *Accounting Forum*, Vol.28, pp. 181-200
- Cameron, K., and Ettington, D.R., 1988, *The conceptual foundations of organizational Culture*, Higher Education: Handbook of Theory and Research, pp. 356-396, New York: Agathon
- Cameron, K., and Freeman, S.J., 1991, Cultural Congruence, Strength, and Type: Relationships to Effectiveness, In Woodman, R. W. and Pasmore, W.A. (Eds), *Research In Organizational Change And Development*, Vol. 5, Greenwich, CT: JAI Press, pp.23-58
- Cameron, K., and Quinn, R., 1999, *Diagnosing And Changing Organizational Culture*, Prentice Hall
- Cooke, T.E., 1992, The Impact Of Size, Stock Market Listing And Industry Type On Disclosure In The Annual Reports Of Japanese Listed Corporations, *Accounting And Business Research*, Vol. 22 (87), pp.229-237
- Denison, D.R., 1990, *Corporate Culture And Organizational Effectiveness*, New York: Wiley
- Deumes, R., 2008, Corporate Risk Reporting: A Content Analysis Of Narrative Risk Disclosures In Prospectuses, *Journal of Business Communication*, Vol. 45, No. 2, pp.120-157
- Gibbins, M., Richardson, A., and Waterhouse, J., 1990, The Management Of Corporate Disclosure Opportunism, Ritualism, Policies And Process, *Journal Of Accounting Research*, Vol. 28 (1), Spring
- Gray, S.J., 1988, Towards a Theory Of Cultural Influence On The Development Of Accounting Systems Internationally, *Abacus*, Vol. 24 (1), pp.1-15
- Hansen, G.S., and Wernerfelt, B., 1989, Determinants Of Firm Performance: The Relative Importance Of Economic And Organizational Factors, *Strategic Management Journal*, Vol. 10, pp. 399-411
- Hassan, M.K., 2009, UAE Corporations-Specific Characteristics And Level Of Risk Disclosure, *Managerial Auditing Journal*, Vol. 24, No. 7, pp.668-687
- Hassan, M.K., 2011, Risk Regulations And Disclosure In The United Arab Emirates: An Institutional Theory Analysis, *Corporate Ownership and Control Journal*, Vol.8, No. 4, pp. 514-526.
- Hofstede, G., 1980, *Culture's Consequences: International Differences In Work Related Values*, Beverly Hills, CA, Sage Publications
- Hofstede, G., 2001, *Cultures Consequences*, Thousand Oaks, California: Sage Publications
- Hofstede, G., Neuijen, B., Ohayv, D.D., and Sanders, G., 1990, Measuring Organizational Cultures: A Qualitative and Quantitative Study Across Twenty Cases, *Administrative Science Quarterly*, Vol. 35, pp. 286-316
- Hwang, D., Staley, B., Chen, Y. and Lan, J., 2008, Confucian Culture And Whistle-Blowing By Professional Accountants: And Explanatory Study, *Managerial Auditing Journal*, Vol. 23, No. 5, pp. 504-526
- Iatridis, G., 2008, Accounting Disclosure And Firms' Financial Attributes: Evidence From The UK Stock Market, *International Review of Financial Analysis*, Article in Press
- Jaggi, B. and Low, P., 2000, The Impact Of Culture, Market Forces And Legal Systems On Financial Disclosure, *The International Journal of Accounting*, Vol. 35, No. 4, pp. 495-519
- Johnson, G., 1988, Rethinking Incrementalism, *Strategic Management Journal*, Vol. 9, pp.75-91
- Jorion, P., 2002, How Informative Are Value At Risk Disclosures?, *The Accounting Review*, October, Vol.77, No.4, pp.911-931

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The influence of organizational culture*

- Lajili, K., and Zéghal, D., 2005, A Content Analysis Of Risk Management Disclosures In Canadian Annual Reports, *Canadian Journal of Administrative Sciences*, Vol.22, No.2, pp.125- 142
- Lim, B., 1995, Examining The Organizational Culture And Organizational Performance Link, *Journal Of Leadership And Organizational Leadership*, Vol. 16, No. 5, pp.16-21
- Linsley, P. M. and Lawrance, M. J., 2007, Risk Reporting By Largest UK Companies: Readability And Lack Of Obfuscation, *Accounting, Auditing and Accountability Journal*, Vol. 20, No. 4, pp. 620-627
- Linsley, P. M. and Shrivies, P. J., 2006, Risk reporting: A Study Of Risk Disclosure In The Annual Reports Of UK Companies, *The British Accounting Review*, Vol.38, No.1, pp.387-404
- Linsmeier, T. J., Thirnton, D. B., Venkatachalam, M. and Welker, M., 2002, The Effect Of Mandated Risk Disclosure On Trading Volume Sensitivity To Interest Rate, Exchange Rate And Commodity Price Movements, *The Accounting Review*, Vol.77, No.2, pp.343-277
- Lopes, P.T., and Rodrigues, L.L., 2007, Accounting For Financial Instruments: An Analysis Of The Determinants Of Disclosure In The Portuguese Stock Exchange, *The International Journal Of Accounting*, Vol. 42, pp. 25-56
- Mir, M., Chatterjee, B. and Rahman, A.b., 2009, Culture And Corporate Voluntary Reporting: A Comparative Exploration Of Chairperson's Report In India And New Zealand, *Managerial Auditing Journal*, Vol. 24, No. 7, pp. 639-667
- Ouchi, W.G., 1980, Markets, Bureaucracies, And Clans, *Administrative Science Quarterly*, Vol. 25, pp. 129-141
- Rajgopal, S., 1999, Early Evidence On The Informative-Ness Of The SEC's Market Risk Disclosures: The Case Of Commodity Price Risk Exposure Of Oil And Gas Producers, *The Accounting Review*, July, pp.251-280
- Scott, T., Mannion, R., Davies, H., and Marshall, M., 2003, The Quantitative Measurement Of Organizational Culture In Health Care: A Review Of The Available Instruments, *Health Services Research*, Vol. 38, Issue 3, pp. 923-945
- Sejjaaka S., 2004, A Process Based Model For Corporate Mandatory Disclosure, working paper, Makerere University Business School, Uganda
- Solomon, J., Solomon, A., Norton, S. D. and Joseph, N. L., 2000, A Conceptual Framework For Corporate Risk Disclosure Emerging From Corporate Governance Reform, *The British Accounting Review*, Vol.32, No.4, December, pp.337-478
- Taskumis, G.T., 2007, The Influence Of Culture On Accountants' Application Of Financial Reporting Rules, *Abacus*, Vol. 43, Issue.1, pp.27-48
- Trice and Beyer, 1993, *The cultures of work organizations*, Prentice Hall, Englewood Cliffs, N.J.
- Uddin, MD. and Hassan, M.K., 2011, Corporate Risk Information In The Annual Reports And Stock Price Behavior In The UAE, *Academy of Accounting and Financial Studies Journal*, Accepted, Forthcoming
- Van den Berg, P.T., and Wilderom, C.P.M., 2004, Defining, Measuring, And Comparing Organizational Cultures, *Applied Psychology: An International Review*, Vol. 53 (4), pp. 570-582
- Wong, M., 2000, The Association between SFAS No. 119 Derivatives Disclosures and Foreign Exchange Risk Exposure Of Manufacturing Firms, *Journal of Accounting Research*, Autumn, pp.387-418

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An Empirical Investigation of the Impact of Information Technology on the Decision Support Role of Management Accountants: A UAE Perspective

INTRODUCTION

The role of management accounting in business organizations has recently been increasingly questioned, particularly regarding keeping pace with the constantly and rapidly changing business environment. The revolution in information technology (IT) has significantly changed the nature of business (Elliot, 1992), and globalization and dynamic markets have put more competitive pressures on business organizations and increased the need for more relevant strategic information for management decisions and actions.

The recent developments in information and communication technologies (ICT), including the internet and related technologies such as e-commerce, web invoicing, internet reporting and data warehousing, have led to tremendous quantities and constant flow of data and information available for analysis and perusal (Granlund & Mouritsen, 2003). The growing level of global competition leads to the adoption of such technological evolution, which creates the need to adopt complementary administrative innovations (Baines & Langfield-Smith, 2003; Abdel-Kader and Luther, 2008; Ong And and Heng The, 2008; Yi Fei and Isa, 2010).

The purpose of this study is to investigate the effect of IT-related organizational changes on the management accounting function and to contribute to the current literature about the extent to which IT affects the ability to solve accounting tasks in the United Arab Emirates (UAE), a developing country that has, like most developing countries, been affected by the forces of globalization, including information and communication technologies, global competitive environments, and dynamic markets. These forces are putting increasing pressures on business organizations and their managers in the UAE to constantly adapt to and deal with the changes engendered by these forces. In particular, the UAE management accounting function is subject to the influence of these changes, and its role of supporting managerial decision making in such environments is increasingly questioned. Since very little has been studied about the impact of information technology on the decision support role of management accountants in developing countries, the results of this research will contribute to the current knowledge by providing insight into the current profile of accounting information and computerized Accounting Information System (AIS) usage by UAE firms to improve their decision making process. The paper is organized as follows. Section two presents a background and research questions. Section three discusses the research methodology. Section four presents the empirical results and analysis. Section five includes discussion and implications, followed by section six that includes the research conclusion, limitations, and directions for future research

BACKGROUND AND RESEARCH QUESTIONS

The job of management accountants is potentially subject to two related demands: on the one hand, globalization, information overload, and the increasingly complex and competitive business environment have placed significant pressure on the management accountant to ratchet up his role to provide the critical information needed for managerial decisions to cope with these complexities. On the other hand, information technology has the potential to ease the job of the management accountant by providing the tools and capabilities needed to amass, analyze, and provide the information needed for decision making (Alves, 2010). Moreover, information technology facilitates communication, information distribution, and intraorganizational coordination (McChesneu III, 2000).

There have been many calls over the last decade for the management accountant to step up to the challenge, step out of the traditional role of information compiler, and take on the more effective roles of interpreter, adviser, and business partners to business managers (Harrison 1993). Ittner and Larcker, (2001) argued that the traditional performance measurements such as budgetary control and the purely financial indicators are insufficient in today's economic environment, where advancement in information technology and global competitive pressures are forcing companies to review their performance measurement systems to align with the new circumstances.

Foot (2006), O' Mahony and Doran (2008), and Yi Fei and Isa (2010) argued that management accountants have to respond to the new environment challenges by broadening the nature of their roles and become strategic managers to survive and prosper. Cooper (1996b) suggests that the survival of management accountants requires that they develop their skills in the area of system design and implementation, change management, and strategy formulation.

Based on the above arguments, researchers point out to the dire warnings of losing relevance if management accountants fail to add value to the organizations for which they work (Harrison 1993; & Scapense, Burns, Baldvinsdottir, and Ezzamel, 2003). For example, Scapense et al. (2003) suggest that management accountants "...must progress beyond 'bean counter', 'corporate cop' and 'financial historian' to become instead a 'valued business partner' with greater strategic and managerial decision making responsibilities.

To determine the extent to which management accountants in the UAE are involved in decision support and problem solving, the proportion of management accountants' time devoted to scorekeeping and decision support (as defined by King, Lee, Piper, and Whittaker, (1990), and applied by Beaman and Richardson (2007)) can be measured. The current research questions replicate those developed and used by Beaman and Richardson (2007, p. 62) as the following:

What proportion of management accountants' time is being devoted to scorekeeping?

And what proportion of their time is used for decision support to managers?

Do management accountants in the UAE perceive their role will change in the future as a result of IT systems?

Has the introduction of IT enabled management accountants to provide more focused information and/or improved the level of decision support provided to management?

What are the most critical work activities practiced by management accountants in the UAE?

What types of IT skills do management accountants believe they need in order to provide valuable decision support?

RESEARCH METHODOLOGY

Research Instrument

The study collected views from management accountants working in the UAE. The questionnaire, structured along fifty-nine questions divided into six parts. It was pr-tested on fifteen students matriculating during the fall of 2010-2011 and their feedback was used to refine the questions and

ensure that they are clear and without ambiguity. The questionnaire used five-point Likert scale questions. The first part consisted of eight questions covering the organization and the respondents' background to explore mediating variables which might have an impact on the respondents' views and experiences. The questions covered company size (number of employees), business type, stock exchange status, gender, age, qualification, years of past-qualification experience and years with present employers.

The second part contained the respondent's time allocation on the following type of activities: decision support, processing of routine transactions, non-standard analysis and managing & enhancing computerized AIS. The third part included seven questions (Q1-Q7) to measure the respondents' perceptions towards the impact of IT on the changing role of traditional management accounting. Part four included twelve questions (Q8- Q19) to measure the effect of IT on the level of decision support provided to management. Furthermore, the fifth part included eighteen questions (Q20 – Q37) to ascertain the most critical work activity practiced by UAE management accountants. Finally, the sixth Part included ten questions (Q38-Q47) to determine the types of IT skills management accountants believe they need in order to provide valuable decision support.

Research Sample and Technique

The investigation was pursued through a survey to collect views from management accountants working in the UAE. The questionnaire was distributed by senior accounting students during the fall of 2010. The questionnaire (in both Arabic & English Languages) was addressed to the management accountants of different companies working in the UAE.

Originally, 300 questionnaires were distributed, 261 (87%) questionnaires were collected, only 150 (50%) questionnaires from respondents comprising management accountants, financial managers, financial analyst and internal auditors employed in industry, commerce or government and who had indicated that their primary job function was management accountants. As a consequence, those working as financial accountants, external auditors were excluded. However, due to incomplete 12 questionnaires, a total of 138 useable questionnaires were considered with a response rate of 46%.

For the purpose of data analysis from the survey, this study used descriptive analysis technique, frequencies, descriptive analysis, non-parametric test (Kruskal-Wallis) analysis, as well as a test for differences in responses.

Characteristics of Respondents

An analysis of the responses by organization background, indicate that companies included in this research represented a variety of industry types, with some companies diversified into numerous industries. Large companies (those with greater than one thousand employee) were represented as well as medium (greater than one hundred and less than one thousand employee) and small companies (less than a hundred employees). Most respondents in the sample (28%) were from contracting and oil companies (others) and the majorities are from unlisted companies (75%).

The results also indicate that (82.6%) of the respondents are male and the vast majority of respondents had the bachelor degree as a minimum qualification (87%). Furthermore, they show that (79%) of them have more than 5 years of post-qualification experience and only (21%) have been with the present employer for less than 5 years. However, the profile of the respondents suggests that the survey of the respondents represents a full spread over all sizes of companies, business type, years with present employer and years of experience. Therefore, the finding below should be seen as unbiased and reliable.

EMPIRICAL RESULTS AND ANALYSIS

Reliability Analysis

Cronbach's alpha test was used to measure the reliability and sensitivity of the items comprising each construct. The results indicate scores of 0.62, 0.80, 0.82 and 0.86 for the constructs of Accountants' perception towards the effect of IT systems on the future of management accountants, the effect of the introduction of IT on the level of decision support provided to management in the UAE, the most critical work activities practiced by management accountants in the UAE and types of IT skills needed by management accountants in the UAE to improve decision support. These scores are all greater than Nunnally's (1978) recommended threshold of 0.70 except that for the effect of IT systems on the future of management accountants, where it is 0.62, to some extent acceptable for generalizing the results of this study.

Proportion of time devoted to decision support, problem solving, and scorekeeping

To determine the extent to which management accountants in the UAE are involved in decision support and problem solving, management accountants were asked to specify the allocation of their job time on the following four types of activities: decision support, non-standard analysis, processing of routine transactions, and managing & enhancing computerized AIS.

The results indicate that on average, UAE management accountants devoted (39%) of their time to decision support and problem solving, (18%) to non-standards analysis, (28%) to processing of routine transactions and (15%) to managing and enhancing computerized AIS. The results obtained here confirm Beaman & Richardson's (2007) conclusion that management accountants spend on average only a third of their time providing decision support information to managers, and confirm the findings of King et al. (1990, p.66) that many managers are going elsewhere, rather than to the management accountant, for the information they need for decision making.

The effect of IT systems on the future of management accountants

The current research attempts to investigate the effect of the IT systems within the context of the new business environment on the role of management accounting and the need for change. In order to do that, the questionnaire used in this study was designed based on a study done by Xydias-Lobo, Tilt, and Forsaith, (2004). Using a scale of 1 (strongly disagree) to 5 (strongly agree), the respondents were asked to indicate their views on seven assertions concerning UAE management accountants' perception towards the effect of IT on their roles. The results are reported in Table (1) which shows the mean response, the SD of opinions associated with each assertion, the strength of opinion associated with each assertion with the two strongest points, and the t-value with its significance.

Table (1) indicates that the respondents strongly agree that management accounting is currently in a state of change (Q5, average greater than 3.00) with 66.7% recording a rating of 3 or 4 (agree or strongly agree, respectively). They also have a strong belief that the role of management accountants has been changed significantly over the last 5 years (Q6, average greater than 3.00) with 81.2% recording a rating of 3 or 4, and that it will continue to change over the coming 5 years (Q7, average greater than 3.00) with 75.9% recording a rating of 3 or 4. At the same time, Table (1) confirms that UAE management accountants currently have

more input into organizational decisions than they did in the past, (Q2 & Q3, averages greater than 3.00).

On the other hand, in spite of the fact that respondents are not sure about the negative effect of automation on the need to management accountants (Q4), Table (1) indicates that they do not agree with the adequacy of traditional management accounting for the 21st century (Q1, average less than 3.00) with 38.4% recording a rating of 1 or 2 (disagree or strongly disagree, respectively), compared with 32.6% recording a rating of 3 or 4 (agree or strongly agree, respectively).

Table (1) also shows that the overall responses on the respondents' perception towards management accounting change as reflected on the 6-item measure revealed that the respondents positively agreed on the fact that the role of management accountants has been changed (average = 3.77).

Table 1: UAE Management Accountants' Perception towards the Effect of IT on their Future Role

		n	Mean	SD	Percentage Rating 1 or 2	Percentage Rating 4 or 5	t-value	Sig.
1	Traditional accounting measures remain adequate for management accounting in the twenty first century	138	2.89	1.33	38.4%	32.6%	-0.958	0.340
2	Management accountants currently have more input into organizational decisions than they did in the past	138	4.24	0.956	6.5%	85.5%	15.233	0.000
3	I currently have more input into organizational decisions than I did in the past.	137	4.11	0.960	9.5%	82.5%	13.53	0.000
4	The automation of accounting processes will reduce the need for management accountants	138	3.07	1.402	37.75%	42.8%	.607	0.545
5	Management Accounting is currently in a state of change	138	3.83	0.940	33.3%	66.7%	10.409	0.000
6	The role of management accountants has been changed significantly over the last 5 years	138	4.123	0.875	5.8%	81.2%	15.078	0.000
7	Management accounting will change significantly over the next 5 years	137	4.11	0.937	5.6%	75.9%	13.862	0.000
	Average		3.77	0.595			15.02	0.000

The effect of IT on the level of decision support provided to management

To determine the effect of the introduction of IT on the level of decision support provided to management in the UAE, respondents were asked to indicate their views on twelve assertions using a scale of 1 (strongly disagree) to 5 (strongly agree) about the extent to which UAE management accountants' are involved in decision support and problem solving.

Table 2: The effect of IT on the level of decision support provided to management in UAE

		n	Mean	SD	Percentage Rating 1 or 2	Percentage Rating 4 or 5	t-value	Sig.
8	Globalization of business practices/trade	133	3.89	0.982	7.5%	67.6%	10.42	0.000
9	Introduction of e-commerce	138	4.05	0.931	8.7%	76.9%	13.36	0.000
10	Advances in information technology	137	4.36	0.735	1.5%	89.8%	21.62	0.000

Impact of Information Technology on the Decision Support Role of Management Accountants: A UAE Perspective

		n	Mean	SD	Percentage Rating 1 or 2	Percentage Rating 4 or 5	t-value	Sig.
11	Advances in production technology	137	4.08	0.948	7.3%	75.9%	13.34	0.000
12	Increasing competition	136	4.206	0.952	5.15	80.2%	14.78	0.000
13	Changing management and organizational structure (eg downsizing, flatter organizations)	136	3.69	1.06	11.8%	61.1%	7.62	0.000
14	Changing performance measures (eg benchmarking, KPIs, etc)	137	3.89	0.942	7.3%	71%	11.16	0.000
15	Greater emphasis on customer relationships	137	4.00	1.06	9.5%	73.7%	10.99	0.000
16	Greater emphasis on supplier relationships	138	4.02	0.978	9.4%	76.8%	12.28	0.000
17	Higher quality requirement for product/services	138	3.98	1.06	10.1%	73.9%	10.806	0.000
18	Outsourcing of organizational functions	137	3.62	1.95	21.2%	60.5%	6.08	0.000
19	Team working	137	4.46	0.823	3.6%	88.3%	20.77	0.000
	Average		3.97	0.595			19.39	0.000

Table (2) indicates that management accountants in the UAE strongly agree on the positive effect of IT and other environmental forces such as globalization, customer and supplier relationships on the level of decision support to management. To test whether there is a significant difference between the neutral value of 3 and the average of the items listed above, the one sample t-test indicates that the mean value of the effect of IT on the level of management support is significantly different from 3 ($t = 19.39, p = .000$). The mean for all responses varies between 4.46 and 3.62 with a range of .84. The overall average response 3.97 also reveals that the respondents positively agreed on the effect of those variables on management accounting change in the UAE.

The most critical work activities practiced by management accountants

In order to have a clear idea about management accountants' activities, a question using a scale of 0 (not applied), 1 (strongly disagree) to 5 (strongly agree), was used to ask respondents to indicate their views on eighteen assertions concerning UAE management accountants different activities. The results which are reported in Table (3) show the mean response, the SD of opinions associated with each assertion, the strength of opinion associated with each assertion with the two strongest points, and the t-value with its significance.

Table 3: UAE Management Accountants Main Work Activities

		n	Mean	SD	Not Applied	Percentage Rating 1 or 2	Percentage Rating 4 or 5	t-value	Sig.
20	Budgeting for planning and control	129	4.34	4.70	6.2%	4.7%	76%	3.239	0.002
21	Variance Analysis	133	3.83	1.24	3.8%	6.8%	69.9%	7.691	0.000
22	Performance evaluation	138	3.86	1.32	5.8%	4.4%	73.2%	7.635	0.000
23	Return on investment measurement	135	3.49	1.63	11.1%	11.9%	62.2%	3.486	0.001
24	Customer satisfaction measurement	136	3.169	1.72	14.7	13.2%	50%	1.150	0.252
25	Shareholder value analysis	137	2.94	1.82	19.7%	13.15	52.6%	-0.376	0.708
26	The use of accounting systems and financial reporting	136	4.27	.875	2.2%	6.6%	91.2%	19.021	0.000
27	Short term budgeting process	137	3.6	1.54	8.8%	7.8%	64.2%	4.546	0.000
28	External financing	137	2.82	1.72	19.7%	13.8%	46%	-1.239	0.218
29	Internal Audit	137	3.57	1.64	9.5%	15.3%	64.3%	4.053	0.000
30	Using cost accounting systems	138	3.46	1.62	10.1%	15.2%	58.7%	3.359	0.001
31	Financial Analysis	137	3.77	1.4	6.6%	7.3%	69.3%	6.476	0.000
32	Preparing reports for a government agency (e.g. labor statistics)	137	3.04	1.83	18.2%	12.4%	50.4%	0.279	0.780
33	Providing specialized reports (e.g. about growth possibilities) to stockholders	133	3.02	1.75	17.3%	12.8%	48.9%	0.099	0.921
34	Providing other non-standard reports for general use	135	3.30	1.45	6.7%	20%	51.8%	2.430	.016

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		n	Mean	SD	Not Applied	Percentage Rating 1 or 2	Percentage Rating 4 or 5	t-value	Sig.
35	Analyzing and designing computerized accounting information systems	137	3.175	1.73	14.6%	13.9%	55.5%	1.187	0.237
36	Trouble-shooting, revising, and enhancing existing systems	135	3.59	1.51	8.1%	11.1%	65.2%	4.567	0.000
37	Managing and supervising accounting information systems	138	3.56	1.55	8%	13.72%	68.1%	4.236	0.000
	Average		3.44	0.972				4.91	0.000

Table (3) indicates that respondents perceived budgeting for planning and control as the most critical work activity practiced by management accountants in the UAE (Q20), average greater than 3.00), with 76% of them recording a rating of 4 or 5 (significant at 0.05 level, $t = 3.24, p = .002$). At the same time, the respondents perceived the use of accounting systems and financial reporting (Q26) as the second most critical activities, while external financing and shareholder value analysis (Q28) were perceived as the least critical work activities (average less than 3.00) with 19.7% of the respondents recording not applied for both of them. The results here confirm the adoption of traditional management accounting by management accountants in the UAE.

Types of IT skills needed by management accountants in the UAE to improve decision support

Taking advantage of IT to fulfill their expanding roles requires management accountants to have relevant technical skills and competent IT knowledge (Beaman & Richardson, 2007). Ahmadi and Salami (2010) argued that the application of some software is very important for business development.

Table (4) shows evidence that IT tools are perceived highly needed by UAE management accountants to make significant improvements in their role for decision support (average response = 4, $t = 14.16, p = .000$). Table (4) also indicates that UAE management accountants perceived Spreadsheets, Security & Control of Sensitive Data, in addition to ERP systems are the most important IT skills needed by them while, Data Mining Software was perceived to be less important IT skills needed.

Table 4: IT skills needed for decision support

		n	Mean	SD	Percentage Rating 1 or 2	Percentage Rating 4 or 5	t-value	Sig.
38	Spreadsheets	138	4.36	0.911	5.1%	84.7%	17.481	0.000
39	Executive Information Systems/Decision support systems	136	4.15	0.978	7.4%	82.3%	13.681	0.000
40	Security & control of sensitive data	137	4.21	0.973	6.6%	81%	14.570	0.000
41	Database design	136	4.04	1.14	10.3%	73.5%	10.625	0.000
42	ERP systems (e.g. SAP, Oracle, Business Suite)	136	4.19	0.901	5.1%	81.6%	15.318	0.000
43	Database management software/Data warehousing	136	4.00	1.04	9.6%	74.2%	11.214	0.000
44	Data mining software	135	3.61	1.11	14.8%	56%	6.458	0.000
45	Business intelligence (BI)	12	3.86	1.16	12.7%	66.4%	8.580	0.000
46	Web-based application	135	3.75	1.16	13.2%	66.2%	7.543	0.000
47	Emerging Technologies (please specify.....)	108	3.8	1.21	13%	63.9%	6.864	0.000
	Average		4.00	0.723			14.16	0.000

The Influence of Respondents' Demographic Background

There are good reasons to suggest that a number of organizational variables such as company size, business type, stock exchange listing status, in addition to the number of the respondents' background such as sex, age, qualification, years of past qualification experience and years with present employers, may have a significant effect on the respondents' perceptions towards the impact of IT on the management accountants' time allocation, the future management accountants, level of decision support provided to management accountants, main work activities by management accountants, and IT skills needed for decision support in the UAE. The null hypothesis is that demographic variables have no effect on the beliefs of the respondents. The non-parametric Kruskal-Wallis test¹ was used at a significant level $\alpha \leq 0.05$.

The results show that many demographic variables have significantly affected the respondents' perception towards the impact of IT on the decision support role of UAE management accountants. The results indicate that the respondents' qualification is the most demographic variable has significantly influenced time devoted by management accountants for decision support and routine transactions, (P-value < 05). The results pointed out that highly qualified manager allocates more time for decision support and have a belief that automation of accounting process will affect the future needs for management accountants. Furthermore, the results indicate that gender does not have a significant effect on the respondents' perceptions towards the effect of IT on the decision support roll of management accountants except that relates to their perceptions towards the change in the roll of management accountants over the last five years. Moreover, they indicate that age has a significant effect on the respondents' perceptions towards customer relationships, budgeting and types of reports to be used for general purposes. The results also reveal that the UAE management accountants' post experience has significantly affected their perceptions towards the importance of using accounting systems to prepare financial accounting, introducing e-commerce and providing special reports to stockholders. Finally, the table indicates that the length experience with present employer has influenced the respondents' attitudes towards the importance of providing specialized reports for stockholders and other non-standard reports to be used in general.

DISCUSSION AND IMPLICATIONS

The results reported in this study raises an interesting question regarding the role of information technology (IT) in enhancing the capacity of management accountants to provide more decision making support for management. The results indicate that management accountants are not taking advantage of the support capabilities provided by information technology today to enhance their role of supporting decision making. Furthermore, they indicate that management accounting has been changed significantly and will continue to change over the next five years, probably provides a possible explanation: that UAE accountants used to spend much less time on decision support, and now information technology has enabled them to provide more support to decision making.

The results also revealed that UAE management accountants need critical skills in IT to boost their ability to provide more decision support. This assumes that they currently lack these skills, which is a possible reason why they spend only 38% of their time providing decision support, as reported in the first finding.

CONCLUSIONS, LIMITATIONS, AND FUTURE RESEARCH

This study investigated the impact of information technology on the traditional role of management accountant of providing relevant information for managerial decisions and actions. We conducted a survey to 138 practicing management accountants in the United Arab Emirates to determine their perceptions towards the current and future roles, and the extent to which information technology has enabled them to have more valuable input into managerial decisions.

The main findings of the study indicate that management accountants in the UAE spend on average only about one third of their time on activities supporting managerial decision making. This is consistent with conclusions from previous studies and points to the need to upgrade academic curricula to train management accountants on relevant skills on automated decision making tools to enhance their potential for aiding managerial decisions.

The limitations of this study include its small sample size (134) which may limit the generalizability of the conclusions. However, the diversity in the respondents' backgrounds reinforces and provides more relevance to the findings. Another limitation of the study involves its cross-sectional nature, and its comparison with studies performed in other countries and contexts. Future research is therefore needed to repeat this study over future periods to provide more relevant comparisons.

REFERENCES

- Abed-Alkader, M. and Luther, R. 2008. The Impact of the Firm on Management Accounting Practices: A UK-Based Empirical Analysis. *British Accounting Review*. Forthcoming
- Ahmadi H. and Salami, P. 2010. Application of Information Systems in Electronic Insurance. *Research Journal Information Technology* 2(1): 1-6.
- Alves, M. G. 2010. Information Technology Roles in Accounting Tasks- A Multiple-Case Study. *International Journal of Trade, Economics and Finance*, 1(1): 103-107.
- Baines, A., & Langfield-Smith, K. 2003. Antecedents to Management Accounting Change: A Structural Equation Approach. *Accounting Organizations and Society*, 28 (7-8): 657-698.
- Beaman, I. & Richardson, B. 2007. Information Technology, Decision Support and Management Accounting Roles. *Journal of Applied Management Accounting Research*, 5(1): 59-67.
- Cooper, R. 1996b. Look out, Management Accountants. (Part 2). *Management Accounting*, 77(12): 35-41.
- Elliot, R. K. (1992). The third wave breaks on the shores of accounting. *Accounting Horizons*, 6 (2), 61-85.
- Foote, A. 2006. ERP for Everyone. <http://www.nxtbook.com/nxtbooks/idealmedia/bw1106/index.php?startid=73>. Accessed 30 January, 2012.
- Granlund M. & Mouritsen J. 2003. Introduction: problematizing the relationship between management control and information technology. *European Accounting Review*, 2 (1):77-83.
- Harrison, S. R. 1993. Not Just Bean Counters Any More. *Management Accountants (US)*, March: 29-32.
- Ittner, C. D. & Larcker, D. F. 2001. Assessing empirical research in management accounting: A value-based management process, *Journal of Accounting and Economics*, 32.
- King, M., Lee, R.A., Piper, J.A. and Whittaker, J.W. 1990. *Information Technology and the Working Environment of the Management Accountant - A Research Report*. CIMA.
- Ong And, Tze San. And Heng The, Boon. (2008). Factors Influencing the Design and Use of Performance Measurement Systems in the Malaysian Electrical and Electronic Industry. *The Journal of Economics and Management* 2(2): 437-475.

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Founder Characteristics and Small Firm Performance in Pakistan

Key words: Founder characteristics, small firm, performance, Pakistan.

INTRODUCTION

Small firm vs. small and medium enterprises (SMEs)

In this study the focus is on the small firm with 6 to 50 employees whereas in reference to literature the terms small firm and SMEs will be used interchangeably as in research these terms are often overlapping. SME Policy of government of Pakistan claims that different approaches are required for supporting small enterprises as opposed to medium-sized enterprises. Thus, wherever required, separate policy measures are proposed for small vs. medium-sized enterprises. This implies small firms need to be studied separately from the medium-sized firm.

Role of SMEs (including small firms) in developing countries

Role of SMEs in the economy of developing countries has long been recognized. (Kazmil and Farooque, 2000). SMEs can enable rapid industrialization and accelerated economic growth. Recent literature from all parts of the world suggests importance of SMEs in the overall performance of economy, including USA (Audretsch, 1998), Japan (Urata and Kawai, 1998), East Asia (Berry and Mazumdar, 1991), and Africa (Morris, 1996). SMEs play an important role in economic structure and performance of a country (Berry, 1997).

In spite of the recognition of their importance, performance of SMEs has always fallen short of expectations (Arinaitwe, 2006). It needs investigation as to why SMEs have not been able to perform or to play their due role in poverty reduction, economic recovery and other developmental goals in the economies of developing countries. Most of these businesses are in the traditional, well established sectors and their customers are usually poor or lower middle class. They cannot compete in technology with medium or large scale business (Romijin, 2001). They cannot use economy of scale. Their financial position is weak and so is their technology. All these combine to make them risk averse. And this further makes them shy about investment in new technology. A lack of ability to produce efficiently, upgrade product quality, meet deadlines and improve designs can lead to disaster. Due to all these factors institutional support is very important for them.

SMEs in Pakistan

According to the recent Census of Establishments conducted by the Federal Bureau of Statistics (FBS) there are about 3.2 million economic establishments in Pakistan. Out of these, small and medium sized enterprises constitute about 90% of all private enterprises employing approximately 78% of non agriculture labor force. SMEs contribute over 30% to GDP, 25% in export earnings besides sharing of 35% in manufacturing value addition. Economic indicators clearly reveal the importance and potential of SMEs.

SMEs (specially small firms) in Pakistan are facing many problems. This includes illiteracy, lack of business know how (specially marketing), weak government support, lack of skilled manpower, over-

regulation by government, obsolete technology, difficulty in obtaining loans, and a serious shortage of electricity, roads, transport facilities and other infrastructure. Berry et al. (1993) found that most of the problems faced by small business are related to marketing and its application. Lack of marketing skills and know how is an impediment to the viability of the small firm. In spite of the realization of the problem of small business, there has not been any significant effort to understand the problem and suggest solution.

Berry (1998) found that most SMEs in Pakistan were facing falling revenues. Roomi et al., (1998) found that problems of SMEs in Pakistan include inaccessibility to local and international market, shortage of skilled personnel, technological constraints and lack of innovation, lack of entrepreneurial and management skills, and poor product quality. Rana et al., (2003) studied 650 SMEs in Pakistan to see what characteristics of owner-managers affect SME performance. He found owners' education, media related habits, and use of information technology, number of investors, and number of generations in business had a significant relationship with the health of the firm.

LITERATURE REVIEW

Founder characteristics

In this study the terms founder, owner and entrepreneur will be used interchangeably as they are so used in literature with reference to the small firm. Founder in this study is taken to be the starter and first owner of business. In small firms the owner personifies the firm. He sets up traditions for the firm. And his style often determines the future of the small firm. It is also argued that small firms are embodiment of the personality of the small firm owner. Thus decisions of the small firm are the decisions of the owner. Based on this premise in this study the characteristics of the founder/owner/entrepreneur will be considered to be the characteristics of the firm.

Characteristics of the business founder greatly impact the performance of SMEs (Chen, 1993; Fu, 1991; Liu, Liu and Wu, 1995). Hill, et al. (2002) studied crisis points in SMEs in UK and USA. To cope with life stage crises in SMEs Hill found founder characteristics to be significant. Lin (2000) studied success factors for 43 SMEs in Taiwan. She found that business founder's attitude (16.4 %), and their skills (14.2 %), are the two most important concerns of the studied firms.

The following sections will discuss the founder characteristics used in this study to predict firm performance.

Age

Age is considered to have a negative effect on performance through diminishing entrepreneurial spirit in older entrepreneurs (Lussier, 1995). General consensus holds that younger business owners are more innovative, risk-taking and proactive than older ones who are usually more content with the status quo. Older owners do not want to change things which have previously worked for them. They are comfortable with the existing situation and do not want to rock the boat. Ahmed (1995) argued age was one of the factors associated with small firm success through innovation and adaptability. He argues that with age owners are more innovative and adaptable. It would therefore be valuable to investigate what is the effect of age on performance in Pakistan.

Education

Altinay and Wang (2011) in a study on Turkish entrepreneurs found education had positive impact on owners' entrepreneurial orientation and performance. Education gave entrepreneurs the skills and thinking necessary for understanding customers and responding to their needs. Simpson et al., (2004) and Hankinson (2000) argued education was positively related to success. Dickson (2008) argued there was a significant and positive relationship between education and entrepreneurial performance. Verhees et al., (2004) found product innovation and performance were related to education and experience. Better educated owner-managers were more efficient (e.g., Burky & Terell, 1998). In developing countries low levels of education is remarkable when contrasted with developed countries. The poor in developing countries mostly create survival-oriented small firms to overcome lack of employment. This seems to be the case in Pakistan where educated youths are now picking up self-

employment in line with developed countries where highly educated were more likely to be self employed (Woodruff, 1999).

Education is one of the most fundamental characteristics necessary for business performance. This includes college education which is important in providing a logical way to analyze situations. Morris (1996) argues formal education levels achieved and skill-related training were key factors in achievement of entrepreneurial sophistication in business. An educated owner can understand concepts and apply them. Morisette, (2007) argues entrepreneurship needs to be inculcated in education. Luk and Sheriff (1996) studied factors self-reported by successful small business owners in Hong Kong which included education. Education may not directly impact success but indirectly it has significant role to play in enabling entrepreneurs to make better decisions, understand complex situations, be more analytical and command better communication abilities. Due to chronic low levels of literacy in Pakistan, education assumes major importance as a factor to be studied.

Prior industry experience

Altinay and Wang (2011) in a study on Turkish entrepreneurs found experience had a positive impact upon their firms' entrepreneurial orientation. In addition, the entrepreneur's previous related work experience prior to opening a new venture influences how the entrepreneur handles the start-up and the growth of the business (Hatch and Dyer, 2004). Such experience creates a 'cognitive framework' which facilitated better future decisions and handling of risk.

Harada (2002) found entrepreneur's previous experience in the industry and related business experience was related to performance. Entrepreneurs who had prior related experience were not only doing better but had a more confident approach and were ready to take reasonable risks. Performance is also affected by whether parents were entrepreneurs. Experience of 'any' business in general is also relevant for success. Hill (2001) suggested experience is the most significant competency and is the foundation level competency without which marketing competency cannot occur.

In this study aggregate experience will be used to represent four dimensions of experience including number of years of current business ownership, number of years of similar business owned before the present one, number of years of some other type of business owned before this one, and number of years of managerial experience before starting present business.

Parents experience

Parents' experience is significant in its effect on business performance (Harada, 2002; Hausman, 2005). Businesses running in families tend to perform better than those which are not. Role models exert a powerful influence over subsequent innovativeness (Perry-Smith and Shalley, 2003). Entrepreneurship cannot ignite and grow without the mobilization of family forces (Editorial, J. of BV, 2003). Thus family comes to play a strong part in business performance.

Entrepreneurial personality

Entrepreneurial personality as a factor in firm performance has strong support in literature. Among the large number of variables found related to entrepreneurial behavior the most widely quoted are innovation, risk taking and proactive-ness (Morrison, 2000; Curran et al., 1986; Nandram, 2002; O'Gorman, 2001; and Watson et al., 1998). A founder possessing characteristics of innovation, risk-taking and proactive-ness (among many other factors) is said to have an entrepreneurial personality. But having an entrepreneurial personality is not enough. Entrepreneurial actions must actually be taken on the ground. In this study entrepreneurial personality as a factor in performance is investigated.

For small firms 'owner-manager' personifies the firm. It is the personality of the owner-manager that dictates direction for the small firm. Also entrepreneurial orientation of the owner-manager as a factor in firm performance is well supported in literature. Keh et al., (2007) found entrepreneurial orientation (EO) was significantly related to firm performance directly as well as through information utilization as an intervening variable. He found firms with high levels of EO were more likely to identify

opportunities and to make their position stronger with time. High EO helps in acquisition and utilization of information.

Among the large number of characteristics found related to entrepreneurial orientation, some of the most widely quoted are innovation, risk taking and adaptability (Morrison, 2000; Curran et al., 1986; Nandram, 2002; O’Gorman, 2001; and Watson et al., 1998). A founder possessing these characteristics is said to have an entrepreneurial orientation which serves as driver for small firm success. Most discussions of entrepreneurship start with innovation.

Innovation

In order to survive and grow in the highly competitive world of today, where globalization, deregulation, e-commerce and great competitive intensity with new technologies is the order of the day firms must innovate continually (Higgins, 1996; Kay, 1993; Patel, 1999; Cook, 1998; Davis and Moe, 1997; Doyle, 1999). In an empirical study of 100 UK firms, Cottom et. al. 2001, found that a significant number of these firms were serious about innovation. To the extent that some had directors of innovation, managers of innovation and cross functional teams doing innovation. However Hausman (2005) found that knowledge applicable to innovativeness in large firms cannot be applied to innovation in small firms. Industry competitiveness appears to work the opposite in case of small vs. large firm.

Most discussions on entrepreneurship have focused on innovation. Activities of the firm are changed through innovation leading them away from routine and repetitive activities. New environment is created and this is done by the entrepreneur. Entrepreneur plays the innovative role (Yamada, 2004). The definition of entrepreneur is derived from the Austrian view suggested by Schumpeter (1971). According to this view entrepreneurship is carrying out of new combinations to connect resources and people. Schumpeter (1954) suggested innovativeness is the tendency to support new ideas, novelty, experimentation, and creative processes resulting in new products, services, or technological processes. Innovativeness includes fostering a spirit of creativity, supporting R&D and experimentation, developing new processes, introducing new products/services, and technological leadership (Lumpkin, 2001; Lumpkin and Dess, 2001). Usually entrepreneurs and their firms who are innovative are the first to bring a product to market (Colvin and Slevin, 2001). Creativity and innovation are related. Innovation is applied creativity.

Drucker (1994) argues there are 7 basic sources of opportunities to innovate and only one of them is to do with inventing something new. Innovation is more than invention and does not have to be technical. It can be social and economic. Thus innovation can be in any activity including selling, pricing, or even delivery. It has to have value for the end customer. Innovation can be radical vs. incremental, product vs. process, and administrative vs. technological (Cooper, 1998). Cooper defined innovation to include new products, new processes, new services (including new uses of established products, processes and services), new forms of organization, new markets, and the development of new skills and human capital. Thus entrepreneurs can do any of these innovations to gain edge over competitors.

Risk-taking

Risk-taking is an important characteristic of entrepreneurs. Entrepreneurs are likely to take great risks in their pursuit of business opportunities and to promote innovation (Knight, 1921). Knight places great emphasis on this aspect of entrepreneurship. There is no guarantee that new products would succeed. Entrepreneurs have to face this uncertainty. It is entrepreneurs that can deal with this type of uncertainty. Folani and Mullins (2000, pp. 304) suggest entrepreneurs’ perception of risk is the “uncertainty and potential losses associated with the outcomes which may follow from a given set of behaviors.” It may include venturing into a new and unknown territory, committing a relatively large share of assets and significant borrowing (Baird and Thomas, 1985). Entrepreneurs usually accept that entrepreneurship involves risk-taking and they are willing to take these risks in return for the rewards. They would however, prefer to lower the risks when possible.

Risk-taking may be more profitable in the long term rather than the short term —because some projects fail while others succeed—(March, 1991; McGrath, 2001). In order to excel competition and gain edge in the market, firms have to take actions which may result in considerable loss to them. Risk-taking was related to performance (Covin and Slevin, 1991; Wiklund, 1999; Zahra and Covin, 1995). Among the dimensions of entrepreneurial orientation characteristics risk-taking was next to innovation in terms of significance and effect on performance. Risk-taking is a very important issue for the small firms due to their high failure rates (Stokes, 2000).

Proactiveness

Proactive-ness is the opportunity seeking, forward looking perspective that involves introducing new products/services and acting in anticipation of future demand. Lumpkin and Dess (2001) describe proactive-ness as a response to opportunities and competitive aggressiveness as response to threats. It includes many activities including identifying opportunities, and market trends, assessing strengths and weaknesses of opportunities, and forming teams capable of exploiting them (Kropp, Lindsay, and Shoham, 2004). Entrepreneurs need to develop a vision and determine ways to combat previously unidentified components to capitalize on the perceived business opportunities (Bird, 1989; Schumpeter, 1954).

Motivation for business (push vs. pull factors)

Gilad and Levine (1986) introduced the 'push' and 'pull' theory of motivation for entrepreneurship. According to the 'push' theory individuals are pushed into entrepreneurship by negative factors including unemployment, low incomes, bad experience from work and other such factors. The 'pull' theory suggests individuals are attracted to entrepreneurship due to what it offers including self fulfillment, independence, wealth, and other desirable outcomes. Keeble et al. (1992) and Orhan and Scott (2001) argue people become entrepreneurs primarily due to pull factors.

Pull factors were more likely to lead to success than push factors (Watson, et al., 1998). It is generally argued that individuals who are pulled into entrepreneurship will have more profitable and higher growth firms (Storey, 1994). This push-pull dichotomy can provide a useful classification for entrepreneurial motivations.

Moreover, those owners who entered business due to pull factors had an entirely different attitude. They were enjoying doing business and were more motivated. Push factor motivated owners were just surviving and looking for financial returns. They did not have emotional involvement in business in the same way as the pull motivated owners.

Adaptability

Entrepreneurial success requires both a real opportunity in the market and a well conceptualized business concept and a good fit between the two. This fit is not necessarily present from the beginning. The successful entrepreneur realizes this and thus recognizes the need for continuous adaptation of elements (Shindehutte et al. 2001).

Shindehutte et al. (2001) found adaptability in small firms, based on turbulence in the external environment, related to success. They also found prior ventures lead to more adaptation. And opportunist entrepreneur is more likely to adapt than craftsmen or inventors. Also non family ventures were more adaptive than family ones. Dynamic markets led to more adaptation and to innovation. Firms with more adaptive capacity adapt more. And adaptation leads to higher sales revenues and higher profits

The extent to which a given marketing strategy will work is a function of its adaptation. This may include positioning a company around a flexible product line. Adaptation may well be associated with the marketing concept (Pitt, 2000). A critical finding is that adaptation has performance implications in small firms. The tendency to adapt over time is positively associated with profit performance. The

most important adaptive strategy seems to be product/service development. It is important for an entrepreneur to have a concept that loosely fits the opportunity and then proactively adapt as things evolve, than to lock the firm into specific commitments that limit the venture's future actions.

Performance measurement

In this study performance is measured both objectively and subjectively. Objective measures of performance include growth in profit, sales and employees with respect to competition in the last three years as judged by the owner manager. Subjective measures of performance include overall satisfaction from business and decision to invest in business next year (Rana et al, 2003). Objective measures of success may not be enough. Small business owner may have personal objectives that need not always be objective. He may be lifestyle oriented businessman. Or he may just like to carry out an activity to 'pass time.' Thus he may not measure his success in objective terms. Such business owner may be happy with moderate success as long as he is achieving his other subjective goals. Thus to fully understand performance from the small business owners' point of view it is important that both measures of success be included in performance measurement. This study asks small business owner questions related to profit and growth in sales and employees to assess objective performance. He is asked his overall satisfaction from business and his willingness to invest in same in next period as a proxy for subjective success measurement.

Factor analysis and adjustment of research framework

Based on the factor analysis some variables were deleted and the final revised framework and hypotheses were formulated as in the sections below.

Research framework

Framework for the study is given in Figure 1.

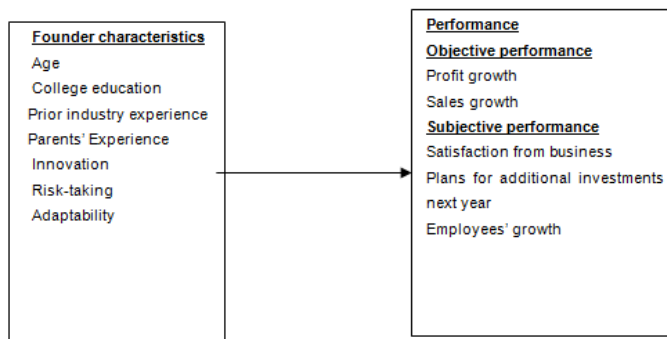


Figure 1. Research Framework

RESEARCH HYPOTHESES

Objective business performance

H1: Founder characteristics of small firms in Pakistan influence objective business performance.

H1A: The higher the age of the founder the lower the business performance of the firm.

H1B: The higher the education of the founder the higher the business performance of the firm.

H1C: The higher the prior industry experience of the founder the higher the business performance of the firm.

H1D: The higher the parents' industry experience the higher the business performance of the firm.

H1E: The more innovative the founder the higher the business performance of the firm.

H1F: The more risk-taking the founder the higher the business performance of the firm.

H1G: The more adaptable the founder the higher the business performance of the firm.

Subjective business performance

H2: Founder characteristics of small firms in Pakistan influence objective business performance.

H2A: The higher the age of the founder the lower the business performance of the firm.

H2B: The higher the education of the founder the higher the business performance of the firm.

H2C: The higher the prior industry experience of the founder the higher the business performance of the firm.

H2D: The higher the parents' industry experience the higher the business performance of the firm.

H2E: The more innovative the founder the higher the business performance of the firm.

H2F: The more risk-taking the founder the higher the business performance of the firm.

H2G: The more adaptable the founder the higher the business performance of the firm.

RESULTS

Inter-correlation of variables of study

Services

Results showed two dimensions of entrepreneurial orientation were significantly correlated with objective performance, namely innovation ($r = .19, p < .01$), and risk-taking ($r = .16, p < .01$) and all three dimensions of entrepreneurial orientation were correlated with subjective performance, namely, innovation ($r = .28, p < .01$), risk-taking ($r = .25, p < .01$) and adaptability ($r = .15, p < .01$). See table 1.

Table 1: Inter-correlation of variables of Study for Service Firms

	AGE	ED	EXP	PAR	INN	RISK	ADA	OBJP	SUBP
AGE	1								
ED	0	1							
EXP	0.25**	0.04	1						
PAR	-0.14**	0.09	-0.06	1					
INN	-0.03	0.16**	0.12*	0.01	1				
RISK	-0.03	0.10*	0.08	0.08	0.43**	1			
ADA	-0.01	0.07	0.13*	0.02	0.50**	0.34**	1		
OBJP	-0.11*	0.03	-0.03	0.04	0.18**	0.15**	0	1	
SUBP	-0.15**	-0.02	-0.05	0.06	0.28**	0.24**	0.15**	0.49**	1

Manufacturing

Results showed two dimensions of entrepreneurial orientation were significantly correlated with objective performance, namely innovation ($r = .18, p < .01$), and risk-taking ($r = .15, p < .01$) and all three dimensions of entrepreneurial orientation were correlated with subjective performance, namely, innovation ($r = .28, p < .01$), risk-taking ($r = .24, p < .01$) and adaptability ($r = .15, p < .01$). See table 2.

Table 2: Inter-correlation of Variables of Study for Manufacturing Firms

	AGE	ED	EXP	PAR	INN	RISK	ADA	OBJP	SUBP
AGE	1								
ED	0	1							
EXP	0.25**	0.04	1						
PAR	-0.14**	0.09	-0.06	1					
INN	-0.03	0.16**	0.12*	0.01	1				
RISK	-0.03	0.10*	0.08	0.08	0.43**	1			
ADA	-0.01	0.07	0.13*	0.02	0.50**	0.34**	1		
OBJP	-0.11*	0.03	-0.03	0.04	0.18**	0.15**	0	1	
SUBP	-0.15**	-0.02	-0.05	0.06	0.28**	0.24**	0.15**	0.49**	1

HYPOTHESES TESTING THROUGH MULTIPLE REGRESSION ANALYSIS

Service

Relationship between founder’s entrepreneurial orientation characteristics and objective business performance H1

Hypothesis H1 (H1E to H1G) postulated a positive significant relationship between owner-managers’ entrepreneurial orientation characteristics and objective business performance of the firm. This hypothesis was tested through regression analysis. Results indicated innovation ($\beta = .21, p < .01$) positively and significantly influenced objective business performance. Risk-taking ($\beta = .18, p < .01$) also positively and significantly influenced objective business performance. Adaptability however was not significant with objective performance. R^2 was found to be 8 % which meant the three dimensions of owner-managers’ entrepreneurial orientation characteristics together explained 8 % variation in objective business performance of small firms in Pakistan. Therefore the hypothesis H1E (innovation and objective business performance) and hypothesis H1F (risk-taking and objective business performance) were supported, while hypothesis H1G (adaptability and objective business performance) was not supported. See table 3.

Table 3. Multiple Regression: Founder’s Entrepreneurial Orientation Characteristics and Business Performance Services

Independent Variables	Dependent Variables (β)	
	Objective business performance	Subjective business performance
Innovation	.21***	.26***
Risk-taking	.18***	.21***
Adaptability	-.12	-.01
R^2	.08	.15
R^2 Change	.08	.15
F Change	7.29***	14.37***

Significance levels *** $p < .01$; ** $p < .05$; * $p < .10$

Relationship between founder’s entrepreneurial orientation characteristics and subjective business performance H2

Hypothesis 2 (H2E to H2G) postulated a positive significant relationship between owner-managers' entrepreneurial orientation characteristics and subjective business performance of the firm. This hypothesis was tested through regression analysis.

Results indicated innovation ($\beta = .26, p < .01$) positively influenced subjective business performance. Risk-taking ($\beta = .21, p < .01$) also positively influenced subjective business performance. Adaptability ($\beta = -.18, p < .01$) however did not significantly influence subjective business performance.

R^2 was found to be 14.3 % which meant the three dimensions of owner-managers' entrepreneurial orientation characteristics together explained 14.3 % variation in subjective business performance. Therefore the hypothesis H2E (innovation and subjective business performance) and hypothesis H2F (risk-taking and subjective business performance) were supported, while hypothesis H2G (adaptability and subjective business performance) was not supported.

MANUFACTURING

Relationship between founder's entrepreneurial orientation characteristics and objective business performance H1

Hypothesis H1 (H1E to H1G) postulated a positive significant relationship between owner-managers' entrepreneurial orientation characteristics and business performance of the firm. This hypothesis was tested through regression analysis. Results are given in Table 4.

Results indicated innovation ($\beta = .20, p < .05$) positively and significantly influenced objective business performance. Adaptability ($\beta = -.20, p < .05$) negatively and significantly influenced objective business performance. Risk-taking however did not significantly influence objective performance.

R^2 was found to be 4 % which meant the three dimensions of owner-managers' entrepreneurial orientation characteristics together explained 4 % variation in objective business performance. Therefore hypothesis H1E (innovation and objective business performance) was supported. However hypotheses H1F (risk-taking and objective business performance) and H1G (adaptability and objective business performance) were not supported.

Relationship between founder's entrepreneurial orientation characteristics and objective business performance H2

Hypothesis H2 (H2E to H2G) postulated a positive significant relationship between owner-managers' entrepreneurial orientation characteristics and subjective business performance of the firm. This hypothesis was tested through regression analysis.

Results indicated none of the entrepreneurial orientation dimensions, namely, innovation, risk-taking, and adaptability were significant with subjective performance. Thus hypothesis H2E (innovation and subjective business performance), H2F (risk-taking and subjective business performance) and H2G (adaptability and subjective business performance) were not supported.

Table 4: *Multiple Regression: Owner-managers' Entrepreneurial Orientation Characteristics and Business Performance*

Independent Variables	Dependent Variables (β)	
	Objective business performance Method A/B	Subjective business performance Method A/B
Innovation	.20**	.08
Risk-taking	-.04	.08
Adaptability	-.20**	.08
R^2	.08	.15
R^2 Change	.08	.15
F Change	2.25*	.8

Significance levels *** $p < .01$; ** $p < .05$; * $p < .10$

DISCUSSION

Age is negatively correlated with objective and subjective performance for services firms. This shows that younger founders are more successful than older ones. This might be due to the fact that services are usually found in retail setups where the business model tends to be simple in Pakistan, e.g. shops and grocery stores. Education is not significant with objective or subjective performance. Reasons for this appear to be similar to those given for age. Incidentally experience, parents experience are also not significant. Innovation, risk-taking are significant with both objective and subjective performance and adaptability with subjective performance. This shows founders who are adaptable perceive themselves to be more successful in a subjective manner.

For manufacturing results are quite similar.

Regression analysis results indicated that for services innovation and risk-taking are significant with both objective and subjective business performance but adaptability has not found to be significant. This means those who innovate and take risks are rewarded but those who adapt may not be.

For manufacturing however only innovation is significant with objective business performance. One explanation can be that manufacturing often needs substantially more investment and thus founders are reluctant to take risks. Adaptability requires more knowledge and technology in manufacturing.

CONCLUSIONS

There are lessons in this study for the small business firms in Pakistan. In the present global economic crisis small firm survival will depend on its ability to innovate ahead of competition. Doing business the conventional way is not likely to lead the small firm to profitability, sales growth and growth in employment. The small firm has to innovate within its limited resources. Innovation is not invention. It is new ways of doing business which adds value to the business or quality of life of its customers.

Small business owners must try to get into the kind of business they enjoy doing and this is likely with type of business in which they feel confident.

For the policy makers the implications are that small firm must be helped to survive its first few years in which it is vulnerable. Training programs and consultancy can help the small firm but the small firm needs assurance that consultants are good for them and for this consultants need to talk in the language of the small firm owners.

For a complete copy of this paper with endnotes and references contact the author(s)
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Toward a Conceptual Model of Ethical Business Practice in Small and Medium Enterprises: The Case of Egypt

Keywords Business Ethics; Ethical Management Practice; SME's; Egyptian Junior Business Association (EJB); Egyptian Corporate Responsibility Center (ECRC); Egypt

INTRODUCTION

Our theories and ideas have done much to strengthen the management practices that we are all now so loudly condemning... By propagating ideologically inspired amoral theories, business schools have actively freed their students from any sense of moral responsibility (Ghoshal, 2005).

The field of business ethics is no longer a novice one. The importance of incorporating business ethics in everyday transactions, academia, and popular literature is underscored internationally. The presence of corporate scandals, such as Enron, among others, has served as a wake-up call to scholars, practitioners, and policy makers internationally. According to recent literature, "issues such as misleading advertising, unsafe and harmful products, abuse of distribution channel power, and promotion of materialism, which were the main ethical concerns of the 1950's, are still serious problems today, half a century later" (Abela and Murphy, 2008: 40; cf. Abela, 2006; Star, 1989).

Porter and Reinhardt (2007) highlight that "environmental accountability has evolved from a social responsibility issue into a strategic imperative" (as cited in Ruyter, Jong and Wetzels, 2009: 1). The broad consequence was the birth of global associations such as Transparency International that assesses the Corruption Perceptions Index (CPI) annually and the Caux Roundtable Discussions that develop countries' Social Capital Achievement (SCA) index based on aggregate indicators linking economic, financial and social/ethical prosperity. This was concurrent with global concerns for the business abuse of vulnerable groups (Hawkes, 2004). Another consequence was the stress on the leading role of academia in educating ethical entrepreneurs (Ghoshal, 2005; Reuben, 1996). One example is the Bentley University Alliance for Ethics and Social Responsibility. Yet a third consequence was the development of international initiatives calling for the incorporation of ethics in everyday business transactions. A fourth consequence was the call for character/ethics education (El-Bassiouny, Taher, and Abou-Aish, 2008). Finally, a fifth consequence was the resonance of all this in popular literature (Bauman, 1993; Covey, 2003; Goleman, 2009; Klein, 1999).

The critical role of SMEs in boosting national economies, and the developmental hopes placed on them in one day becoming what Collins and Porras (2005) called a corporation that is "Built to Last", directs special attention to the dimensions of business ethics implemented in SMEs (Besser and Miller, 2001; Castka, Balzarova, Bamber, and Sharp, 2003; Dutta and Banerjee, 2009; Enderle, 2004; Hannafey, 2003; Morris, Schindehutte, Walten, and Allen, 2002; Simpson, Taylor and Barker, 2004; Spence and Rutherford, 2003; Thompson and Smith, 1991; Verbos, Gerard, Forshey, Harding and Miller, 2007). According to Dutta and Banerjee (2009: 191-2), "the small businesses' contribution to a nation's economy cannot be overlooked because of its inherent capital-employment generation capacity, ability to nurture the spirit of technological innovation and entrepreneurship and their

locational flexibilities". In Egypt, with around 5 million Egyptians being "engaged in early-stage entrepreneurial activities" (Hattab, 2008: 9), a Corruption Perceptions Index (CPI) of 2.8, and a rank of 110 on the Social Capital Achievement (SCA) scale, with an index as low as 0.42 in 2009, the role of business ethics cannot be undermined.

The broad objective of this research is to develop a comprehensive framework for conceptualizing ethical business practice in SMEs based on a thorough survey of international literature as well as an exploratory qualitative investigation side by side with a probing quantitative pilot test. The research also aims to pave way for a multi-phase empirical research of business ethics in Egypt, especially on the level of SMEs. This paper represents the conceptual framework development, the scale development and the preliminary scale usage phase. In the future, the broad research objective would then be narrowed down to an empirical study based on the operationalization of the developed conceptual framework.

This paper starts with a review of international literature on business ethics and specifically in SMEs. This is followed by a highlight of the Egyptian context through a qualitative exploratory investigation. The framework conceptualizing the operationalization of ethical business practice in SMEs is then presented. The research constructs of the compiled multi-item scale are then highlighted. This is followed by managerial and theoretical implications as well as prospects for future research.

THEORETICAL BACKGROUND

Recent international literature still professes the lack of literature in the area overlapping between business ethics and entrepreneurship (Dutta and Banerjee, 2009; Hannafey, 2003). According to Dutta and Banerjee (2009: 192), "the issues of business ethics and corporate social responsibility, which were primarily targeting large global corporations, are gradually broadening to include the small entrepreneurial firms". According to recent literature, the term Entrepreneurship refers to "a process of opportunity identification and the creation of an organization to exploit the opportunity" (Misra and Kumar, 2000: 138). Despite the fact that stakeholder theory mandates that entrepreneurs, in their decision making, take the welfare of all stakeholders into consideration, yet more often than not, entrepreneurs are busy with their fast survival and expansion plans to the marginalization of ethical business conduct with one or all stakeholders, including employees, suppliers, competitors, government, and customers (Dutta and Banerjee, 2009; Enderle, 2004; Gerd and Swanson, 2000; Spence, 1999).

Dutta and Banerjee (2009: 191) have compiled the dimensions of ethical issues in the literature and have related them to ownership type (proprietorship, partnership, or limited company), where their research on Indian SMEs showed "support for the hypothesis that proprietorship and partnership firms tend to be more ethically infractionous than the limited companies". The dimensions of ethical practice covered the inherent principles on which the SME is based, the fair hiring and replacement systems, the abiding by legal issues, proper marketing communications, and environmental accountability. On the other hand, unethical practice included "bribery to expedite dealings with governmental agencies (and as a) common inducer for business loans", "dependence on political/bureaucratic connections for bank loans", "dependence on abnormally high interest loan from unorganized financial sector", "default and delays in payment to suppliers", and "incidental costs imposed by outlaws" (Dutta and Banerjee, 2009: 198-9).

Maignan and Ferrell (2004: 3) highlight that the companies' Corporate Social Responsibility (CSR) "initiatives can generate increased stakeholder support". They highlight the "significant" dimensions of a firm's Stakeholder Orientation classified into "Information Generation", "Information Dissemination", and "Responsiveness" (see Exhibit (1) below).

Exhibit 1: "Examples of Activities Significant of a Stakeholder Orientation" - Source: Maignan and Ferrell (2004: 11)

	<i>All Stakeholders</i>	<i>Employees</i>	<i>Customers</i>	<i>Communities Where the Firm Operates</i>
Information generation	<ol style="list-style-type: none"> 1. Selection of relevant stakeholder communities (through a press review, for example). 2. Inquiry into the nature of stakeholder issues (with panels, focus groups). 3. Evaluation of the firm's impact on stakeholder issues. 4. Evaluation of the corporate reputation among stakeholders. 	<ol style="list-style-type: none"> 1. Regular discussions with representatives of different categories of personnel. 2. Forums of information/discussion on employee issues (health, stress management, etc.). 3. Regular evaluation of employee satisfaction. 4. Data about employee injuries, absenteeism. 	<ol style="list-style-type: none"> 1. Identification of, and contact with, customer advocates. 2. Discussion forums with customers to understand their needs and concerns. 3. Data on customer complaints. 	<ol style="list-style-type: none"> 1. Identification of community leaders. 2. Consultation with community leaders to know about emerging issues. 3. Analysis of impact of corporate activities on environment (e.g., electricity use, use of recycled materials). 4. Survey of the firm's reputation in the community.
Information dissemination	<ol style="list-style-type: none"> 1. Regular interdepartmental meetings about trends in the firm's environment. 2. Circulation of documents (reports, newsletters) about the impact of corporate activities on stakeholder issues. 3. Facilitating the contacts of all departments with stakeholders. 	<ol style="list-style-type: none"> 1. Internal communications about employee-related issues. 2. Open-door policy to superiors. 3. Facilitation of informal meetings between employees at all levels. 	<ol style="list-style-type: none"> 1. Communicating the nature of customer complaints across all departments. 2. Including results of customer research in product policies. 3. Circulation of information on emerging consumer trends. 	<ol style="list-style-type: none"> 1. Discussion forums about community issues, for example, on Intranet. 2. Facilitating the participation of employees into community affairs (giving lectures, attending seminars). 3. Granting a prize for the best community initiative.
Responsiveness	<ol style="list-style-type: none"> 1. Programs to address stakeholder issues. 	<ol style="list-style-type: none"> 1. Employee health and safety programs. 2. Provision of day care. 3. Facilitating employee education 	<ol style="list-style-type: none"> 1. Product quality and safety improvement programs. 2. Programs to respond to customer complaints. 3. Facilities for handicapped customers. 	<ol style="list-style-type: none"> 1. Philanthropic and volunteerism programs. 2. Environmental protection programs. 3. Economic development programs.

Batten, Hettihewa, and Mellor (2008: 2) highlighted three largely-used dimensions for the "assessment of ethical management practice" in Australia, namely: "1) whether firms have written codes of ethics; 2) whether firms have a forum for the discussion of ethics; and 3) whether respondents consider their firms' activities to have a negative environmental impact." They also highlighted the important role played by a country's legal system "since the relationship between the firm and its various stakeholders involves defining a set of contracts that need to be upheld" (La Porta et al. 1998, 2000 as cited in Batten, Hettihewa, and Mellor, 2008: 3). They have surveyed the literature on ethical business practice and have highlighted the importance of "industry classification"; "firm location", firm "size", "international involvement", and ownership type (cf. Dutta and Banerjee, 2009)

Verbos, Gerard, Forshey, Harding, and Miller (2007: 17-19) stress that "in a positive ethical organization, the right thing to do is the only thing to do". They highlight that "the reduction or elimination of unethical practices is not sufficient to establish an ethical organizational identity". In that sense, scholars should not only study unethical business practices, but also research and highlight positive ways of inducing ethical practice in view of what is known as "Positive Organizational Scholarship" (POS). They further highlight that "within a positive ethical organization, ethical practices are 1) modeled and promoted by authentic leaders; 2) infused through a positive organizational context in which formal and informal organizational structures, processes, and systems are aligned with ethical practices; and 3) sustained and reinforced in an ethical organizational culture". Authentic leaders are essential to having a "living code of ethics" within an organization. Authentic or ethical leaders are characterized by disseminating "confidence, hope, optimism, resiliency, and future-orientation". They are also characterized by being caring for others' welfare and standing "consistently with their beliefs when dealing with difficult moral issues" (Verbos et al., 2007: 19-23; cf. Roberts, D., Roberts, L., O'Neill and Blake-Beard, 2008).

Maignan and Ferrell (2004: 4) highlight that "some scholars advocate an ethics-driven view of CSR that asserts the rightness or wrongness of specific corporate activities independently of any social or stakeholder obligation" (cf. Dusuki, 2008; Lane and Solberg, 2008). Despite the identification of six universal values in international business ethics literature, namely "trustworthiness, respect, responsibility, fairness, caring, and citizenship" (Collins, 2009: 63), the literature also points direction

to cross-cultural variation in terms of the pronounced effects of cultural and religious norms on ethical business conduct (Abela, 2001; Dusuki, 2008; Graafland, Kaptein and Mazereeuw – van der Duijn Schouten, 2007; Rawwas, Patzer and Vitell, 1998; Shehata, 1999; Vitell, Paolillo and Singh, 2005). In the following lines, we present the case of Egypt.

THE CASE OF EGYPT

According to the most recent report prepared by the Ministry of Foreign Trade (2003: 1-5) as part of the Small and Medium Enterprises Policy Development Project:

Micro, small, and medium-sized enterprises (M/SMEs) are a dynamic force for sustained economic growth and job creation. They are a valid, crucial component of a vibrant industrial society. M/SMEs stimulate private ownership and entrepreneurial skills; they are flexible and can adapt quickly to changing market demand and supply conditions; they generate employment, help diversify economic activities and make significant contribution to export and trade... M/SMEs number in Egypt is significant if compared to the total number of enterprises; especially micro as they constitute 92.7% of the private sector.

As mentioned previously, Egypt is ranked as one of the highest countries' in terms of corruption. To aid in the process of theory development, qualitative research was employed intermittently through in-depth interviews with SME managers, the Egyptian Junior Business Association (EJB) members, and MBA executives in the earlier phases of the research as recommended by the literature on theory construction (Bagozzi, 1984; Parasuraman, Zeithaml and Berry, 1985; Strauss and Corbin, 1998). Qualitative research was then further employed in the form of focus group discussions. Later, a probing quantitative analysis is built on the questionnaire items developed through the earlier qualitative research and proposed conceptual model.

The qualitative investigation conducted by the researchers revealed that two main public and private sector institutions have been established to combat corruption and raise the level of ethical awareness among both SMEs and corporations. With respect to the propagation of business ethics, the EJB in Egypt is taking a leading role and working as a forum for young business people and entrepreneurs to contribute to the overall development of Egypt. EJB's mission is to "provide a platform for dynamic business people to affect a positive business environment through business development and social responsibility promoting a culture of excellence and business ethics".

Recently also, Egypt has witnessed the development of an Egyptian Corporate Responsibility Center (ECRC) that is essentially an "initiative between the Ministry of Investment (MOI) and the United Nations Development Program (UNDP)" and represents the UN Global Compact program in Egypt (UNGC). Both organizations represent the formal institutions responsible for propagation of proper ethical conduct. EJB is more focused on the small and entrepreneurial companies, whereas ECRC is more active with corporations. It is worth noting in this respect that SMEs encompass a maximum of 49 employees as defined by the Ministry of Foreign Trade in Egypt.

Due to the lack of research to build on with respect to business ethics in Egypt in general as well as specifically on the level of SMEs, the researchers also conducted a qualitative exploratory study through four focus group discussions each comprising 10 - 12 MBA executives in an Entrepreneurship class at one of the most reputable private universities in Egypt. The students were either working in Egyptian SMEs or having a direct contact with them as suppliers or customers. The procedure used included one focus group in which MBA executive students were asked to brainstorm and discuss all possible ethical and unethical issues in SMEs. They were then asked to conduct in-depth interviews with SME management executives within their reach to further identify other issues. They were instructed to use probing unstructured questions as was used previously in the literature (Ruyter, Jong and Wetzels, 2009). Following, 3 focus groups were conducted. This approach also served to modify the original scale developed by Dutta and Benrjee (2009) for future quantitative

empirical investigation. The purpose of the discussions was to explore their perceptions about Egyptian SMEs ethicality, as well as, to identify unethical practices prevailing among them. Consistent with the findings of Dutta and Banerjee (2009), SMEs lack the extent of liability and legal accountability which corporations have and therefore exhibited higher unethical practice.

RESULTS OF EXPLORATORY RESEARCH

The focus group discussions revealed a high perception of the existence of unethical practices among Egyptian SMEs. However, it also revealed a perception that some of those practices are necessary to be able to smoothly start and run a business. The identified unethical practices included the following:

- *Tax evasion*: Participants identified several practices carried out among SMEs to evade taxes. These include issuing separate financial statements with undermined profits for tax purposes, purchasing bills to inflate expenses, or conducting unregistered business deals. Participants confirmed that although the frequency and extent of those practices were reduced to a great extent by the new more stringent tax law, however, several SMEs are still involved in such practices. They can no longer claim that they are forced to do so because of unfair tax estimations or an exaggerated tax rate.
- *Bribery*: Bribery is also perceived as one of the prevailing and necessary unethical practices to conduct business in Egypt. This includes bribery to governmental agencies to obtain licenses and approvals, bribery to customers' employees to win tenders as well as to banks and financial institutions' officers to obtain financing. Participants described bribery as a survival imperative for firms to be able to conduct business in Egypt.
- *Unethical competitive practices*: Participants also discussed unfair competition among some of the Egyptian SMEs. They highlighted some of the related practices such as spreading rumors about competitors' products or insider competitive intelligence. These are not widely practiced and they constitute a clear case of an unethical choice by a company.
- *Unfair employee treatment*: Several unethical practices related to employees were pointed out during the focus group discussions, especially when many participants worked in Human Resources departments in small companies. These included un-insured workers, forcing employees to sign un-dated resignations upon employment, giving unfeasible promises of promotion or raises, nepotism, trainees' exploitation, and inequity of rewards based on negotiation power. These again are based on the company's choice with no external forces involved but are widely prevalent.
- *Unethical marketing practices*: Unethical marketing practices identified by respondents related mainly to advertising, customer service and product quality. Deceptive advertising is one of the main issues discussed because many SMEs include unreal offers or prizes in their ads. After sales service is weak in almost all SMEs. Product quality is usually questionable with increased use of hazardous or unhealthy material given the relaxed laws and regulations addressing this issue in Egypt. This includes artificial colors, recycled hospital wastes, etc. One of the common practices referred to by respondents is changing the expiry date of food, beverage, and pharmaceutical products so as not to dump them.

CONCEPTUAL FRAMEWORK

The qualitative research conducted concurrent with the thorough literature review not only guided further literature search but also formed the mental synthesis necessary for the development of the conceptual framework on which future empirical descriptive studies can be based. It also highlighted the importance of including environmental, demographic, and firm-related factors in assessing ethical business practice in SMEs in an effort to probe into the antecedents and reasons underlying a company's unethical choices. The conceptual framework of the paper represents a multi-item scale which sets the base for future empirical investigation of SME ethics (see Exhibit (2) below). This research embarks upon in a probing exploratory quantitative research to set the path for future research and analysis.

Exhibit 2: Proposed Model by the Study:



The first construct on the scale aims to probe into SME managers' attitudes toward (and conformity with) internationally-accepted and agreed-upon ethical norms (Dutta and Banerjee, 2009). The second construct identifies the degree of stakeholder orientation exhibited by sampled SMEs (Maignan and Ferrell, 2004). The third construct tests for the presence of "authentic leadership" within the SME (Verbos, Gerard, Forshey, Harding, and Miller, 2007). The fourth construct checks for the presence of obvious dimensions of ethical management practice (Batten, Hettihewa, and Mellor, 2008). Finally, a group of classification items are used to test for the effect of several environmental, demographic, and firm-related factors on the previous four scale constructs; i.e., within the present framework, industry type, ownership type, firm size, "international involvement", legal systems and "firm location" are regarded as possible moderating variables (Abela, 2001; Batten, Hettihewa, and Mellor, 2008; Dutta and Banerjee, 2009; Graafland, Kaptein and Mazereeuw – van der Duijn Schouten, 2007 and Shehata, 1999). Overall, a plausible multi-item scale was compiled to fulfill the broad research objective outlined previously (see Exhibit (3) below).

Exhibit 3: A Multi-Item Scale for Assessment of SME Ethics

Scale	Source
Attitudes toward Ethical Conformity	Dutta and Banerjee (2009)
Stakeholder Orientation	Maignan and Ferrell (2004)
Presence of Authentic Leadership	Verbos, Gerard, Forshey, Harding, and Miller (2007)
Dimensions of Ethical Management Practice	Batten, Hettihewa, and Mellor (2008)
Environmental, Demographic, and Firm-Related Factors (Industry type, Legal system, "Firm location", Size, "Ownership form", "international involvement",)	Abela (2001); Batten, Hettihewa, and Mellor (2008); Dutta and Banerjee (2009) and Graafland, Kaptein, Mazereeuw – van der Duijn Schouten (2007).

EMPIRICAL FINDINGS

Due to the extreme difficulty of conducting empirical research on such sensitive topic with SMEs in post-revolutionary Egypt at present times, and the fact that the Egyptian culture is not research intensive, a pilot exploratory study was the optimum solution for data gathering. This investigative in-depth research with SMEs in Egypt also presented an adequate entry point into a full-fledged descriptive research in the future. It was conducted on a sample of 10 respondents, out of the 10 responding participants' companies, 1 was a micro-company (1-4 employees), and 4 were small-sized companies (5-14 employees) and 5 were medium-sized companies (25-49 employees). Upon considering the ownership types, 2 turned out to be (sole proprietorships), 3 were (limited liability companies) and 5 were (partnerships); where 9 respondents were (owners/partners) and only 1 (employee). Results' analysis will follow the conceptual framework's division as follows:

Exploratory empirical results could be grouped to four main aspects, namely Attitudes Towards Ethical Conformity, Stakeholder Orientation, Authentic Leadership and Obvious Indicators of Ethical Management Practices.

In total, all of the questions identifying the respondents' Attitudes Towards Ethical Conformity came to be in favor of a negative attitude towards ethical conformity. Some extreme cases appeared in the

aspects of “taking a positive general approach towards pollution control” and “care to make charitable donations for community welfare”; which might be interpreted in the lack of CSR initiatives that Egyptian SMEs would embark and/or adopt.

Upon addressing Authentic Leadership, results showed the increased importance embedded in the confident, optimistic and hopeful leadership concept for the success of SMEs’ operations with an ethical perspective. Further, ethical imperative in such leaders are manifested to be a necessity for the successful operations of SMEs.

A considerable part of the questionnaire was dedicated to the Stakeholder Orientation; namely community and general stakeholders, employees, customers, advocacy groups and community leaders. The earlier three are further elaborated upon based on importance in literature and as per research outcomes. Such results reflect that on one hand a significant importance is placed upon employees as valuable asset for the company’s success. On another hand, results highlight the limited importance placed on community and general stakeholder issues and problems in the eyes of SMEs, tending to stress more on their survival. Moreover, importance addressed towards the customers’ complaints and the internal availability of data across organizations to address such problems was highly shown in the research results. Thus, in total, seemingly the two most important stakeholders’ groups turn to be employees and customers.

On addressing the Obvious Indicators of Ethical Management Practices, the quantitative results seems to show a slight amendment to the qualitative focus groups and in-depth interviews’ results; where the use of bribery came to be enlisted as an imperative for survival amongst all interviewees versus almost half of the quantitative analysis annulling that result. Money-laundry phenomenon turns out to be a well-heard of phenomenon in Egyptian market, which questions the ethical climate in the totality of the market. Also results had confirmed the usage of document forgery for tax reduction purposes had been a common practice in Egyptian market. Again, the lack of trust in the legal system came to be a ruling attitude amongst the respondents.

To sum up, the exploratory quantitative research had been employed to preliminary test the proposed conceptual framework’s applicability in Egyptian SMEs’ context. Upon reviewing results; first, the Stakeholder Orientation appears to require further investigation as results showed precedence to two groups only; namely employees and customers. Maybe results are context-confined, but still the results open the door for questioning the importance of stakeholders in the eyes of SMEs implying their ethical practices or lack thereof. Secondly, the Authentic Leadership construct had been significantly confirmed as a cornerstone for ethical practices in SMEs, considering the high level of entrepreneurial activities that turns to SMEs. Third, for the Obvious Indicators of Ethical Management Practice construct, quantitative results revealed the existence of a considerable level of such practices as revealed by qualitative focus groups; but their persistence level had been relatively marginalized versus the earlier interviews and focus groups’ results. Fourth, the Attitudes Towards Ethical Conformity construct’s results came to be in favor of a negative attitude towards ethical conformity by respondents. Finally, the Environmental, Demographic and Firm Related Factors classification variables, turned out to show adequate relationships with other variables; nonetheless the only significance (using Pearson’s correlation coefficient) it had attributed was when ownership type had significantly affected Obvious Indicators of Ethical Practice($r=0.639$, $sig=0.047$).

IMPLICATIONS OF THE STUDY

The current research represents a comprehensive conceptualization of ethical business practice internationally with special emphasis on the Egyptian context. The research presents a significant theoretical contribution since such a comprehensive framework is lacking in both Entrepreneurship and Business Ethics literature, and more so in the Egyptian context. The research is further considered a prelude to rigorous empirical investigations of SME Ethics. The multi-item scale developed forms a

unique unified basis for cross-cultural comparisons in the area of business ethics. In the next section, concrete recommendations are highlighted which we encourage to be replicated in several countries.

The qualitative study results compiles issues of unethical business practice in Egypt, especially on the level of SMEs. This is unprecedented in Egypt. Due to the high level of perceived corruption, which eventually leads to lack of general public trust and a low Social Capital Achievement index, it is advised that policy makers in Egypt set a strategy for the enhancement of ethical business practice, especially with respect to the areas raised in the qualitative study, including tax evasion, bribery, employee treatment, unethical competitive practices, and unethical marketing techniques. This formal strategy should not only coordinate with institutions and associations such as the EJB and the ECRC, but should also go down to the level of university business education of future entrepreneurs and managers consistent with Ghoshal's (2005) insight that amorality leads eventually to immorality (cf. Reuben, 1996). Further, the empirical exploratory findings supports the conceptual framework and further invites a review of the stakeholders' orientation for SMEs in Egypt as well as reviewing the role of demographics, firm-related and environmental factors in ethical or unethical practices of SMEs.

PROSPECTS FOR FUTURE RESEARCH

Following the recommendation of Deshpande (1983) of a mixed research methodology, it is recommended that a wider-scale future quantitative study is conducted to corroborate the findings of the qualitative study and test the developed multi-item scale. Overall, the researchers take a middle stance between pure positivism and pure constructivism whilst recognizing the limitations of each philosophical approach. The researchers also recognize the sensitivity of the topic and the possible presence of inherent biases due to a tendency to respondents' choosing socially-accepted responses. However, surveys had been used extensively in the most recent previous literature assessing business and customer ethics (cf. Dutta and Benerjee, 2009; Rawwas, Patzer and Vitell, 1998). Furthermore, this error possibility can be minimized not only by the complementarity of incorporating both qualitative and quantitative approaches but also by surveying respondents with different posts in the company as well as incorporating several dimensions of operationalizing and measuring business ethics in the sampled SMEs as outlined previously in Exhibit (3) above.

It is suggested that the quantitative study start with a piloting of the instrument on randomly-selected SME managers as well modifying the instrument based on the technique of verbal protocol analysis (Malhotra, 2007). Test-retest reliability using Pearson (r) as well as Spearman (ρ) is also recommended to check for the consistency and correlations of the results over time as recommended in the literature (Bagozzi, 1996). Measures of internal consistency of the compiled scale, such as Chronbach alpha, should also be employed. Since the scales were already adapted from most recent international literature, the technique for Confirmatory Factor Analysis (CFA) is recommended. Cross-tabulation is recommended to correlate the effect of the proposed moderating variables with the model-related scale responses. Cluster analysis is recommended to segment the responses into homogenous groups. Furthermore, composite scores of the four main research objectives/constructs can be developed and T-tests or ANOVA run to test for correlations and the presence of significant differences related to the four main research constructs being measured; namely attitudes toward ethical conformity, stakeholder orientation, presence of authentic/ethical leadership, and visible ethical business practice indicators (Dancey and Reidy, 1999; Hair, Black, Babin, Anderson and Tatham, 2006; Keller, 2005; Pallant, 2007). The pilot study conducted within this research represents the cornerstone to embark upon the instrument testing as recommended earlier.

The future research agenda also reveals several dimensions yet to be investigated. One issue is studying the internal/inherent traits of the entrepreneur and testing their effect on the model developed. It is also recommended to conduct a longitudinal study relating quantifiable performance indicators of the SMEs with their business ethics assessment. Relating performance indicators and ethical business practice was highlighted as an area for future research previously as well by Dutta

and Banerjee (2009). There is evidence from the literature that "an environmentally focused business strategy has positive effects on operational efficiency, revenues, and access to lower cost equity capital" (Griffiths, 2007 as cited in Ruyter, Jong and Wetzels, 2009: 1).

Another line of research is investigating the relationship between customer ethics of the entrepreneur in light of the scale developed by Rawwas, Patzer, and Vitell (1998) and the business ethics assessment of the SME based on the developed multi-item scale. Further, the application of the present study on "social enterprises" remains to-date marginalized (Rangan, Leonard and McDonald, 2008).

A further adaptation could be introduced to the conceptual framework in the future. The group of classification items proposed; Environmental, Demographic and Firm Related Factors; could be further converted into moderating variable to test for relationships and significances among the four different constructs of the proposed model. Such step would serve in further developing and identifying business ethics in SMEs and would help in further comparative research to be undertaken between different contexts.

Again, an extra aspect could be added to the model that may serve as either a classification variable as per the model's current format or as a moderating variable as proposed above. This aspect is the Religious Orientation. Collins and Porras (2005) highlight that companies that have broader visionary objectives "tend to be more successful than those which pursue only the maximization of profits" (as cited in Abela, 2001: 107). Vitell, Paolillo and Singh (2005: 175) highlighted that "intrinsic religiousness was a significant determinant of customer ethical beliefs". Graafland, Kaptein and Mazereeuw – van der Duijn Schouten (2007: 331) highlighted that there is "much inductive evidence of a relationship among (respondents') conceptions of God, norms and values, and business conduct... (and) that executives with a monotheistic conception of God display a stronger orientation toward socially responsible business conduct than do executives with a pantheistic conception of God". For instance, Dusuki (2008: 17) highlighted that the Islamic view of Corporate Social Responsibility stresses "that the concept (of CSR) is not merely perceived as a strategic or instrumental initiative, which the corporations undertake for the sake of enhancing goodwill or boosting long term financial performance, (but rather) encompasses a broader meaning embracing God-consciousness" (cf. Shehata, 1999). This dimension is critical to consider especially for Middle-Eastern countries where the culture is primarily Islamic (Goldschmidt, 2004).

Finally this research had aimed at addressing an under researched area in SMEs literature, in relevance to business ethics. Initially, a review of literature was presented in order to help in generating a conceptual framework that was supplemented through a qualitative approach. Further, a quantitative approach is employed to initially explore in a pilot study the proposed instrument developed to compliment the theoretical framework. Results had supported such model.

Such research is important in Egypt at present times; post revolution; where corruption is being disclosed and fought against to give a push towards a more promising and productive future. Investigating business ethics strikes as a clear and significant step in an economy suffering debts, huge inflation rates and other several pitfalls to start on a road of redemption and correction. This fact stands absolutely correct for an economy that SMEs represent a considerable portion of its economic activity and earnings like Egypt (UNDP, 2005).

REFERENCES

- Abela, A. (2001). Profit and More: Catholic Social Teaching and the Purpose of the Firm. *Journal of Business Ethics*, 31 (2):107-116.
- Abela, A. (2006). Marketing and Customerism: A Response to O'Shaughnessy and O'Shaughnessy. *European Journal of Marketing*, 40 (1/2): 5-16.
- Abela, A. and Murphy, P. (2008). Marketing with Integrity: Ethics and the Service-Dominant Logic for Marketing. *Journal of the Academy of Marketing Science*, 36: 39-53.

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- Bagozzi, R. (1996). Measurement in Marketing Research: Basic Principles of Questionnaire Design. In Bagozzi, R. (ed.), 1996, *Principles of Marketing Research*. Cambridge: Blackwell Business.
- Bagozzi, R. P. (1984). A Prospectus for Theory Construction in Marketing. *Journal of Marketing*, 48 (1):11-29.
- Batten, J.; Hettihewa, S.; and Mellor, R. (2008). Ethical Management Practice in Australia. *Global Business Review*, 9 (1):1-18.
- Bauman, Z. (1993). *Postmodern Ethics*. Blackwell Publishing: USA, UK, Australia.
- Besser, T. L. and Miller, N. (2001). Is the good corporation dead? The community social responsibility of small business operations. *Journal of Socio-Economics*, 33: 221-241.
- Business Ethics and Corporate Social Responsibility: Different Sides of the Same Coin? A Comparison of European and North American Perspectives (2007) *Proceedings of the Third Global Business Ethics Symposium sponsored by the State Street Foundation at Bentley University* (www.bentley.edu).
- Castka, P.; Balzarova, M.; Bamber, C.; and Sharp, J. (2003). How can SMEs effectively implement the CSR agenda? A UK case study perspective. *Corporate Social Responsibility and Environmental Management*, 11: 140-149.
- Collins, D. (2009). *Essentials of Business Ethics: Creating an Organization of High Integrity and Superior Performance*. John Wiley and Sons: New Jersey and Canada.
- Collins, J.; and J. Porras (2005). *Built to Last: Successful Habits of Visionary Companies*. London: Random House Business Books.
- Covey, S. (2003). *Principle-Centered Leadership*. New York, London, Toronto, Sydney: Free Press.
- Dancey, C. P., and Reidy, J. (1999). *Statistics Without Maths for Psychology*. Harlow, England, London, New York, Massachusetts, San Francisco, Toronto, Ontario, Sydney, Tokyo, Hong Kong, Seoul Taipei, Cape Town, Madrid, Mexico City, Amsterdam, Munich, Paris, Milan: Prentice Hall.
- Deshpande, R. (1983). Paradigms Lost on Theory and Method in Research in Marketing. *Journal of Marketing Research*, 47(4): 101-110.
- Dusuki, A. (2008). What does Islam say about Corporate Social Responsibility? *Review of Islamic Economics*, 12: 5-28.
- Dutta, S. and Banerjee, S. (2009). Ownership Patterns and Ethical Practice of Small Enterprises in Kolkata. *The Journal of Entrepreneurship*, 18 (2): 191-207.
- El-Bassiouny, N., Taher, A., Abou-Aish, E. M. (2008) The Importance of Character Education for Tweens as Customers: A Conceptual Model with Prospects for Future Research. *Journal of Research in Character Education*, 6(2), 37-61.
- Enderle, G. (2004). Global competition and corporate responsibilities of small and medium-sized enterprises. *Business Ethics: A European Review*, 13 (1): 51-63.
- Gerde, V.; Swanson, D. (2000). Review of Patricia Werhane and R. Edward Freeman (Eds.). 1997. *The Blackwell Encyclopedic Dictionary of Business Ethics*. Cambridge, MA: Blackwell Publishers. 416 pp. in *Business and Society*, 39 (2): 220-244.
- Ghoshal, S. (2005). Bad Management Theories are Destroying Good Management Practices. *Academy of Management Learning and Education*, 4 (1): 75-91.
- Goldschmidt Jr., A. (2004). *A Concise History of the Middle East*. Egypt: The American University in Cairo Press.

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E-Banking Service Quality and Its Implications on Customer Satisfaction: A Conceptual Framework

Keywords: E-banking service quality, Customer satisfaction, China

INTRODUCTION

In recent years, the advances in information technology have had a huge impact on service delivery and service quality within the banking industry. In this context, there has been an increase in the number of traditional banks using e-banking service. Clearly, compared with traditional banks, e-banking can provide faster, speedier and individual services to the customers (Mohammed & Mahapatra, 2009). E-banking allows customers to conduct transactions and payments anytime and anywhere. However, when customers realize that e-banking has many benefits, the customers become more demanding of the e-banking services, resulting in these banks being unable to meet the more critical standards of the customers.

Previous research on e-banking has provided a series of factors that may influence the e-banking service, such as the reputation, privacy, and network security (Omar, Bathgate & Sonny, 2011). Tianxiang and Chunlin (2010) explained that the ease of access and serviceability of the e-banks' web site, network security, and the liability of customers' online transaction can affect the formation of the customers' primary satisfaction on e-banking, which will directly affect the satisfaction of customers. Similarly, Shu et al. (2009) observed that the customer and e-banking relationship can be influenced by the following two reasons: the customers' needs are dynamic rather than static; and the e-banking service is very complex and customized, and embodied in the transaction process.

In China, the Central Bank of China (People's Bank of China) had been contemplating the introduction of e-banking for a long time; however, the e-banking service was only introduced on 6th March 1998, with the Bank of China being the first e-banking provider. Subsequently, other banks followed to provide a variety of e-banking services. The data (People's Bank of China Website, 2011) shows that there are 19 commercial banks in China providing Internet banking services, which includes 13 local banks and 6 foreign banks (see **Table 1** see the next page).

Since the e-banking service has become available, most banks in China have experienced a dramatic growth in the quantity of e-banking providers. The convenience and usefulness of the e-banking service has made more Chinese become deeply dependent on the functions of e-banking. Accordingly, the Chinese government and Banking and Financial Institutions have made a serious study of the considerable effects that may arise from e-banking services. Therefore, the purpose is to investigate the relationship between e-banking service quality and customer satisfaction.

LITERATURE REVIEW

E-banking service quality

E-banking service quality also known as e-SERVQUAL was first defined by Zeithaml et al. (2002), as "the extent to which a website facilitates efficient and effective shopping, purchasing, and delivering of products and services". E-service has become a widespread topic in recent years, especially, with

the development of information technology, and has led to an extensive number of research papers and studies offering a variety of conceptual definitions.

Table 1: Banks offering e-banking services in China

Local Banks	Foreign Banks
1. Bank of China	1. HSBC
2. Guangdong Development Bank	2. Citibank
3. CITIC Industrial	3. Standard Chartered Bank
4. Industrial and Commercial Bank	4. Bank of East Asia
5. Bank of Huaxia Bank	5. ANZ
6. Shanghai Pudong Development Bank	6. Dutch bank
7. Industrial Bank	
8. Everbright Bank	
9. Agricultural Bank of China	
10. Construction Bank	
11. Merchants Bank	
12. Minsheng Bank	
13. Shenzhen Development Bank	

Source: People’s Bank of China Website, 2011

There are many studies assessing e-service quality in banking contexts, and emphasizing the importance of technical aspects of web site delivery. For example, Jayawardhena (2004) explained that that customer pay more attention to place importance upon downloading speed, navigability and search feature efficiency in dealing with Internet banking. Furthermore, Jayawardhena (2004) concludes that banks should focus on building trust in ensuring the security and privacy of customer information. Similarly, Al-Hawari and Ward (2006) suggested that web site content, information accuracy, security, timeliness of information and web site aesthetics are more important attributes in online banking.

In addition, e-SERVQUAL is a major factor for effective service performance, and for achieving and contributing to the central goals of the organization. Meanwhile, Zeithaml et al. (2002) has developed e-SERVQUAL scales, consisting of five dimensions: information availability; ease of use; privacy/security; graphic style; and reliability. Meanwhile, Parasuraman et al. (2005) has developed online shopping service quality, consisting of four dimensions: efficiency; fulfillment; availability; and privacy. Similarly, Ribbink et al. (2004) has developed online CD and bookstores service quality, and consisting of five dimensions: assurance; ease of use; e-scape; responsiveness; and customization.

Customer satisfaction

Oliver (1980) explained that customer satisfaction is full meeting of customer expectation of the products and services. If the perceived performance matches or even over customers’ expectations of services, they are satisfied. If it does not, they are dissatisfied. In the real world, unsatisfied customers tend to create negative word-of-mouth and convey their negative impression to other customers (Lewis, 1991; Newman, 2001; Caruana, 2002). In the online context, for example Szymanski and Hise’s (2000) defined perceived e-satisfaction as an overall construct reflecting the cumulative effect of a set of discrete experiences with the service provider over a period of time. Similarly, Anderson and Srinivasan (2003) explained that e-satisfaction as “the contentment of the customer with respect to his or her prior purchasing experience with a given e-commerce firm”. These positive and negative word-of-mouth communications are very useful in Asia countries such as China, where social life and culture are structured in a way to improve social relationships among them. The bank’s ability to deliver these benefits on an on-going basis probably influences the level of customer satisfaction. Banks have provided innovative methods of satisfying customers, such as internet banking and online system, telephone and call center.

Previous research has identified various factors that determine customer satisfaction in the retail banking sector in the USA and Europe. For example, Chen and Wells (1999) suggested three aspects in measuring the attitude to the web site; informativeness of web site, entertainment of web site, and organization of web site. Similarly, Yongju and Yongsung (2010) explained product diversity, tangibles, responsiveness, interaction, and stability have positive influence on internet shopping mall customer satisfaction. In result, it seems that the consumer satisfied with internet shopping mall can keep consistent relation with internet shopping mall in future. Accordingly, Gera (2011) identified three key attributes of e-SQ, i.e. ease of use, flexibility, and reliability. The results showed the web site experience is most important for positive evaluations and behavioral response from general web users. The interaction experience with the web site is the most critical in influencing their decision to return to the site and/or make positive recommendations to others. Designing the web site and its interactive features from the consumer perspective is of most importance.

Relationship between e-banking service quality and customer satisfaction

In the services literature, strong emphasis is placed on the importance of e-banking service quality perceptions and the relationship between service quality and customer satisfaction (Cronin & Taylor, 1992; Taylor & Baker, 1994). Some researchers and academics described that customer satisfaction is an antecedent of service quality (Parasuraman et al., 1985, 1988, 1991, 1994; Carman, 1990; Bitner, 1990), and others have counter argued that the service quality as an antecedent of customer satisfaction (Cronin & Taylor, 1992; Anderson & Sullivan, 1993) and that service quality is not equivalent to satisfaction (Oliver, 1981). The current research suggests that consumer satisfaction is likely to be driven by web site characteristics (e.g. ease of use), since the web site is the principle interface between the consumer and the firm (Anderson & Srinivasan, 2003). Similarly, Cristobal et al. (2007) found that there is significant impact e-service quality on customer satisfaction. In this sense, the way in which the service is delivered through a web site plays a critical role in driving consumer satisfaction. Consequently, positive (or negative) consumer perceptions of the quality of the various e-service attributes will result in satisfaction (or dissatisfaction) with the e-service provided via the web site (Carlson & O'Cass, 2010). The causal relationship between e-service quality and customer satisfaction is the subject of great academic debated and no consensus has been reached (Bahia et al., 2000). Nevertheless, from a theoretical point of view the researchers and academics have established the conceptual definition of customer satisfaction. The conceptual model is demonstrated and tested as Figure 1. This model starts with e-banking service quality measurement scale, consisting of four dimensional structures: efficiency, requirement fulfillment, accessibility, and privacy to measure China e-banking service quality and customer satisfaction. Then, we developed a set proposition:

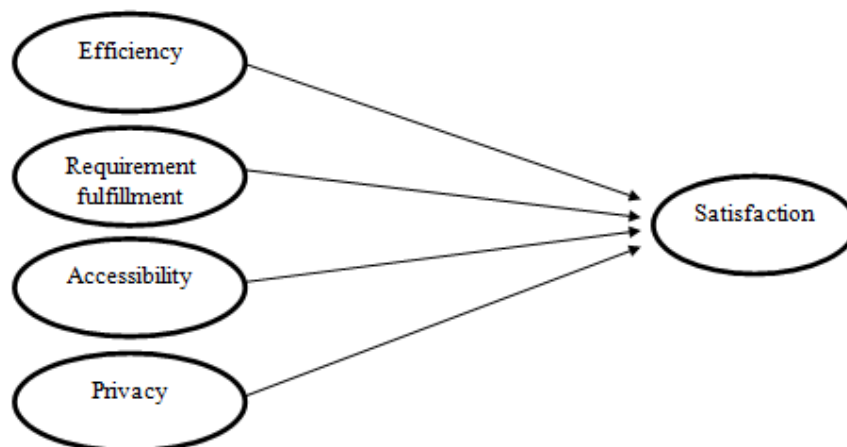


Figure .1 Conceptual Framework

- Hypothesis 1. There is a significant relationship between efficiency and customer satisfaction.
- Hypothesis 2. There is a significant relationship between requirement fulfillment and customer satisfaction.
- Hypothesis 3. There is a significant relationship between system accessibility and customer satisfaction.
- Hypothesis 4. There is a significance relationship between privacy and customer satisfaction.

PROPOSED METHODOLOGY

Method

This study will use self-administered questionnaires for data collection. The questionnaires will be hand delivered to thirteen public banks in Beijing. The survey will be conducted from January to March 2012 during banking hours. The respondents will be sought individually to complete the survey questionnaire by research assistants who are specially trained to speed up the process of distributing and collecting of questionnaires. Essentially, the respondents selected will vary according to the age group, as well as their willingness to be involved in the survey work.

Questionnaire Development

A qualifying question, "Do you use the Internet to do your banking?" is used to seek only respondents who utilize online banking facilities. Willingness to participate in the self-complete survey about their overall experience with online banking services provided by their main bank is sought from qualified respondents. They are given the option of taking the questionnaire away and returning it in an attached unidentifiable envelope to a box provided at the service station or alternatively completing the questionnaire immediately. E-banking service quality is measured using the items from Carmel and Scott (2009). Satisfaction is measured using a four-item measure previously used by Ribbink et al. (2004) and Carmel and Scott (2009) in their online research. Respondents are asked to indicate both the level of importance they place on each item and how they rate their own bank's performance on each of the items. Five-point Likert scales are utilized to collect participant responses, in an effort to increase the response rate and quality of responses and to reduce respondent fatigue.

CONCLUSION AND IMPLICATIONS

The purpose of this paper is to investigate the relationship between e-banking service quality and customer satisfaction. The conclusions can be drawn from this paper; e-banking service quality is the key factor that can influence customer satisfaction. In addition, the proposition exposed by the e-banking service quality has a significantly impact on customer satisfaction, which is a significant relationship with the efficiency and customer satisfaction, and a significant relationship with the requirement utilize fulfillment and customer satisfaction. Moreover, there is a significant relationship between the system accessibility and customer satisfaction, and a significant relationship between privacy and customer satisfaction. The propositions of this paper indicate that e-banking service quality is an important factor that will influence customer satisfaction. However, these propositions are only true for China e-banking and cannot be generalized to other counties and regions. The same paper needs to be conducted with customers from other counties and regions to see if there are any similarities with the factors that will influence customers' satisfaction in e-banking service quality.

The implications of this research are that the e-service quality dimensions of Ribbink et al. (2004) captured different aspects of e-service quality. This study implies that the dimension of functional, safe and reliable bank web sites is an insufficient means of satisfying customers. In this sense, the important area that needs to be given attention is the human interaction in online service, which may

be the main factor contributing to lower customer satisfaction levels. Therefore, bank e-retailers need to be mindful of the role and importance of traditionally provided services in fostering long-term relationships with their customers.

REFERENCES

- Al-Hawari, M., & Ward, T. 2006. The effect of automated service quality on Australian banks' financial performance and the mediating role of customer satisfaction. *Marketing Intelligence & Planning*, 24(2):127-147.
- Anderson, R. E. & Srinivasan, S. S. 2003. E-satisfaction and e-loyalty: a contingency framework. *Journal of Psychology and Marketing*. 20(2):123-140.
- Anderson, E.W. & Sullivan, M.W. 1993. The antecedents and consequences of customer satisfaction for firms. *Marketing Science*, 12(2):125-143.
- Bahia, K., Paulin, M. & Perrien, J. 2000. Reconciling literature about client satisfaction and perceived service quality. *Journal of Professional Services Marketing*, 2(2):27-41.
- Bitner, M.J. 1990. Evaluating service encounters: the effects of physical surroundings and employee responses. *Journal of Marketing*, 54(1):69-82.
- Carman, J.M. 1990. Consumer perceptions of service quality: an assessment of the SERVQUAL dimensions. *Journal of Retailing*, 66(1):33-55.
- Carmel, H. & Scott, W. 2008. E-retailing by banks: e-service quality and its importance to customer satisfaction. *European Journal of Marketing*. 43(9):1220-1231.
- Carlson, Jamie. & O'Cass, Aron. 2011. Exploring the relationships between e-service quality, satisfaction, attitudes and behaviors in content-driven e-service web sites. *Journal of Services Marketing*, 24(2):112-127.
- Caruana, A. 2002. Service loyalty: the effects of service quality and the mediating role of customer satisfaction. *European Journal of Marketing*, 36(7/8):811-828.
- Chen, Q. & Wells, W., D. 1999. Attitude toward the site. *Journal of Advertising Research*, 7(3): 11-29.
- Cristobal, E., F., C. & Guinaliu, M. 2007. Perceived e-service quality (PeSQ): measurement validation and effects on consumer satisfaction and web site loyalty. *Managing Service Quality*, 17(3):317-340.
- Cronin, J.J. Jr & Taylor, S.A. 1992. Measuring service quality: a re-examination and extension. *Journal of Marketing*, 56(1):55-68.
- Gera, R. 2011. Modelling e-service quality and its consequences in India: an SEM approach. *Journal of Research in Interactive Marketing*, 5(2/3): 203-225.
- Jayawardhena, C. 2004. Measurement of service quality in internet banking: the development of an instrument. *Journal of Marketing Management*, 20(1):185-207.
- Lewis, B. R. 1991. Service quality: an international comparison of bank customers' expectations and perceptions. *Journal of Marketing Management*, 7(1):47-62.
- Mohammed, S. K. & Mahapatra, S. S. 2009. Service quality evaluation in internet banking: an empirical study in India. *Int. J. Indian Culture and Business Management*, 2(1):30-47.
- Newman, K. 2001. Interrogating SERVQUAL: a critical assessment of service quality measurement in a high street retail bank. *International Journal of Bank Marketing*, 19(3):126-139.
- Oliver, R. L. 1981. Measurement and evaluation of satisfaction processes in retail settings. *Journal of Retailing*, 57(2):14-26.
- Omar, M., Bathgate, I., & Sonny, N. 2011. Internet marketing and customer satisfaction in emerging markets: the case of Chinese online shoppers. *Competitiveness Review: An International Business Journal*. 21(2):224-237.
- Parasuraman, A., Berry, L. & Zeithaml, V. 1985. A conceptual model of SQ and its implications for future research. *Journal of Marketing*, 49(1):41-50.
- Parasuraman, A., Berry, L. & Zeithaml, V. 1988. SERVQUAL: a multi-item scale for measuring consumer perceptions of SQ. *Journal of Retailing*, 64(2):12-40.
- Parasuraman, A., Berry, L. & Zeithaml, V. 1991. Perceived service quality as a customer-based performance measure: an empirical examination of organizational barriers using an extended service quality model. *Human Resource Management*, 30(3):335-364.

- Parasuraman, A., Berry, L. & Zeithaml, V. 1994. Reassessment of expectations as a comparison standard in measuring SQ: implications for future research. *Journal of Marketing*, 58(1):111-124.
- Parasuraman, A., Zeithaml, V. & Malhotra, A. 2005. E-S-QUAL: a multiple-item scale for assessing electronic service quality. *Journal of Service Research*, 7(3):213-234.
- Ribbink, D., Riel, A., Liljander, V. & Streukens, S. 2004. Comfort your online customer: quality, trust, and loyalty on the internet. *Managing Service Quality*, 14(6):446-456.
- Shu, F. L., Hsiao, Y. C., Yi, F. Y., Shu, T., Yuan, C. H., & Chao, L. 2009. The Mediating influence of service quality satisfaction and information trust on the e-CRM process model: an empirical bank marketing research. *The Journal of American Academy of Business*, 15(1):243-255.
- Szymanski, D. & Hise, R. 2000. E-satisfaction: an initial examination. *Journal of Retailing*, 76(3): 309-322.
- Taylor, S.A. & Baker, T.L. 1994. An assessment of the relationship between service quality and customer satisfaction in the formation of consumers' purchase intentions. *Journal of Retailing*, 70 (2):163-178.
- Tianxiang, S., & Chunlin, L. 2010. An empirical study on the effect of e-service quality on online customer satisfaction and loyalty. *The Journal of Nankai Business Review*, (3):273-283.
- Yongju, J. & Yongsung, L. 2010. A study on the customer satisfaction and customer loyalty of furniture purchaser in on-line shop. *The Asian Journal on Quality*, 11(2):145-156.
- Zeithaml, V. A., Parasuraman, A., & Malhotra, A. 2002. Service quality delivery through web sites: a critical review of extant knowledge. *Journal of the Academy of Marketing Science*, 30 (4):362-375.
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A Path Analytic Investigation of Job Complexity, Psychographics and Demographics as Determinants of Employees' Turnover

INTRODUCTION

Even though organizations and people today are operating in an environment where the challenge is high, Lebanon as a developing country is not different from other Arab countries. Lebanon is not internationally integrated on the economic, social, technological and political levels with the rest of the world. The failure to notice Lebanon on international technological indexes could be attributed to the fact that Lebanon's main industries are banking; food processing; jewelry; cement; textiles; mineral and chemical products; wood and furniture products; oil refining; and metal fabricating (The World Factbook. 2003). According to the UNDP Human Development Report (HDR), Lebanon GDP ranks is 78th of a total number of 175 countries, at the top of the high medium human development category, (UNDP, 2003). The Heritage Foundation categorizes Lebanon in 2004 as one of the mostly unfree countries of the world. Lebanon's rank on the Index of Economic Freedom is 83rd of a total number of 153 countries. The U.S. Department of State, recognizes that "Unauthorized copying of imported books, videotapes, cassettes, and computer software is common in Lebanon." (Heritage, 2001, 2003). Lebanon falls in the middle in the Euromoney Country ranking. It's Country Risk Score is 98th of a total number of 185 countries (Euromoney, 2003). When it comes to technology, it becomes evident that a serious digital divide exists between Lebanon and the developed world (Abouchedid and Eid, 2004). Internet Users in Lebanon is just 2.4% of the Internet Users in the Middle East and Lebanon is ranked 8th among 15 Middle Eastern countries (InternetWorld Stats, 2004).

A big fraction of the Lebanese business is a family business made of small and medium enterprises

(SME). As to be expected, "Family involvement in a firm has an impact on many aspects of organizational behaviour" (Cromile and O'Sullivan, 1999, p. 77). *Morris et al*, argue that " family firms violate a tent of contemporary models of organizations, namely , the separation of ownership from management" (*Morris et al*, 1996, p. 68). This leads to a lot of job complexities including role conflict, role ambiguity, stress, dissatisfaction which in turn leads to employees turnover. Employees and managers in such a business are just a tool in a structure and in most of the cases they are the first on the line to be send home if things go wrong. Strachan and Burgess , believe that "There is a range of overlapping and complex issues that arises from the work and family discourse " (Strachan, and Burgess, 1998, p. 265). Goffee, on one hand business notes that even though the term "family" is itself sufficient "to distinguish the use of more traditional/ particularistic, face-to-face forms of authority – paternalistic from more rational/ universalistic and impersonal modes" (Goffee, 1996, p.40). In comparison, Reid and Adams on the other hand, argue that employees in the developing countries are regarded as valued assets (Reid and Adams, 2001, p.311).

Need for the Study

Based on previous research, role ambiguity and conflict are a crucial reasons for employees' intention to quit. Employees turnover has become a major concern because it entails great financial losses, lower productivity as well as discontinuity in the work process. Russ and McNeilly believe that when good employees leave, then, "the company can suffer from increased costs for hiring and training, lost revenues and eroding customer relationships" (Russ and McNeilly, 1995). The primary concern of managers is the efficiency in the use of available resources.

Granted, there have been many studies done on technology in general or on using technology in a specific country; however, there was no attempt to study technology usage in the public and private Lebanese sectors per se. This researcher believes that it is important to have studies on impact of job complexity, psychographics and demographics on employees' intention to leave organization. A study, such as the one conducted here, is recommended by experts in the fields of Employees' Turnover. Goffee believes that as in other areas, much of the existing body of work on the management and organization is either American or Western European. (Goffee, 1996). In their critique of Small and Medium Enterprises business research, Morris and colleagues note "the prevalence of inadequate research designs and major limitations in terms of statistical analysis and results" (*Morris et al*, 1996,p.72).

Research Problem

The objective of this study was to determine "What is the direct and indirect effects of role conflict and role ambiguity on employees intention to quit via job satisfaction and to determine if psychographic and demographic variables have any effect on employees intention to quit?"

Research Hypotheses

Clearly defined roles should decrease the intention to quit among employees as job tension would decrease resulting in a higher level of job satisfaction. The research hypotheses are therefore:

- H₁: Role ambiguity will increase intention to quit and negatively affect job satisfaction and Role conflict will increase intention to quit and negatively affect job satisfaction.

REVIEW OF LITERATURE

Theory

In most scientific state of affairs there are alternative theories to explain particular classes of phenomena. To determine which is the better theory, researchers gather empirical data to verify theories. FIGURE 1 (omitted) is a modified portrayal of a theory to explain voluntary job turnover (the movement of employees to other organizations (Zikmund, 2003, p. 44).

Previous Research

"The relationship between people and their work has long attracted psychologists and other behavioral

scientists" (Wiley, 1995, p. 263). According to role theory, when an employee experiences role conflict and/or role ambiguity he/she will become stressed and dissatisfied. In order to cope with the stress, employees may resort to a variety of reactions such as quitting their job in order to avoid contact with those causing the stress. Based on previous research it is found that role conflict and role ambiguity are related to specific aspects of job satisfaction, they lead to less satisfaction and high intent to leave organization (Koustelios et al, 2004). Lui, et al., note that interrole concept was originally developed by Goulner in 1958 who argued that professionals working in bureaucratic organizations develop two roles: A local role implying commitment to the employing organization and a broader cosmopolitan role the demand commitment to values and skills. This suggest that interrole conflict arises when organizations try to shape professionals into disciplined members (Lui, et al., 2001, p.470). According to Koustelios et., role conflict occurs when different persons with whom the individual must interact (family and organizational members) expect different behaviour from that individual while role ambiguity refers to the un certainty about the job requirements (Koustelios et., 2004, p. 88). Rogers, et al., believe that role conflict occurs when an individual is expected to engage in inconsistent behavior as a result of receiving contradictory demands (Rogers, et al., 1994, p. 15). Firth, et al., in their investigation of the variables that lead to intention to leave job found four aspects of stress that can be used as predictors of employees turnover: role conflict, role ambiguity, work-overload and work-family conflict (Firth, et al., 2004, p. 173). Crossman and Abou-Zaki examined the effect of socio-demographic variables on satisfaction and found that "Situational theories assume that the interaction of variables such as task characteristics, organizational characteristics, and individual characteristics influence job satisfaction" (Crossman and Abou- Zaki, 2002, p. 369).

In sum, Several researchers have examined role ambiguity's relationship with turnover. Accordingly different studies have conflicting results. Few studies found that role ambiguity was a significant predictor between stayers and leavers. Others found that role ambiguity had both a direct and indirect effect on propensity to leave while role conflict had only an indirect effect. Most of the studies reported that intention to quit is greatly influenced by job dissatisfaction, lack of commitment to the organization and feelings of stress, which are in turn influenced by job stressors. One of the major job stressors is role ambiguity, which is a factor that triggers the chain of psychological states that lead to intention to quit. Previous research found that role conflict had a negative relationship on job satisfaction and a positive relation on intention to quit. Role conflict may cause employees to leave, or at least to have a propensity to leave, their organization.

Population of this Study and sample Selection

Employees working for different organizations were used as the population for this study. Since the researcher in this study was unable to randomly select a representative sample because he did not have access to the names of employees in Lebanon therefore, I decided to use a very large sample which consisted of 520 employees.

The Selected Variables and Their Measurement

Through a review of literature, informal discussion with university colleagues in management, and this researcher's personal research experience, this researcher constructed a pilot instrument that was distributed on a trial basis. Since the pilot questionnaire was found to be lengthy, wordy, and inappropriately scaled, the final draft was revised to correct for these problems.

The Dependent Variable

Four questions in part I of the questionnaire contain items that were identified by other studies as a measure of employee's intention to leave organization. Each item was measured on a scale from 1 to 5 where "1" means Strongly Disagree and "5" means Strongly Agree.

- | | |
|-----------------|---------------------------------------|
| Q ₈ | I like to hunt for a different Job |
| Q ₉ | I am looking for a better opportunity |
| Q ₁₀ | My job is not rewarding |
| Q ₁₂ | I am not motivated at work |

The Independent Variables

Ten questions in part I of the questionnaire contain items that were identified by other studies as a measure of Role Conflict (Q₇, Q₁₁), Role ambiguity (Q₂, Q₃, Q₅), Tension (Q₁), Satisfaction (Q₄, Q₆), psychographics (Q₁₃, Q₁₄) and demographics (Q₁₇, Q₁₈, Q₁₉). Each item was measured on a scale from 1 to 5 where "1" means Strongly Disagree and "5" means Strongly Agree except for the demographics that were scaled differently because they are nominal variables (gender and marital status) and continuous (age) as compared to the rest that are interval (summated rated scales).

FINDINGS OF THE STUDY

The data of this research were collected by means of personal interviews using questionnaire. Different research assistants succeeded in collecting 520 valid questionnaires from employees in Lebanon. The average age is 22.99 years with standard deviation of 3.06 years. Two thirds are male (65.0 per cent) and one third is female (35.0 percent).

Factor Analysis and Construct Validation

Factor analysis was carried out as a data reduction technique. Two statistical tests were conducted in order to determine the suitability of factor analysis. First, the Kaisers-Meyer-Olkin (KMO) measure of sampling adequacy score of 0.597 was well above the recommended level of 0.5. Second, the Bartlett test of sphericity was significant (Chi Square = 2949.098, P < 0.01), indicating that there are adequate inter-correlations between the items which allow the use of factor analysis.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.597
Bartlett's Test of Sphericity	2949.098
Approx. Chi-Square	91
df	.000
Sig.	

Principal axis factoring was used as an extraction method and oblique rotation was used as a rotation method. Six factors were extracted using Eigenvalue greater than one criterion. The six factor solution accounted for 77.853 per cent of the total variance.

The six factors were easy to label. The first factor accounts for 25.837 percent of total variance and is defined by four items with factor loadings greater than 0.70. We call factor one "Intention to Leave Organization". The second factor accounts for 14.126 percent of total variance and is defined by its three items with factor loadings greater than 0.70. We call this factor "Role Ambiguity". The third factor accounts 12.863 percent of total variance and is defined by two items with factor loadings greater than 0.70. We call factor three "Role Conflict". The fourth factor accounts 8.846 percent of total variance and is defined by two items with factor loadings greater than 0.70. We call factor four "Psychographics". The fifth factor accounts 8.526 percent of total variance and is defined by one item with factor loadings greater than 0.70. We call factor three "Tension". The last factor accounts 7.655 percent of total variance and is defined by two items with factor loadings greater than 0.70. We call factor three "Job Satisfaction".

The mathematical model underlying the relations that lead to intention to leave organization is as follows:

$$Z_3 = P_{31} Z_1 + P_{32} Z_2 + R_u$$

$$Z_4 = P_{41} Z_1 + P_{42} Z_2 + P_{43} Z_3 + R_w$$

A Path Analytic Investigation of Job Complexity, Psychographics and Demographics as Determinants of Employees' Turnover

$$Z_5 = P_{51} Z_1 + P_{52} Z_2 + P_{53} Z_3 + P_{54} Z_4 + R_v$$

$$r_{51} = P_{51} + P_{52}P_{21} + P_{53}P_{31} + P_{53}P_{32}P_{21} + P_{54}P_{41} + P_{54}P_{42}P_{21} + P_{54}P_{43}P_{31} + P_{54}P_{43}P_{32}P_{21}$$

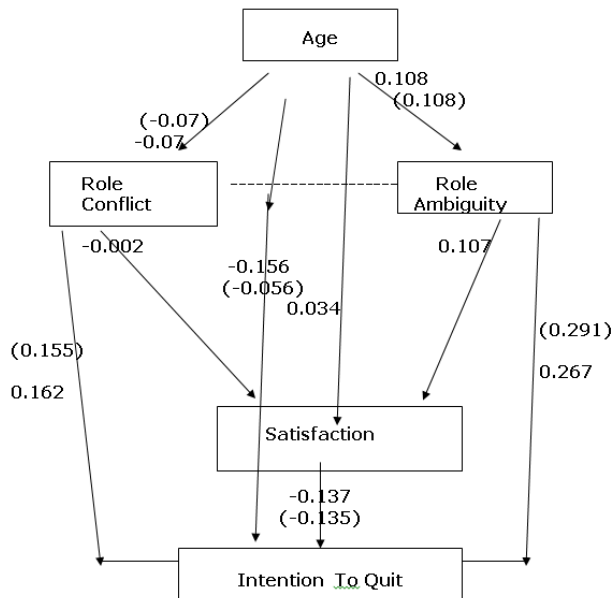
$$r_{52} = P_{51}P_{21} + P_{52} + P_{53}P_{31}P_{21} + P_{53}P_{32} + P_{54}P_{41}P_{21} + P_{54}P_{42} + P_{54}P_{43}P_{31}P_{21} + P_{54}P_{43}P_{32}$$

$$r_{53} = P_{51}P_{31} + P_{51}P_{32}P_{21} + P_{52}P_{31}P_{21} + P_{52}P_{32} + P_{53} + P_{54}P_{41}P_{31} + P_{54}P_{41}P_{32}P_{21} + P_{54}P_{42}P_{331}P_{21} + P_{54}P_{42}P_{332} + P_{54}P_{43}$$

$$r_{54} = P_{51}P_{41} + P_{51}P_{42}P_{21} + P_{51}P_{43}P_{31} + P_{51}P_{43}P_{32}P_{21} + P_{52}P_{41}P_{21} + P_{52}P_{42} + P_{52}P_{43}P_{31}P_{21} + P_{52}P_{43}P_{32} + P_{53}P_{41}P_{31} + P_{53}P_{41}P_{32}P_{21} + P_{53}P_{42}P_{31}P_{21} + P_{53}P_{42}P_{32} + P_{53}P_{43} + P_{54}$$

Results of Path Analysis

Figure 2
Path Diagram of the Actual Model



CONCLUSIONS AND RECOMMENDATIONS

This investigation was conducted to discover the causal effects of job complexities, psychographics and demographics on the Lebanese employees intention to leave their jobs (organization). The selected sample of 520 employees was asked 16 questions. These questions tapped different areas of job complexities that were identified by previous research. Factor analysis was used in determining the construct validity of the items. Multiple regression and path analysis were used in computing the direct effects of the explanatory variables to the explained variation in employee's intention to quit his job in Lebanon. Findings of the study support the hypotheses. Furthermore "role ambiguity" has the highest direct effect on "employees

turnover" while "role conflict" has the second highest direct effect. Age which come fourth in predicting employee's turnover has the least direct effect and comes after "satisfaction" that has a negative direct effect. The more an employee runs into role ambiguity, the more an employee runs into role conflict, the less an employee is satisfied and the older he is becoming then, the more the possibility that he/she quits his/her job and look for a different organization. psychographics and life style showed no effect on employees turnover in Lebanon.

Recommendations

For subsequent research, the results of this study is consistent with previous research and suggest that the relationships between "role ambiguity", "role conflict", "satisfaction" and "age" are ones of complex causal sequence. The causal model constructed for this study should be elaborated and tested per industry and per sector for male employees and for female employees. A cross validation of the causal system across different industries and different sectors becomes imperative before we can generalize the findings to all employees.

REFERENCES

Abouchedid, K and Eid, G.M. (2004), "E-learning challenges in the Arab world: revelation from a case study profile", Quality Assurance in Education; Volume 12 No. 1; full text record available at: <http://juno.emeraldinsight.com/vl=1602475/cl=101/nw=1/rpsv/cg.htm>

A Path Analytic Investigation of Job Complexity, Psychographics and Demographics as Determinants of Employees' Turnover

- Blalock, H.M. jr., (1996), Causal Inferences in Non-experimental Research (Chapel Hill: The University of North Carolina Press). P6.
- Cromile, S. and O'Sullivan, S. (1999), " Women as managers in family firms", *Women in Management Review*, Vol. 14 No. 3, pp.76-88.
- Crossman, A. and Abou-Zaki, B., "Job Satisfaction and employee performance of Lebanese Banking Staff", *Journal of Management Psychology*, Vol. 18 No. 4, pp. 368-376.
- Euromoney, 2003 "Country Risk Index", London.
- Firth, L. Mellor, D. J. Moore, K. A. Loquet, C., " How can managers reduce employees intention to quit?", *Journal of Managerial Psychology*, Vol. 19 No. 2, pp. 170- 187.
- Goffee, R. (1996), " Understanding family business: issues for further research", *International Entrepreneurial Behaviour & Research*. Vol. 2 No. 1, pp.36-48.
- Heritage Foundation, 2004 Index Of Economic Freedom.
- Internet World Statistics, 2004.
- Koustelios, A. Theodorakis, N. Goulimaris, D., " Role ambiguity, role conflict and job satisfaction among physical education teachers in Greece", *The International Journal of Educational Management*, Vol. 18 No. 2, pp. 87-92.
- Lui, S.S. Yue-Ngo, H. Tsang, A.W.N., (2001), "Interrole conflict as a predictor of job satisfaction and propensity to leave", *Journal of Managerial Psychology*, Vol. 16 No. 6, pp. 469-484.
- Morris, M. H. Williams, R. W. Nel, D. (1996), "Factors influencing family business succession", *International Entrepreneurial Behaviour & Research*. Vol. 2 No. 3, pp.60-81.
- Reid, R.S and Adams, J. S. (2001), " Human resource management-a survey of practices within family and non-family firms", *Journal of European Industrial Training*, Vol. 25 No. 6, pp.310-320.
- Rogers, J. D. Clow, K.E. Kash, T.J., "Increasing job satisfaction of service personnel", *Journal of service marketing*, Vol. 8 No. 1, pp. 14-26.
- Russ, F.A, McNeilly, K.M, (1995) Cited in Johnson, J.T. Griffin, M., Griffith, R.W., 2000,P. "Factors discriminating functional and dysfunctional salesforce turnover", *The Journal of Business & Industrial Marketing*, Vol. 15 No. 6, pp. 399-415.
- Strachan, S. and Burgess, J. (1998), "The family friendly workplace: Origins, meaning and application at Australian workplaces", *International Journal of Manpower*, Vol. 19 No. 4, pp. 250-265.
- UNDP. Arab Human Development Report, 2003.
- Wiley, C., "What motivates employees according to over 40 years of motivation surveys", *International Journal of Manpower*, Vol. 18 No. 3, pp. 263-273.
- Zikmund, W.G., Business Research Methods, 7th ed., 2003. Ohio: South – Western, p. 45.

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Men's Purchasing Decision on Grooming Products: A Comparative Study on Customers' Status

Keywords: Purchasing decision; men's grooming product; status

INTRODUCTION

Ointments and scented oils being used to clean and soften men's skin and mask body odour during the process of men's grooming since 10000 BC in Egypt. Men's grooming products examples skin care and makeup became popular in the late 1900s. With the metro sexual phenomenon brought into the society in the year of 2000, men start to focus more on their appearance by using skin-care products and cosmetics (Marek Cosmetics n.d.).

In Asia-Pacific region, South Korea, India and China are the only three markets with significant value for male grooming product. In contrast, the sales in Malaysia, Philippines, Thailand and Taiwan are increasing dramatically (Rexam consumer packaging report, 2007). There has been a positive estimation of growth rate of men's grooming product industry. For instance, the sales of male grooming products are expected to reach USD\$ 25 billion by 2011 (Brehl, 2009).

Although male consumers are now placing better understanding in looking good and the personal-care aspects by improving their health and wellness, the sense of masculinity is still an obstacle for male grooming industry in the way of being flourished in countries, which have conservative culture. For example, in Muslim countries, Razor and its supplementary products are significantly less marketed as men with the beard are considered as a sign of religious devotion (Davis, 2007).

OBJECTIVES

Number of studies previously has been done related to product gender perceptions, examples Iyer & Debevec (1986a; 1986b; 1989), Milner et al. (1990) and Milner & Fodness (1996). However, not much research has been done related to the impact of the customer's status with the product, especially grooming products. Thus, the main objective of this study is to compare men's perception on grooming products in terms of their status. This can be referred to whether they are single, married or divorced.

LITERATURE REVIEW

According to The U.S Commercial Service (n.d), men's grooming products include pre-shave, razors, post shaves, bath and showers, deodorants, hair care, skin care and clothing. Men are getting more

involved for shopping and decision-making in grooming products (Sukato, 2008).

The main group of customers who purchase men's grooming products is young adults (male) with the age ranging from 25 to 40 years old. This is due to they would choose high end grooming products and they have a stable financial background to support their purchasing behaviour (Leung et al., n.d). Sukato (2008) stated that men's purchasing decisions on grooming products are dependent on many factors.

In terms of macro environment, numbers of studies have proven that there is a strong relation between demographics and purchasing decision on grooming product. A study by The U.S. Commercial Service (n.d) found that income, age, education and status will affect men's purchasing decision towards grooming products. Higher average disposable income leads consumer to purchase luxury products and men with higher age range tend to buy grooming products as anti-aging tools. Sukato (2008) stated that male consumers who are well educated to tend to accept metro sexuality, which is referring to well-off urban straight guy, who typically lives on his own and has a lot of money to spend on his appearance.

Fugate & Phillips (2010) found that product gendering is still prevalent. From their study, their stated that "males were more likely than females to purchase gender-congruent products; that individuals with a greater desire for product-self-congruence used products as a form of self-concept; that individuals reared in non-traditional households were less focused on gender congruence; that less traditional individuals were less focused on gender congruence; and that those who sought gender congruence were more likely to seek gender cues in the marketing mix".

Another study by McNeill & Douglas (2011) explores the concept of masculine identity in a modern social world as evidenced by consumption of retail products traditionally seen as female or feminine related to cosmetic grooming products. Their paper finds the notion of conflict in construction of self-identity has the greatest impact on how a New Zealand male might purchase grooming products, with many individuals struggling to balance gender expectations of 'manliness' with social expectations of appearance. Males tend to create unwritten 'rules' around the use and purchase of such products, including acceptable types of product, maximum number of products and packaging colour expectations.

Men at different ages tend to react differently to the ideas of investing in male grooming activities. Young people are more open to use grooming products and new products can easily arouse their interests, while older men are more brand loyalty and used to a more basic daily hygiene regimen (Davis, 2007).

Source of information can be one of the factors has influenced men in their purchasing decision. Hongpaisarnwiwat & Srinil (1987) found that source of information or media such as advertisements on television, magazines, newspapers and the internet has influences on men's purchasing decision of grooming products. Another study by Sukato (2008) found that spouse, friends, family and colleagues also affect their purchasing decision.

Grooming products' attributes such as brands, reputation, packaging and ingredients or materials can affect men's purchasing decision (Sukato & Elsey, 2009). Furthermore, as life expectancy rises, more men are becoming concerned with their appearance and lead them towards purchasing grooming products. There are five reasons, which led men to purchase grooming products. These main reasons are including enhancing self-attractiveness, aging reduction, hygiene conscious and the pleasure of using grooming products (Sukato, 2008).

METHODOLOGY

Primary data for this research were collected using a self-administered questionnaire designed to serve

the purpose of the research objective. The questionnaire designed was mainly based on 1-Very relevant, 2-Relevant, 3-Quite relevant, 4-Indifferent, 5-Quite irrelevant, 6-Irrelevant, and 6-Very irrelevant.

Non-probability sampling was chosen as the research survey method which was convenience sampling since it is quickly and economically to distribute the questionnaires. Totally, 250 questionnaires have been distributed. Malhotra (1999) suggested minimum sample of problem solving is at least 200 samples. The targeted population is young adult male in Malaysia within the age of 21 and 40.

FINDINGS AND DISCUSSIONS

Demographics

Totally, 250 respondents have replied to the research questionnaire. However, only 224 valid questionnaires have been used in this research. Another 26 questionnaires were unable to be included because of incomplete.

In terms of the number of samples, most of the respondents were still single. A total of 193 respondents or 86.16% were single. The total sample of married and divorce are very small, each 29 respondents or 12.95% is for married and 2 respondents or 0.89% is for divorced. By contrast, the imbalance has occurred on the sample size (see Table 1).

Of the samples obtained from single respondents, most of them are between the ages of 21 to 25. This can be seen from the number of responses of 177 respondents. Of the total sample, 120 respondents were still studying or graduated from the university. Samples obtained also showed that most of them are earning less than RM1000.

For samples obtained from the married, most of them are aged between 36 and 40. Of the total 29 respondents, 20 respondents have university-level qualifications. Although the total sample obtained was lower financially from single respondents, but the number of high income is more than respondents who are married. This can be seen from the number of married respondents totalled 12 respondents compared to respondents who were still of five respondents only.

Both divorced respondents are between the ages of 21 to 25. Each was educated primary and secondary schools. From the responses obtained, one is earning less than RM1000, while another respondent is earning more than RM6000.

Table 1: Demographics

	Single	Married	Divorced	Total
Age				
21 - 25	177	3	2	182
26 - 30	11	8	0	19
31 - 35	2	4	0	6
36 - 40	3	14	0	17
Total	193	29	2	224
Qualification				
Primary Education	1	1	1	3
Secondary Education	19	3	1	23
Post-secondary Education	53	5	0	58
Tertiary Education	120	20	0	140

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	Single	Married	Divorced	Total
Total	193	29	2	224
Monthly Income				
< RM 1000	153	1	1	155
RM 1000 - RM 1999	17	0	0	17
RM 2000 - RM 2999	14	5	0	19
RM 3000 - RM 3999	3	6	0	9
RM 4000 - RM 5999	1	5	0	6
=>RM 6000	5	12	1	18
Total	193	29	2	224

Reliability Analysis

For the analysis of reliability of the data, the values 0.7 or 0.75 are often used as cutoff value for Cronbach's alpha (Christmann & Van Aelst, 2006). Hair et al. (2006) highlighted 0.7 is an acceptable level of reliability. The analysis of this study shows that the cronbach's alpha is 0.811, which is an acceptable level of reliability (see Table 2).

Table 2 Cronbach's Alpha

Number of Items	Cronbach's Alpha
8	0.811

Overall, the analysis of all samples, single, married or divorced shows that all variables are among the indifferent and quite relevant. This can be seen in terms of output gain. The highest mean score is "societal pressure" (4.0777) and the lowest is "hygiene conscious" (3.6269). So, overall, perceptions of respondents in terms of grooming products are relevant (See Table 3). Thus, similar like The U.S. Commercial Service (n.d) outcome, this study proved that status will affect men's purchasing decision towards grooming products.

Table 3 Descriptive Analysis

	Single		Married		Divorce		Total	
	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D
Look presentable	3.6891	1.67604	3.3793	1.65645	6.5000	.70711	3.6741	1.68774
Important to professional and social success	3.7358	1.70099	3.5172	1.68228	4.5000	.70711	3.7143	1.69107
Look youthful to compete with younger guys socially and jobs	4.0466	1.64345	3.5517	1.78458	3.5000	.70711	3.9777	1.66053
Look better to women	3.9430	1.74758	3.3103	1.60587	3.5000	.70711	3.8571	1.73261
Anti-aging tools	3.9275	1.55955	2.8621	1.43238	2.5000	.70711	3.7768	1.58020
Define image	3.6580	1.59333	3.3103	1.53770	5.0000	2.8284	3.6250	1.59666
Hygiene conscious	3.6269	1.70956	2.8276	1.44096	5.0000	1.4142	3.5357	1.69636
Societal pressure	4.0777	1.63592	3.3448	1.67494	3.5000	3.5355	3.9777	1.66592

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The analysis of respondents who are single shows that most of the correlations of these variables are positive correlation and it is significant at the 0.01 and 0.05. Only correlations between “hygiene conscious” and “anti-aging tools”, and “societal pressure” and “look youthful to compete with younger guys socially and jobs” are not significant even it shows a positive correlation. They have responded that the best mean score is Hygiene conscious (3.6269) (See Table 4). The analysis shows the relationship between "look presentable" and "important to professional and social success", and "look presentable" and "look youthful to compete with younger guys socially and jobs" are the best compared to other correlations, which is between moderate positive and strong positive correlation. Thus, this study shows a similarity with previous study done by McNeill & Douglas (2011).

Table 4 Descriptive Analysis (Single)

	Mean	S.D	1	2	3	4	5	6	7	8
Look presentable	3.6891	1.67604	1							
Important to professional and social success	3.7358	1.70099	.568**	1						
Look youthful to compete with younger guys socially and jobs	4.0466	1.64345	.556**	.547**	1					
Look better to women	3.9430	1.74758	.348**	.514**	.427**	1				
Anti-aging tools	3.9275	1.55955	.145*	.146*	.282**	.310**	1			
Define image	3.6580	1.59333	.496**	.480**	.404**	.442**	.273**	1		
Hygiene conscious	3.6269	1.70956	.363**	.261**	.210**	.308**	.132	.444**	1	
Societal pressure	4.0777	1.63592	.178*	.148*	.138	.306**	.229**	.160*	.199**	1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

The analysis of respondents who are married found that the overall mean score are much better compared with the respondents who are still single. Most of the respondents no matter what is their status still believed that “hygiene conscious” still one of the most relevant variable compared with other variables. This can be referred to the mean score 2.8276, which is better than other variables. Even the highest mean score, “look youthful to compete with younger guys socially and jobs”, however, the analysis still shows it is around “quite relevant” scale (See Table 5). This study also shows that “look presentable” has a better correlation compared with other seven variables.

Table 5 Descriptive Analysis (Married)

	Mean	S.D	1	2	3	4	5	6	7	8
Look presentable	3.3793	1.65645	1							
Important to professional and social success	3.5172	1.68228	.722**	1						
Look youthful to compete with younger guys socially and jobs	3.5517	1.78458	.615**	.699**	1					
Look better to women	3.3103	1.60587	.612**	.718**	.648**	1				
Anti-aging tools	2.8621	1.43238	.535**	.401*	.534**	.314	1			
Define image	3.3103	1.53770	.611**	.695**	.456*	.625**	.458*	1		
Hygiene conscious	2.8276	1.44096	.552**	.436*	.524**	.456*	.265	.557**	1	
Societal pressure	3.3448	1.67494	.337	.251	.293	.304	.571**	.650**	.440*	1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

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Overall, there is no difference between the three groups related to five variables (see Table 6). This can be referred to analysis of data. With $P > 0.05$, analysis of five variables has concluded that there is no difference in terms of “important to professional and social success”, “look youthful to compete with younger guys socially and jobs”, “look better to women”, “define image”, and “societal pressure”.

With $P < 0.05$, only three variables are significant differences. Similar like previous studies done by Sukato (2008), and Sukato & Elsey (2009), analysis of respondents' feedback shows that there is statically difference in terms of “look presentable”, “anti-aging tools”, and “hygiene conscious”.

Table 6: ANOVA Test

	F	Sig.	Decision
Look presentable	3.321	.038	Difference
Important to professional and social success	.426	.654	No difference
Look youthful to compete with younger guys socially and jobs	1.205	.302	No difference
Look better to women	1.735	.179	No difference
Anti-aging tools	6.716	.001	Difference
Define image	1.350	.261	No difference
Hygiene conscious	3.635	.028	Difference
Societal pressure	2.558	.080	No difference

CONCLUSIONS

Despite the different status of men have different perceptions associated with three variables (look presentable, anti-aging tools and hygiene conscious), the overall perception of respondents, whether single, married or divorced are still positive about grooming products. In can be referred to them have the same view of the other five variables, mean scores were less than 4:00, which means between indifferent and quite different, and most of the variables have significant influence in connection with purchasing decision on grooming products.

In terms of managerial implication, this study provides marketers ideas related to the perception of consumers on men's grooming products. Marketers are currently more focused on grooming products for men. Since the use of grooming products have good acceptance for men, it gives a very lucrative business opportunity in the present and future.

REFERENCES

- Brehl, E. 2009. Male grooming products emerge as an important sector in the cosmetics and fragrance industry. <http://www.ameinfo.com/197515.html>. Accessed 1 October 2011.
- Christmann, A., & Van Aelst, S. 2006. Robust estimation of Cronbach's Alpha. *Journal of Multivariate Analysis*, 97(7): 1660-1674.
- Davis, B. 2007. Men's grooming: worth the hype? GCI Magazine. <http://www.gcimagazine.com/marketstrends/consumers/men/12307996.html>. Accessed 15 September 2011.
- Fugate, D.L., & Phillips, J. 2010. Product gender perceptions and antecedents of product gender congruence. *Journal of Consumer Marketing*, 27(3): 251-261.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., & Tatham, R.L. 2006. *Multivariate data analysis, 6th Ed*. Upper Saddle River: Pearson Education.
- Hongpaisarnwiwat, S., & Srinil, B. 1987. Lifestyles and consumer behavior regarding gay men in Bangkok. *Journal of Business Administration*, 11(42): 51-66.

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- Iyer, E., & Debevec, K. 1986a. Gender stereotyping of products: Are products like people?'. In N.K., Maholtra, & J.M., Hawes (Eds), *Developments in Marketing Science*: 40-45. Atlanta, GA: Academy of Marketing Science.
- Iyer, E., & Debevec, K. 1986b. Sex roles and consumer perceptions of promotions, products, and self: What do we know and where should we be headed?'. In R.J., Lutz (Ed.), *Advances in Consumer Research*: 210-214, Provo, UT: Association for Consumer Research.
- Iyer, E., & Debevec, K. 1989. Bases for the formation of product gender images. In J.M., Hawes, & J., Thanopoulos (Eds), *Developments in Marketing Science*. Akron: Academy of Marketing Science.
- Leung, C. F., Cheng, W.K., Lam, S.C., Lau, K.L. and Tai, N.C. n.d. SK-II men: Business development plan, MKT3651 final report of business environment in China. City University of Hong Kong. <http://lbms03.cityu.edu.hk/oaps/mkt2007-3651-lcf321.pdf>. Accessed 1 October 2011.
- Malhotra, N.K. 1999. *Marketing research: An applied orientation, International Ed*. New Jersey: Prentice Hall.
- Marek Cosmetics. n.d. A history of men's grooming. http://www.4voo.com/education/ed_history.htm. Accessed 1 October 2011.
- McNeill, L.S., & Douglas, K. 2011. Retailing masculinity: Gender expectations and social image of male grooming products in New Zealand. *Journal of Retailing and Consumer Services*, 18(5): 448-454.
- Milner, L.M., & Fodness, D. 1996. Product gender perceptions: The case of China. *International Marketing Review*, 13(4): 40-51.
- Milner, L.M., Speece, M.W., & Anderson, J. 1990. Product gender perceptions: The case of Greeks. In N.E., Synodinos (Ed), *Proceedings of the Third Symposium on Cross-cultural Consumer and Business Studies*, 17-19 December 1990, Honolulu, HI: 404-14. Honolulu: College of Business Administration, University of Hawaii.
- Rexam. 2007. Consumer packaging report 2007-08. http://www.rexam.com/files/pdf/Rexam_Consumer_Packaging_Report_2007.pdf. Accessed 16 August 2011.
- Sukato, N. 2008. Change in male buying behavior in Thailand – The case of “Metrosexuals”. *The Management Case Study Journal*, 8(2): 263-270.
- Sukato, N., & Elsey, B. 2009. A model of male consumer behaviour in buying skin care products in Thailand. *AU Journal*, 29(1): 39-52.
- The U.S. Commercial Service. n.d. Canadian men's cosmetics market. <http://docs.google.com/gview?a=v&q=cache:vDDuYYArkMAJ>. Accessed 16 August 2011.
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Impact of Performance Pay on Employee Performance: Mediating Role of Work Motivation and Pay Satisfaction

INTRODUCTION

“Performance Pay”, which is also known in various other names like Pay-for-Performance, Performance linked pay, Variable compensation, Performance Incentive, Merit Pay etc. has become an integral part of compensation program in the Industry across the globe, particularly for employees in management cadre. Several forms of Performance Pay practices are in vogue with different

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mechanism of linking the pay with performance as well as with different methods of allocating performance contingent rewards (Schwab and Olson, 1990, Milkovich and Newman, 2005).

There are manifold purposes for organizations to have performance based compensation plan. According to Burkey and Terry (2004) a compensation package usually comprises of large portion of firm's total costs, and the ability to adjust the cost is important to firm's survival, to the extent that compensation can be shifted to variable category, it becomes easier to recover cost in the long run. They also argue that pay is a powerful communicator of organisation goals and priorities across all levels in the organisation; therefore organisations that expect to be more successful must make employees partner in their success. Proponents of variable pay claim that such systems improve employee motivation, create a culture in which employees genuinely care about organisational effectiveness and integrate an organisation's labour cost to its ability to pay (Guthrie and Cunningham, 1992). Attracting and retaining best employees is also an important purpose of Performance pay plan (Cadsby, Song and Tapon, 2007).

A number of researches have been done, particularly during last four decades in finding out linkages of performance pay and employees motivation for enhanced performance (e.g Pearce, Stevenson and Perry, 1985; Heneman, Greenberger and Strasser, 1988; Schwab and Olson 1990; Burkey and Terry, 2004; Kim, Mone and Kim, 2008). Rynes, Gerhart and Minette (2004) stated that there is strong evidence of pay being a powerful motivator—perhaps the most powerful potential motivator—of performance. Of course, some other research findings contradict the view that Pay for Performance drives positive behaviour for higher performance. (e.g Deci, 1971; Pearce *et al*, 1985, Mersden and Richardson, 1994).

Performance pay by nature is an instrument for influencing work motivation towards resulting in enhanced performance (Igalens and Rousell, 1999).

There have been also a number of studies done on interrelationship between Pay satisfaction and Merit Pay (e.g. Lawler, 1971. Heneman *et al*, 1988, Fong and Shaffer, 2003).

Research Objective

Pay for performance has two advantages for firms relative to fixed salary, first it attracts higher quality employees and second, it motivates the employees more and also the risk attitude has an important impact on compensation scheme chosen and incentive effect of pay for performance (Cadsby *et al*, 2007). A critical aspect of pay for performance plan design is to move employees away from the belief that their compensation is an entitlement, and instead to something that is at risk and associated with performance (Milkovich and Newman, 2005).

Codsby *et al* (2007) suggested that future researches should explore effectiveness of various mechanisms of motivating strong performance and their interaction with various forms of pay for performance in different organisation settings.

In pursuit of searching the answer for “Does Performance pay drive enhanced performance?” and, if so, does motivational factors like work motivation and pay satisfaction have any interplay?, the objectives of this study are to:

- a) Examine the impact of Performance Pay plan in enhancing performance.
- b) Assess the mediation effect of work motivation and pay satisfaction in the relationship between Performance Pay plan and Performance

LITERATURE SURVEY

The logic underlying Job-based pay structure flows from scientific management, championed by Frederick Taylor in the 1930s (Lawler III, 1993). Herzberg's Motivation–Hygiene theory (1959) holds that the content of a person's job is the primary source of motivation. In other words, Herzberg argued

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(1968) against the commonly held belief that money and other compensation is the most effective form of motivation to an employee. Expectancy theory of Vroom (1964) posits that the motivational force experienced by an individual to select one behaviour from a larger set is some function of perceived likelihood that behaviour will result in attainment of various outcomes weighted by desirability (valence) of these outcomes of the person. If we accept Vroom's theory, incentive-pay should lead employees with higher pay valence to higher productivity while those with lower valence should have correspondingly lower performance (Fox, Scott and Donohue, 1993)

The model of Porter and Lawler (1968) suggested that the more an individual values a reward and the more he sees his efforts as leading to this reward, the more effort he will expend. Extending the argument on Vroom's expectancy theory, Lawler (1971) argued that pay can be a powerful performance incentive because it can be used to satisfy many needs. However attractive money may be, it cannot motivate performance unless it is contingent on performance (Pearce *et al*, 1985). As suggested by Lawler (1971), if level of pay is held constant, self-rated performance will be negatively related to pay level satisfaction. Similar argument can be made with respect to the relationship of self-rated performance to both instrumentality beliefs (i.e., the belief that success will bring reward) merit increase satisfaction, both being important to merit pay program (Vest, Scott and Markham, 1994)

A different perspective was offered by Deci (1972). Referring to his research on externally-mediated rewards, such as pay on intrinsic motivation, Deci argues that contingent payment plans should be avoided because they reduce intrinsic motivation, lead individuals to develop strategies that will enable those rewards with least efforts. Pearce *et al* (1985) indicate that the implementation of merit pay had no significant effects on organizational performance.

Psychological economics and self-determination theory (Ryan and Deci 2000) suggest that motivation is not a unitary phenomenon. According to this theory, individuals may not only have different levels of motivation but also experience different kinds of motivation depending on the specificities of the organizational context and of the task characteristics. It further states that extrinsic motivation satisfies personal needs indirectly, that is, extrinsic motivation refers to doing something because it leads to separable outcomes such as monetary compensation. Intrinsic motivation, in contrast, satisfies personal needs directly by creating an intrinsic reward for those who perform the tasks (Frey and Jegen 2001). Tasks are thought to be intrinsically rewarding if they are perceived to be interesting, that is, to be challenging, enjoyable, or purposeful (Ryan and Deci 2000). Pay for performance is proposed to have under certain conditions a negative, crowding-out effect on intrinsic motivation, for this reason, especially, the performance of interesting tasks is likely to suffer upon the introduction of performance-related pay (Ryan and Deci 2000; Frey and Jegen 2001). According to Cognitive Evolution Theory (Deci, 1972, Deci, Cascio and Krusell, 1975) performance reward expectancy should lessen perceived self-determination reducing intrinsic interest in job activities. According to this theory positive effects of performance reward expectancy on job performance should be countered at least partly, by the loss of perceived autonomy.

Hypotheses:

Fernie and Metcalf (1995) reported that employee involvement and performance contingent pay results superior performances compare to other establishments, who do not have such schemes. Cadsby *et al* (2007) establishes that besides attracting higher quality of employees, pay for performance induces more efforts and higher productivity from employees regardless of their quality compare to fixed pay. Baker, Jensen and Murphy (1988) hold that pay for performance systems are powerful motivators of human actions, apparently so powerful that they induce counterproductive effects and substitution of less productive motivational devices in organisation. Addison and Belfield (2001), however, find no significant relationship between pay for performance and productivity performance.

Hypothesis (H1): Performance Pay Plan drives enhanced performance.

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Latham and Pinder (2005) describe that work motivation is a set of energetic forces that originates both within as well as beyond an individual's being, to initiate work related behaviour and to determine its form, direction, intensity and duration. The process of work motivation in relation to compensations can be described by three independent variables; efforts-performance expectancy, performance-outcome expectancy and valence (Igalens and Rousell, 1999). Porter and Lawler (1968) advocated structuring the work environment, so that, effective performance would lead to both intrinsic and extrinsic rewards, which would in turn produce total job satisfaction. They suggested a reward –effort- performance structure to lead both intrinsic and extrinsic motivation. Marsden and Richardson (1994) in studying relationship of Performance pay and work motivation failed to find a positive relation and stated that if the Performance Pay did not improve employee motivation, it is hard to see how it could have enhanced employee performance. Majority of researchers, however, suggest a positive relation of Performance pay and Work Motivation.

Hypothesis (H2): 'Performance Pay' stimulates higher 'Work Motivation'

Locke and Latham (1990) states that the precursor of a high work motivation will be present when the individual is confronted by high degree of challenges in the form of a specific, difficult goal or its equivalent. He explained that it is a precursor because being confronted by challenge, does not guarantee high performance; there are five moderators that effect the relation between goal and performance viz., action- ability, commitment, feedback, expectancy & self-efficacy and task complexity. Porter and Lawler (1968) hold that Social cognitive theory not only provides comprehensive understating of work motivation but self-efficacy and collective efficacy, with their clearly demonstrated strong relationship with work related performance, seem to have considerable implication of improving human performance. Kuvass (2006) reported a strong relationship between intrinsic motivation and self-reported performance among typical knowledge workers.

Hypothesis (H3): 'Work Motivation' mediates relationship between Pay for performance and Performance

As Lawler (1971) stated, at a theoretical level, there should be a positive relation between pay-for – performance and pay satisfaction. He explains that to the extent that performance is perceived by employees as being instrumental to the attainment of a valued outcome such as pay raise, and then pay satisfaction should increase. Heneman *et al* (1988) observed that Pay – for-performance has a larger weightage on pay raise satisfaction than any other facet of pay satisfaction. Fong and Shaffer (2003) stated that pay for performance is a significant positive predictor of pay satisfaction dimensions, including satisfaction with group incentive plan. Kim *et al* (2008) stated that pay-for-performance perceptions moderate the relationship between self-efficacy and pay satisfaction.

Hypothesis (H4): Performance Pay Plan positively impacts Pay satisfaction

Pay is an emotional and affective reaction and is likely to be influenced by personal and environmental factors; some social psychological processes like leader-member exchange, justice, and voice that are likely to impact pay satisfaction (Bahl and Gulati,2007). According to Chiu (1999) both pay and job satisfaction play an important role in work motivation and have impact as mediating variables between personal affectivity and work motivation. In a study of examining the implication of pay-for performance system on intrinsic and extrinsic motivation as well as pay and job satisfaction of front line employees, Stringer and Didham (2011) found positive associations between pay and intrinsic motivation, and intrinsic motivation and job satisfaction, while there was negative association between extrinsic motivation and job satisfaction; pay satisfaction had the strongest association with job satisfaction.

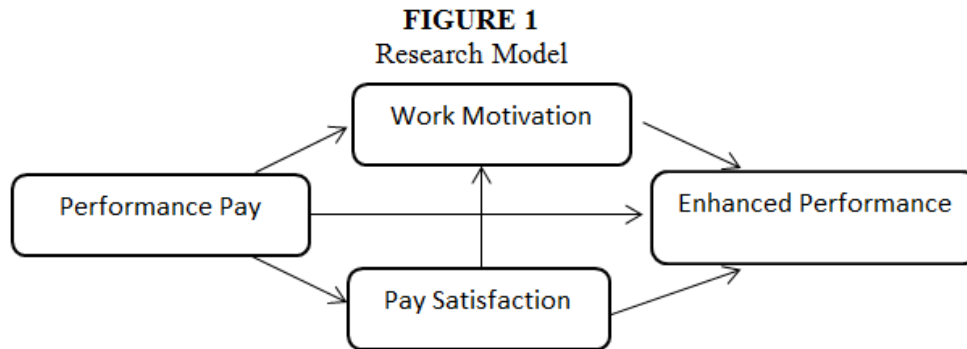
Hypothesis(H5): Higher the pay satisfaction, higher the work motivation

Vandenberghe and Tremblay (2008), hold that Pay satisfaction is related to normative commitment but the latter has no influence on outcome. Greene (1973) in his study concerning satisfaction-performance relationship observed that that performance causes satisfaction and not the opposite. He concluded that merit may cause satisfaction but satisfaction does not cause performance. Self –rated performance was found to exhibit significant negative relationship with pay level satisfaction and performance (Vest *et al*, 1994). While the previous research studies throw lots of insights in

relationship between pay satisfaction and various dimensions of satisfaction including work motivation, this study aims to investigate the mediating impact of pay satisfaction in the relationship between Performance Pay plan and Performance.

Hypothesis (H6): Pay satisfaction mediates the relationship between pay for performance and performance

Research Model: The research model is shown in figure 1.



METHODOLOGY

Subjects & Procedure:

The survey was conducted on-line through the research questionnaire using ‘Google mail document system’. The respondents were required to submit their response online through the system. Respondents were chosen randomly from various industries with the help of CEO /COO and HR heads of the respective companies. Out of about 500 mails with questionnaire link 264 responses were received. The respondents belonged to several industries, predominate ones being IT/ITES (19%), Automotive (10%), FMCG/Food & Beverages (10%), Education (10%), and from all levels of management (5% top management (Chairman/CEO/COO), 27% senior management /Functional Head, 51% middle management and 17% junior and entry level of management). Male and female respondent ratio was 84 : 16.

Measures

A five-point Likert scale (1 - Strongly disagree / highly dissatisfied and 5 - Strongly agree/highly satisfied) was used. Items were based on the following proven measures:

- ‘Performance Pay plan effectiveness’ Measure: The Questionnaire of 8 items developed by Lowery, Petty and Thomson (1995), four items scale on ‘Pay for performance’ of Heneman *et al* (1988) combined to make scale more appropriate for the target respondents, who were corporate executives.
- ‘Performance’ Effectiveness measure: Performance scale (3 Items) is adopted from Tessema & Soeters (2006).
- ‘Work Motivation’ measure: Work motivation measures taken from Harpen, Praag and Cool, (2005). And,
- ‘Pay Satisfaction’ measure: Pay satisfaction Questionnaire (PSQ) of 18 items developed by Heneman & Schwab (1985) adopted for pay satisfaction measurement.

Analysis

In establishing validity of relationship between the constructs, to begin with, internal consistency, reliability and unidimensionality of each of the measures under each construct have been studied

through corrected item-total-correlation (CITC), exploratory factor analysis (EFA) and Cronbach alpha coefficient analysis.

In order to find the relationship, Barron & Kenny (1986) test method has been used. In this study Performance Pay (PPP) is the independent variable, Work Motivation (WM) and Pay satisfaction (PS) separately & combinedly are the mediating variables. Performance (PRP) is the dependent variable. The steps followed in the analysis are given in figure 2.

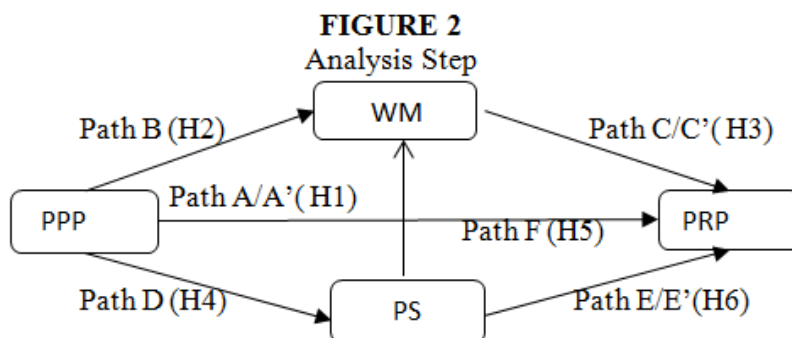
FINDINGS

Corrected – Item -Total –Correlation (CITC)

In Corrected Item Total Correlation (CITC), item 12 (0.307) of Performance Pay Plan scale and item 6 (0.222) of Work Motivation scale were found to be below 0.40. CITC of all the other items of these two and all items of other two scales were found to be above 0.08.

Exploratory Factor Analysis (EFA)

EFA of Performance Pay (PPP) revealed two Factors. Factor 1 comprised of item number 1 to 7. These items imply the impact of performance plan on self, organisation in terms of productivity, satisfaction and quality. Thus, this factor I have termed in this study as Performance Pay Plan effectiveness (PPPE). The other factor comprised of items number 8,9 10 and 11. These items pertained to comparative and competitive gains attached to performance pay plan. This factor in this study has been termed as Performance Pay competitiveness (PPPC).



PPP: Performance Pay Plan, WM: Work Motivation; PRP: Performance, PS : Pay satisfaction

EFA of 18 items of PSQ showed three factors instead of four factors namely, Pay Level, Pay raise, Pay Benefit and Pay administration, as suggested and found by Heneman & Schwab (1985), the authors of the scale. Three factors included Pay level (Item no. 1, 4 10 and 14), Pay structure/ administration and benefit (Item no. 9, 11, 12, 15, 17 and 18) and Pay raise (item no. 4 and 16). Items 2, 3, 6 and 8 found to be having cross loading, hence dropped from scale. Differences in dimensionality of pay satisfaction scale from four dimension model of Heneman and Schwab (1985) have been observed by other researchers as well. Lam (1989) studying the dimensions of PSQ with Hong Kong workers reported that in countries like Hong Kong there may be two factor model (pay- Pay level, raise and structure & Administration one factor and pay benefit as another factor) underlying pay satisfaction, not four independent dimensions posited by Heneman and Schwab (1985). Observing differences in dimensions of pay satisfaction scale (PSQ) of Heneman and Schwab (1985), Carrahar and Buckley (2004) reported that solution of pay satisfaction dimensionality problem may depend on cognitive complexity of a population with which they are working.

Other two scales namely Work motivation and Performance were found to be having single factor with no item having communality < 0.30 or there was also no cross loading. Means, Standard Deviations, Reliabilities and intercorrelations for dependant & Interdependent variables^a have been shown in Table 1

Table 1: Means, Standard Deviation, Reliabilities and intercorrelations for dependant & Interdependent variables^a

Sr. No.	Variable	No. of Item	Mean	S.d.	1	2	3	4	5	6	7	8	9
1	PPPE	7	3.232	0.904	(0.93)								
2	PPPC	4	3.528	0.783	0.635**	(0.703)							
	PPP	11	3.340	0.803	0.960**	0.826	(0.913)						
3	WM	5	3.918	0.741	0.254**	0.244**	0.274**	(0.850)					
4	PLS	4	3.206	0.837	0.538**	0.441**	0.553**	0.240**	(0.787)				
5	PBAS	7	3.107	0.813	0.575**	0.521**	0.605**	0.190**	0.754**	(0.946)			
6	PRS	2	3.066	0.884	0.541**	0.521**	0.583**	0.180**	0.637**	0.694**	(0.887)		
	PS	13	3.161	0.744	0.681**	0.548**	0.649**	0.228**	0.889**	0.944**	0.778**	(0.632)	
7	PRP	3	3.785	0.699	0.043	0.171**	0.093	0.251	0.034	-0.074	-0.100	-0.029	(0.935)

n= 264, **P < 0.01 (Two tailed), Cronbach's alpha shown diagonally in parenthesis.

PPPE=Performance Pay Effectiveness, PPPC= Performance Pay Competitiveness, PPP= Overall Performance Pay, PLS= Pay Level Satisfaction, PBS= Pay Benefit & Administration Satisfaction, PRS= Pay Raise Satisfaction, PS= Overall Pay Satisfaction, WM= Work Motivation

Simple Regression Analysis

From the simple regression analysis as shown in Table 2, it could be observed that the 'Overall Performance Pay (PPP)' and its component 'Performance Pay effectiveness (PPPE) relationships with 'Performance Pay Competitiveness (PPPC)' are statistically insignificant. Performance Pay Competitiveness (PPPC), however, has statistically significant positive relation with 'Performance (PRP)' though the effect looks marginal (R square .029, B 0.168, p < .01)

Performance Pay effectiveness (PPPE), Performance Pay Competitiveness Impact (PPPC) as well as Overall Performance Pay (PPP) have positive effect on Work Motivation and their relationships are statistically significant.

Table 2
Simple Regression Analysis

Independent Variables	Dependent Variables											
	PRP		WM		PLS		PBAS		PRS		PS	
	R ²	B	R ²	B	R ²	B	R ²	B	R ²	B	R ²	B
PPPE	0.002	0.033	0.109	0.270**	0.322	0.533**	0.330	0.480**	0.715	0.827**	0.381	0.508**
PPPC	0.029	0.168**	0.113	0.318**	0.239	0.550**	0.272	0.503**	0.367	0.684**	0.301	0.520**
PLS	0.001	0.020	0.102	0.268**								
PBAS	0.005	-0.068	0.086	0.287**								
PRS	0.000	0.018	0.087	0.247**								

**P < 0.1 PPPE=Performance Pay Effectiveness, PPPC= Performance Pay Competitiveness PLS= Pay Level Satisfaction, PBS= Pay Benefit & Admn. Satisfaction, PRS= Pay Raise Satisfaction, WM= Work Motivation

Similarly, it is found that both the components of performance pay plan viz., Performance Pay effectiveness (PPPE), Performance Pay Competitiveness Impact (PPPC) and also the overall Performance Pay (PPP) has significant positive effect on each of the three components Pay satisfaction (PS) i.e, Pay level satisfaction (PLS), Pay benefit and administration satisfaction (PBAS) and Pay raise satisfaction (PRS) as well as on overall pay satisfaction.

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All the three components of Pay satisfaction (PS) i.e, Pay level satisfaction (PLS), Pay benefit and administration satisfaction (PBAS) and Pay raise satisfaction (PRS) as well as overall pay satisfaction also found to be having significant positive impact on Work motivation (WM).

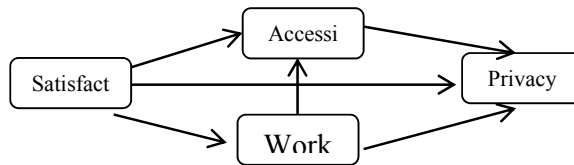
Thus, above observations though does not support the original Hypothesis (H1) that ‘Performance Pay drives enhanced performance’, however, modified hypothesis as ‘Performance Pay competitiveness (PPPC) drives enhanced performance’ statistically stands true.

‘Performance Pay competitiveness (PPPC)’ has been found to be having significant effects on ‘Work Motivation (WM)’ and also with all components of ‘Pay Satisfaction’ namely, pay level satisfaction, Pay benefit & Administration satisfaction (PBAS), Pay raise satisfaction (PRS) as well as with overall Pay Satisfaction.

With replacement of ‘Performance Pay (PPP)’ with ‘Performance Pay Competitiveness (PPPC)’, this analysis supported that the Hypothesis (H2) i.e., Performance Pay Competitiveness stipulates ‘Work Motivation’ and also supported the Hypothesis (H4) that ‘Performance Pay Competitiveness impact’ positively affects ‘Pay Satisfaction’. This analysis further supported the hypothesis 5 that higher the pay satisfaction, higher the motivation

The original model stands modified as shown in figure 3

FIGURE 3
Modified Research Model



PPPC: Performance Pay Competitiveness, WM: Work Motivation, PRP : Performance, PS= Pay satisfaction

Multiple Regression analysis: Mediating Impacts (Barron & Kenny method,1986)

Table 3 contains the findings of multiple regression analysis data of mediating impacts as per research model.

The above Regression analysis data indicates that Model 1 (Mediation effect of Work motivation), Model 3 (Mediation effect of Pay benefit & administration satisfaction) and Model 5 (Mediation effect of overall Pay satisfaction) in the relationship between Performance Pay plan competitiveness and enhanced performance are statistically significant. However Pay benefit & administration satisfaction and overall pay satisfaction have negative mediation impact.

The corresponding Sobel test data for these models are as follows:

	<u>A</u>	<u>B</u>	<u>Sa</u>	<u>Sb</u>	<u>Z-Statistics</u>	<u>P value</u>
Model 1	0.318	0.250	0.055	0.059	4.41773461	0.00031572
Model 3	0.503	0.270	0.051	0.065	-3.84020954	0.00000618
Model 5	0.520	0.165	0.049	0.068	-2.36542605	0.00900467.

Since the value of sobel’s z- statistics of each these models are higher than the critical value of z (1.96, p < .05), it confirms that each of these models is statistically significant.

Thus, these findings supported the hypothesis 3 i.e., work motivation as mediating variable leads enhanced performance. However, the pay satisfaction impact in enhancing performance found to be having negative impacts and thus, hypothesis 6 is not supported. These results indicates that pay benefit & administration satisfaction as well as overall Pay satisfaction as a mediating variable, has negative impact on performance.

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As a full model (model 7, 8 and 9) of the mediation impact work motivation and pay level satisfaction, it is observed that work motivation positively impacts in enhancing performance but pay level satisfaction has no statistically significant mediation impact. In full model analyses of work motivation and other components of pay satisfaction namely pay benefit & administrative satisfaction and pay raise satisfaction as well as overall pay satisfaction separately, it revealed that work motivation in all these models has full mediating effects with regard to Performance plan competitiveness driving enhanced performance. However, pay benefit & administrative satisfaction, pay raise satisfaction and overall pay satisfaction though statistically significant as mediating variable but each of them has negative impact on Performance.

Table 3
Multiple Regression: Mediating Impact

Mediating Variables	Exploratory Regression Analysis of Mediating effect on Performance, Performance Pay competitiveness (PPPC) being control Variable								
	Model1	Model2	Model3	Model4	Model5	Model6	Model7	Model8	Model9
WM	0.250***					0.292**	0.285***	0.267***	0.289**
PLS		-0.061				-0.107			
PBAS			-0.207**				-0.252***		
PRS				-0.102				-0.134**	
PS					-0.165**				-0.227***
R ²	0.092	0.034	0.066	0.040	0.051	0.105	0.145	0.110	0.131
F	13.103	5.569	10.488	5.43	9.804	10.171	14.658	10.679	13.075

***P<0.01, ** P<0.05

WM= Work Motivation, PLS= Pay Level Satisfaction, PBAS= Pay Benefit & Admn. Satisfaction, PRS=Pay Raise Benefit, PS= Pay Satisfaction

DISCUSSION

This study finding is unique in nature as it indicates that Performance Pay plan, as such, has hardly any impact in enhancing Performance. A further analysis reveals that the Performance Pay effectiveness (Perceived performance pay impacts on self, department and company in terms of productivity, work quality, job satisfaction etc.) has no bearing on 'Performance' but 'Performance pay competitiveness impact' (perceived comparative & competitive gain associated with performance pay plan) found to be having positive impact on performance. According to Perry, Engbers and Jun (2009) researchers have found mixed results in regard to employee perceptions about variables such as expectancy instrumentality, and valence (drawn from expectancy theory). Lawler (1981) stated that the problem of merit pay system is that employees are unable to perceive direct relationship between pay and performance; there are number of interconnected factors that account for it. The finding in this study is supported by basic concept of expectancy theory. Expectancy theory argues that performance contingent reward system can lead to higher performance levels than systems that do not tie pay for performance (Kahn and Sherer, 1990). It also finds reasoning from equity theory as Harder (1991) stated that equity performance effects depend on performance outcome expectancy.

The study finds that Performance pay competitiveness impact has significant effect on work motivation, which is in consistence with the findings of many previous researchers (e.g., Eisenberger, 1999; Kuvaas, 2006). The findings in this study established a full mediating impact of work motivation in the relation of performance pay plan competitiveness driving enhanced performance.

In line with findings of previous researchers (Heneman et al, 1988; Fong and Shaffer, 2003) that a strong positive relationship exists between Pay-for-performance perceptions and pay raise satisfaction, pay level satisfaction, and overall pay satisfaction, similar strong relationship of performance pay plan competitiveness with all three dimensions of pay satisfaction namely pay level

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satisfaction, pay benefit & administrative satisfaction, pay raise satisfaction and also with overall pay satisfaction.

However, Pay Satisfaction as mediating variable is having feeble but negative impact in driving enhanced performance, which is also a revealing finding against the common belief. It supports the finding of Lawler (1971) and Vest et al (1994) that 'self-rated performance has significant unique negative relationship with Pay satisfaction. Since this study shows very low effect of Pay Satisfaction on Performance, it calls for further in-depth study & research on this aspect.

One could bring an inference from these findings that it is not the 'pay' that appears to be prime driver in enhancing performance but it is the 'work motivation', which drives. However, with regard to reward contingent as pay, it is the competitive gain perceptions that may matter more. Pay satisfaction impact on performance needs further probing

Limitations

The scales of the construct in this study captures only the perceived responses of employees, particularly, with respect to measurements of performance & performance pay effectiveness, which may not be the true understanding of the actual impact. Self-rated performance measure is a major limitation in this study. 'Indeed, there is evidence to suggest that employees tend to rate their own performance higher than the supervisor rate it (Mayer, 1975). Mayer (1975) argues that most individuals tend to rate themselves above average whether they are or not. It is the tendency of the individuals to rate their performance highly that serves as one basis of criticism of merit pay program (Vest et al, 1994)

Future research scope

The findings strongly suggest for further detail study in exploring and discovering the interplay and underlying factors that lie between Performance pay plan and performance. The unique findings of this study against the common beliefs throws open a huge scope of future research on performance pay plan. A deeper understanding of relationship of performance linked pay plan and work motivation as well as intrinsic motivation could bring out a new body of knowledge which would be of immense help in developing effective Performance Pay plan. The interplay of underlying factors that stipulates work motivation as well as intrinsic motivation for higher level of performance need to be probed in detail.

There seems to be also a need to enlarge the scope of the study for the other important factors that influences the linkage between Performance pay plan and performance like organisation culture, intrinsic motivation, Goal setting process, employee communication etc.

REFERENCES

- Addision John and Belfield Clive R (2001), Updating the Determinants for firm performance: Estimation using the UK 1998 employee relations survey, *British Journal of Industrial Relations*, 39:3, PP 341-66
- Bahl Konika T and Gulati Namrata, (2007), Pay satisfaction of software professionals in India, *Vikalpa*, Vol. 33, No. 3 PP 9-21
- Baker Gorge P, Jensen Michael C and Murphy Kevin J (1988), Compensation and Incentive: Practices vs. Theory, *Journal of Finance* Vol. XLIII, No.3 PP 593-616
- Baron Rueben M and Kenny David A, The moderator mediator variable distinction in Social Psychology Research: Conceptual, Strategic and statistical considerations (1986), *Journal of personality and social psychology*, vol. 51, No. 6, PP 1173-1181
- Burkey Lisha A and Terry Brian (2004), At the intersection of economy and HRM: An argument of variable pay scheme, *American Business Review*, PP 88-92
- Cadsby Bram C, Song Fei and Tapon Francis (2007), Sorting and Incentive Effects of Pay for Performance: An Experimental Investigation, *Academy of management journal*, Vol 50, No.2, PP 387-405.

- Carraher Shwan P and Buckley Ronal P (1996), Cognitive Complexity and Perceived Dimensionality of Pay Satisfaction, *Journal of applied psychology*, Vol. 91, No.1, PP 101-109
- Chiu Randy (1999), Does perception of pay equity, pay satisfaction and Job satisfaction mediate the effects of positive affinity on work motivation, *Social behaviour and personality*, 28 (2), PP 177-184
- Deci Edward L (1971), Effects of external mediating reward on Intrinsic motivation, *Journal of Personality and Social Psychology*, Vol 18, No.1, PP-105-115
- Deci Edward L (1972), Effects of contingent and non-contingent reward and controls of intrinsic motivation, *Organisation behaviour and Human Performance*, 8, PP-217-229
- Deci Edward L, Cascio Wyane F and Krusell Judith (1975), Cognitive evaluation theory and some comments on Caldar and Straw critique , *Journal of Personality and social psychology*, Vol 31, No.1, PP 81-85
- Eisenberger Robert , Rhoades Linda and Cameron Judy (1999), Does pay for performance increase or decrease self-determination and intrinsic motivation, *Journal of personality and psychology*, Vol.77 No.5, PP 1026-1040
- Fernie Sue and Metcalf David (1995), Participation, Contingent Pay, Representation and Work Place Performance: Evidence from Great Britain, *British Journal of Industrial Relations*, 33: 3, PP 379-413
- Fong Sunny C.L. and Shaffer Margaret A. (2003), The dimensionality and determinants of pay satisfaction: a cross-cultural: investigation of a group incentive plan, *Institution Journal of Human Resource Management* 14:4, PP 559-580
- Fox Jeremy B, Scott Dow K and Donohuek Joan M (1993), An Investigation on Pay Valence and Performance in a Pay-for-Performance Field Setting, *Journal of Organizational behaviour*, Vo. 14, PP 687-693
- Frey Burno S and Jegen Reto (2001), Motivation Crowding Theory, *Journal of Economic Surveys*, Vol. 15 No. 5, PP 589-611
- Greene Charles N (1973) Casual connections among Managers' Merit Pay, Job Satisfaction, and Performance, *Journal ol Applied Psychology*, Vol. 58, No. 1, PP 95-100
- Guthrie James P and Cunningham Edward P (1992), Pay for Performance for Hourly Workers: The Quaker Oats Alternatives, *Compensation and Benefit Review*, Vol. 24, Issue 2, PP 18-23

For a complete copy of this paper with endnotes and references see author (s).

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Financial Analysis and Trading: Financial Engineering and Applications of Fibonacci Sequences

Key Words: Financial Engineering, Fibonacci Recurrences, Financial Analysis

INTRODUCTION

It is frequently observed in price charts that as significant price moves retrace themselves, support and resistance levels are more likely to occur at certain specific retracement levels e.g. at 0.0%, 23.6%, 38.2%, 61.8%, 100%, 161.8%, 261.8% and 423.6%. Each of these numbers starting from 23.6% is approximately 0.618 times the succeeding number and each number starting from 38.2% is approximately 1.618 times the preceding number. The number 1.618, sometimes called the golden

mean, is of special mathematical significance as it is the limiting value of the ratio F_{n+1}/F_n as n tends to $+\infty$. Here, the numbers F_n and F_{n+1} are two successive numbers in a Fibonacci series. The general Fibonacci recurrence relation is given as follows:

$$F_n = F_{n-1} + F_{n-2} \quad (1)$$

Dividing both sides of equation (1) by F_{n-1} we obtain the following form:

$$F_n/F_{n-1} = 1 + F_{n-2}/F_{n-1} \quad (2)$$

As $n \rightarrow \infty$, we have $F_n/F_{n-1} \approx F_{n-1}/F_{n-2}$. Putting F_n/F_{n-1} as α , we may therefore write as follows:

$$\lim_{n \rightarrow \infty} \alpha = 1 + 1/\alpha \quad (3)$$

Solving the above equation for α , we get $\alpha \approx 1.618$, which is the limiting value of the Fibonacci ratio for infinitely large values of n . This ratio has great historical significance – ancient Greek architects believed that buildings constructed so as to make their perpendicular sides in the ratio α would render the most pleasing visual effect. Therefore, many of the ancient Greek and Egyptian works of architectural marvel are found to reflect this golden mean property.

FIBONACCI VECTOR GEOMETRY

Fibonacci Vector Geometry (FVG) is a relatively modern branch of computational geometry which studies geometric objects that can be sequentially generated using Fibonacci-type recurrences.

The n -th general Fibonacci vector is defined as $\mathbf{G}_n = (\mathbf{G}_{n-1}, \mathbf{G}_n, \mathbf{G}_{n+1})$; $\{\mathbf{G}_n\}$ being a set of generalized Fibonacci vectors with $\mathbf{G}_1 = \mathbf{a}$, $\mathbf{G}_2 = \mathbf{b}$ and the terms of the vector sequence satisfying the linear recurrence relation as follows:

$$\mathbf{G}_{n+2} = \mathbf{G}_{n+1} + \mathbf{G}_n \quad (4)$$

Therefore, $\{\mathbf{G}_n\} = \dots, \mathbf{a}, \mathbf{b}, \mathbf{a}+\mathbf{b}, \mathbf{a}+2\mathbf{b}, \mathbf{a}+3\mathbf{b}, \dots, F_{n-2}\mathbf{a}+F_{n-1}\mathbf{b}, \dots$ where \mathbf{a} and \mathbf{b} may be interpreted as position vectors in Z^3 . Since each vector in the sequence is of the form $m\mathbf{a} + n\mathbf{b}$, they individually lie on some plane $\pi(\mathbf{a}, \mathbf{b})$ defined by the point of origin $\theta(0, 0, 0)$ and two distinct points in space A and B, assuming that \mathbf{a} and \mathbf{b} are not collinear. The coefficients m and n are of course Fibonacci numbers. The vectors \mathbf{G}_n tend towards an equilibrium limit ray originating from $\theta(0, 0, 0)$ as $n \rightarrow \infty$. In the context of security price movements, we will be concerned only with positive values of the coordinates of the vectors \mathbf{a} and \mathbf{b} in case of a significant uptrend. A significant downtrend will likewise mean that we will be concerned only with negative coordinates of the vectors \mathbf{a} and \mathbf{b} .

Why would security prices seem to follow predictable sequences?

This is a million-dollar question to which, unfortunately there is no scientifically justified million-dollar answer as yet. Technical analysts would often go a long way in putting their faith on what they visually inspect on the price charts even in the absence of a thoroughly scientific reasoning. And traders can and do make money based on the recurrent chart patterns. In his addendum to the highly innovative and paper by Lo, Mamaysky and Wang, (Lo, Mamaysky and Wang, 2000), Narasimhan Jagadeesh has opined that serious academics and practitioners alike have long-held reservations against technical analysis because most of the popular charting techniques are based on theoretically rather weak foundations. While the chartists believe that some of the observed price patterns keep repeating over time, there is no plausible, scientifically justifiable explanation as to why these patterns should indeed be expected to repeat.

While there is usually no debate regarding the “information content” of price charts, Narasimhan argues that this information pertains to past events and as such cannot be considered to have any practical utility unless and until it helps market analysts to actually predict future prices significantly better than they can predict in the absence of such information. In our present paper, though we do not attempt to advance a rigorously mathematical justification as to why asset prices tend to sometimes follow predictable patterns like Fibonacci sequences, we do try and provide a reasonable pointer to what might be a good enough explanation. Of course, the topic is open to further exhaustive and incisive research, but that we believe is largely what we originally wanted to achieve – to make the academicians shake off their inhibitions about technical analysis and give it a fair chance to prove its efficacy or otherwise in the light of rigorous theoretical investigation. For our part, in our present research endeavour, we perform an indicative empirical investigation of the predictive usefulness of Fibonacci sequences as filters in computerized trading systems.

Mathematical Represent ability of Certain Stochastic Processes on a Sequence of Binary Trees with Fibonacci Nodes

One of the fundamental premises of many well-known asset-pricing models in theoretical finance is that of the temporal evolution of security prices in accordance with some pre-specified stochastic process. For example, the classical Black-Scholes option-pricing model assumes that stock prices evolve over time in accordance with a specific stochastic diffusion process known as the geometric Brownian motion.

Furthermore, all classical derivative valuation models assume that stock prices evolve in a risk-neutral world, which implies that the expected return from all traded securities is the risk-free rate and that future cash flows can be valued by discounting their future expected values at this expected rate. This assumption of risk-neutrality enables a discretization of the continuous geometric diffusion process in terms of a two-state price evolution and forms the mathematical basis of the common numerical approach to option pricing using multi-nodal binomial trees.

It has been shown (Turner, 1985) that certain stochastic processes can be represented on a sequence of binary trees in which tree T_n had F_n nodes, F_n being the n -th element of a Fibonacci number sequence. It was subsequently shown that generalized Fibonacci numbers can be used to construct convolution trees whereby the sum of the weights assigned to the nodes of T_n is equal to the n -th term of the convolution. That is, with Ω as the sum of the weights:

$$\Omega (T_n) = \sum F_j C_{n-j+1} \tag{5}$$

In equation (5), $\{C_n\}$ is a general sequence used in weighting the nodes with integers applying a specific sequential weighting scheme. The idea we seek to convey here is that *if a* continuous evolution of asset prices does follow a specific, time-dependent stochastic process, then there could indeed be a discrete equivalent of that process whose convolutions may be constructed out of generalized Fibonacci sequences.

Moreover, the Fibonacci retracements observed in security prices can then be directly associated with the change in G_n and their oscillatory convergence to the equilibrium limit ray in n steps. This is a geometric analogue of the oscillatory changes in the Fibonacci ratio F_n/F_{n-1} as it converges to α . The required conditions for this convergence are $n \rightarrow +\infty$ and $n > N$; where N is some critical value of n after which the magnitudes of $|G_n|$ are increasing with n . That is, N is some integer for which the magnitude $|G| = |F_{n-2}\mathbf{a} + F_{n-1}\mathbf{b}|$ is at its minimum. In price trends of traded securities, quite obviously n denotes time-points e.g. close of trading days; and hence can be said to satisfy these required convergence conditions.

FIBONACCI SEQUENCES IN TECHNICAL ANALYSIS

Security prices are observed over time to climb up, slide down, pause to consolidate and sometimes retrace, before continuing onward evolution. A good number of technical analysts claim that these retracements often reclaim fixed percentages of the original price move and can be effectively predicted by the Fibonacci sequence. We must however hasten to repeat that though there is a relatively strong belief amongst technical analysts about the efficacy of Fibonacci sequences in security price prediction, yet to the best of knowledge of the authors no scientific research has yet been directed towards establishing if at all there is any grain of hard, mathematical truth to support this belief or even, indeed, in the absence of any hard mathematical proof, is there in the very least, any concrete empirical evidence to suggest likewise. One of the more popular automated trading schemes based on the notion of Fibonacci sequences is that of Harmonic Trading.

This is a methodology that uses the recognition of specific *Harmonic Price Patterns* and Fibonacci numbers to determine highly probable reversal points in stocks. This methodology assumes that trading patterns or cycles, like many patterns and cycles in life, repeat themselves. The key is to identify these patterns, and to enter or exit a position based on a high degree of probability that the same historic price action will occur. Essentially, these patterns are price structures that contain combinations of consecutive Fibonacci retracements and projections. By calculating the various Fibonacci aspects of a specific price structure, this scheme attempts to indicate a specific area to examine for potential turning points in price action. J.M. Hurst outlined one of the most comprehensive references to Harmonic Trading in his "cycles course" from the early 1970s. He coined the well-known principle of harmonicity that states: "The periods of neighbouring waves in price action tend to be related by a small whole number."

The analysis of Harmonic Price Patterns is based on the elements of plane geometry and is related to the controversial Elliott Wave theory. However, the Fibonacci-based trading schemes do try to account for the fact that specific price structures keep repeating continually within the chaos of the markets. Hence, although conceptually similar to the Elliott Wave approach in its examination of price movements, trading schemes based on Fibonacci sequences require specific alignment of the Fibonacci ratios to validate the price structures. In this context, we should also perhaps point out that the Fibonacci sequences do play a central role in imparting a semblance of scientific justification to another common and albeit controversial charting tool - that of the Gann lines.

During the early part of the last century, a stock trader named William Gann developed an elaborate set of geometric rules that he proposed could predict market price movements. Basically, Gann divided price action into "eighths" and "thirds". According to Gann, security prices should move in equal units of price and time - one unit of price increase occurring with the passage of one unit of time. The division results in numbers such as 0.333, 0.375, 0.5, 0.625 and 0.667, which Gann used as crucial retracement values. Similarity with the Fibonacci numbers is all too obvious.

Practicing chartists and traders who advocate Fibonacci retracements proclaim, based on their interpretations of chart patterns that these retracement levels show up repeatedly in the market because the stock market is the ultimate mirror of mass psychology. It is a near-perfect recording of social psychological states of human beings, reflecting the dynamic evaluation of their own productive enterprise, and thereby manifesting in its very real patterns of progress and regress. Whether financial economists accept or reject their proposition makes no great difference to these technical analysts, as they happily rely on the self-compiled historical evidence supporting their belief.

Obviously, if there is a large enough body of traders out there in the market relying on the Fibonacci retracements to make their trading decisions, then, in so doing they could end up self-validating the efficacy of the methodology in a circular reference! It is therefore a primary goal of our current

research to try and independently investigate the efficacy or otherwise of Fibonacci sequences in forecasting asset price structures.

INVESTIGATING THE POTENTIAL UTILITY OF FIBONACCI SEQUENCES AS FILTERS IN AUTOMATED TRADING SYSTEMS

Automated trading systems are usually collection of a set of rule-based logic statements which generate a series of traffic lights regulating the transactions. If the signals are favourable, the system gives an overall green signal implying that the trader should go ahead with the transaction or, if the signals are not favourable, the system gives an overall red signal implying that the trader should hold position and not go ahead with the transaction. To what degree the underlying rule-based logic is transparent or not marks a distinguishing feature between the so-called black box, grey box and tool box systems.

The reliability of any rule-based system can be improved through incorporation of better filters for the trades. In this paper, we investigate the utility of Fibonacci sequence as such a filter. Our objective is to try and *objectively identify* any clear visual patterns resembling the Fibonacci sequence in a set of historical market data.

What we have used is an input data set comprising of more than a thousand data points corresponding to the daily closing values of the S&P500 index from April 1, 1998 to March 31, 2003. We marked out seven critical retracements on the chart on August 31, 1998, December 20, 2000, April 4, 2001, September 21, 2001, August 23, 2002, October 9, 2002 and March 11, 2003. These seven points have been evaluated based on the following formula which gives the maximum retracement till the j^{th} day:

$$\text{Retracement}_j = (\text{Index}_j - \text{Max}_j \text{Index}_j) / \text{Index}_j \quad (6)$$

If a row represents days of trading and a column represents the index values then the spreadsheet version of the above retracement formula could be expressed in the form “=(E107-MAX(\$E\$2:E107))/E107”, which incidentally gives the retracement on the 106th day corresponding to August 31, 1998 of our S&P500 index historical data.

The spread sheet formula yields the percentage retracements on these seven days as 23.97%, 20.77%, 24.52%, 35.93%, 46.99%, 23.94% and 17.25% respectively. Barring the fifth and seventh retracements, the remaining ones are indeed quite remarkably close to the Fibonacci levels of 23.6% (the first, second, third and sixth retracements) and 38.2% (the fourth retracement)! These retracements are marked out as critical simply because an inspection of the spread sheet output in the Appendix reveals that these are the maximum retracements observed in our sample time-period. A popular method employed by technical analysts to automatically generate buy-sell signals in computerized trading systems is by using the difference between a fast and a slow moving average and marking out the cross-over points. Often an exponential moving average (EMA) is preferred over a simple moving average because it is argued that an EMA is more sensitive and reflects changes in price direction ahead of its simple counterpart. Fitting the EMA basically becomes the statistical equivalent of exponentially smoothing the input data which calls for an optimal smoothing parameter to minimize the sum-squared errors (SSE) of the one-period lags. Mathematically, this boils down to solving the following constrained, non-linear programming problem (NLPP):

$$\text{Minimize } \text{SSE}_{n+1} = \sum_{t=1} [P_{t+1} - \{\alpha \sum_{j=2}^{(n-j)} P_j\} - \beta^{(n-1)} P_1]^2$$

Subject to $\alpha + \beta = 1$; and $0 \leq (\alpha, \beta) \leq 1$, where P_j is the asset price on the j^{th} day (7)

Proof:

$$\text{EMA}_1 = P_1$$

$$\text{EMA}_2 = \alpha P_2 + \beta \text{EMA}_1 = \alpha P_2 + \beta P_1$$

$$\text{EMA}_3 = \alpha P_3 + \beta \text{EMA}_2 = \alpha P_3 + \beta (\alpha P_2 + \beta \text{EMA}_1) = \alpha P_3 + \beta (\alpha P_2 + \beta P_1); \text{ and}$$

$$\text{EMA}_4 = \alpha P_4 + \beta \text{EMA}_3 = \alpha P_4 + \beta (\alpha P_3 + \alpha \beta P_2 + \beta^2 P_1)$$

Generalizing up to k terms we therefore get:

$$\begin{aligned} \text{EMA}_t &= \alpha P_t + \alpha\beta P_{t-1} + \alpha\beta^2 P_{t-2} + \alpha\beta^3 P_{t-3} + \dots + \alpha\beta^{t-2} P_2 + \beta^{t-1} P_1 \\ \text{Therefore, } \text{EMA}_{t+1} &= \alpha P_{t+1} + \alpha\beta P_t + \alpha\beta^2 P_{t-1} + \alpha\beta^3 P_{t-2} + \dots + \alpha\beta_{t-1} P_2 + \beta^t P_1 \dots \text{ (i)} \\ \text{But } \text{EMA}_{t+1} &= \alpha P_{t+1} + \beta \text{EMA}_t = \alpha P_{t+1} + \beta (\alpha P_t + \alpha\beta P_{t-1} + \alpha\beta^2 P_{t-2} + \dots + \beta_{t-1} P_1) \dots \text{ (ii)} \end{aligned}$$

It is easily seen that equation (i) is algebraically equivalent to equation (ii). Since we have already proved the case for $k = 1, 2, 3$ and 4 , therefore, by the principle of mathematical induction the general case is proved for $k = n$. Thus, summing up and simplifying the expression, the one-period lag error in $n+1$ is evaluated as $P_{n+1} - \{\alpha \sum_{j=2}^{(n-j)} \beta^{(n-j)} P_j\} - \beta^{(n-1)} P_1$. Note that $P_{n+1} - \{\alpha \sum_{j=2}^{(n-j)} \beta^{(n-j)} P_j\} - \beta^{(n-1)} P_1$ has an open ended topology and it can capture the smooth volatility between periods.

Any approach towards an analytical solution to the above NLPP would become exceedingly cumbersome, given the rather complex nature of the polynomial objective function. However, most spread sheet softwares do offer useful numerical recipes to satisfactorily solve the problem and yield fair approximations of α and β . We have calculated two exponential moving averages, a five-period one and a fifteen-period one as the fast and slow EMAs respectively. The spread sheet approximations of the optimal parameter values are 0.9916 and 0.9921 respectively. We have thereafter calculated the differences between the fast and the slow EMA and calculated its product-moment correlation with the difference between the retracement percentages and their closest Fibonacci levels. This yielded an $r_{xy} \approx 0.3139$. Now we perform the standard one-tailed test of hypothesis to test the significance of this correlation coefficient:

$$H_0: \rho_{xy} = 0$$

$$H_1: \rho_{xy} > 0$$

$$\text{Test statistic: } t = r_{xy} [(1 - r_{xy}^2) / (n - 2)]^{-1/2}$$

Decision rule: Reject H_0 if $t > t_{\alpha, n-2}$

Inference: $t \approx 11.3559 > t_{0.05, 1180} \approx 1.6461$; so we may reject H_0 and infer that a significant positive correlation exists between the two variables. This does indicate that a fairly sophisticated automated trading system based on a pattern learning algorithm like for example an Artificial Neural Network (ANN) or a Support Vector Machine (SVM) could be trained on input Fibonacci sequences along with additional input vectors comprising of some common technical indicators like the EMA cross-overs, to pick up recurring patterns in the historical price data.

CONCLUSIONS AND FUTURE RESEARCH

The statistical result we obtained does appear to corroborate the claim of technical analysts that perhaps there indeed is some predictive utility in using Fibonacci sequences as filters in automated trading systems. However we must add that this is merely indicative and by no means conclusive empirical evidence and more exhaustive studies are required before any definite conclusion can be drawn. Nevertheless, this mere indicative evidence is reason enough to warrant a further incisive and potentially rewarding research into the topological and statistical interrelationship of Fibonacci sequences with the prices of securities being actively traded on the floors of the global financial markets.

In this paper we have made another attempt to take off the lid from a potential Pandora's Box. That lid was first prised open in 2000, when Lo, Mamaysky and Wang published their bold and innovative paper on the foundations of Technical Analysis. A peep inside the box does seem to reveal extremely interesting and potentially rewarding contents! We are inclined to opine that all of Technical Analysis

is definitely not “voodoo science” and there are in fact elements of true science lurking in some of its apparently wishful formulations, just waiting to be uncovered by the enterprising investigator! We intend and hope that our present paper will do its bit in inspiring a few more academicians in Finance and allied fields, to sit back and take another look at this widely criticized but scarcely researched area of knowledge.

REFERENCES

- Atanassov, Krassimir, Atanassova, Vassia, Shannon, Anthony and Turner, John, 2002, *New Visual Perspectives on Fibonacci Numbers*, (World Scientific, Singapore)
- Brock, William, Joseph Lakonishok and Blake, Le Baron, 1992, Simple technical trading rules and the stochastic properties of stock returns, *Journal of Finance* 47, 1731-1764
- Brown, David and Robert Jennings, 1989, On technical analysis, *Review of Financial Studies* 2, 527-551
- Chorafas, Dimitris N., 1995, *Chaos Theory in the Financial Markets: Applying Fractals, Fuzzy Logic, Genetic Algorithms, Swarm Simulation & The Monte Carlo Method To Manage Market Chaos & Volatility*, (S. Chand & Co Limited, New Delhi)
- Edwards, Robert and John Magee, 1966, *Technical Analysis of Stock Trends*, (John Magee, Boston, Mass.)
- Freund, J. E., 1992, *Mathematical Statistics*, (Prentice-Hall Inc., N. J.)
- Hurst, J. M., 1973, *J.M. Hurst Cycles Course*, (Traders Press, Greenville, S.C.)
- Lo, Andrew; Harry Mamaysky and Jiang Wang, 2000, Foundations of Technical Analysis: Computational Algorithms, Statistical Inference, and Empirical Implementation, *Journal of Finance* 4, 1705-1765
- Narasimhan, Jagadeesh, 2000, Discussion on the paper by LMW, *Journal of Finance* 4, 1765-1770
- Turner, John C., 1985, Stochastic processes defined on tree sequences, *University of Waikato Mathematical Research Report*, No. 42
- Turner, John C., 1985a, Fibonacci convolution trees and integer representations, *New Zealand Mathematical Society Newsletter*, 16-22
- Wilde, D. J., 1964, “Optimum seeking methods”, (Prentice-Hall Inc., N. J.)

**Appendix
(Spreadsheet data and output)- Figure 1**

S&P 500 daily data, 5-day and 15-day EMAs and sum of squared lag-errors

Optimal Parameters	
15EMA	0.99210386
5EMA	0.99163681

	Date	S&P500	5EMA	Error ²	15EMA	Error ²
1	1/04/1998	1108.15	-	-	-	-
2	2/04/1998	1120.01	-	-	-	-
3	3/04/1998	1122.70	-	-	-	-
4	6/04/1998	1121.38	-	-	-	-
5	7/04/1998	1109.55	1116.36	-	-	-
6	8/04/1998	1101.65	1101.77	216.33	-	-
7	9/04/1998	1110.67	1110.60	79.16	-	-
8	13/04/1998	1109.69	1109.70	0.82	-	-
9	14/04/1998	1115.75	1115.70	36.63	-	-
10	15/04/1998	1119.32	1119.29	13.11	-	-
11	16/04/1998	1108.17	1108.26	123.65	-	-
12	17/04/1998	1122.72	1122.60	209.00	-	-
13	20/04/1998	1123.65	1123.64	1.10	-	-
14	21/04/1998	1126.67	1126.64	9.17	-	-
15	22/04/1998	1130.54	1130.51	15.17	-	-
16	23/04/1998	1119.58	1119.67	119.41	1116.71	-
17	24/04/1998	1107.90	1108.00	138.57	1107.97	77.58
18	27/04/1998	1086.54	1086.72	460.46	1086.71	459.23
19	28/04/1998	1085.11	1085.12	2.59	1085.12	2.56
20	29/04/1998	1094.63	1094.55	90.37	1094.55	90.39
21	30/04/1998	1111.75	1111.61	295.82	1111.61	295.67
22	1/05/1998	1121.00	1120.92	88.24	1120.93	88.09
23	4/05/1998	1122.07	1122.06	1.32	1122.06	1.31
24	5/05/1998	1115.50	1115.55	43.04	1115.55	43.05
25	6/05/1998	1104.92	1105.01	113.10	1105.00	113.04
26	7/05/1998	1095.14	1095.22	97.40	1095.22	97.30
27	8/05/1998	1108.14	1108.03	166.86	1108.04	166.98
28	11/05/1998	1106.64	1106.65	1.94	1106.65	1.95
29	12/05/1998	1115.79	1115.71	83.51	1115.72	83.52
30	13/05/1998	1118.86	1118.83	9.90	1118.84	9.87
31	14/05/1998	1117.37	1117.38	2.14	1117.38	2.15
32	15/05/1998	1108.73	1108.80	74.86	1108.80	74.85
33	18/05/1998	1105.82	1105.84	8.89	1105.84	8.87
34	19/05/1998	1109.52	1109.49	13.51	1109.49	13.52
35	20/05/1998	1119.06	1118.98	91.60	1118.98	91.57
36	21/05/1998	1114.64	1114.68	18.84	1114.67	18.87
37	22/05/1998	1110.47	1110.51	17.69	1110.50	17.68
38	26/05/1998	1094.02	1094.16	271.76	1094.15	271.70
39	27/05/1998	1092.23	1092.25	3.72	1092.25	3.69
40	28/05/1998	1097.60	1097.56	28.66	1097.56	28.67
41	29/05/1998	1090.82	1090.88	45.36	1090.87	45.40
42	1/06/1998	1090.98	1090.98	0.01	1090.98	0.01

	Date	S&P500	SEMA	Error²	1SEMA	Error²
43	2/06/1998	1093.22	1093.20	5.02	1093.20	5.02
44	3/06/1998	1082.73	1082.82	109.65	1082.81	109.67
45	4/06/1998	1094.83	1094.73	144.30	1094.74	144.42
46	5/06/1998	1113.86	1113.70	365.97	1113.71	365.76
47	8/06/1998	1115.72	1115.70	4.08	1115.70	4.04
48	9/06/1998	1118.41	1118.39	7.33	1118.39	7.32
49	10/06/1998	1112.28	1112.33	37.30	1112.33	37.32
50	11/06/1998	1094.58	1094.73	315.10	1094.72	315.00
51	12/06/1998	1098.84	1098.81	16.90	1098.81	16.97
52	15/06/1998	1077.01	1077.19	475.05	1077.18	475.13
53	16/06/1998	1087.59	1087.50	108.11	1087.51	108.32
54	17/06/1998	1107.11	1106.95	384.43	1106.96	384.25
55	18/06/1998	1106.37	1106.37	0.33	1106.37	0.34
56	19/06/1998	1100.65	1100.70	32.77	1100.70	32.77
57	22/06/1998	1103.24	1103.22	6.46	1103.22	6.48
58	23/06/1998	1119.49	1119.35	264.75	1119.36	264.72
59	24/06/1998	1132.88	1132.77	182.95	1132.77	182.75
60	25/06/1998	1129.28	1129.31	12.16	1129.31	12.20
61	26/06/1998	1133.20	1133.17	15.14	1133.17	15.15
62	29/06/1998	1138.49	1138.45	28.33	1138.45	28.31
63	30/06/1998	1133.84	1133.88	21.21	1133.88	21.23
64	1/07/1998	1148.56	1148.44	215.55	1148.44	215.61
65	2/07/1998	1146.42	1146.44	4.07	1146.44	4.10
66	6/07/1998	1157.31	1157.22	118.22	1157.22	118.24
67	7/07/1998	1154.66	1154.68	6.55	1154.68	6.57
68	8/07/1998	1166.37	1166.27	136.62	1166.28	136.65
69	9/07/1998	1158.56	1158.62	59.48	1158.62	59.56
70	10/07/1998	1164.33	1164.28	32.55	1164.28	32.59
71	13/07/1998	1165.19	1165.18	0.82	1165.18	0.82
72	14/07/1998	1177.58	1177.48	153.70	1177.48	153.69
73	15/07/1998	1174.81	1174.83	7.11	1174.83	7.14
74	16/07/1998	1183.99	1183.91	83.86	1183.92	83.89
75	17/07/1998	1186.75	1186.73	8.05	1186.73	8.02
76	20/07/1998	1184.10	1184.12	6.90	1184.12	6.90
77	21/07/1998	1165.07	1165.23	362.98	1165.22	362.93
78	22/07/1998	1164.08	1164.09	1.32	1164.09	1.30
79	23/07/1998	1139.75	1139.95	592.42	1139.94	592.39
80	24/07/1998	1140.80	1140.79	0.72	1140.79	0.74
81	27/07/1998	1147.27	1147.22	41.95	1147.22	41.95
82	28/07/1998	1130.24	1130.38	288.18	1130.37	288.28
83	29/07/1998	1125.21	1125.25	26.75	1125.25	26.67
84	30/07/1998	1142.95	1142.80	313.17	1142.81	313.26
85	31/07/1998	1120.67	1120.86	489.83	1120.84	490.19
86	3/08/1998	1112.44	1112.51	70.81	1112.51	70.64

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Portfolio Analysis and Asset Management: Simple Genetic Algorithm Approach

Key Words: portfolio analysis, asset management, haploid genetic algorithm, option writer

INTRODUCTION

Let a structured financial product be made up of an envelope of J different assets such that the investor has the right to claim the return on the best performing asset out of a topological envelope after a stipulated lock-in period (Johnson, H , 1987). Then, if one of the J assets in the envelope is the risk-free asset then the investor gets assured of a minimum return equal to the risk-free rate i on his invested capital at the termination of the stipulated lock-in period. This effectively means that his or her investment becomes endogenously capital-guaranteed as the terminal wealth, even at its worst, cannot be lower in value to the initial wealth plus the return earned on the risk free asset minus a finite cost of portfolio insurance, which is paid as the premium to the option writer.

The expected present value of terminal option payoff is obtained as follows:

$$\hat{E}(r)_{t=T} = \text{Max} [w, \text{Max}_j \{e^{-it} E^{(j)}_{t=T}\}], j = 1, 2, \dots, J-1 \quad (1)$$

and $\hat{E}(r)$ is in a nested boundary of all acceptable payoff options

In the above equation, i is the rate of return on the risk-free asset and T is the length of the investment horizon in continuous time and w is the initial wealth invested i.e. ignoring insurance cost, if the risk-free asset outperforms all other assets then we obtain:

$$\hat{E}(r)_{t=T} = w e^{iT} / e^{iT} = w \quad (2)$$

Now what is the probability of each of the $(J - 1)$ risky assets performing worse than the risk-free asset? Even if we assume that there are some cross correlations present among the $(J - 1)$ risky assets, given the statistical nature of the risk-return trade-off, the joint probability of all these assets performing worse than the risk-free asset will be very low over even moderately long investment horizons.

Proposed stochastic optimization model

An option writer shall make an attempt to hedge his or her position, the expected utility maximization criterion will require the tracking error to be at an optimum level at each point of rebalancing. At each point of re-balancing, the tracking error has to be minimized if the difference between the expected option payoff and the replicating portfolio value is to be minimized. The more significant this difference, the more will be the cost of re-balancing associated with correcting the tracking error; and as these costs cumulate; the less will be the ultimate utility of the hedge to the option writer at the end of the lock-in period. Then the cumulative tracking error over the lock-in period is given as:

$$X = St |E (r_t) - v_t| \quad (3)$$

Here $E (r_t)$ is the expected best-of option payoff at time-point t and v_t is the replicating portfolio value at that point of time. Then the replicating portfolio value at time t is obtained as the following linear form:

$$v_t = (p_0)_t e^{it} + S \sum_j \{(p_j)_t (X_j)_t\}, j = 1, 2 \dots J-1 \quad (4)$$

Here $(X_j)_t$ is the realized return on asset j at time point t and $p_1, p_2 \dots p_{J-1}$ are the respective allocation Proportions of investment funds among the $J - 1$ risky assets at time-point t and $(p_0)_t$ is the allocation for the risk-free asset at time-point t . We shall have :

$$(p_0)_t = 1 - \sum (p_j)_t \quad (5)$$

It is the portfolio weights (p_0 and p_j values) that are of critical importance in determining the size of the tracking error. The correct selection of these portfolio weights will ensure that the replicating portfolio accurately tracks the option. The problem of minimizing the randomness associated with the tracking error can be mathematically given as stochastic optimization problem with respect to the portfolio weight vector \mathbf{p}_{t-1}^T corresponding to the last rebalancing time point. The squared cost of tracking error for the t^{th} rebalancing is obtainable as follows:

$$[C (e_t)]^2 = [h_t d_t + \text{Max}_j E (r_j)_t - \mathbf{p}_{t-1}^T \mathbf{R}_t]^2 \quad (6)$$

where h_t is a fixed rebalancing cost and d_t is a binary variable such that $d_t = 1$ when $f \{ [\text{Max}_j E (r_j)_t - \mathbf{p}_{t-1}^T \mathbf{R}_t] \} > h_t + \text{error}_t$ and $d_t = 0$ otherwise. That is, it will be feasible to rebalance at time point t only if the rebalancing cost at time point t is less than the cost of keeping the same portfolio weights as at time point $t-1$. \mathbf{R}_t is the vector of expected returns on the J assets constituting the portfolio.

Let the probability density function for getting a specific vector \mathbf{p}_t^T be given by φ_t . Then over a period of $t = 1, 2 \dots T$ time points, this is obtainable as the joint conditional likelihood function obtainable as follows:

$$\prod_t [\varphi (\mathbf{p}_t^T | \mathbf{p}_{t-1}^T)] = \varphi (\mathbf{p}_T^T | \mathbf{p}_{T-1}^T) \varphi (\mathbf{p}_{T-1}^T | \mathbf{p}_{T-2}^T) \dots \varphi (\mathbf{p}_2^T | \mathbf{p}_1^T) \varphi (\mathbf{p}_1^T) \quad (7)$$

The target is to minimize this expected squared cost of tracking error over the entire investment horizon i.e. for all $t = 1, 2 \dots T$. To allow the replicating portfolio to be self-financing, the elements of \mathbf{p}_t^T must be unrestricted in sign. and finally the stochastic recurrence relations to be computed in the minimization procedure are obtainable using standard derivation as follows:

$$F_t^* (s_{t+1}) = \text{Min}_t S_{\varphi_t} Q_t \{s_t, \mathbf{p}_t^T, E [C (e_t)]^2\}, 1 = t = T, \quad (8)$$

where $Q_t \{s_{t+1}, \mathbf{p}_t^T, E [C (e_t)]^2\} = \text{Rec}_t \{s_{t+1}, \mathbf{p}_t^T, E [C (e_t)]^2\} + F_{t-1}^*$

and

$$Q_1 \{s_2, \mathbf{p}_1^T, E [C (e_1)]^2\} = \text{Rec}_1 \{s_2, \mathbf{p}_1^T, E [C (e_1)]^2\} \quad (9)$$

GENETIC ALGORITHM APPROACH

Given a necessarily biological basis of the evolution of utility forms (Robson, Arthur J, 1968) and (Becker, Gary S, 1976), a a haploid genetic algorithm model, which, as a matter of fact, can be shown to be statistically equivalent to multiple multi-armed bandit processes (Berry, D.A. and Fristedt, B, 1985) and should show satisfactory convergence with the Black-Scholes type expected utility solution to the problem of minimizing the target cost function. This would allow for estimation of the optimal weight vector \mathbf{p}_t^T without explicitly solving the

stochastic optimization problem outlined above. A computational haploid genetic algorithm model has been programmed for this purpose in Borland C; Release 5.02 and performs the three basic genetic functions of reproduction, crossover and mutation with the premise that in each subsequent generation x number of chromosomes from the previous generation (Khoshnevisan, M and Nahavandi, S) will be reproduced based on the principal of natural selection (De Jong, K. A, 1976) and (Stulz, R, 1982).

The model is presently restricted to $n = 3$ underlying assets within the structured financial product Following the reproduction function, $2(x - 1)$ number of additional chromosomes will be produced through the crossover function, whereby every g^{th} chromosome included in the mating pool will be crossed with the $(g + 1)^{\text{th}}$ chromosome at a pre -assigned crossover locus. There is also a provision in the computer program to introduce a maximum number of mutations in each current chromosome population in order to enable rapid adaptation. According to the haploid genetic algorithm reproduction and crossover functions, the size of the n^{th} generation i.e. the number of chromosomes in the population at the end of the n^{th} generation is given by the following first-order, linear difference equation:

$$G_n = G_{n-1} + 2 (G_{n-1} - 1) = 3 G_{n-1} - 2 \quad (10)$$

If x initial number of chromosomes are introduced at $n = 0$, we have $G_0 = x$. Then, obviously, $G_1 = x + 2(x - 1) = 3x - 2 = 3^1 (x - 1) + 1$. Extending the recursive logic to G_2 and G_3 we therefore get $G_2 = 9x - 8 = 3^2 (x - 1) + 1$ and $G_3 = 27x - 26 = 3^3 (x - 1) + 1$. Thus, by the principle of mathematical induction, the general formula is derived as follows:

$$G_n = 3^n (x - 1) + 1 \quad (11)$$

This simple genetic algorithm performs satisfactorily in terms of computational efficiency as well as the target minimization objective for $n = 3$. However, to reduce computational complications at the onset we have ignored a part of the objective function i.e. h.d.t. However our proposed computational genetic algorithm model may be appropriately extended to cover the complete version of the stochastic optimization problem with the minimization of the expected squared cost of tracking error as the target.

In our computational model we assume that all three assets start off with a realized return of unity at $t = 0$. The correlation between the two risky assets is assumed constant at a moderate 60%. The risk-free rate is 4% p.a. and the lock in period is taken as one year. The replicating portfolio is re-balanced at the end of each month over the period.

Figure 1 shows the hypothesized figures relating to the two correlated risky assets and the risk-free asset underlying the best-of option as have been used in computing the expected option pay-offs. These figures have been chosen so as to maximize the chances for a pay-off pattern whereby each of the risky assets may be seen to outperform the other for some length of time within the 12-month lock-in period.

A Monte Carlo simulation algorithm is used to generate the potential payoffs for the option on best of three assets at the end of each month for $t = 0, 2 \dots 11$. The word potential is crucial in the sense that our option is essentially European and path-independent i.e. basically to say only the terminal payoff

Figure 1 Monte Carlo Simulation

S ₁ (t=0)	1.00
S ₂ (t=0)	1.00
S ₀ (t=0)	1.00
Correlation (S ₁ , S ₂)	0.60
MS ₁	25%
MS ₂	17%
σS ₁	38%
σS ₂	19%
i	4%
T 12	months
Re-balancing frequency	Monthly

counts. However the replicating portfolio has to track the option all through its life in order to ensure an optimal hedge and therefore we have evaluated potential payoffs at each t . The potential payoffs from the option are computed as $\text{Max} [(S_1)_t - (S_0)_t, (S_2)_t - (S_0)_t, 0]$. This proposed Monte Carlo simulation has been constructed model with the hypothetical data in Table I over the one-year lock-in period and five replicating portfolios according to a simple rule-based logic: $k\%$ of funds are allocated to the observed best performing risky asset and the balance $(90 - k)\%$ to the other risky asset (keeping the portfolio self-financing after the initial investment) at every monthly re-balancing point. We have reduced k by 10% for each portfolio starting from 90% and going down to 40%. This simple hedging scheme performed quite well over the lock-in period when $k = 80\%$ and 90% but the performance falls away steadily as k is reduced every time. The cumulative tracking errors corresponding to choices of k are supplied in Figure 2

Figure 2 Simulated Cumulative Tracking Error

Choice of k	Cumulative Tracking Error
90%	0.1078
80%	0.1064
70%	0.1467
60%	0.1679
50%	0.1845
40%	0.1964

CONCLUSIONS

The genetic algorithm that has been used here to solve the stochastic optimization problem of minimizing the option tracking error becomes particularly susceptible to local optima especially when the return on the risky assets underlying the best-of option have temporally unstable correlation

and with high degree of volatility. Especially for many of the longer term options; implied volatility measures are often based on subjective and imprecise probability assessments which can significantly slow down the search speed (] Xu, H. U. and Vukovich, G, 1993). Furthermore, this new computational results provide some experimental support to the premise that embedding a Black Scholes type of expected payoff maximization function indeed results in evolutionary optimality (Robson, Arthur J, 2001). It can be stated from the results that genetic algorithms combined with Fuzzy Controller may resolve the imprecise information dynamically during run-time thereby allowing faster adaptation (Herrera, F., Herrera-Viedma, E., Lozano, M. and Verdegay, J. L, 1994). In future research for 3 or more asset dynamic hedging problem, a fuzzy controller could be implemented to compare the results with the proposed genetic approach in this paper.

REFERENCES

- Becker, Gary S. "Altruism, Egoism and Genetic Fitness: Economics and Socio- biology." *Journal of Economic Literature*, 14 September 1976, pp 817–26.
- Berry, D.A. and Fristedt, B. *Bandit Problems: Sequential Allocation of Experiments* London: Chapman and Hall, 1985.
- De Jong, K. A. "Artificial genetic adaptive systems." Department of Computer Science Technical Report No. 76–7. Pittsburgh: University of Pittsburgh, 1976.
- Herrera, F., Herrera-Viedma, E., Lozano, M. and Verdegay, J. L. "Fuzzy tools to improve genetic algorithms", *Proceedings of the Second European Congress on Intelligent Techniques and Soft Computing*, 1994, pp 1532-1539
- Johnson, H. "Options on the Maximum and Minimum of Several Assets." *Journal of Financial and Quantitative Analysis* 22, 3 September 1987, pp 277–283. [2] Robson, Arthur J. "A Biological Basis for Expected and Non-expected Utility" *Journal of Economic Theory* 68, February 1968, pp 397–424.

- Khoshnevisan, M and Nahavandi, S "An Evolutionary Computing Approach to Minimize Dynamic Hedging Error", BISC presentation, University of California-Berkeley, USA, 2003
- Robson, Arthur J. "Why Would Nature Give Individuals Utility Functions?" *Journal of Political Economy* 4, August 2001, pp 900 – 914.
- Robson, Arthur J. "A Biological Basis for Expected and Non-expected Utility" *Journal of Economic Theory* 68, February 1968, pp 397–424.
- Stulz, R. "Option on the Minimum or Maximum of Two Assets." *Journal of Financial Economics* 10, June 1982, pp 161–85.
- Xu, H. U. and Vukovich, G., "A fuzzy genetic algorithm with effective search and optimization", *Proceedings of 1993 International Joint Conference on Neural Networks*, 1993, pp 2967-2970.
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Antecedents of Patients' Trust in Doctors: Evidence From a Developing Economy

INTRODUCTION

Trust in customer-frontline staff in hospitals plays a significant role in enhancing customer relationships and organizational effectiveness (Davis & Rundall, 2000; Straten, Friele, & Groenewegen, 2004). In healthcare, doctors are instrumental in the delivery of healthcare services, and their relationship with patients is of critical importance in the service encounter. It is acknowledged that the quality of healthcare service delivery can be variable and is dependent on the characteristics and behavior of doctors (Khan, 2006). The extant literature discusses the benefits associated with patient trust in doctors including the perception of reduced risk, reduced shopping around for healthcare services, patient loyalty and many others (Davies & Rundall, 2000; Gilbert, 1998; Rowe & Calnan, 2006; Straten et al., 2004).

Trust is important because it enables people to deal with uncertainties and risks (Gilbert, 1998) and it determines possible future behavior (Straten, et al, 2004). A review of relevant literature highlights a number of factors that foster patient trust in their doctor including technical competence, respect for patient views, information sharing, and doctor confidence in patient's ability to manage their illness (Rowe & Calnan, 2010). Wuthow (2004) also suggests that the sincerity of doctor is very important. In the USA, many studies have investigated trust in the context of healthcare (Dugan, Trachtenberg & Hall, 2005; Mcgorry, 1999). Studies have also examined trust in other developed economies such as Australia (Dagger & O'Brien, 2010; Ouschan, Sweeney & Johnson, 2006) and the United Kingdom (Gruber & Frugone, 2011; Karasaavidou, Glaveli & Papadopulos, 2009). Although there has been some research on healthcare in the context of Asian countries such as India (Gaur, Xu, Quazi, & Nandi, 2011) and Malaysia (Butt & Run, 2010) these studies have not studied the antecedents of trust in doctors as perceived by patients.

Against this backdrop, and recognizing the paucity of research examining doctor trust in a developing economy (Pearson & Raeke, 2000), the objective of the current study is to identify and examine the antecedents of trust in doctors in a different economic context. The focus of the current study is Pakistan. According to a report of the WHO (May, 2011) challenges such as low expenditure on the

healthcare sector in Pakistan, inadequate institutional systems and insufficient planning have resulted in an increased burden of diseases, low access to safe drinking water and ultimately low performance on global healthcare indicators. In some regions of Pakistan, healthcare organizations are not delivering quality healthcare services and the main reasons for this are the behavior and technical expertise of doctors (Khan, 2006). In Pakistan there exists a significant difference in the quality of healthcare services between villages and cities. In many cities there are some regulatory bodies (Haidari, 1996) but in case of villages, there is no well-organized healthcare system to provide effective healthcare services.

Moreover, in low developing economies such as Pakistan, healthcare systems and patients behave in a different manner from those in Western developed economies (Hofstede, 1988). Most developed economies such as the UK and USA are more individualistic whereas economies like Pakistan are more relationship oriented (collectivist). According to Hofstede's (1988) cultural study, Pakistan is considered a collectivist society with a ranking of 14 on the individualism dimension (UK-89 and USA-91) suggesting that people in Pakistan are relationship oriented and take responsibility for fellow members of their group. These characteristics make the current study of the patient doctor relationship in a developing country like Pakistan even more interesting.

The organization of the paper follows. The next section presents a review of relevant literature and the research framework used to guide the study including hypotheses. Results are then presented followed by a discussion of findings and an agenda for future research.

LITERATURE REVIEW

Trust

Trust has been studied in different disciplines and settings including education (Gosh, Whipple and Bryan, 2001), services marketing (Halleday, 2004; Suh, Janda and Seo, 2006), and healthcare (Thorn and Campbell, 1997; Mechanic, 1996; Straten et al., Mechanic, 2004; Sheppard, Zambrana and O'Malley, 2004; Rowe and Calnan, 2010; Schee, Braun, Schnee, and Groenewegen, 2007; Dagger and O'Brien, 2010). Trust is not a simple concept to define as it has a variety of subtle paradoxes and points of confusions (Hardin 2001) and in healthcare it is more complex as it involves many key players i.e., physicians, nurses, non-clinic staff, trust in medical institutions and a list of other situational factors (Mark, Dugan, Zheng & Mishra, 2001).

Trust in Doctors

Trust in the patient-physician relationship is considered to be central part of good healthcare services (Ostertag, Wright, Broadhead & Altice, 2006). Patient's trust in a doctor is defined by Hall, Dugan, Zheng and Levine (2002, p.69), "Optimistic acceptance of a vulnerable situation in which patient [trustor] believes the physician [trustee] will care for his/her interests [better healthcare services]". Patients that have trust in their physicians increase the involvement of both parties and also the utilization of healthcare services by patients (Ostertag et al., 2006). In some cases, trust between the parties extends beyond medical care as they discuss other emotional issues, family matters and also patients are more likely to spend more time with physicians (Altice, et al., 2001).

An effective relationship between a doctor and patient has benefits for both hospitals and patients. Hospitals can have loyal patients (Davies & Rundall, 2000) and patients can reduce risks and experience a positive impact on their health and state of mind (Arasli & Ahmadeva, 2004; Wuthow, 2004). The lack of trust in the patient-doctor relationship makes it difficult for doctors to treat patients in a better way (Schmittiel, Selby, Grumbach & Quesenberry, 1997).

Our review of the extant literature identifies the following factors as being important for developing patients' trust in doctors (Mechanic 1996; 1998; 2004; Schee, et, al. 2007; Straten et al., 2002).

Patient Focus: To develop trustworthiness and improve the quality of healthcare services, systems and organizations need to focus on patients and as doctors play a key role in the delivery of healthcare

systems, it is expected that patient focus will have positive relationship with trust in doctors. Francis and Alley (1996) showed that a focus on patients improves the patient experience, satisfaction levels, reduces costs and increases the overall productivity of the surgical processes. A patient focus also enables the doctors to avoid interference in their relationship with their patients (Rosser & Kasperski, 2001). If the patient perceives that the doctor understands his/her problems and listens effectively, then trust in that doctor is likely to be higher. Therefore, our first hypothesis is:

Hypothesis 1. Patient focus has a positive relationship with trust in the doctor.

Quality of Cooperation: The quality of cooperation is a key variable in developing trustful relationship in the context of interactive services (Woo & Ennew, 2005) and healthcare is one such example of a highly interactive service. Patients experience quality of cooperation from all participants in healthcare service delivery (Kvamme, Olesen & Samuelsson, 2001) including doctors. If patients perceive that medical personnel cooperate with one another and doctors do not give conflicting information, then trust in their doctor is likely to be higher. Therefore:

Hypothesis 2. Quality of Cooperation has a positive relationship with trust in the doctor.

Confidentiality: The strength of the patient-doctor relationship is also highly dependent on the level of confidentiality. Confidentiality refers to the personal information shared by the patient and this information is used only as required for the patient's care (Mechanic, 1996, 1998). Not surprisingly, numerous studies have identified confidentiality as a key predictor of patients' trust in doctors (Mechanic, 1996, 1998, 2004; Rowe & Calnan, 2010; Schee et al., 2007; Straten et al., 2002). Consistent with existing research, our third hypothesis is:

Hypothesis 3. Confidentiality has a positive relationship with trust in the doctor.

Sincerity: Sincerity is also identified as one of the most important factors of trust although some researchers argue that it is a sub-dimension of trust rather than an antecedent (Crosby, Evans & Cowles, 1990). Sincerity also lays the foundation of trust in healthcare (Wuthow, 2004). Willemyns et al (2003) argue that sincerity depicted by the overall system is not enough; it should be backed by the personnel sincerity of the service deliverer. Sincere communication results in better understanding of patients' problems (Robb & Greenhalg, 2006) and it is expected to influence trust in doctors. Therefore:

Hypothesis 4. Sincerity has a positive relationship with trust in the doctor.

Information & Communication: Information also plays a significant role in delivering quality healthcare services (Thiede, 2005). Thiede (2005) suggests that information and communication provided by organizations and doctors to the general public enhances patient understanding and reinforces the importance of information in healthcare delivery. The quality of information and communication is therefore expected to foster trust in doctors. If patients perceive that they receive information about treatment options and its effects the trust in the doctor is likely to be higher. Therefore:

Hypothesis 5. Information and Communication has a positive relationship with trust in the doctor.

Quality of Care: Quality of care requires healthcare providers such as doctors to protect patients' rights in healthcare systems (Schee et al., 2006). The quality of care is highly related to and dependent upon staff including doctors (Evason & Whittington, 1997). Patients not receiving quality healthcare services are most likely to report lower perceptions of trust in doctors (Gilson, 2006). Therefore, our last hypothesis is:

Hypothesis 6. Quality of care has a positive relationship with trust in the doctor.

METHODOLOGY

We collected data on patients' trust in doctors from a sample of patients in the capital city of Pakistan using a self-administered questionnaire.

Questionnaire

An English version of the questionnaire was used. Topics covered in the questionnaire included demographic questions, the level of trust in doctors and perceptions of factors affecting trust drawn from the relevant literature (Benjamins, 2006; Straten et al., 2002). Trust in the doctor was measured with six items six (Benjamins, 2006), patient focus utilized four items, quality of care seven items, information and communication five items, quality of cooperation three items, confidentiality three items and sincerity two items (Mechanic, 1996; Straten, et al., 2002; Wuthow, 2004). The research instrument was refined at the pilot testing stage. After pilot testing results, three items from trust in the doctor scale, one item each from confidentiality and information and communication were removed due to low communalities. All questions utilized five point likert scales.

Sample size

Data was only collected patient respondents who acknowledged their independent decision making regarding physicians and hospitals. A total of 450 questionnaires were distributed, 343 were returned (response rate 76%). Thirty questionnaires were discarded due to response based error (mostly respondents' missed one page as the questionnaire was on two pages). Most of the 313 respondents were male (58.5%). The age groups represented by respondents were: below 20 (6%), 21-25 (46%), 26-30 (26%), 31-35 (12%) and remaining were above 35 years (7%). Some of respondents (3%) didn't mention their age. Nearly two-thirds of respondents were single (64%). Academic qualifications of participants were intermediate (5%), graduation (35%) and master level (60%).

Data Analysis

Data analysis was undertaken using PLS-graph version 3 (Chin, 2003).

RESULTS

Table 1: Convergent and Discriminant Validity of the Model Constructs

1 Variable	Factor Loading	t-value
Trust in Doctor <i>ic = 0.798 AVE = 0.568</i>		
DT1	0.7271	12.9128
DT2	0.7871	23.9723
DT3	0.7454	18.1041
Sincerity <i>ic = 0.881 AVE = .787</i>		
D4F1	0.8906	34.9622
D4F2	0.8835	39.1931
Confidentiality <i>ic = 0.862 AVE = 0.758</i>		
D3F1	0.8160	21.4659
D3F2	0.9219	48.4081
Quality of Cooperation <i>ic = 0.765 AVE = 0.522</i>		
D2F1	0.7378	10.1458
D2F2	0.6462	7.3284
D2F3	0.7766	11.6032
Patient focus <i>ic = 0.829 AVE = 0.550</i>		
D1F1	0.7429	15.6887
D1F2	0.7849	22.2359
D1F3	0.6535	12.1100

D1F4		0.7778	21.9981
Information & Communication		ic = 0.820 AVE = 0.532	
D5F1		0.7002	13.9080
D5F2		0.7364	16.7309
D5F3		0.7535	16.1386
D5F4		0.7264	15.4768
Quality of Care		ic = 0.819 AVE = 0.532	
D6F1		0.7718	15.9795
D6F2		0.8026	18.2967
D6F3		0.5113	20.6465
D6F4		0.7464	13.2946

‘ic’ is internal consistency measure; AVE is average variance extracted.

In the measurement model convergent and discriminant validity were tested by examining factor loadings, composite reliability, average variance extracted (AVE) scores and a comparison of the square root of AVE with the correlations between constructs. In PLS, reliability as measured by internal consistency should be greater than 0.70; AVE values should be at least 0.50 and the square root of AVE should be larger than the correlation between constructs (Chin, 1998; Fornell & Larcker, 1981). PLS also provides information to test hypothesized relationships in the form of path coefficients and t-statistics using the bootstrap procedure (1000 resamples).

In the first run of the measurement some items exhibited loadings below the 0.70 threshold. These were removed from further analysis. Table 1 provides the composite reliability of each construct and item loadings for the final measurement model. All internal consistency scores are above 0.70 and AVE values are above 0.50 as suggested by Fornell and Larcker (1981) and Chin (1998). The findings reported in Tables 1 and 2 demonstrate adequate convergent and discriminant validity.

Table 2: Correlation among Construct Scores (square root of AVE in the diagonal)

	Patient Focus	Quality of Cooperation	Confidentiality	Sincerity	Trust in Doctor	Information and Communication
Patient Focus	0.754					
Quality of Cooperation	0.402	0.887				
Confidentiality	0.345	0.343	0.871			
Sincerity	0.404	0.391	0.456	0.722		
Trust in Doctor	0.378	0.277	0.354	0.354	0.742	
Information and Communication	0.374	0.382	0.430	0.420	0.364	0.729
Quality of Care	0.433	0.435	0.404	0.439	0.380	0.546

Table 3: Structural (Inner) Model Results

	Proposed Effect	Path Coefficient	Observed t-value	Sig.*
1.1 Effects on Trust in Doctor				
(R-square = 0.250)				
H1. Patient Focus	+	0.1830	2.9419	Supported
H2. Quality of Cooperation	+	0.0140	0.2319	Not Supported
H3. Confidentiality	+	0.1350	2.3244	Supported
H4. Sincerity	+	0.1070	1.5936	Not Supported
H5. Information & Communication	+	0.1170	1.6663	Supported

	Proposed Effect	Path Coefficient	Observed t-value	Sig.*
1.2 H6. Quality of Care	+	0.1290	1.8926	Supported

* P-values: **** - <0.001, *** - <0.010, ** - <0.050, * - <0.100 ns – not significant

Table 3 shows that the structural model explains 26.5 percent of the variance in Trust in Doctor. The path coefficients and their corresponding t-values are also shown. The results show that four of the six hypothesized relationships are supported. Specifically, patient focus has a significant positive relationship with trust in the doctor ($p < .05$), thus supporting H1. Contrary to expectations quality of cooperation has no impact on trust in the doctor ($p > .05$), thus H2 is rejected. Confidentiality has a significant impact on trust in the doctor ($p < .05$). H3 is therefore supported. Sincerity has no influence on trust, H4 is therefore rejected. Finally, information/communication and quality of care have a positive impact on trust in the doctor ($p < .05$), thus H5 and H6 are supported.

DISCUSSION

Institutional (healthcare systems) and cultural influences (Rosenbloom & Larsen, 2003) should be discussed here because they may be responsible for explaining the results of the current study. Most of the previous papers in the area of trust in healthcare have focused on developed countries, more specifically the United Kingdom and the United States. The findings of these studies limited generalizability for developing countries. The current study examined the antecedents of patient trust in doctors using Pakistan and an example of a developing country. The findings of study help in highlighting a number of important differences between developed economies and developing economies.

In developed countries such as the UK and the USA there are regulatory and controlling agencies to ensure the delivery of effective healthcare systems (Gruber & Frugone, 2011; Karasaavidou, Glaveli & Papadopoulos, 2009). In Pakistan's institutional system of healthcare, there are very few regulatory bodies with low levels of expenditure on healthcare and poor healthcare planning. This context could explain the non-significant relationship between quality of cooperation and trust in the doctor.

In addition to these institutional differences, cultural differences may also play a role in explaining our findings. As noted earlier, Pakistan is a collectivist society which means that people are relationship oriented. Patients may need some time to judge the sincerity of doctors as it cannot be judged in a few meetings.

The significant paths suggest that patients trust doctors who focus on their needs and understand their expectations. They also feel secure and confident while dealing with doctors who maintain the confidentiality of patient information. Patients also perceive higher levels of trust from doctors who provide them appropriate information to explain the causes, effects and treatment of illness.

LIMITATIONS AND FUTURE RESEARCH

This study has some limitations that represent opportunities for future research. Future research could select respondents according to whether they are in-patients, out-patients or emergency treatment to test for group differences. Future research could also look at situational factors that act as moderators or mediators on the patient-doctor relationship. Patients have less control in risky situations and they have to trust doctors without little or no option (Mark et.al, 2001; Hall et al., 2000; Thom, Ribisl & Steward, 1999). This study discussed the case of respondents from one developing country (Pakistan); future research should also study other developing countries to broader the generalizability of findings.

REFERENCES

- Altice, F.L., Mostashari, F. & Friedland, G.H. 2001. Trust and the acceptance of and adherence to antiretroviral therapy. *Journal of Acquired Immune Deficiency Syndromes*, 28 (1): 47-58.
- Arasli, H., & Ahmadeva, L. 2004. No more tears! A local TQM formula for health promotion. *International Journal of Health Care Quality Assurance*, 17 (3): 135 – 145.
- Benjamins, M. R. 2006. Religious influences on trust in physicians and Healthcare systems. *International Journal of Psychiatry Medicine*, 36 (1): 69-83.
- Butt, M.M., & Run, E.C. 2010. Private healthcare quality: applying a SERVQUAL model. *International Journal of Health Care Quality Assurance*, 23 (7): 658 – 673.
- Calnan, M., & Rowe, R. 2006. Researching trust relations in health care Conceptual and methodological challenges – an introduction. *Journal of Health Organization and Management*, 20 (5): 349-358.
- Chin, W. 1998. Issues and opinion on structural equation modeling. *MIS Quarterly*, 22 (1): vii-xvi
- Crosby, L. A., Evans, K.R., & Cowles, D. 1990. Relationship Quality in Services Selling: An Interpersonal Influence Perspective. *Journal of Marketing*, 54 (July): 68-81.
- Dagger, T.S., & O'Brien, T.K. 2010. Does experience matter? Differences in relationship benefits, satisfaction, trust, commitment and loyalty for novice and experienced service users. *European Journal of Marketing*, 44(9/10): 1528-1552.
- Davies, H. T. O., & Rundall, T.G. 2000. Managing Patient Trust in Managed Care”. *The Milbank Quarterly*, 78(4): 609-624.
- Dugan, E., Trachtenberg, F., & Hall, M.A. 2005. Development of abbreviated measures to assess patient trust in a physician, a health insurer, and the medical profession. *BMC Health Services Research*, 5(64)
- Evason, E., & Whittington, D. 1997. Patients' perceptions of quality in a Northern Ireland hospital trust: a focus group study. *International Journal of Health Care Quality Assurance*, 10 (1): 7 – 19.
- Fornell, C., & Larcker, D. F. 1981. Evaluating structural equations models with unobservable variables and measurement error. *Journal of Marketing Research*, 8 (1): 39-50.
- Francis, S.D., & Alley, P.G. 1996. A “patient focus review” of surgical services: Business process re-engineering in health care. *Business Process Management Journal*, 2 (1): 48 – 62.
- Gaur, S.S., Xu, Y., Quazi, A., & Nandi, S. 2011. Relational impact of service providers' interaction behavior in healthcare. *Managing Service Quality*, 21 (1): 67 – 87.
- Ghosh, A. K., Whipple, T. W., & Bryan, G. A. 2001. Student Trust and its Antecedents in Higher Education. *Journal of Higher Education*, 72(3): .332-340
- Gilbert, T. 1998. Towards a politics of trust. *Journal of Advanced Nursing*, 27: 1010–10 16.
- Gilson, L. 2006. Trust in health care: theoretical perspectives and research needs. *Journal of Health Organization and Management*, 20 (5): 359 – 375.
- Gruber, T. & Frugone, F. 2011. Uncovering the desired qualities and behaviours of general practitioners (GPs) during medical (service recovery) encounters. *Journal of Service Management*, 22 (4): 491 – 521.
- Gruber, T., & Frugone, F. 2011. Uncovering the desired qualities and behaviours of general practitioners (GPs) during medical (service recovery) encounters. *Journal of Service Management*, 22 (4): 491 – 521.
- Haidari, I. 1996. Health conditions in Pakistan. *Economic Review*, 27(8): pp. 23
- Hall, M., Dugan, B., Zheng & Levine, D. 2002. Development of a scale to measure patients' trust in health insurers. *Health Services Research*, 37 (1): 187-202.
- Hall, M., E. Dugan, B. Zheng, & Levine, D. 2000. Patient Trust in a Primary Care Physician: What Is It and Can It Be Reliably Measured. *Journal of General Internal Medicine*, 15(1): 69.
- Halliday, S.V. 2004. How placed trust works in service encounters. *Journal of Services Marketing*, 18 (1): 45-59.
- Hardin, R. 1991. Trusting persons, trusting institutions. In R. J. Zeckhauser (Ed.), *Strategy and choice* (pp. 185–209). Cambridge, MA: The MIT Press.

- Hofstede, G. 1988. The Confucius connection: from cultural roots to economic growth. *Organizational Dynamics*, 16 (4): 5-21.
- Karassavidou, E., Glaveli, N., & Papadopoulos, C.T. 2009. Quality in NHS hospitals: no one knows better than patients. *Measuring Business Excellence*, 13 (1): pp.34 – 46.
- Khan, M.M. 2006. Behavioral and environmental problems in Pakistan. Dissertation available at <http://dissertations.ub.rug.nl/FILES/faculties/medicine/2006/m.m.khan/c4.pdf> accessed at Jan., 2012-01-11.
- Kvamme, O.J., Olesen, F., & Samuelsson, M. 2001. Improving the interface between primary and secondary care: a statement from the European Working Party on Quality in Family Practice (EQuiP). *Quality in Health Care*, 10: 33–39.
- Mark A. H., Dugan, E., Zheng B., & Mishra, A.K. 2001. Trust in Physicians and Medical Institutions: What Is It, Can It Be Measured, and Does It Matter?. *The Milbank Quarterly*, 79 (4): 613-639.
- McGorry, S.Y. 1999. An investigation of expectations and perceptions of health-care services with a Latino population. *International Journal of Health Care Quality Assurance*, 12 (5): 190 – 198.
- Mechanic D. 1996. Changing medical organization and the erosion of trust. *Milbank Quarterly*, 74: 171–89.
- Mechanic, D. 1998. The Functions and Limitations of Trust in the Provision of Medical Care. *Journal of Health Politics, Policy and Law*, 23 (4): 661-86
- Mechanic, D., 2004. In My Chosen Doctor I Trust: And That Trust Transfers From Doctors to Organizations. *British Medical Journal*, 329 (7480): 1418-1419.
- Meit, S.S., D. Williams, F.C. Mencken, & Yasket,. 1997. Gowning: Effects on Patient Satisfaction. *Journal of Family Practice*, 45: 397–401.
- Morgan, R.M. & Hunt, S.D. 1994. The commitment-trust: Theory of relationship marketing. *Journal of Marketing*, 58: pp.20-38.
- Ostertag, S., Wright, B., Broadhead R., & Altice, F. 2006. Trust and other characteristics associated with health care utilization by injection drug users. *Journal of Drug Issues*, Fall: .953-974
- Ouschan, R., Sweeney, J., & Johnson, L. 2006. Customer empowerment and relationship outcomes in healthcare consultations. *European Journal of Marketing*, 40 (9/10): 1068 - 1086
- Pearson, S.D., & Raeke, L.H. 2000. Patients' Trust in Physicians: Many Theories, Few Measures, and Little Data. *J Gen Intern Med.*, 15 (7): 509–513.
- Robb, N., & Greenhalgh, T. 2006. You have to cover up the words of the doctor: The mediation of trust in interpreted consultations in primary care. *Journal of Health Organization and Management*, 20 (5): 434 – 455.
- Rosenbloom & Larsen, T. 2003. Communication in international business-to-business marketing channels Does culture matter?. *Industrial Marketing Management*, 32 (4): 309-315.
- Rosser, W. & Kasperski, J. 2001. The Benefits of a Trusting Physician-Patient Relationship. *The Journal of Family Practice*, 50 (4):329-330.
- Rowe, R. & Calnan, M. 2010. Trust relations in health care—the new agenda. *European Journal of Public Health*, Accessed from <http://eurpub.oxfordjournals.org> on July 7, 2010
- Schee, E., Groenewegen, P. & Friele, R. 2006. Public trust in health care: a performance indicator?. *Journal of Health Organization and Management*, 20 (5): 468 – 476.
- Schee, E.V.D, Braun, B., Calnan, M., Schnee, M., & Groenewegen, P. P. 2007. Public trust in health care: A comparison of Germany, The Netherlands, and England and Wales. *Health Policy*, 81: 56–67.
- Schmittiel, J., Selby, J.V., Grumbach, K., & Quesenberry, C.P. Jr 1997. Choice of a personal physician and patient satisfaction in a health maintenance organization. *Journal of the American Medical Association*, 278 (19): 1596-9.
- Sheppard, V.B., Zambrana, R.E., & O'Moalley, A.S. 2004. Providing health care to low-income women: a matter of trust. *Family Practice-an International Journal*, 21 (5): 484-491.
- Straten, G.F.M., Friele, R.D., & Groenewegen P. P. 2002. Public trust in Dutch health care. *Social Science and Medicine*, 55: 227–234.
- Suh, J., Janda, S., & Seo, S. 2006. Exploring the role of culture in trust development with service providers. *Journal of Services Marketing*, 20 (4): 265–273.

- Thiede, M. 2005. Information and access to health care: is there a role for trust?. *Social Science & Medicine*, 61: 1452–1462.
- Thom, D.H., Ribisl, A.L. & Steward, D. A. 1999. Luke, and Stanford Trust Study Physicians. Further Validation and Reliability Testing of the Trust in Physician Scale. *Medical Care* 37:510–7.
- Thorn, D., & Campbell, B. 1997. Patient-physician trust: an exploratory study. *The journal of family practice*, 44: 169–176.
- Willemyns, M., Gallois, C., & Callan, V. 2003. Trust me, I'm your boss: trust and power in supervisor-supervisee communication. *International Journal of Human Resource Management*, 14 (1): 117-27.
- Woo, K.-S., and Ennew, C.T. 2005. Measuring business-to-business professional service quality and its consequences. *Journal of Business Research*, 58: 1178-85.
- World Health Organization, 2000. *World health report 2000: health systems: improving performance*. World Health Organisation, Geneva
- World Health Organization, 2009. *Country Profile: Pakistan*. available at <http://www.who.int/hac/crises/pak/en/> accessed on Jan., 2012-01-11.
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Factors Influencing Online Repurchase Behavioral Intention of University Students in Malaysia

Keywords: Online Shopping, Repurchase Intention, Pre-Purchase User Perceptions of Attributes, Pre-Purchase User Attributes, Post-Purchase User Attribute, Malaysia.

INTRODUCTION

Customer's repurchase intention (RI) is considered by both academicians and practitioners to be one of the critical success factors for online retailing with its implications for cost savings and gain profitability for business's stakeholders. Heinemann & Schwarzl, (2010) and Sherman & Topol (1996) found that marketing, retailing and information technologies will be brought together and enjoy positive synergy to create value for business's stockholders. Relatively, a substantial body of research showed customer must purchase four times at an online store to make profits from that customer (Chao-Min, Chen-Chi, Hsiang-Lan, & Yu-Hui, 2009). In this study post-adoption of online shopping and customer retention and loyalty are used interchangeably. "Internet marketing or online marketing could be defined as the entire process of building and maintaining customer relationships through the online activities to facilitate the exchange of ideas, products and services that satisfy the goals of both buyers and sellers or create value for both side" (Muhammad Najib, Zaharah, & Azlina Mohd, 2010).

The development of Multimedia Super Corridor (MSC) in Malaysia has attracted so much attention on the accomplishment and development of internet practice in all industries' performance (Armesh, Salarzahi, Yaghoobi, Heydari, & Nikbin, 2010). According to Yang & Lai (2006) a better understanding of consumer behavior allows marketer to design effective marketing strategies because the Internet provides marketers much more data and information about customers in comparison with offline shopping so, as a result this issue has brought marketing management into a new age. In contrast with previous related studies, the area of this study is a combination of consumer behaviour insight and also strategy related. Grewal & Levy (2007) through a meta-analysis of journal published

between 2002 and 2007 (published 130 found that more study should integrate insights gained from consumer behaviour with the development and implementation of retail strategy. “Post-adoption usage of the online channel is dynamic and multi-dimensional in many ways” (Chuanlan & Sandra, 2010).

Continued usage (continuance) of the information technologies (IT) is a key research issue in the information systems (IS) field (Hsu, Yen, Chiu, & Chang, 2006). It is important to study the factors that influence individuals’ post-adoption behavior and attitudes, in regard to the significant influence of continued usage on the long-term viability and profitability of an Information Technology enterprise like online retailers (Blanca, Julio, & Martín, 2011; Blery et al., 2009; Chai Har, Uchenna Cyril, & Nelson Oly, 2011). Besides, researchers seldom study the effect of particular online shopping on undergraduate student (Dan & Xu, 2011). In fact, university students have a higher level of knowledge and access Internet more frequently in the university, they are full of curiosity and are willing to accept new things (Peng, Wang, & Cai, 2008). It is argued that although students are not earning, but they are representative of a future earning population, and so their opinions are valid (Chang & Chen, 2008; Dan & Xu, 2011; Hart, 2008; Talal, Charles, & Sue Vaux, 2011).

Problem statement in this study is “understand attitudes and behaviour of repurchase intention of multiracial university students in Malaysia”. Through a meta-analysis “A+” level marketing journals published between 1996 and 2007 (Taylor & Strutton, 2010) proposed future research direction (and also research framework of study) that is the problem statement of this study. Consequently, this study is driven by exploratory and descriptive object in the hope to explore new area of study that’s suggested by many scholars like (Chuanlan & Sandra, 2010) and directly by (Taylor & Strutton, 2010). Moreover, the objectives of this study are as follow: 1) To understand factors influencing attitudes and behaviour of repurchase intention of multiracial university students in Malaysia (proposed by Taylor & Strutton (2010) and 2) To examine the impact of pre-purchase user perceptions of attributes, pre-purchase user attributes and post-purchase user attributes on repurchase intention of multiracial university students in Malaysia.

THEORETICAL RESEARCH FRAMEWORK

Drawing upon the literature in internet marketing, online retailing, information systems, information technology, computer in human recourse, this study examines the modelling of consumer shopping behaviour in post adoption era or repurchase tendency of online shoppers. Repurchase tendency represent the customer’s self-reported likelihood of engaging in further repurchase behaviour that is the focus of this chapter (Hong-Youl, Swinder, & Siva, 2010).

Pre-Purchase User Perceptions of Attributes

In the following sentences, these attributes are explained to understand their impact on repurchase behaviour intention (BI) of online shopper.

Perceived Usefulness (PU). In TAM, PU and PEOU are considered distinct factors influencing a user's attitude toward using that technology (Yuan, 2009). Users may continue using an internet service if they consider it useful, even if they may be dissatisfied with their prior use (Talal, et al., 2011). Clearly, all users of internet are looking to get more productivity and feel useful by moving from market space to marketplace. Perceived usefulness is expected to be influenced by perceived ease of use because, other things being equal, the easier it is to use a system, the more useful it can be (Venkatesh & Goyal, 2010). So, we hypothesize:

H1. There is a significant relationship between PU and RI.

Perceived Ease of Use (PEOU). Drawn from the technology acceptance model (TAM) that was introduced and developed by Davis et al., (1989) ease of use in website was considered to be one of the influential elements in this research framework. Lu, et al., (2011) support the moderating effect of online shopping experience on the relationships between PEOU, PU, and attitude toward Web sites because users with more Internet experience are usually exposed to more Web sites and they are more

willing to experience different Web services than inexperienced users. We hypothesize:

H2. There is a significant relationship between PEOU and RI.

Perceived Value. In the last recent years as the concept of customer value has attracted rising attention both for marketing researchers and practitioners, more enterprises started to take customer value strategies in order to increase profits and ensure sustainable development in their core businesses (Tang & Zhang, 2010). “Honesty, integrity, trust and justice are cornerstone values in contemporary business” (Maaja & Krista, 2011). According to Lindman (2010) as value creation for target customers has become an important element in contemporary business management, knowledge about customer value which customers actually perceive becomes a strategic asset to gain strategic competitiveness. How much the customer values the product offering is critical to the success of any firm (Caruana & Ewing, 2010). We hypothesize:

H3. There is a significant relationship between Perceived value and RI.

Perceived Risk. Pervious literatures show that perceived risk is a key factor that influences purchase and repurchase intention of online shoppers (Peng, et al., 2008). Clearly, the level of perceived risk that a customer associates with a buying decision is higher in online shopping than in traditional shopping (Sonia San, Carmen, & Rebeca San, 2011). The effect of customer trust on purchase intentions is possibly mediated by perceived risk, at least when the e-commerce activity involves inexperienced customers who examine a variety of websites some of which are not well known (Gefen, Karahanna, & Straub, 2003). It is negatively influenced by high perceived risk (Patricia, Victor, & Stanley, 2005). We hypothesize:

H4. There is a significant relationship between perceived risk and RI.

Pre-Purchase User Attitudes

Another key operational variable that has significant impact on online shopper is pre purchase user attitudes. In fact, the online attitudes of user determine their level of shopping both to retain on single online vendor and replace their online shopping portal. Chang Liu, et al., (2005) state little empirical research has been done to examine the relationship among the three constructs-privacy concerns, trust, and behavioural intentions. Accordingly, the theoretical relationship between privacy of personal information and trust has received limited research focus (Mary Ann & Sherry, 2011).

Trust. According to Chiou & Pan (2009) perceived trust of the online customer is very important in retaining shoppers and this issue demonstrated the importance of building asset specificity in increasing customer retention and loyalty. The importance of trust in exchange contexts is being recognized from years ago in marketing context (Andaleeb, 1995). Accordingly, most studies of trust in online business models have tended to focus on trust as an antecedent to initial web usage or acceptance, and “have devoted little attention to its effects on continued usage” (Wang & Chiang, 2009). In short, previous studies on internet trust were remarkable but they did not deal with the development of trust in continuous period of time (Ji-Seok, Jae-Nam, & Hoffmann, 2008). We hypothesize:

H5: There is a significant relationship between Trust and RI.

Privacy Concern. According to Dinev & Hart (2005) privacy concern is another critical factor in the online area which impact need to be fully understood and adequately studied. Privacy refers to the degree to which the online shopping web site is safe and protects the customers’ information (Badrinarayanan, Becerra, Kim, & Madhavaram, 2010; Chao-Min, et al., 2009). In Malaysia many buyers appear to be afraid to purchase products online due to fears of lack of privacy and possibility that online retailers will misuse their personal information (Chai Har, Uchenna Cyril, & Nelson Oly, 2011). We hypothesize:

H6. There is a significant relationship between Privacy concern and RI.

Internet Interest/Literacy/Affinity. While IT literacy is an important factor in digital divide research, and studies examine user characteristics with respect to IT literacy, few studies make the process of basic IT literacy acquisition their main focal point (Ferro, Helbig, & Gil-Garcia, 2011). Jones &

Reynolds (2006) states that consumers often switch brands due to boredom despite being highly satisfied and this problem is especially true in retailing and generally results from consumers losing interest and becoming bored with stores. In addition, internet literacy is also closely related to computer literacy, which is now of great importance in everyday life (Dinev & Hart, 2005). We hypothesize:

H7: There is a significant relationship between Internet literacy/affinity and RI.

Post-Purchase User Attitudes

(Román, 2010) found that “learning more about the critical relationship between e-satisfaction and e-loyalty should be a top priority for scholars and practitioners”. Another important factor mentioned is literature and suppose to impact on online customer retention and loyalty is post purchase customer attitudes. In the real world satisfaction is a big issue to be understood by businesses both offline and online. In the following section satisfaction, expectation and experience are explained. According to Dwayne, et al., (2004) “satisfaction is the most critical factor to the explanation of customer retention and loyalty”.

Satisfaction. Most studies on customer satisfaction focus just on the forming mechanism and process of satisfaction. Little studies have examined satisfaction concept from its origin (Ye, Zhang, & Zan, 2009). Satisfaction has been seen as the major determinant of subsequent loyalty, with positive consequences for company performance (Finn, Wang, & Frank, 2009). Loyal customers are important because they contribute to the profitability of the service providers. We hypothesize:

H8: There is a significant relationship between satisfaction and RI.

RESEARCH METHODOLOGY

The theoretical framework of this study has been built on TAM proposed by Davis (1989) and developed in 2010 by Taylor & Strutton. (Taylor & Strutton, 2010) declared that their model should be use to conduct more study in post adoption online behaviours.

Sampling Method

The target population of this research were university students (age: 18-31) both male and female to understand and predict e-attitude and e-behaviour in post adoption era. The sampling design was random sampling technique used in this study proposed by (Kwek Choon, Lau Teck, & Tan Hoi, 2010; Tan, Yan, & Urquhart, 2007).

Data Collection Method and Determine Necessary Sample Sizes

Based on (Hong-Youl, et al., 2010) the important criteria for selecting respondents for the sample are: 1) Minimum of twelve months' experience shopping on the internet 2) At least one purchase within that period and 3) Age 18 to 31. 220 e-mails were sent to respondents from which 180 questionnaire were collected. From this method a total of 43% of data were collected. Secondly, questionnaires were embedded in Facebook for the others who didn't receive the survey via email. Therefore 180 questioners were collected through Facebook (43%). The overall sample size were 318 respondents which were collected within thirty one (31) days.

Measurement of Variables

The questionnaire and its scaling were developed and modified based on validated and reliable existing empirical studies carried out by various scholars (See appendix). To measure PEOU, 3 items were adopted from (Chao-Min, et al., 2009), to measure PU 3 items were adopted from (Hausman & Siekpe, 2009), 3 items to measure satisfaction adopted from (Chang & Chen, 2009), to measure trust 3 items were adopted from (Chao-Min, et al., 2009), to measure privacy concern 3 questions adopted from (Yu-Hui & Stuart, 2007), to measure Perceived value 5 items from (Chai Har, et al., 2011), to measure Perceived risk 4 items were adopted from (Sonia San & Carmen, 2009) to measure Internet literacy (IL) 3 questions were adopted from (Dinev & Hart, 2005) and to measure Repurchase intention (RI) 3 questions were adopted from (Chao-Min, et al., 2009).

Validity and Reliability

The survey questionnaire was adopted and modified from the questionnaire constructed by validated empirical studies. Subsequently, the reliability analysis was conducted with the results of Cronbach alphas of more than 0.7. Prior to the distribution of the final questionnaires, a pilot study was performed at Multimedia University, Cyberjaya Campus as the pilot study population. Thirty (30) respondents participated in this process.

RESULTS

The respondents of this study were under-graduate and post-graduate students from four (4) universities in Malaysia which includes: (1) MMU, (2) UKM, (3) UTM and (4) UPM.

Table 1 Summary of Demographic Characteristics of Respondents

	Demographic Profile	Frequency
1	Distribution of Gender	Male: 55% ; Female: 45%
2	Distribution of Age	18 to 24 : 74.8% ; 25 to 31: 24.8%
3	Distribution of Marital Statues	Single: 73% ; Married: 27%
4	Distribution of Respondents by Race/Nationality	Chinese 27.4%; Malay 23.3%; Indian 11.3%; Iranian 17.9%; Arabian 9.4%; African 8.8% and Other races or nationality 1.9%.
5	Distribution of Town/City	Kuala Lumpur 26.7 %; Cyberjaya 31.1% Serdang 22.0%; Other city or location 12.3% Not Stated 7.9%
6	Distribution of University	MMU: 30% ;UTM: 23% ;UKM: 23% ; UPM: 24%
7	Distribution of Education Level	Undergraduate 67.6% ; Postgraduate 32.4%

Hypotheses Testing

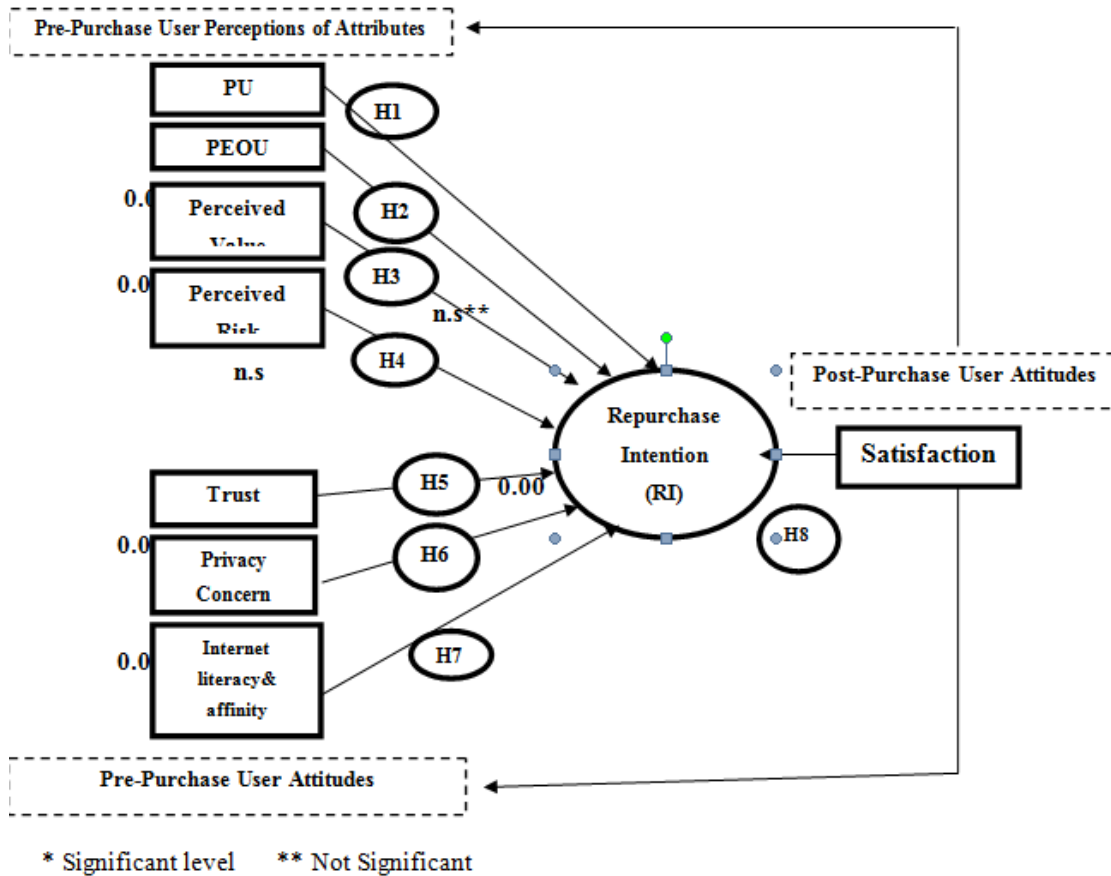
This research seeks to examine the repurchase intention of students who are studying in four major universities in Malaysia. Then the data was analyzed to measure the hypotheses empirically. Table 2 displays the summary of all eight (8) hypotheses tested in the study.

Table 2 Summary of the Hypotheses Testing

	Hypothesis of Research	Research Objectives	Decision
1	There is a significant relationship between PU and RI	1,2	Reject H0, Accept H1
2	There is a significant relationship between PEOU and RI	1,2	Reject H0, Accept H1
3	There is a significant relationship between Perceived value and RI	1,2	Accept H0 Reject H1
4	There is a significant relationship between perceived risk and RI	1,2	Accept H0 Reject H1
5	There is a significant relationship between Trust and RI	1,2	Accept H0 Reject H1
6	There is a significant relationship between Privacy concern and RI	1,2	Reject H0, Accept H1
7	There is a significant relationship between Internet literacy and RI	1,2	Reject H0, Accept H1

8	There is a significant relationship between satisfaction and RI	1,2	Reject H0, Accept H1
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Figure 5.1: Research Findings



DISCUSSION OF RESULTS

This research focuses on attitudes and repurchases behavioural intention of Malaysian university students and contributes to the literature in assessing and explanation of this issue. Consumer attitudes are often acknowledged to mediate the link between consumer values and behaviour (Hansen, 2008). In this light, this research begins with explanation and drawing literature about online marketing strategy and its relationship with online consumer behavioural intention. Based on literature review and proposed models (Taylor & Strutton, 2010) in consumer behaviour an integrative model was chosen to understand online shopper re purchase behavioural intention. The questionnaire was created based on the modification of tested and validated research instruments obtained from the literature in relevant studies.

Research Contribution

This study confirms that the Internet marketing capabilities have passed the point where they represent mere nice-to-haves. Instead, such capabilities now represent absolute musts for all kind of businesses in different industry. The reason to state above statement is because among target population (318) of this research, 246 (77%) state they will continue purchasing from their experienced online retail that purchased before but the rest of the respondents (23%) state they will not purchase again on the online retail that they bought within one year. The main contribution of this study is employing an integrated model of online shopping model proposed by Taylor & Strutton

(2010). This study carries out with primary research to examine whether there is a relationship between proven variables that they suggest or not (See Figure 5.1). According to this study the significant relationship were not proven as Taylor & Strutton (2010) suggested in their study. In fact, this study just proved the significant relationship between PU, PEOU, privacy concern, internet literacy, satisfaction with RI. Accordingly, the relationships between perceived value, perceived risk, trust and RI in this study are not proven.

Managerial Implications and Recommendations

This study provides internet marketing managers with useful and important knowledge to increase shoppers' intention toward online shopping. The findings of this study enable a better understanding of online shoppers relevant to market segmentation variables to enhance internet marketing strategy based internet consumer behavioural intention. Manager should target consumers based on prior experience with online vendors as discussed in this study. In addition, targeting solely just Malaysian local students is a mistake. Accordingly, other nationality like Iranian, Arabian and African are also a big segment to be considered in this light. Online retailers' managers should understand that the attitudes of online shoppers are affected by information that they want from customers. For example, online retailers should not get all information about customers that are not necessary. The needed information about targeted customer should be taken, therefore customer will feel better. The marketer could give free information during purchase process of online shopper to make shopper transaction more useful. Opt-in Marketing and Conveniences of post-sales services could influence consumer behaviour intention in this prospect. The best practice ever done is airasia.com.my. Through opt-in marketing airasia.com.my send the information about online discount and new flight schedule to who subscribed before. This way prevents spam e-mail therefore customer perceived useful. The online marketer should understand that perceived Beauty of Simplicity of online shopper should be managed in the right way. The layout and forms of interaction by customer must perceive comfortable.

Limitations and Directions for Future Research

Future research should employ longitudinal study to carry out the relationship that exists between present and future behaviour 2) This study focused on B2C trading and did not consider the other categories of e-commerce (Chang & Chen, 2009). 3) Research proposed that university students as respondents are not representative of all consumers so; future study is needed to filling this gap by targeting both students and professionals in different cultures. 4) This study did not compare shopper continuers and discontinuers. Future studies should examine the behaviour of both groups by using statistical methods.

REFERENCES

- Andaleeb, S. S. (1995). Dependence relations and the moderating role of trust: implications for behavioral intentions in marketing channels. *International Journal of Research in Marketing*, 12(2), 157-172.
- Armash, H., Salarzahi, H., Yaghoobi, N. M., heydari, A., & Nikbin, D. (2010). Impact of Online/Internet Marketing on Computer Industry in Malaysia in Enhancing Consumer Experience. *International Journal of Marketing Studies*, 2(2), 75-86.
- Badrinarayanan, V., Becerra, E., Kim, C.-H., & Madhavaram, S. (2010). Transference and congruence effects on purchase intentions in online stores of multi-channel retailers: initial evidence from the U.S. and South Korea. *Journal of the Academy of Marketing Science*, 1-19.
- Caruana, A., & Ewing, M. T. (2010). How corporate reputation, quality, and value influence online loyalty. [doi: DOI: 10.1016/j.jbusres.2009.04.030]. *Journal of Business Research*, 63(9-10), 1103-1110.
- Chai Har, L., Uchenna Cyril, E., & Nelson Oly, N. (2011). Analyzing key determinants of online repurchase intentions. *Asia Pacific Journal of Marketing and Logistics*, 23(2), 200-221.

- Chang, H. H., & Chen, S. W. (2008). The impact of customer interface quality, satisfaction and switching costs on e-loyalty: Internet experience as a moderator. [doi: DOI: 10.1016/j.chb.2008.04.014]. *Computers in Human Behavior*, 24(6), 2927-2944.
- Chang, H. H., & Chen, S. W. (2009). Consumer perception of interface quality, security, and loyalty in electronic commerce. *Information & Management*, 46(7), 411-417.
- Chao-Min, C., Chen-Chi, C., Hsiang-Lan, C., & Yu-Hui, F. (2009). Determinants of customer repurchase intention in online shopping. *Online Information Review*, 33(4), 761-784.
- Chiou, J.-S., & Pan, L.-Y. (2009). Antecedents of Internet Retailing Loyalty: Differences Between Heavy Versus Light Shoppers. *Journal of Business & Psychology*, 24(3), 327-339.
- Chuanlan, L., & Sandra, F. (2010). Post-adoption online shopping continuance. *International Journal of Retail & Distribution Management*, 38(2), 97-114.
- Dan, S., & Xu, H. (2011). Research on Online Shopping Intention of Undergraduate Consumer in China--Based on the Theory of Planned Behavior. [Article]. *International Business Research*, 4(1), 86-92.
- Dinev, T., & Hart, P. (2005). Internet Privacy Concerns and Social Awareness as Determinants of Intention to Transact. *International Journal of Electronic Commerce*, 10(2), 7-29.
- Dwayne, B., Pedro Simões, C., & Alexandra, M. (2004). The role of communication and trust in explaining customer loyalty: An extension to the ECSI model. *European Journal of Marketing*, 38(9), 1272-1293.
- Ferro, E., Helbig, N. C., & Gil-Garcia, J. R. (2011). The role of IT literacy in defining digital divide policy needs. *Government Information Quarterly*, 28(1), 3-10.
- Finn, A., Wang, L., & Frank, T. (2009). Attribute Perceptions, Customer Satisfaction and Intention to Recommend E-Services. *Journal of Interactive Marketing*, 23(3), 209-220.
- Gefen, D., Karahanna, E., & Straub, D. W. (2003). Inexperience and experience with online stores: the importance of TAM and trust. *Engineering Management, IEEE Transactions on*, 50(3), 307-321.
- Grewal, D., & Levy, M. (2007). Retailing research: Past, present, and future. *Journal of Retailing*, 83(4), 447-464.
- Hansen, T. (2008). Consumer values, the theory of planned behaviour and online grocery shopping. *International Journal of Consumer Studies*, 32(2), 128-137.
- Hart, M. (2008). *Do online buying behaviour and attitudes to web personalization vary by age group?* Paper presented at the Proceedings of the 2008 annual research conference of the South African Institute of Computer Scientists and Information Technologists on IT research in developing countries: riding the wave of technology.
- Hausman, A. V., & Siekpe, J. S. (2009). The effect of web interface features on consumer online purchase intentions. *Journal of Business Research*, 62(1), 5-13.
- Hong-Youl, H., Swinder, J., & Siva, K. M. (2010). A new understanding of satisfaction model in e-repurchase situation. *European Journal of Marketing*, 44(7), 997-1016.
- Hsu, M.-H., Yen, C.-H., Chiu, C.-M., & Chang, C.-M. (2006). A longitudinal investigation of continued online shopping behavior: An extension of the theory of planned behavior. *International Journal of Human-Computer Studies*, 64(9), 889-904.
- Ji-Seok, Y., Jae-Nam, L., & Hoffmann, J. (2008, 7-10 Jan. 2008). *Trust in Online Shopping: The Korean Student Experience*. Paper presented at the Hawaii International Conference on System Sciences, Proceedings of the 41st Annual.
- Jones, M. A., & Reynolds, K. E. (2006). The role of retailer interest on shopping behavior. *Journal of Retailing*, 82(2), 115-126.
- Kwek Choon, L., Lau Teck, C., & Tan Hoi, P. (2010). The Effects of Shopping Orientations, Online Trust and Prior Online Purchase Experience toward Customers' Online Purchase Intention. [Article]. *International Business Research*, 3(3), 63-76.
- Lindman, M. (2010). EXTENDING CUSTOMER KNOWLEDGE: THE VALUE OF CUSTOMER VALUE-BASED APPROACH. [Article]. *Journal of Global Business & Technology*, 6(2), 48-63.
- Liu, C., Marchewka, J. T., Lu, J., & Yu, C.-S. (2005). Beyond concern--a privacy-trust-behavioral intention model of electronic commerce. *Information & Management*, 42(2), 289-304.

- Lu, Y., Cao, Y., Wang, B., & Yang, S. (2011). A study on factors that affect users' behavioral intention to transfer usage from the offline to the online channel. *Computers in Human Behavior, 27*(1), 355-364.
- Maaja, V., & Krista, J. (2011). The dual value of honesty among Russians in selected former Soviet countries. *Cross Cultural Management: An International Journal, 18*(1), 55-70.
- Mary Ann, E., & Sherry, L. (2011). Cognitive and institutional predictors of initial trust toward an online retailer. *International Journal of Retail & Distribution Management, 39*(4), 234-255.
- Muhammad Najib, R., Zaharah, M., & Azlina Mohd, Y. (2010). Internet business strategies by property companies in Asia. *Property Management, 28*(4), 270-289.
- Patricia, S., Victor, P., & Stanley, W. (2005). Attitude and age differences in online buying. *International Journal of Retail & Distribution Management, 33*(2), 122-132.
- Peng, H., Wang, C., & Cai, J. (2008, 19-19 Dec. 2008). *An Empirical Investigation on the Adoption of Online Shopping of University Students in China*. Paper presented at the Business and Information Management, 2008. ISBIM '08. International Seminar on.
- Román, S. (2010). Relational Consequences of Perceived Deception in Online Shopping: The Moderating Roles of Type of Product, Consumer's Attitude Toward the Internet and Consumer's Demographics. *Journal of Business Ethics, 95*(3), 373-391.
- Sonia San, M., & Carmen, C. (2009). How perceived risk affects online buying. *Online Information Review, 33*(4), 629-654.
- Sonia San, M., Carmen, C., & Rebeca San, J. (2011). Dual effect of perceived risk on cross-national e-commerce. *Internet Research, 21*(1), 46-66.
- Talal, A.-m., Charles, D., & Sue Vaux, H. (2011). Antecedents of continuance intentions towards e-shopping: the case of Saudi Arabia. *Journal of Enterprise Information Management, 24*(1), 85-111.
- Tan, F. b., Yan, L., & Urquhart, C. (2007). The Effect of Cultural Differences on Attitude, Peer Influence, External Influence, and Self-Efficacy in Actual Online Shopping Behavior. *Journal of Information Science & Technology, 4*(1), 3-23.
- Tang, S., & Zhang, M. (2010, 7-9 Nov. 2010). *Differences and Impact Factors between Customer Expected Value and Customer Perceived Value*. Paper presented at the E-Product E-Service and E-Entertainment (ICEEE), 2010 International Conference on.
- Taylor, D. G., & Strutton, D. (2010). Has e-marketing come of age? Modeling historical influences on post-adoption era Internet consumer behaviors. *Journal of Business Research, 63*(9-10), 950-956.
- Venkatesh, V., & Goyal, S. (2010). EXPECTATION DISCONFIRMATION AND TECHNOLOGY ADOPTION: POLYNOMIAL MODELING AND RESPONSE SURFACE ANALYSIS. *MIS Quarterly, 34*(2), 281-303.
- Wang, J.-C., & Chiang, M.-J. (2009). Social interaction and continuance intention in online auctions: A social capital perspective. *Decision Support Systems, 47*(4), 466-476.
- Yang, T.-C., & Lai, H. (2006). Comparison of product bundling strategies on different online shopping behaviors. [doi: DOI: 10.1016/j.elerap.2006.04.006]. *Electronic Commerce Research and Applications, 5*(4), 295-304.
- Ye, J.-h., Zhang, M.-l., & Zan, J.-y. (2009, 14-16 Aug. 2009). *Study on Customer Satisfaction in Benefit/Sacrifice Hierarchy*. Paper presented at the Fuzzy Systems and Knowledge Discovery, 2009. FSKD '09. Sixth International Conference on.
- Yu-Hui, C., & Stuart, B. (2007). Initial trust and online buyer behaviour. *Industrial Management & Data Systems, 107*(1), 21-36.
- Yuan, G. (2009, 10-11 July 2009). *Factors Influencing Perceived Value of and Attitude toward E-commerce among Online Shoppers in China*. Paper presented at the Information Engineering, 2009. ICIE '09. WASE International Conference on.

APPENDIX- MEASUREMENT SCALES

1. Pre-Purchase User Perceptions of Attributes

a. Perceived ease of use (PEOU)

PEOU1 The web site is flexible to interact with

PEOU2 My interaction with the web site is clear and understandable

PEOU3 The web site is easy to use

b. Perceived usefulness (PU)

PU1 Using this website can improve my shopping performance

PU2 Using this website can increase my shopping productivity

PU3 I find using this website useful

c. Perceived value (PV)

PV1 I will be attracted to repurchase a product online, if I experience tangible values

PV2 I will repurchase online provided the web site offers good value for money

PV3 Perceive value for time used online will attract me to repurchase a product/service online.

PV4 Greater value-added services provided on the web site would attract me to shop online

PV5 I will repurchase online if the online store provides a promise to refund, or an exchange policy

d. Perceived risk (RIS)

RIS1 If I want to buy a product/service online, I fear that the expenditure is worthwhile

RIS2 I am worried about wasting time buying online

RIS3 I want to buy a product/service online I fear not obtaining the desired results

RIS4 I fear that the product/service bought online will not be as I want

2. Pre-Purchase User Attitudes

a. Trust (TR)

TR1 Based on my experience with the online store in the past, I know it is honest.

TR2 Based on my experience with the online store in the past, I know it cares about its customers.

TR3 Based on my experience with the online store in the past, I know it keeps its promises to its customers.

TR4 Based on my experience with the online store in the past, I know it is trustworthy

b. Privacy concern (PC)

PC1 The personal information that I provide on this web site is secure

PC2 The monetary information that I provide on this web site is well protected

PC3 This web site does not apply my personal information for other purposes

c. Internet literacy (IL)

Rate the extent to which you are able to do the following tasks:

IL1 Identify and delete a program which you consider intrusive (spyware) and which was installed through the Internet without your knowledge and permission

IL2 Manage virus attacks by using antivirus software

IL3 Communicate through instant messaging or discussion boards.

3. Post-Purchase User attitudes

a. Satisfaction (SAT)

SAT1 I am satisfied with my decision to purchase from this website

SAT2 If I had to purchase again, I would feel differently about buying from this website

SAT3 My choice to purchase from this website was a wise one

Repurchase intention (RI)

RI1 If I could, I would like to continue using the web site to purchase products

RI2 It is likely that I will continue to purchase products from the web site in the future

RI3 I intend to continue purchasing products from the web site in the future

Sources: Adapted from (Chai Har, et al., 2011; Chang & Chen, 2009; Chao-Min, et al., 2009; Dinev & Hart, 2005; Hausman & Siekpe, 2009; Sonia San & Carmen, 2009; Yu-Hui & Stuart, 2007).

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Behavioral Characteristics and International Marketing Capability in the Performance of Born Global firms: Case Studies of Malaysian Firms

Key words Born Global; International Entrepreneurship; International Marketing Capability; Malaysia.

INTRODUCTION

Malaysia, located in Southeast Asia, has benefited from political stability, high level physical infrastructure, multilingual and multicultural workforce. Malaysia has positioned herself as the world's top 20 trading nations (FMM Directory, 2005). As a developing country and a newly industrialized economy, Malaysia has been experiencing transitional economy from agriculture to a new industrialized market economy. The profile of Malaysia's export has been changed from a leading exporter of commodities in the early 1960s to an exporter of a wide range of high value-added products. This transformation is primarily supported by the New Economic Model and the 10th Malaysian Plan in which small and medium enterprises (SMEs) are potentially the key contributors to the success of these initiatives.

According to the Bank Negara of Malaysia, as of 2006, the total number of business establishments in Malaysia is 523,132 firms. Out of this total, 518,996 firms are SMEs which represent 99.2 % of the total business establishments in Malaysia. The SME sectors that are exporting Malaysian products are the manufacturing, service and agriculture sectors with 57.6 %, 40.6 % and 1.8% respectively. The top three Malaysian export markets are Singapore (13.3%), China (12.5) and Japan (10%) (MATRADE, 2010). The above statistics as well as national level policies such as the Third Industrial Master Plan (IMP3), New Economic Model and 10th Malaysia Plan show high support towards SMEs exports and reliance of the Malaysian economy on SME international trade (Zizah, Entekin & Scott-Ladd, 2010).

However, the total contribution of SMEs to the overall exports is 16.6% (Bank Negara Malaysia, 2006). Being a newly industrialized country, Malaysia relies heavily on Multinational Enterprises (MNEs) to export. This discovery has sparked the authors to conduct case studies in Malaysia on what constitutes the firms' early internationalization from inception and their performance in international market.

Besides that, research on early internationalization of Born globals has been limited to the advanced economy and developed countries (Thai & Chong, 2008) and there is still a lack of comprehensive theoretical perspective as well as lack of cohesive framework on these firms that internationalize from early inception (Weerawardena, Mort, Liesch & Knight, 2007). Thus, this paper aims to explore the factors that contribute to the early and rapid internationalization as well as performance of firms in the international market through the

lens of dynamic capability view of competitive strategy. Practical implications that will be drawn from this result are offered to entrepreneurs, business owners, and top management of SMEs who have yet to internationalize and/or aim to perform in foreign markets, as well as policy makers. This study provides new knowledge and important insights that will benefit SMEs in the context of accelerated internationalization in newly industrialized and developing countries such as Malaysia.

REVIEW OF LITERATURE

Theoretical Background of Internationalization

Resource Based View (RBV) and Capability view are widely used by researchers in the born global literature (Rialp & Rialp, 2006; Weerawardena et al., 2007; Karra, Phillips & Tracey, 2008; Di Gregorio, Musteen & Thomas, 2008). According to RBV view, firms act differently in the same industry due to their differences in possessing resources (Barney, 1986).

Capability view, in contrast to the RBV, focus on the role of capabilities rather than resources in explaining the ability to achieve organizational goals. The key factor that differentiates the capability view from RBV is entrepreneurial owner/managers' ability to develop organizational routines (Mort & Weerawardena, 2006). Capability view suggests that in order to identify opportunities, the firms need to develop new capabilities and respond in a timely manner (Eisenhardt & Martin, 2000; Nelson & Winter, 1982). Dynamic capabilities view - which is derived from capability view - focuses on the role of capabilities rather than resources in explaining the ability to achieve organizational goals. Dynamic capabilities reflect a firm's capacity to reconfigure its capabilities to adapt to its environment to achieve superior performance in any market the firm decides to operate (Sapienza, Autio, George, & Zahra, 2006; Nelson & Winter, 1982).

Empirical Evidence of born global

The key factors that contribute to born global firms which internationalize from early inception as studied by various scholars are discussed below.

Born Global behavior characteristics. Born globals tend to be formed by entrepreneurs with strong orientation towards international market (Cavusgil & Knight, 2009). Cavusgil and Knight (2009) highlight born global firms as entrepreneurial firms that see the world as their market place and often involving international marketing skills. Strong international entrepreneurial orientation, strong differentiation strategy and strong marketing capabilities are associated with superior international performance in born global firms (Hartsfield, Johansen & Knight, 2008).

Di Gregorio, Musteen, and Thomas (2008) argue that a majority of born global firms emerge due to the entrepreneur's opportunity-seeking behavior in regards to the resources and markets across the border. Zhou, Wu and Luo (2007) describe three dimensions of entrepreneurial orientation of born global as innovative, proactive and risk taking. He found that pro-activeness is the most influential entrepreneur behavior in accumulating international market knowledge, followed by innovativeness and risk taking in comparison to traditional firms, and that international market knowledge emerge from incremental accumulating of experience in foreign markets.

Weerawardena et al. (2007) argue that a set of dynamic capabilities built and nurtured by entrepreneur-oriented founders/managers assist firms in developing knowledge-intensive products, which leads to early internationalization of firms. Furthermore, they argue that the

issue of why some Born Globals are able to internationalize from inception while others concentrate on domestic market, is highly dependent on entrepreneur behavior characteristics.

Freeman, Edwards and Schroder (2006) found that the main factors influencing early internationalization of born global firms are international vision of the founders, the desire to be the international market leaders, identifying specific international opportunities and the possession of international contacts and sales leads. The competitive advantage for them is that it makes it possible to quickly grab opportunities, utilize first mover advantage and move fast in multiple international markets.

McDougall, Oviatt and Shrader's (2003) findings suggest early internationalization to be driven by prior entrepreneurial and international experience, the global integration of the industry, and strategy variables such as aggressiveness, product innovation, and quality.

In sum, international entrepreneurial orientation (Knight & Cavusgil, 2004), international visionary (Freeman et al., 2006), international experience (McDougall et al., 2003) and international market orientation (Dib, Rocha & da Silva, 2010) are the features that reflect on norms and behavior of born global firms to seek out new markets and opportunities in international markets.

International Marketing capability. Knight, Madsen & Servais (2004) findings reveal that marketing capability in international market appear to be crucial to born global international performance. International marketing capability implies skillful handling of product adaptation and marketing planning process, control of marketing activities, prowess in differentiating the product (knowledge development, R&D, innovativeness, and a general emphasis on the product), as well as being highly effective in pricing, advertising, and distribution (Knight et al., 2004). The ability of firms to gather this information, manage it and use it to implement marketing was found key to the international success of these born global firms (Hartsfield et al., 2008). McDougall et al. (2003) argue that born global firms can be distinguished from firms that focus on domestic market by emphasis more on strategic weapons such as innovative differentiation, quality of service and marketing as compared to traditional firms. These findings have been consistent with Osman, Ramayah and Nasurdin (2001) that relationship marketing differentiates born global and incremental exporters.

METHOD

This research uses a case studies approach. The in-depth interviews were conducted with three firms with an overall time of 12 hours, approximately 4 hours for each firm. The firms which participated in this case studies are Malaysian firms which are located in Selangor, Penang and Kuala Lumpur. Their export activities began, on average, 6 years after their inception. Firm A is specialized in light-weight construction materials. Their target export market primarily is the United Arab Emirates and is currently expanding to the whole Middle East countries.

Firm B is specialized in providing furniture for the international market by focusing more on marketing rather than manufacturing. This firm differentiates itself by offering quality designer furniture with over 2,500 product types at competitive prices, unique services (such as mixed container) and timely delivery. Their target export market is shifting from Australia and USA to European countries such as UK.

Firm C's main activity is trading wood related products such as engineered flooring, solid timber flooring, laminated flooring, plywood and Medium Density Fiber board (MDF). Their focus is on Far East and South East countries.

The research problem which gives guidance to collect the data for this study is "What are the major drivers of early and rapid internationalization which leads to international performance of born global firms in a newly industrialized and developing country such as Malaysia?" This research problem will be addressed by focusing on the research questions mentioned below:

- RQ1. What is the Born Global behavior characteristics that leads to early and rapid internationalization?
- RQ2. How do Born Global firms gain superior performance in international market?

FINDINGS

This section presents the firms' behavior characteristics in regards to venturing into international market from early inception followed by the international marketing capability as a competitive advantage to gain superior performance in international market.

- RQ1. What is the Born Global behavior characteristics that leads to early and rapid internationalization?

Top management in these cases studied was globally oriented with a vision to expand internationally. Besides that, living overseas or having international experience in related industries as well as adaptability, flexibility and actively looking for new market opportunities were the key behavior characteristics of those cases studied. As highlighted by the founder of firm C, "*Sometimes our customers require some alternative products. If we have product A, but they require product B, we need to find the information within Malaysia or within the boundaries of Asia because usually the cost will be cheaper. Then we will provide the quotation, and that needs to be done fast and efficiently.*"

The founder of firm A mentioned that one of the reasons for their success was their hard work through the early stages of company setup. There were times that they worked from 8 am until 2 am in the morning to benefit from both markets' (Asia and Middle East) opening hours. He highlighted that living and working in Dubai helped him to gain invaluable experience about Middle Eastern culture in terms of negotiation skill and attitude. As supported by firm B, "*It is a motivation to have a more proactive role to know the culture of another country because what we may accept as a norm in our own culture may be an insult in another country.*"

- RQ2. How do Born Global firms gain superior performance in international market?

Marketing and marketing tools as stated by Hartsfield et al. (2008) play a crucial role in differentiation strategy. Top management in all three case studies highlighted on the importance of marketing capability in differentiating themselves among competitors in venturing to new market overseas.

As mentioned by senior manager of firm B, "*Furniture market in Malaysia is not very attractive for furniture companies due to price war and high competition, therefore who ever want to get out of this competition need to be very strong in marketing*" and supported by founder of firm A, "*The overall product design and packaging as well as the services offered to the customers is crucial to establish some sort of trust and credibility in the early phase of introducing the company*". Besides that, during the interviews of these firms, brand image, effective advertisement and of providing unique services has been highlighted in their success

in venturing to their export market.

DISCUSSION AND CONCLUSIONS

We have found that behavior characteristics of these exemplar case studies in developing countries such as Malaysia comprises as visionary behavior that see the international market as its own market place, market oriented behavior, management commitment, risk taker behavior as continually looking for any new market opportunity, innovative behavior in finding ways of entering the international market and proactive behavior which refers to aggressive and hard work in pursuing ventures and forward looking into the future. Last but not least, the international experience of the top management in the relevant industry has been highlighted as extraordinary. Besides that, learning orientation behavior which is continuously learning negotiation skills, understanding the culture of target countries and finding new ways of doing business was highlighted as behavior characteristics of these case studies. These behavior characteristics of top management are crucial in building marketing capability in international market. These gives them the source of competitive advantage for seeking and exploiting new opportunities in export market. According to Hartsfield et al. (2008) and as highlighted in these case studies, born globals follow differentiation strategy that requires strong marketing capability in order to customize their products and fit to the demand of target market. International marketing capability combined with superior behavior characteristics of the company's top management lead born globals to develop knowledge intensive products that facilitate early internationalization and gain superior performance in international market.

REFERENCES

- Barney, J. 1986. Strategic factor markets: Expectations, luck and business strategy. *Management Science*, 17(1): 99 - 120.
- Bank Negara Malaysia 2006. *SME Annual Report 2005: Optimizing Strategic Values*, National SME Development Council. Kuala Lumpur, Malaysia.
- Cavusgil, S. T. & Knight, G. A. 2009. *Born Global Firms: A new international enterprise*. International Business Collection, Business Expert Press, USA.
- Di Gregorio, D., Musteen, M., & Thomas, D. 2008. International new ventures: The cross border nexus of individuals and opportunities. *Journal of World Business*, 43(2): 186-196.
- Dib, L. A., da Rocha, A., & da Silva, J. S. 2010. The internationalization process of Brazilian software firms and the Born Global phenomenon: Examining firm, network and entrepreneur variables. *Journal of International Entrepreneurship*, 8: 233-253.
- Eisenhardt, M., & Martin, J. 2000. Dynamic capabilities: What are they? *Strategic Management Journal*, 21(10/11), 105–117.
- Etemad, H., & Lee, Y. 2003. The knowledge network of international entrepreneurship: Theory and evidence. *Small Business Economics*, 20 (1): 5-23.
- FMM Directory. 2005. *FMM Directory: Malaysian Industries*. Federation of Malaysian Manufacturers (FMM) (36th Edn.). Kuala Lumpur Malaysia.
- Freeman, S., Edwards, R., & Schroder, B. 2006. How smaller Born-Global firms use networks and alliances to overcome constraints to rapid internationalization. *Journal of International Marketing*, 14 (3): 33-63.
- Hartsfield, S., Johansen, D., & Knight, G. 2008. Entrepreneurial Orientation, Strategy, and Marketing Capabilities in the Performance of Born Global Firms, *International Business: Research, Teaching and Practice*, 2(1): 12-38.
- Karra, N., Phillips, N., & Tracey, P. 2008. Building the born global firm: Developing entrepreneurial capabilities for international new venture success. *Long Range Planning*, 41(4): 440–458.
- Knight, G. A., & Cavusgil, S. T. 2004. Innovation, Organizational Capabilities, and the Born-Global Firm. *Journal of International Business studies*, 35 (2): 124-141.
- Knight, G. A., & Kim, D. 2009. International business competence and the contemporary firm, *Journal of International Business Studies*, 40: 255-273.

- Knight, G. A., Madsen, T. K., & Servais, P. 2004. An inquiry into born-global firms in Europe and the USA. *International Marketing Review*, 21 (6): 645 – 665.
- McDougall, P., Oviatt, B., & Shrader, R. 2003. A comparison of international and domestic new ventures. *Journal of International Entrepreneurship*, 1, 59-82.
- Mort S. G., & Weerawardena, J. 2006. Networking capability and international entrepreneurship: How networks function in Australian born global firms. *International Marketing Review*, 23(5), 549-572.
- Nelson, R., & Winter, S. 1982. *An Evolutionary Theory of Economic Change*. Belknap Press: Cambridge, MA.
- Osman, M., Ramayah, T., & Nasurdin, A. M. 2001. Differentiating Born Global Versus Incremental Exporters: The Case of Local Malaysian Manufacturing Firms. *Session 5B Marketing Management*, 729 –733.
- Rialp, A., & Rialp, J. 2006. Faster and more successful exporters: An exploratory study of born global firms from the resource-based view. *Journal of Euro-Marketing*, 16(1/2):71–86.
- Sapienza H. J., Autio, E., George, G., & Zahra, S. 2006. A capabilities perspective on the effects of early internationalization on firm survival and growth. *Academy of Management Review* 31(4): 914–933.
- Thai, M.T.T. & Chong, L.C. 2008. Born-global: the case of four Vietnamese SMEs. *Journal of International Entrepreneurship*. 6: 72-100.
- Weerawardena, J., Mort, G., Liesch, P., & Knight, G. 2007. Conceptualizing accelerated internationalization in the born global firm: A dynamic capabilities perspective. *Journal of World Business*, 42(3): 294–303.
- Zhou, L. X., Wu, W. P. & Luo, X. M. 2007. Internationalization and the performance of born-global SMEs: the mediating role of social networks. *Journal of International Business Studies*, 38 (4): 673-90.
- Zizah, C.S., Isa, R.M, L., Scott-Ladd, B. & Entekin, L. 2010. Influential factors for SME internationalization: Evidence from Malaysia. *International Journal of Economics and Management*. 4(2): 285-304.

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Environmental Performance and Institutions: Quantitative Analyses for EU countries

Keywords: Environmental policy, liberalization, EU, data envelopment analysis, regression analysis

INTRODUCTION

The environmental quality is one of the main concerns of humanity in recent decades. Due to human activities environmental degradation has reach dangerous levels in many regions around the world so environmental performance has become a relevant issue.

There are several definitions for the concept of institution. It has different meanings according the context. It could be for instance an established organization or a custom, practice or rule. A more accurate definition for our purpose is as follows: Institutions are rules that influence behavior and

provide safeguards before entering in a transaction by developing rules, sanctions and mechanisms in order to make interaction less risky. More about the institutions see in Vymetal and Zak (2005).

There are formal and informal institutions and distinction can be made as the difference between public and private institutions. Formal institutions are public rules of behavior designed by public authority with legislative power and enforced by executive power (the administration of government) and a judiciary power (judges) that penalizes for breaking a rule. The most typical examples are laws and regulations aiming at policy objectives. Informal institutions are private rules of behavior developed gradually and do not need legal enforcement because the sanctions are applied by private parties or because individuals follow the rules on their own accord. Two key elements here are the self-enforcing mechanisms implying that rules will be complied and self-regulating mechanisms which are the agreements of sanctions by the private actors.

The European Union has positioned in the fight for the protection of the environment at regional and international level by participating on different initiatives, for instance EU market standards are strict on product requirements which reflects the commitment of the EU and member states at the highest level on environmental protection; the domestic regulations and the size of the domestic market represent a real source for changes (EC, 2009 and EC, 2007).

This paper tries to give hints about the environmental performance focusing on institutional and economical factors having potential impact on environmental performance of a set of EU countries. Regression and data envelopment analyses (DEA) were applied in the research.

LITERATURE REVIEW

Given the relevance of the regulatory institutions, property rights and economic factors we will try to test some indicators to measure the effect over the environmental performance of the European Union and we will compare it against the desirable expected effects concerning the Sustainable Development Strategy an additional variable will be used in order to measure the effects of corruption, on this estimation Malta was excluded due to insufficient data; we will use cross-sectional estimation to calculate the equation.

There is demand of explanation about the determinants of environmental performance, but there aren't many quantitative studies about it, one approach is the IPAT equation which was introduced by Ehlich and Holdren (1971) and Commoner (1972). This model states that environmental impact (I) is in function of population size (P), the affluence of consumption per capita (A) and the available technology (T); this equation can't identify the sustainable limits but provides a frame for understanding the general factors that increase or decrease environmental impact. For more details see Sauer et al (2008).

Culas (2006) tested a model for Environmental Kuznets Curve (EKC) over deforestation on developing countries using the variables GDP per capita and a squared term of the same variable to test the existence of the EKC; it also considered institutional factors specially variables concerning property rights like security of property rights, enforceability of contracts and efficiency of bureaucracy. Culas did the estimation by using panel data methods using a simple pooled regression (with constant intercept) and a second one using fixed effects. The results were that property rights and better environmental policy programs might limit the effect of deforestation, which implies that the trade of timber and goods made of wood will also be limited, exports in this case, and however the institutional dimension of the deforestation problem needs to be subject of study in order to improve the institutional response to this problem.

REGRESSION ANALYSES

Methodology

We estimated a regression model using cross - sectional estimation using the software E-VIEWS for data for all countries of the EU except Malta, the estimated equation will have the following shape:

$$y_i = \beta_1 x_{i1} + \dots + \beta_p x_{ip} + \varepsilon_i = x_i' \beta + \varepsilon_i, \quad i = 1, \dots, n, \quad (1)$$

Where:

“ y_i ” is the endogenous (dependent) variable
 “ x_i ” are, exogenous (independent) variables
 “ β_i ” correlation coefficients,
 intercept or constant term “ α ”

The data used for this estimation is from the Environmental Performance Index and data from the Economic Freedom of the World Index (see the authors for references to this data).

Variables and Data Sources

The Environmental Performance Index (EPI, 2010) ranks 163 countries on 25 performance indicators tracked across ten policy categories covering both environmental public health and ecosystem vitality. These indicators provide a gauge at a national government scale of how close countries are to established environmental policy goals. The underlying indicators are the following: (1) Environmental Burden of Disease, (2) Adequate Sanitation, (3) Drinking Water, (4) Urban Particulates, (5) Indoor Air Pollution, (6) Local Ozone, (7) Regional Ozone, (8) Sulfur Dioxide (SO₂) Emissions, (9) Water Quality Index, (10) Water Stress, (11) Conservation Risk Index, (12) Effective Conservation, (13) Critical Habitat Protection, (14) Marine Protected Areas, (15) Change in Growing Stock, (16) Marine Trophic Index, (17) Trawling Intensity, (18) Irrigation Stress, (19) Agricultural Subsidies, (20) Intensive Cropland, (21) Pesticide Regulation, (22) Burned Area, (23) Emissions Per Capita, (24) CO₂ from Electricity Production, and (25) Industrial Carbon Intensity.

The Economic Freedom of the World Index (Eelco Zandberg, 2009 and FTW, 2008) was used to gather data of important institutions for the EU countries, which could explain the differences in the environmental performance between countries. Forty-two variables are used to construct the FTW and to measure the degree of economic freedom in five broad areas: (1) size of government; (2) legal structure and security of property rights; (3) access to sound money; (4) freedom to trade internationally; and (5) regulation of credit, labor and business. We scrutinized the New GCI for the data on institutions and policies, which might explain differences in national environmental performance. It captures many different components of competitiveness, which are grouped into 12 pillars of economic competitiveness: (1) Institutions, (2) Infrastructure, (3) Macroeconomic stability, (4) Health and Primary education, (5) Higher education and Training, (6) Goods market efficiency (7) Labor market efficiency (8) Financial market sophistication, (9) Technological readiness, (10) Market size, (11) Business sophistication and (12) Innovations. These twelve clusters comprise 110 variables in total.

Gross Domestic Product (GDP) data at constant prices was obtained from the United Nations statistics (UNSD, 2010). National Accounts Main Aggregates Database was consulted.

Variables and model specification. The Table 1 contains the description of each variable considered by the model:

Table 1: Description of Variables for Regression Analyses

Dependent variable	Description
Environmental Performance Index (EPI 2010)	This variable is used as a measure of sustainable development (in scale of 1 – 100 points)
Independent variables	Description

Dependent variable	Description
(From Economic Freedom of the World Index)	
Legal system and property rights (2008)	This variable measures the impact of institutions that deals with legal issues and that according to theory are linked with SD an environmental performance. The sub-components of the variable are: judicial independence, impartial courts, protection or property rights, military interference in the rule of law and the political process, integrity of the legal system, legal enforcement of contracts and regulatory restrictions on the sale of real property. The calculation of these elements is normally made by rating them in a scale of 1 to 10 and are calculated from the Global Competitiveness Index Report, the International Country Risk's Guide and World Bank <i>Doing Business</i> data
Bribes (2008)	This sub-component is based on the Global Competitiveness Report's question: "In your industry, how commonly would you estimate that firms make undocumented extra payments or bribes connected with the following: A-Import and export permits; B-Connection to public utilities (e.g., telephone or electricity); C-Annual tax payments; D-Awarding of public contracts (investment projects); E-Getting favorable judicial decisions. Common (= 1) Never occur (= 7)
Gross Domestic Product (GDP 2008) at constant prices (base year 1990)	GDP is used to measure the impact of economic activity of environmental performance (millions of dollars).

Following model for the concrete variables was estimated:

$$y_{EPI} = \alpha + \beta_1 * x_{LSPPR} + \beta_2 * x_{BRIBES} + \beta_3 * x_{GDP} + u \quad (2)$$

Where:

- y_{EPI} is Environmental Performance Index 2010
- x_{LSPPR} is Legal System and Protection of Property Rights
- x_{BRIBES} is Bribes
- x_{GDP} is Gross Domestic Product
- u is Residual, term of error
- $\beta_1, \beta_3 > 0$
- $\beta_2 < 0$

The expected effect of the "β" coefficients will be a positive effect of the legal system and protection of property rights as well as GDP over EPI, bribes are expected to harm environmental performance.

Results of Analyses

The outcomes of the correlation matrix and the graphical analysis of the variables and the results are shown in Table 2.

Table 2: Correlation Matrix

	BRIBES	EPI	GDP	LSPPR
BRIBES	1	0.284	0.174	0.912
EPI	0.284	1	0.380	0.427
GDP	0.174	0.380	1	0.232

	BRIBES	EPI	GDP	LSPPR
LSPPR	0.912	0.427	0.232	1

Let's focus on the column of EPI and the degree of dependency with the independent variables (BRIBES, GDP and LSPPR), the correlation between EPI and BRIBES is small and positive, between EPI and GDP is medium and positive as well between EPI and LSPPR is medium and getting close to high and it's also positive. The positive correlations, initially, imply that the independent variables are likely to improve EPI's performance, even if environmental performance correlates positively with bribes, which seem absurd, the regression will provide a more comprehensive understanding about this relation.

Estimation of the regression model. The estimated equation is the following (no problems of autocorrelation, heteroskedasticity or model misspecification were found, all coefficients are statistically significant at a significance level of $\alpha = .01$):

$$y_{EPI} = 44.98 + 5.51 * x_{LSPPR} - 2.25 * x_{BRIBES} + 2.87E^{-12} * x_{GDP} \quad (3)$$

$R^2 = .31$

Table 3 contains the interpretation of the coefficients.

Table 3: Interpretation of Coefficients

Variable	Coefficient interpretation
INTERCEPT (α): 44.98	This is the average Environmental Performance Index for EU without the effect of the rest of the variables
LEGAL SYSTEM AND PROPERTY RIGHTS: 5.51	If LSPPR increases in one unit and the rest of the variables remain constant, EPI will increase in 5.51 units (i.e. very important)
BRIBES: -2.25	If bribes increase in one unit and the rest of the variables remain <i>ceteris paribus</i> , EPI will decrease in 2.25 units (medium importance)
GDP: $2.87E^{-12}$	If Gross Domestic Product increases in one unit and the rest of the variables remain constant, EPI will increase very close to zero

The R^2 states that bribes, legal system and property rights and GDP explain 31% of the total variation of EPI, which means that there is still 69% of the variation to be explained which might be done using other set of variables.

An additional model that included GDP per capita was calculated as well; the results are not included in this paper since the results showed the possibility of autocorrelation, also there was no statistical significance of the GDP per capita and the coefficient showed the opposite expected effect. The R^2 as well was 6 % smaller than in the following model.

DATA ENVELOPMENT ANALYSES

Methodology

The Data Envelopment Analysis (DEA) was used as the second approach for the analysis. The first DEA model was developed by Charnes, Cooper and Rhodes (1978). Various technical aspects of DEA can be found in Charnes, Cooper, and Seiford (1994), Cooper, Seiford, and Tone (2000), and Cooper and Tone (1995). Since the first paper by Charnes et al. (1978), a large number of theoretical articles and applications of DEA have been published.

For our case the following model was applied. Suppose there are n decision making units each consuming r inputs and producing s outputs and (r, n) -matrix X , (s, n) -matrix Y of observed input and output measures. The essential characteristic of the CCR ratio model is the reduction of the multiple input and multiple output to that of a single "virtual" input and a single "virtual" output. For

a particular decision making unit the ratio of the single output to the single input provides a measure of efficiency that is a function of the weight multipliers (u, v) . Instead of using an exogenously specified set of weights (u, v) , the method searches for the set of weights which maximize the efficiency of the decision making unit P_0 . The relative efficiency of the decision making unit P_0 is given as maximization of the ratio of single output to single input to the condition that the relative efficiency of every decision making unit is less than or equal to one. The formulation leads to a linear fractional programming problem.

$$\begin{aligned} & \frac{\sum_{i=1}^s u_i y_{i0}}{\sum_{j=1}^r v_j x_{j0}} \rightarrow \text{max} \\ & \frac{\sum_{i=1}^s u_i y_{ih}}{\sum_{j=1}^r v_j x_{jh}} \leq 1, \quad h = 1, 2, \dots, n \\ & u_i, v_j \geq \varepsilon, \quad i = 1, 2, \dots, s, \quad j = 1, 2, \dots, r. \end{aligned} \quad (4)$$

If it is possible to find a set of weights for which the efficiency ratio of the decision making unit P_0 is equal to one, the decision making unit P_0 will be regarded as efficient, otherwise it will be regarded as inefficient.

Solving of this nonlinear non-convex problem directly is not an efficient approach. The following linear programming problem with new variable weights (μ, ν) that results from the Charnes - Cooper transformation gives optimal values that will also be optimal for the fractional programming problem.

$$\begin{aligned} & \sum_{i=1}^s \mu_i y_{i0} \rightarrow \text{max} \\ & \sum_{j=1}^r \nu_j x_{j0} = 1 \\ & \sum_{i=1}^s \mu_i y_{ih} - \sum_{j=1}^r \nu_j x_{jh} \leq 0, \quad h = 1, 2, \dots, n, \\ & \mu_i, \nu_j \geq \varepsilon, \quad i = 1, 2, \dots, s, \quad j = 1, 2, \dots, r. \end{aligned} \quad (5)$$

If it is possible to find a set of weights for which the value of the objective function is equal to one, the decision making unit P_0 will be regarded as efficient, otherwise it will be regarded as inefficient.

Variables and Data for Data Envelopment Analyses

Following variables were introduced for the preliminary DEA:

1. Possible outputs:
 - a) environmental performance index (EPI, 2010)
 - b) GDP Per capita 2008 (constant terms)
2. Possible inputs:
 - a) Judicial independence

- b) Impartial courts
- c) Protection of property rights
- d) Legal enforcement of contracts
- e) Legal System & Property Rights
- f) Foreign ownership/investment restrictions
- g) Regulatory Trade Barriers
- h) Bureaucracy Costs

Data were collected from National Accounts Main Aggregates Database (UNSD 2010). The list of countries introduced into the data envelopment analysis is visible in the Table 4.

Table 4: Efficiency Scores for EU Countries

Country	Inputs: 2a – 2h (less expected)	Inputs: 2a – 2e (more expected)	Country	Inputs: 2a – 2h (less expected)	Inputs: 2a – 2e more expected)
Austria	0,9716	0,9545	Italy	0,9446	0,5020
Belgium	0,7125	0,5084	Latvia	1	0,9037
Bulgaria	1	0,5687	Lithuania	1	1
Cyprus	0,7701	0,4434	Luxembourg	1	1
Czech Rep.	0,8382	0,5184	Netherlands	0,7908	0,6830
Denmark	1	1	Poland	0,8746	0,4370
Estonia	1	1	Portugal	0,9736	0,6546
Finland	1	1	Romania	1	0,5937
France	1	0,9683	Slovak Rep	1	0,9721
Germany	0,9004	0,8980	Slovenia	0,7845	0,4440
Greece	0,9309	0,4873	Spain	0,8972	0,6310
Hungary	0,9479	0,8028	Sweden	1	1
Ireland	0,8653	0,6283	U.K.	0,9597	0,8937

RESULTS OF ANALYSES

Multiple analyses with different outputs and inputs were performed. Introducing GDP per capita as an output did not provided reasonable results. Selected results for EPI as an output variable are presented in Table 4.

For inputs 2a – 2h (i.e. all input variables introduced) following countries are efficient in terms of achieving given value of EPI: Bulgaria, Denmark, Estonia, Finland, France, Latvia, Lithuania, Luxembourg, Romania, Slovak Republic, and Sweden.

Better logically explainable (more expected) results were achieved, when inputs 2a – 2e were introduced into the analyses. In this case following countries seems to be efficient: Denmark, Estonia, Finland, Lithuania, Luxembourg, and Sweden.

If we compare the results shown in Table 4 with the new EEA information about how EU member states met 2010 emission ceilings set in the EU NEC Directive (Table 5), the positive DEA results concerning new EU countries like Bulgaria, Romania, Latvia, Lithuania, seem not to be so surprising. It opens questions for future research, which should explain this reality.

Table 5: Progress by EU Member States in meeting the 2010 emission ceilings set in the EU NEC Directive.

Member State	NO _x	NMVOCs	SO ₂	NH ₃
Austria	×	√	√	√
Belgium	×	√	√	√
Bulgaria	√	√	√	√
Cyprus	√	√	√	√
Czech Republic	√	√	√	√
Denmark	×	√	√	√
Estonia	√	√	√	√
Finland	√	√	√	×
France	×	√	√	√
Germany	×	×	√	√
Greece	√	√	√	√
Hungary	√	√	√	√
Ireland	×	√	√	√
Italy	√	√	√	√
Latvia	√	√	√	√
Lithuania	√	√	√	√
Luxembourg	×	√	√	√
Malta	×	√	√	√
Netherlands	×	√	√	√
Poland	√	√	√	√
Portugal	√	√	√	√
Romania	√	√	√	√
Slovakia	√	√	√	√
Slovenia	√	√	√	√
Spain	×	×	√	×
Sweden	×	√	√	√
United Kingdom	√	√	√	√

Source: EEA 2012

‘√’ indicates that the emission ceiling has been achieved; ‘×’ indicates the ceiling has not been met.

CONCLUSIONS

The preliminary results of the regression analyses say that for the countries of the European Union the legal system and protection of property rights are very important for a good environmental performance (EPI). The complex and multidimensional SDS exploits them and it appears that they are flexible combination of rights and are generally accepted and enforced by authorities and the citizenship which enables cooperation among stakeholders in order to fight to one common enemy which is environmental degradation.

The effect of corruption is negative, as expected in the regression analyses. Higher level or corruption

may slow down the transition to a green economy, due to a mix of personal interests in governmental and business agents.

The preliminary results of the DEA analyses show which countries seems to be more efficient in terms of achieving given value of EPI. The shorter set of input variables (Judicial independence, Impartial courts, Protection of property rights, Legal enforcement of contracts, and Legal system & property rights) provided better justifiable results.

It might be surprising that the GDP variable had a very small effect in both sets of analyses performed. We believe that future more detailed research will provide more interesting and better logically justifiable results. Disaggregation of EPI, testing of other variables both in regression analyses and DEA will be a subject of future work. The lower importance of GDP for the environmental performance might also contribute to explanations, why less developed members of EU do in some aspects better than the older members of EU, which in summary for the case of EU, the key for a better environmental performance depends on broader set of variables. Future analyses could be improved by the use of more advanced regression methods, including meticulous tests over new institutional variables and the GDP of countries of Central and Eastern Europe (CEE) mainly because environmental performance is vital from the view of the European environmental policy and regulation.

REFERENCES

- Charnes, A., Cooper, W.W., & Rhodes, E. 1978. Measuring Efficiency of Decision Making Units. *European Journal of Operational Research*, 2(6): 429-444.
- Charnes, A., Cooper, W.W., & Seiford, L.M. 1994. *Data Envelopment Analysis: Theory, Methodology, and Applications*. Boston: Kluwer Publ.
- Commoner, B. 1972. The Environmental Cost of Economic Growth. In: *Population, Resources and the Environment*. Washington, DC: Government Printing Office, pp. 339-63.
- Cooper, W.W., & Tone, K. 1995. A Survey of Some Recent Developments in Data Envelopment Analysis. In: *Proceedings of the EURO XIV Conference*, Jerusalem, pp. 149-168.
- Cooper, W.W., Seiford, L.M., & Tone, K. 2000. *Data Envelopment Analysis*. Boston: Kluwer Publ.
- Culas, R. 2006. *Deforestation and the Environmental Kuznets Curve: An Institutional Perspective*, School of Agricultural and Veterinary Sciences, Charles Sturt University, Locked Bag 588, Wagga Wagga, NSW 2678, May 2006, Australia.
- EC. 2007. *A guide to the EU's Sustainable Development Strategy: A Sustainable Future in our hands*, European Commission, Secretariat-General 1049 Brussels Belgium, November 2007.
- EC. 2009. *Sustainable Development in the European Union: 2009 monitoring report of the EU sustainable development strategy*, Luxembourg: Office for Official Publications of the European Communities.
- EEA (2012). Air pollutant emission limits exceeded in twelve EU Member States, European Environmental Agency, on-line: <http://webcache.googleusercontent.com/search?q=cache:1MkFisP3AhsJ:www.eea.europa.eu/highlights/air-pollutant-emission-limits-exceeded/>, Accessed 15 March 2012.
- Eelco Zandberg. 2009. *Economic Freedom of the World: 2009 Annual Report*. Vancouver, BC: The Fraser Institute. Data retrieved from www.freetheworld.com. Accessed 20 November 2011.
- Ehrlich, P. R. and J. P. Holdren. 1971. Impact of Population Growth. *Science* 171: 1212-17.
- EPI. 2010. Index EPI available on-line from: <http://epi.yale.edu/Files>. Accessed 20 November 2011.
- FTW. 2008. *Index of Economic Freedom*, on-line from: <http://www.heritage.org/index/default> Accessed 20 November 2011.
- Sauer, P., Lara, R., Hak, T. 2008. *Environmental Performance and Institutions: A Cross-country Analysis*, paper presented at 5th World Congress of Academy for Global Business Advancement, Bahrain, November 15-18, 2008
- UNSD. 2010. *National Accounts Main Aggregates Database*, available on-line from: <http://unstats.un.org/unsd/snaama/introduction.asp>. Accessed 20 November 2011.
- Vymetal, P., Žak, M. 2005. Instituce a výkonnost. *Politická ekonomie*, 53: 545-566.

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Depth of Penetration of the Enterprise Risk Management Model in the Malaysian Government Sector

Keywords: Asian, ERM, Government, Governance, Malaysia

INTRODUCTION

The recent economic turmoil continues to draw significant attention to the multitude of risks organizations face as they pursue strategic goals. In some instances, risks far exceeded the organization's appetite and ability to bear those risks, ultimately threatening its sustainability. In response, numerous calls have been issued for organizational leaders, including senior executives and their boards, to engage in a fundamental review of how the organization approaches its management of risks and to immediately address any deficiencies in risk oversight. While much of the attention on strengthening risk oversight is aimed at the corporate sector, the need for robust enterprise risk oversight is relevant to all types and sizes of organizations, including governmental entities. Why? No organization is immune to risks affecting the entity's existence and its ability to fulfill mission critical objectives.

Furthermore, increased funding approved by Cabinet related to the economic bailout and federal stimulus initiatives are being funneled through federal, state and local governmental agencies at record levels and at a rapid pace, thereby creating unique challenges — and sometimes, new types of risks — for government agency leaders as they oversee these new programs. Public awareness and skepticism regarding how these agencies are overseeing these new (and sometimes unfamiliar) initiatives are at all-time high, thereby increasing risks for governmental leaders. As Malaysia is going to high income economy, government leaders should be aware of the risks involved in every organizations and how to treat this risks as government sectors are going for more challenging phase. In order to achieve these objectives leaders of government sectors should be aware of the risks involved in their organizations and come with the solutions to reduce or turn these risks to opportunities. Motivated from this issue, we conducted a research to investigate the awareness and depth of penetration of ERM in Malaysian Government agencies.

It is worth noting, however, that the practice of corporate risk management in the Malaysian environment resides within the bigger realm of corporate governance regime as far as the regulatory framework is concerned. The regulatory requirements for corporate governance practice to a large extent are more in the nature of “guidelines” and “best practice”. These approaches do not render that severe of a regulatory implication, should there be any breach in compliance as compared to laws such as the Sarbane-Oxley Act (SOX) enforced in the United States.

This paper discusses on the research conducted to investigate the level of enterprise risk management (ERM) practice for public sectors in Malaysia. The researchers used an empirical approach (quantitative) to test on several hypotheses in this respect. Specifically, this study has three aims: (i) to examine the depth of penetration of ERM practices among Malaysian public sectors; (ii) to identify the key factors for the following constructs: *ERM challenges*, *ERM benefits*, *business performance*, and *corporate value*; (iii) to investigate whether ERM practices will affect public sectors performance.

LITERATURE REVIEW

The review of the literature showed that there was very little empirical research on corporate risk management to address firm-specific risk. Most of the literature discussed ways to reduce systematic risk or market risk, i.e. financial risk, faced by financial institutions such as banks and insurance companies. Only recently, a new concept called *enterprise risk management* (ERM) emerged in an attempt to fill the deficiency of addressing firm-specific risk of corporations by offering a holistic approach to enterprise-wide risk management.

Chapman (2003) defined ERM as the process of identifying and analyzing risk from an integrated, company-wide perspective. On the other hand, Meager and O'Neil (2000) described enterprise-wide risk management (EWRM) as a structured and disciplined approach in aligning strategy, processes, people, technology and knowledge with a purpose of evaluating and managing the uncertainties the enterprise faces as it creates value. Stoke (2004) added that by taking a more holistic, top-down approach to risk strategy and appetite, companies can focus their attention on most significant threats to business objectives and achieve even greater value from risk management.

In the context of this study, the operational meaning of ERM is defined by the extent of risk management practices carried out in an organization which include the following attributes: provision of common terminology and setting of standards of risk management, provision of enterprise-wide information about risk, integrating risk with corporate strategic planning, quantifying risk to the greatest extent possible, integrating risk management in all functions and business units, enabling all staff to understand his/her accountability in risk management initiatives.

METHODOLOGY

The target populations are the public sectors in Malaysia. There are 25 ministries under the government of Malaysia. The sampling elements were senior officials of the sampled companies who have had at least some experiences in their enterprises' risk management initiatives. The positions of the respondents include director, general manager, financial controller/CFO, COO, senior manager, and manager.

The structured questionnaire contained two sections. The first section was used to gather background information about the respondents and their companies. There were 18 items in this part. The second section of the questionnaire was used to gauge the various aspects of enterprise risk management practices by the companies, the critical success factors for ERM implementation, business performance, and corporate risk profile. The second section contained 10 sub-sections with a total of 76 items.

In surveying the profile and commitment of corporate Malaysia to ERM practices, this paper adapted the PricewaterhouseCoopers' 7th Annual Global CEO Survey on enterprise risk management. This paper also adapted Al-Mashari and Zairi's (1999) model in scrutinizing the critical success factors for ERM implementation.

ANALYSIS AND DISCUSSION

Reliability test

There are three constructs (scales) involved in the analysis, namely ERM Intensity, ERM Benefit, and ERM Challenge. All of the three constructs' scales were tested for their internal consistency reliability. Table 1 shows the results of reliability analysis with the Cronbach's alpha scores for the respective construct scale measured by the various items. All the alpha coefficients are above 0.6, indicating satisfactory internal consistency reliability of the summated scale of several items for each construct (Malhotra, 2004).

Table 1: Reliability analysis of construct scales

Construct / Scale	Number of Items	Cronbach's α
ERM Intensity	13	0.969
ERM Benefit	13	0.971
ERM Challenge	9	0.918

Factor analysis

Factor analysis deals with extraction of factors from a matrix of associations between variables under study. Exploratory factor analysis (EFA) investigates “possible relationships in only the most general form and then allows the multivariate technique to estimate relationships”. EFA is performed to establish a factor model from a set of variables to identify the underlying “structure of relationships between either variables or respondents” (Hair et al., 1998, p 95)

Prior to performing factor analysis, Bartlett's test of sphericity (BTS) was deployed to test the appropriateness of the factor model from the data set and Kaiser-Meyer-Olkin (KMO) test was executed to measure sampling adequacy for factor analysis. A value greater than 0.5 is desirable for the KMO test (Malhotra, 2004).

Table 2: Bartlett's test of sphericity (BTS) and Kaiser-Meyer-Olkin (KMO) test results

Attributes	Bartlett's Test of Sphericity	KMO
ERM Intensity	0.000*	0.759
ERM Benefit	0.000*	0.796
ERM Challenge	0.000*	0.672

***significant at 1% = 0.01**

Table 2 shows the results of BTS and KMO tests on the 3 constructs, i.e. *ERM Intensity*, *ERM Benefits*, and *ERM Challenge*. The results from BTS tests conclude that the respective variables in each construct are highly correlated in the population (BTS) where the null hypothesis that the variables are uncorrelated in the population was rejected. In addition, results from KMO tests also indicate that factor analysis is an appropriate technique for analyzing the correlation matrix among variables in each attribute (value > 5).

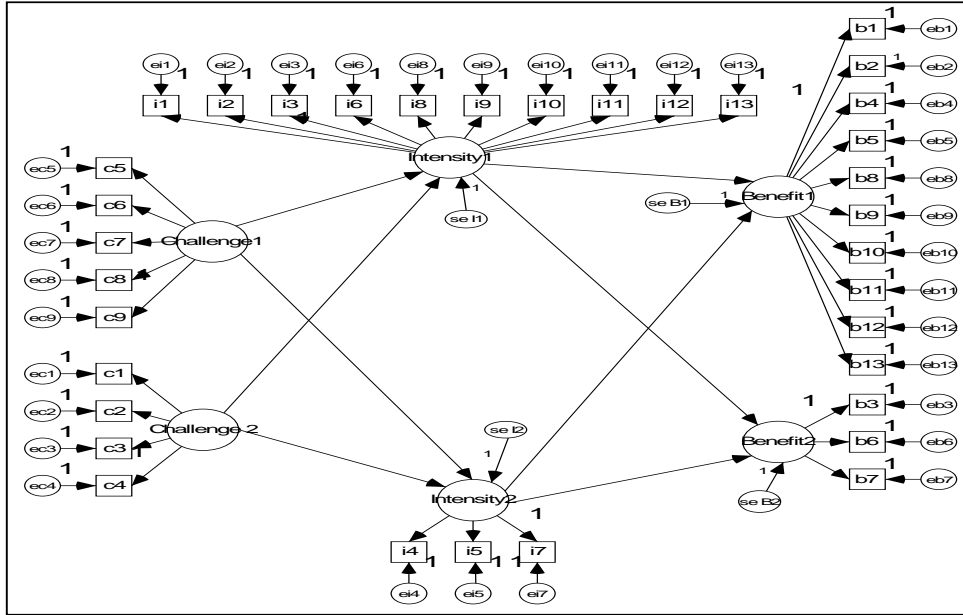
Principal component factor (PCF) analysis using varimax rotation procedure was performed to determine the minimum number of factors that will account for maximum variance in each of the four attributes; i.e *ERM Intensity*, *ERM Benefit*, and *ERM Challenge*.

From our Factor results indicate that PCF analysis yields 2 factors each on *ERM Intensity*, *ERM Benefit*, and *ERM Challenge* respectively. The two factors for each construct cumulatively account for 82.91%, 84.97%, and 76.75% of the total variance of the constructs (*ERM Intensity*, *ERM Benefit*, and *ERM Challenge*) respectively.

Multiple regression analysis

Path Diagram. Based on the results of principal component factor analysis performed, a path diagram for the various multiple regression models is developed as depicted in Figure 1.

Figure 1: Path Diagram of Multiple Regression Model



Based on the above path diagram, 4 multiple regression equations have been developed taking the generic form of $\hat{Y} = a + b_1X_1 + b_2X_2$. The 4 multiple regression equations are:

- (i) $Benefit1 = Intensity1 + Intensity2$
- (ii) $Benefit2 = Intensity1 + Intensity2$
- (iii) $Intensity1 = Challenge1 + Challenge2$
- (iv) $Intensity2 = Challenge1 + Challenge2$

After testing the above multiple regressions only multiple regression 1 and 2 are significant as the following results.

Multiple Regression Analysis 1

$$\hat{Y} = a + b_1X_1 + b_2X_2$$

$$Benefit1 = Intensity1 + Intensity2$$

The testing of significance of the overall regression equation (F-test) is statistically *significant* at $\alpha = 0.01$ level. Thus the overall null hypothesis is rejected, implying one or more population partial regression coefficients have a value different from 0. To determine which specific partial regression coefficients are nonzero, t-test is employed. Result shows the value of coefficient of multiple determinations, R^2 , is 0.67; indicating the strength of association in the multiple regressions is rather strong (> 0.5). The intercept is estimated to be 11.874.

The partial regression coefficient for *Intensity1* (X_1) is -0.070 with the corresponding beta coefficient (standardized coefficient) is -0.076. The t-test indicates the coefficient is statistically *insignificant* at $\alpha = 0.10$ level. The partial coefficient for *Intensity2* (X_2) is 2.614, with a beta coefficient of 0.868. The t-test indicates that the coefficient is statistically *significant* at $\alpha = 0.01$ level. Independent variable *Intensity1* is discarded from this multiple regression model.

The estimated regression equation is written as $(\hat{y}) = 11.87 + 2.61X_2$; or

$$Benefit1 = 11.87 + 2.61(Intensity2)$$

TABLE 3 (a), (b), and (c) summarize the results of the analysis for this multiple regression model:

Table 3(a): Model Summary^B

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.818 ^a	.669	.630	6.47327	1.939

a. Predictors: (Constant), Intensity2, Intensity1

b. Dependent Variable: benefit1

Table 3(b): Anova^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1438.645	2	719.322	17.166	.000 ^a
	Residual	712.355	17	41.903		
	Total	2151.000	19			

a. Predictors: (Constant), Intensity2, Intensity1

b. Dependent Variable: benefit1

TABLE 3(c): Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	11.874	4.772		2.488	.024		
	Intensity1	-.070	.176	-.076	-.399	.695	.536	1.865
	Intensity2	2.614	.574	.868	4.552	.000	.536	1.865

a. Dependent Variable: benefit1

Multiple Regression Analysis 2

$$\hat{Y} = a + b_1X_1 + b_2X_2$$

$$Benefit2 = Intensity1 + Intensity2$$

The testing of significance of the overall regression equation (F-test) is statistically *significant* at $\alpha = 0.01$ level. Thus the overall null hypothesis is rejected, implying one or more population partial regression coefficients have a value different from 0.

To determine which specific partial regression coefficients are nonzero, t-test is employed.

Result shows the value of coefficient of multiple determination, R^2 , is 0.616; indicating the strength of association in the multiple regression is rather strong (> 0.5).

The intercept is estimated to be 4.510.

The partial regression coefficient for *Intensity1* (X_1) is 0.226 with the corresponding beta coefficient (standardized coefficient) is 0.862. The t-test indicates the coefficient is statistically *significant* at $\alpha = 0.01$ level.

The partial coefficient for *Intensity2* (X_2) is -0.103, with a beta coefficient of -0.120. The t-test indicates that the coefficient is statistically *insignificant* at $\alpha = 0.10$ level.

Independent variable *Intensity2* is discarded from this multiple regression model.

The estimated regression equation is written as $(\hat{y}) = 4.510 + 0.226X_1$; or

$$Benefit2 = 4.510 + 0.226(Intensity1)$$

Table 4(a), (b), and (c) summarize the results of the analysis for this multiple regression model:

Table 4 (a): Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.785 ^a	.616	.571	1.97692	1.901

a. Predictors: (Constant), Intensity2, Intensity1

b. Dependent Variable: benefit2

Table 4(b): ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	106.510	2	53.255	13.626	.000 ^a
	Residual	66.440	17	3.908		
	Total	172.950	19			

a. Predictors: (Constant), Intensity2, Intensity1

b. Dependent Variable: benefit2

Table 4(c): Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.	Collinearity Statistics	
		B	Std. Error	Beta	t		Tolerance	VIF
1	(Constant)	4.510	1.457		3.095	.007		
	Intensity1	.226	.054	.862	4.198	.001	.536	1.865
	Intensity2	-.103	.175	-.120	-.587	.565	.536	1.865

a. Dependent Variable: benefit2

CONCLUSIONS

Based on the multiple regression analyses, only the following regression models are statistically significant:

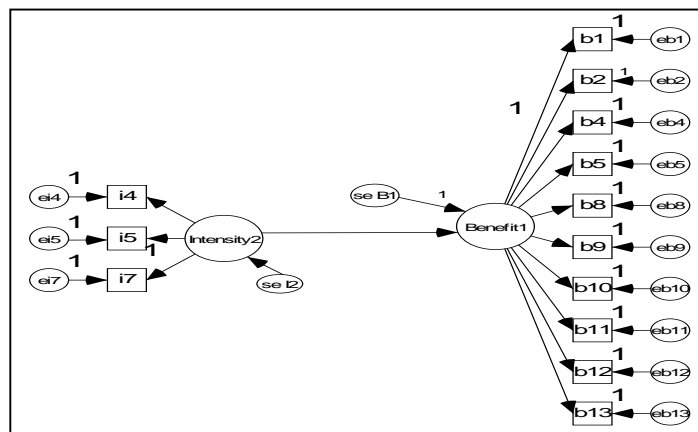
(i) $Benefit1 = 11.87 + 2.61(Intensity2)$ --- Model 1

(ii) $Benefit2 = 4.510 + 0.226(Intensity1)$ --- Model 2

Hence, the corresponding path diagrams for Model 1 and Model 2 can be drawn as depicted in figure 2 and 3.

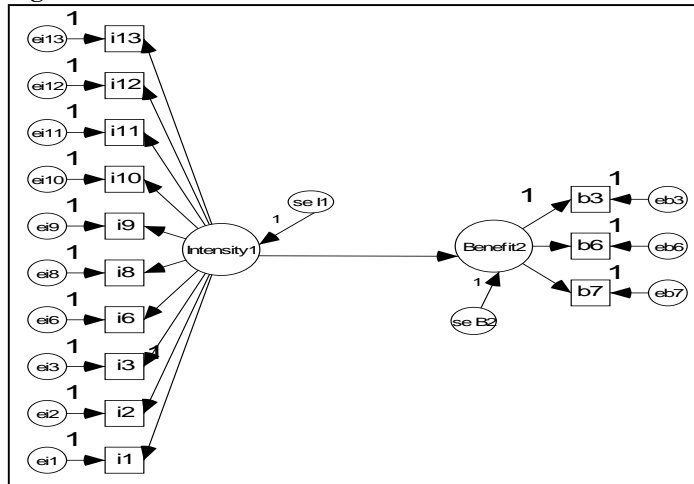
Figure 2: Model 1

Specifically, figure 2 (Model 1) implies that ERM implementation through initiatives like (i) aligning ERM initiatives to business objectives, (ii) integrating ERM across all functions and business units, and (iii) enabling the tracking costs of compliance will deliver benefits such as (i) enhancing enterprise's ability to take appropriate risks in value creation, (ii) strengthening



management's confidence in business operations, (iii) improving the monitor of enterprise performance, (iv) enriching corporate reputation, (v) improving communicating to stakeholders / shareholders, (vi) enhancing managers' ability to think entrepreneurially and innovatively, (vii) receiving reward by the equity market, (viii) attaining positive impact on enterprise's credit rating, (ix) obtaining respect from within the industry, and (x) minimizing the cost of agency problem.

Figure 3: Model 2



On the other hand, figure 3 (Model 2) suggests that implementing ERM through initiatives such as (i) providing common understanding of the objectives of each ERM initiative, (ii) providing common terminology and set of standards of risk management, (iii) providing enterprise-wide information about risk, (iv) providing the rigor to identify and select risk responses (i.e. risk avoidance, reduction, sharing and acceptance), (v) quantifying risk to the greatest extent possible, (vi) integrating risk with corporate strategic planning,

(vii) enabling everyone to understand his/her accountability, (viii) identifying key risk indicators (KRIs), (ix) integrating risk with key performance indicators (KPIs), and (x) aligning ERM strategy with corporate strategy will bring about benefits in the areas of (i) creating smooth governance procedures, (ii) improving clarity of organization-wide decision-making and chain of command, and (iii) facilitating the effort of reporting to regulators.

In conclusion of the above two models we can summarize that the level of ERM penetration in Malaysian public sectors are still low and lots of promotion and risk culture awareness should be promoted.

REFERENCES

- Al-Mashari, M. & Zairi, M. (1999). BPR Implementation Process: an analysis of key success and failure factors. *Business Process Management Journal*, Vol. 5 No. 1, pp. 87-112.
- AP, The Associated Press (2007), "Malaysia's total trade breaks 1 trillion ringgit mark for first time in 2006", *International Herald Tribune Business*, available from <http://iht.com/articles/ap/2007/02/08/business/AS-FIN-Malaysia-Trade.php> [2007, March 14].
- Bierc, G.J. (2003), "Risk management infrastructure can boost corporate performance", *Financial Executive*, vol.19, no.3, pp.59-61.
- Crouhy, M., Galai, D. and Mark, R. (2000), "Risk Management", McGrawHill.
- Doherty N.A. (2000), "Integrated Risk Management", McGrawHill.
- Froot, K., Scharfstein, D. and Stein J. (1993), "Risk Management, Coordinating Corporate Investment, and Financing Policies," *Journal of Finance*, vol. 48, pp. 1,629-1,658.
- Liebenberg, A.P. and Hoyt, R.E. (2003), "The determinants of enterprise risk management: Evidence from the appointment of chief risk officers", *Risk Management and Insurance Review*, vol.6, no.1, pp37.
- Malhotra, N.K. (2004), "Marketing Research: An Applied Orientation", 4th edition, Pearson-Prentice Hall.
- Markides, C. (1994), "Shareholder benefits from corporate international diversification: evidence from U.S. international acquisitions", *Journal of International Business Studies*, Vol. 25 No. 2, pp. 343.
- Matsusaka, J.G. (2001), "Corporate Diversification, Value Maximization, and Organizational Capabilities", *The Journal of Business*, Vol. 74 No. 3, pp. 409.

- Raynor, M.E. (2002), "Diversification as real options and the implications on firm-specific risk and performance", *Engineering Economist*, Vol. 47 No. 4, pp. 371.
- Thompson, D. (2003), "Risk Management: A Brief History", *Journal of Banking and Financial Services*, Australasian Institute of Banking and Finance, Vol.117 No.3, pp.30-32.
- Zey, Mary and Swenson, (2001), "The transformation and survival of fortune 500 industrial corporation through merger and acquisitions", *The Sociological Quarterly*, Vol. 42 No. 3, pp. 461.
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Impact of Ethnicity on Entrepreneurship: A Global Review and Lessons for Nigeria

Key words: Culture, Entrepreneurship attitude, Ethnic groups, Cultural attributes Nigerian Ethnic Groups

INTRODUCTION

Like most social science concepts, ethnicity is viewed by scholars from varied perspectives. Studies on ethnicity have been more about the negatives: ethnic conflicts, ethnic violence, ethnic riots and so on. Ethnicity, however, is a concept that is much wider than its narrow conflict related interpretation suggests. Just like ethnicity, entrepreneurship has equally proven to be an elusive concept for scholars (Iyer and Schoar (2008)). Entrepreneurship is an ancient concept that is both simple and complex at the same time. Conceptualizations, definitions, understandings of the phenomenon, have eluded scholars and practitioners for a very long time. While we struggle to try and capture it, as we seem to get closer to a satisfactory resolution, we find that the concept continues to evolve.

Despite these difficulties and sometimes, misconceptualizations of these concepts, it is still a matter of interest to researchers to understand what determines why some people go into entrepreneurship and what predicts the success or specific approach to entrepreneurship. Researchers have equally been interested in carrying out studies on why certain nations, regions within nations or even ethnic groups within a country differ in their entrepreneurship orientation and attitude (see Light, 1973; Bonacich, 1972, Light and Gold, 1988, Hofstede, 1980, 1991); Waldinger et al. 1986).

The Global Entrepreneurship Monitor (GEM) also carries out annual surveys to determine levels of entrepreneurship across member countries with the aim of ranking those member countries. The GEM (2002) report for instance, found, for example, entrepreneurial activities in Japan, Russia, or Belgium in 2002 were almost six times lower than those of India and Thailand (3% compared to 18%). Dana et al. (2005) as well as Todorovic and McNaughton (2007), while agreeing that entrepreneurial activity promotes knowledge, beliefs and practices that aid economic development, insist that there are significant differences between cultures and societies in their inclinations to entrepreneurship and new venture development.

Even within the same nations, studies have shown major differences in entrepreneurial attitudes between regions and zones. One example is in the difference between West and East Germany.

Bergmann (2009) confirms this difference citing various studies that revealed that even more than 15 years after German unification, the business foundation related attitudes in East Germany are somewhat more cautious than in western Germany. This was further confirmed by the most recent country report of the Global Entrepreneurship Monitor (GEM) on Germany. It clearly points to these differences: eastern Germans tend to assess their start-up environment more pessimistically than western Germans do. Further, there is a great significant difference in relation to the question whether the fear of failure is an obstacle to business foundation.

Differences in cultural traits are usually given as explanation for disparities in entrepreneurship orientation of nations, regions or ethnics. Hence, many cultural entrepreneurship studies that seek to determine the influence of ethnicity, religion, race, etc on entrepreneurship attitude of different people have been undertaken (Bruce, 2003; Hofstede, 1991, Light, 1972, 2000). Some of those studies tried to compare entrepreneurial attributes of ethnic groups within the same country, although most are done in the American or European context (Jung and Kau, 2004). Most ethnic entrepreneurship studies in USA compared entrepreneurship attitude of blacks and migrants like Koreans, Indians, Chinese, Cubans etc against white Americans (see Light, 1972; Light and Bonacich, 1988; Portes and Rumbaut, 1990; Waldinger and Bozorgmehr, 1996; Yoo, 1998; 2000; Light and Gold, 2000). In Europe and particularly in the United Kingdom, such studies compared migrants particularly Asians, Black-Caribbeans with White Caucasians (Ram, 1991; 1994; Phizacklea and Ram, 1995; Ram, Abbas, Songhera and Hillin, 2000; Fadahunsi, Smallbone and Supri, 2000).

An example such studies conducted outside the west was the one undertaken by Iyer and Schoar (2008). It found that the Marwaris were considered the most entrepreneurial community in India. There was also the study by Mungai and Ogot (2009) on ethnicity, culture and entrepreneurship in Kenya. This last study had limited scope as it studied four of Kenyan ethnic groups and was limited to the city of Nairobi. Even then such studies are rare in developing countries and sub-Saharan African countries in particular. This might be because interest on impact of culture on entrepreneurship even in Europe and the West generally were heightened only as from the 1980s.

Nigeria, a country of 150 million and the largest African / black nation is, arguably, one of the world's most diverse countries (Ukiwo, 2005). Agreeing with that assertion, Kohnert (2010) stress that Nigerians form approximately half of the total population of West Africa. In addition, the country is made up of over 250 ethnic groups. McClelland (1961) posits that members of each ethnic group within a modern nation state do have their unique customs, behavior and a common world view and thus do share certain cultural particularities compared to other groups within those nations.

Given such reality and the fact that the country faces challenges of economic development in a fast phased global economy; Nigeria has no alternative but to learn to be increasingly entrepreneurial. Entrepreneurship, in general, and ethnic entrepreneurship, in particular, should thus be of interest to Nigerians. Nigeria would need to learn from some of the best practices globally with a view to learning from such and possibly domesticating those practices among our diverse ethnics. Here, the argument put forward by Valdez (2002), that it is important to understand the relationship between ethnicity and enterprise can never be more apt. It is for this reason that this study is undertaken aimed at reviewing and synthesizing ethnic entrepreneurship studies globally and thereby identifying lessons for Nigeria and Nigerians.

REVIEW OF LITERATURE

Conceptual Framework

Weber (1905) sees ethnic groups as artificial social constructs because they were based on a subjective belief in shared community. A second justification is the fact that this belief in shared community did not create the group, rather, the group created the belief. He was also of the belief that group formation resulted from the drive to monopolise power and status. This position goes contrary to the widely held belief at Weber's time and even now, that socio-cultural and behavioral differences between peoples stemmed from inherited traits and tendencies derived from common descent.

A seminal volume on ethnicity – *Ethnic Groups and Boundaries* – Authored by Barth (1969), went further than Weber in stressing the constructed nature of ethnicity. He sees ethnicity as a phenomenon that is perpetually negotiated and renegotiated by both external ascription and internal self identification. His thesis is therefore a focus on the interconnectedness of ethnic identities. Sharing similar sentiment, Cohen (1978) an anthropologist claims that the label "ethnic groups" is rather inaccurately used by social scientists. This is because in the main, it is imposed and may not conform to indigenous realities. This is because, as he pointed out, when an ethnic group's identification is by outsiders, e.g. anthropologists, it may not coincide with the self-identification of the members of that group. He also described that in the first decades of usage, the term ethnicity had often been used in lieu of older terms such as "cultural" or "tribal" when referring to smaller groups with shared cultural systems and shared heritage, but that "ethnicity" had the added value of being able to describe the commonalities between systems of group identity in both tribal and modern societies. Cohen (1971) also suggested that claims concerning "ethnic" identity (like earlier claims concerning "tribal" identity) are often colonialist practices and effects of the relations between colonized peoples and nation-states.

These views about ethnicity are substantially Eurocentric. For a multicultural nation like Nigeria, ethnicity is more than an artificial social construct as noted by Weber (1905). Even though it was used especially during colonialism and neo-colonial era to emphasize divisions among the people, Nigerians do not regard 'ethnicity and ethnic identity' as a subjective belief in shared community contrary to Cohen (1978).

Ukiwo (2005), who was defining ethnicity from the context of conflict, define ethnicity as "the employment or mobilization of ethnic identity and difference to gain advantage in situation of competition, conflict or cooperation". Ukiwo (2005), found this definition preferable because it identifies two issues that are central to discussions on ethnicity. The first is that ethnicity is neither natural nor accidental, but is the product of a conscious effort by social actors. The second is that ethnicity is not only manifest in conflictive or competitive relations but also in the contexts of cooperation. He allude to the fact that ethnic conflict manifests itself in various forms some of which (like in the case of voting or community service) need not always have negative consequences. Ethnic groups are groups with ascribed membership, usually but not always based on claims or myths of common history, ancestry, language, race, religion, culture and territory.

Bacik (2002), on the other hand, sees ethnic nationalism from the perspective of lineage. He sees it as the attributes that members of an ethnically defined national grouping share including physical characteristic, culture, religion, language, and a common ancestry. In essence, individuals of a different ethnicity, even if they reside in and are citizens of the nation state in question, do not become part of the national grouping. Even the Wikipedia, asserts that ethnic groups are a group of people whose members identify with each other, through a common heritage, often consisting of a common language, a common culture (often including a shared religion) and an ideology that stresses common ancestry or endogamy.

Schildkrout (1978) define ethnicity as "-- a set of conscious or unconscious beliefs or assumption about one's own or another's identity, as derived from membership in a particular type of group or category" . Horowitz (1985) sees ethnicity as an umbrella concept that embraces groups differentiated by colour, language, and religion. According to him the definition could be extended to cover "tribes", "nationalities" and "castes". To Chandra (2006), ethnic identities are a subset of identity categories in which eligibility for membership is determined by attributes associated with, or believed to be associated with descent.

This paper therefore aligns more with Schildkrout (1978), Horowitz (1985) and Bacik (2002). Their views appear to be closer to the accepted reality that the ethnic groups in Nigeria share some physical characteristics, a common language and culture and in some cases even religion. It also agrees with Ukiwo (2005), even though that is not the subject of this effort, that ethnic groups try to gain advantage in situation of competition, conflict or cooperation.

Cantillon (1680 – 1734) was attributed to be the earliest scientist that paid considerable attention to the field of entrepreneurship. The ‘entrepreneur’ was said to have first been acknowledged in Cantillon’s posthumous publication (1755) titled ‘Essai sur la Nature du Commerce en Général’. Since then, entrepreneurs have been seen as the heart of economic activity and growth. For example, in Smith’s (1776), *Wealth of Nations*, the impression one gets is that the most important function of the businessman is to supply capital as an entrepreneur – one of the factors of production. In addition, as Iyer and Schoar (2008) confirms, economic theorists from Schumpeter to Baumol have highlighted entrepreneurship as the driving force for change and innovation in a capitalist system.

Despite this belief, the real roles of entrepreneurs remain a contentious issue. For example, Kirzner (1973), Bygrave (1997), Shane and Venkataraman (2000) as well as Robbins and Coulter (1999) see entrepreneurship from the lens of opportunity recognition while Schumpeter (1934) views the entrepreneur as an innovator – a creative personality.

To some of the opportunity school scholars, entrepreneurship is the study of “how, by whom and with what consequences opportunities to produce future goods and services are discovered, evaluated and exploited” (Shane and Venkataraman, 2000). Bygrave (1997) see an entrepreneur as someone who perceives opportunity and creates organization to pursue it. According to Kirzner (1973), the entrepreneur is a decision maker whose entire role arises out of his alertness to unnoticed opportunities; therefore, entrepreneurship is the ability to perceive new opportunities. This recognition and seizing of the opportunity will tend to “correct” the market and bring it back toward equilibrium.

Ethnic Entrepreneurship

Mitchell et al. (2002) in an attempt to empirically determine whether entrepreneurship cognitions are common across cultures, undertook an exploratory study of 990 respondents in eleven countries. They found that entrepreneurs have cognitions distinct from those of other business people. They also observed differences on eight out of ten proposed cognition constructs and that the pattern of country representation within an empirically developed set of entrepreneurial archetypes does indeed differ among countries. However, in the opinion of Shariff and Saud (2009), few studies have tried to understand what determines why some people go into entrepreneurship and what predicts the success or specific approach to entrepreneurship. In essence, studies that use personality/character, demographic and attitudinal approaches to determine potential to create aspiring entrepreneurs in various fields of endeavour appear to be few. Even fewer studies appear to have been made on the influence of culture on entrepreneurship attitude of ethnic groups. An attempt was made by Lindsay (2005) to design a model of entrepreneurship attitude by combining both Hofstede (1980) dimensions and the EAO model. Even then, he did not attempt to empirically test the model.

Two reasons could be adduced for the fewer studies done with regard to influence of culture on entrepreneurship attitude of ethnic groups. The first is the fact that much entrepreneurship research was undertaken by western scholars who appear to associate ethnicity with backward cultures (see Light and Bonacich 1988; Waldinger 1986; as well as Waldinger et al. 1990). And where such researches are undertaken in the west, it tends to examine the entrepreneurship attitudes of immigrants compared to local populations.

In another study, Aruwa (2005) found that ethnic background was a major influence in explaining entrepreneurial patterns and motivations in Kaduna followed by finance, environmental influence, and personal experience and motivations. The study also found that some ethnic groups in Kaduna dominated certain entrepreneurship ventures. While the study’s objective was not to examine the impact of culture on entrepreneurship attitudes, it has indirectly demonstrated that entrepreneurship attitudes are influenced by cultural factors.

In addition to all of the above, studies have been undertaken in some countries and regions that empirically suggest that differences in entrepreneurial attitude exists between countries and regions.

Bosma et al. (2009), for example, found that inhabitants of Southern Europe, the UK and Ireland show relatively high self-employment preferences among EU countries thus confirming that considerable variation exists within the European Union (EU). Also, Bergmann (2009) found major differences in entrepreneurship attitude between West and East Germany even 15 years after German unification. The Global Entrepreneurship Monitor (GEM) report (2008) on Germany confirms that business foundation related attitudes in East Germany are somewhat more cautious than in western Germany. The report also finds that East Germans tend to assess their start-up environment more pessimistically than west Germans. Further, there is a great significant difference in relation to the question whether the fear of failure is an obstacle to business foundation.

These studies are proofs that differences do exist in the entrepreneurship attitudes among communities and nations and that this was largely because of the respective cultures associated with each group or community, ethnic or otherwise.

Immigrant Ethnic Entrepreneurship

A greater proportion of studies comparing ethnic groups' level of entrepreneurship have focused on immigrants who are more often seen as the 'ethnics' especially in the USA and Europe. In the USA for example, studies have been undertaken to compare levels of entrepreneurship of ethnic groups such as Chinese, Indians, Koreans, Cubans or blacks with white Caucasians (see for example, Waldinger 1986, Morris and Schindehutte 2005, Light and Bonacich 1988, Light 1972). Similar studies were conducted in the United Kingdom, that compare Asians, Black-Caribbeans and Whites (Ram, 1991; 1994; Ram, Abbas, Songhera and Hillin, 2000; Fadahunsi, Smallbone and Supri, 2000;). This, despite the fact that more often than not as Deon et al. (1999) posits, the mistake is always made whereby for example, Moroccans, Indonesians, Indians or Turkish ethnic groups residing in Europe or America are considered as one ethnic group although in their countries of origin they belong to different cultural backgrounds.

In a study that explores the phenomenon of ethnic entrepreneurship and migration in developing countries Deon et al. (1999) found that migrants are motivated to go into entrepreneurial activities because of cultural hostility they face, the degree of competition, market accessibility, capital accessibility, their ability for niche concentration, as well as existence of support network, among other factors. With regards to job prospect, for example, Light (1995) argues that migrants and the local-born workers encounter different challenges on jobs prospects. Job selection criteria in an ideal sense is based largely on education, merit, and transparent rules, but in practice there are also a hidden rule where ethnicity and nativity are included in labour recruitment, which eliminates migrants' opportunities to be accepted in the formal sectors.

Waldinger et al. (1986; 1996) identified four main possibilities to explain why some ethnic groups are more entrepreneurial than others (Bruce, 2003). These possibilities have to do with: culture, structure, the ethnic enclave, and the situation. The cultural approach focuses on the cultural resources or predispositions that may lead to business success. A good example of these cultural resources could perhaps be seen in the findings of studies undertaken by Morris and Schindehutte (2005) in the state of Hawaii which involved administering questionnaires to some first generation Japanese, Filipinos, Koreans, Chinese, Vietnamese in addition to native Hawaiians. The study found each ethnic group associating itself with certain core values generally associated with their particular ethnic backgrounds, such as frugality for the Koreans, risk aversion for the Japanese, or hospitality for the Hawaiians. Also, citing earlier studies like (Bonacich 1973; Ward 1983; Werbner, 1990; Waldinger et al., 1990), he opines that immigrant entrepreneurship have impacted significantly on entrepreneurship in their host communities by emphasizing the importance of values like thrift, close family and religiousities and trust, which enable some immigrant groups to compete successfully in business.

One other feature worthy of review with regards to 'ethnic'/migrant entrepreneurs is the role of the ethnic networks. This has to do with the existence of 'diasporas' –ethno-national communities scattered around the globe that nonetheless remained in continuous, long-term contact with one

another as well as with their real or putative homeland (Cohen 1997; 185). According to Light and Gold (2000), their real or putative homeland constituted the hub of ethnic diasporas while the colonies scattered abroad represented the spokes. Light (2010) stress that trading diasporas were involved in shipping commodities around the diasporas network, sometimes to distant continents and that in each diaspora site, co-ethnic merchants sold imported goods to locals and purchased goods from them for export. The middleman minority's specialisation in international trade gave him many advantages.

Firstly, thanks to their hub and spoke structure, diasporas linked distant continents in such a way that ethnic minorities resident in anyone place had strong social and cultural ties with co-ethnics in many others. And through such networks, it became easy for co-ethnics to dominate certain businesses especially where they have better knowledge of the market with regards to sourcing of inputs or finding markets for particular products. Ethnic diasporas were commercially important, but they were not numerous. Diasporas were uncommon because most immigrants just assimilated into host societies within three generations. (Bonacich 1973, Light and Gold 2000). As a result, unless renewed by new immigration, the spokes ceased to communicate with one another and with the hub.

Entrepreneurial ethnic communities that operated around diaspora structure earned the sobriquet "middleman minorities" in the literature of social science (Bonacich, 1973; Kieval, 1997; Light and Gold, 2000: 6-8). Middleman minorities were non-assimilating ethnic minorities noteworthy for their abundant and persistent entrepreneurship wherever they lived. Light and Gold, 2000, and Bonacich (1973) highlights their characteristics to include among others the fact that they resist assimilation. In non-middleman minority groups, grandchildren are assimilated and unable to speak their grandparents language. However, middleman minorities realizing that when immigrants or ethnic minorities assimilate, they lose their commercial advantages, successfully resisted assimilation for centuries. They become bi-cultural in mono-cultural civilizations (Light, 1995). Speaking their ethnic language as well as the vernacular of their country of residence, middleman minorities could communicate across linguistic barriers thus given them advantages.

Secondly, the international social networks produced an international system of enforceable trust that subjected to sanctions any who violated the presumption of honesty. And thirdly, middleman minorities acquired advanced business skills and passed them along to younger generations even when there were no famous business schools then! While acknowledging the existence of others, Light and Gold (2000) mentioned among the prominent middleman minority communities: the Jews of Europe, the Hausa of Nigeria, the Sikhs of East Africa, the Chinese of South East Asia, the Armenians of Near East and the Parsees of India.

According to Light (2010) another phase in the evolution of immigrant entrepreneurship that followed the 'middleman-minority' phase is what Schiller et al. (1992) referred to as transnationalism. This, they explained as a process through which immigrants (who virtually live in two countries – their country of birth and a country of settlement, build social fields that link together these two countries. Schiller et al. refers to these immigrants as "transmigrants" as they are resident in at least two societies between which they shuttle frequently enough to remain active participants in both, but are not fully encapsulated mono-cultural participants in either. Light (2010) argues that transnationalism started after 1965 the period when globalisation commenced. The transmigrants like the middleman-minorities do not assimilate with their host communities, they however acculturate – by understanding the language of host societies. Light (2010) observes that the transmigrants resemble middleman minorities in some ways. For instance, transnationals have diasporas just like middleman minorities. Gold (1997) asserts that transnationalism gave ethno-racial groups that were never middleman minorities in the past an opportunity to have diasporas. He gave the examples of Brazilians or Filipinos who now maintain diasporas, a benefit enjoyed only by middleman minorities like the Chinese, Armenians, or Jews. This, he argues is because in an era of globalisation, diasporas are logistically easier to maintain now.

Secondly, contemporary transnationals are bicultural just as are members of the classic middleman minorities. As a result, transnationals enjoy some of the same advantages for international trade that

middleman minorities enjoyed in the past. The spokes of the transnationals' diaspora communicate with one another and with the diaspora's hub in the mother tongue while selling locally in the local vernacular. Another similarity highlighted by Light (2010) is that, like middleman minorities, contemporary transnationals have international social capital that provides access to enforceable trust.

There are, however, differences between middleman minorities and transnationalists. For example, Mahler (1998) argues that while middleman minorities originate from 'below', transnationalism originates 'from above' and 'below' as well. Mahler gave the example of countries like Canada, USA, and Australia that issue entrepreneur visas. There is also the method in which special visa are issued to skilled foreigners temporarily to access the labour market in the destination country. Such cases are referred to as coming from above. Light (2010) gave as an example in this category, Jerry Yang, co-founder of Yahoo. But in the cases when routine, non-elite immigrants opt for a transnational lifestyle, it amounts to coming from below just as was the case with middleman minorities. It's the opinion of Light (2010) that transnationalism from above introduces immigrants who arrive well-equipped with human and financial capital as well as of course with ethnic social and cultural capital. As against transnationalism from below which gives rise to entrepreneurs who have only average or even below average human, social and financial capital and who tend to open routine business firms many of which serve only their own co-ethnic community. Regardless of how transnationalism originates (from above or from below), Saxenian ((2002; 2006) is of the view that transnational entrepreneurs enhance the economic growth of both their homelands and adopted countries.

The most recent interesting development that is impacting migrant entrepreneurship is the global acceptance of English language as the language of commerce. Like transnationalism, the dominance of English language as the language of commerce is also seen as part of the effect of globalisation Fishman (1998-1999). Gould (1990, 1994) sought to establish this empirically when he undertook some studies in the 1980s with regards to the effect of the use of English on immigration and foreign trade in Canada and the USA. He found that the volume and skill levels of immigrants increased the dollar volume of both American and Canadian exports to the immigrants' home countries without increasing imports from them. This was in cases where the immigrants were from non-English speaking nations. This finding was contrary to earlier held beliefs that immigrants should import more from their homelands than they export to them because of long-term cultural links to entertainment and food products of their homeland. Light (2001) and Light et al. (2002) replicated Gould's study using a different American data set and confirm the same findings as Gould that immigrants to the United States increased American exports to their home countries without increasing American imports from their home countries.

METHODOLOGY

This study is a literature survey type. It seeks to identify, from literature globally, those attitudes in various cultures that bring out the best in each ethnic group's entrepreneurship. Such positive cultural attitudes from all ethnic groups would be worthy of emulation by the other ethnic groups for best practices in entrepreneurship.

LESSONS FOR NIGERIA

As stated above, Nigeria is the most populous country in Africa with 150 Million inhabitants (Kohnert, 2010). Considering the fact that the country is also the 6th largest oil producing nation globally, we can say that it is well endowed in both human and natural resources. However, given the high level of poverty in the country, there is a need to give entrepreneurship development all the attention it deserves. This becomes even more critical, if the country's vision to be among the top 20 biggest economies globally, by the year 2020, is to be realized. While these lessons are obviously inexhaustible, a few of them are itemized below:

Comparative Studies

As studies by Mitchel et al. (2002), Bosma et al. (2009) and the various GEM annual country reports among several other studies show, entrepreneurship cognitions between countries, regions or ethnic groups within countries differ. However, comparative studies on the entrepreneurship attitudes of the Nigerian ethnic groups are rare, if available. Stakeholders (public or private), would, therefore, need to consciously sponsor studies that would seek to investigate the entrepreneurship drive of Nigeria's many ethnic groups. This way, it would be possible to understand which ethnic cultures encourage entrepreneurship more as well as the cultures that retard entrepreneurship, if any. The factors responsible for either stance can then be publicized for the benefit of all Nigerians. Since ethnic conflicts sometimes manifest in competition between ethnic groups, publicizing the outcome may encourage others to improve their entrepreneurship attitude.

Learning from others

Closely related to the above, Nigerians have a lot to learn from some of the best global practices as enunciated above. For example, they need to learn the frugality of the Koreans, the risk aversion of the Japanese or the penchant for opportunity recognition of the Maoris and so on. Luckily, some studies assert that the major ethnic groups possess high levels of entrepreneurship. For example, Kohnert (2010) acknowledges the fact that Nigerians and in particular the Hausa, Igbo and Yoruba have a dynamic emigration history and that they have trans-regional networks migrant entrepreneurs since pre-colonial times all over West Africa. Citing Mahdi (1990), Aliyu (2000) confirmed that the Hausa were involved in pre-colonial migration motivated by trade (fatauci), itinerant Islamic scholarship (almajiranci) and seasonal migration (cirani). This explains the existence of the prevalence of voluntary settlements (Zango) along the trade routes. Aliyu (2000) also posits that the long-distance caravan trade route from Hausaland during the pre-colonial era extends to North Africa among other places. Also, Harris (1968), Le Vine (1966) and Lovejoy (1971) identified the Igbo as a very enterprising ethnic group. McClelland (1961) gave credit to the Yoruba and Light (2010) and Dana (2007) listed out the Hausa as one of six 'middleman-minority' ethnic groups globally.

Migration and Ethnic Networks

Nigerian ethnic groups would need to consider expanding their businesses and networks beyond West Africa. While it is true that the Hausa, for example, were active players in the trans-Saharan trade routes to north and central Africa, and that the Yoruba and Igbo are increasingly becoming active transmigrants, a lot need to be done to improve the situation. Nigerian ethnic groups would need to key in to modern business practices. They cannot afford to stick to the past. The fate of the old Zangos (business hubs set up by Hausa merchants along trade routes) cannot be guaranteed under modern business realities. If the Nigerian ethnic entrepreneurs do not update trade practices, they will be easily edged out even at home by the rampaging Chinese entrepreneurs among other very aggressive ethnic entrepreneurs (see Kohnert, 2010).

Ethical Practices

One major lesson for the Nigerian ethnic groups is that of imbibing and fully adopting globally accepted ethical standards in trade relations. With globalization, business practices and standards are expected to comply with global standards. Nigerians must therefore key into that and can use their trading networks in the diasporas to enforce compliance.

The Use of English Language

The increasing adoption of English language as the language of commerce has implications for Nigerian traders. English is officially the second and official language in Nigeria. The use of English as the language of commerce should provide opportunity to Nigerian international traders most of whom can speak the language in addition to their mother tongues. They can use their proficiency in the language to their advantage in the international trading arena.

CONCLUSIONS AND RECOMMENDATIONS

The findings of this study, which are based on a synthesis of the reviewed literature confirms that there are differences in entrepreneurship attitudes globally. There are differences between nation states, between regions and ethnic groups within the same countries. These differences are conditioned substantially by the varied cultures (including ethnicity) of the people concerned.

It is also the finding of this study that Nigeria can benefit from global trade through encouraging entrepreneurship development. The country's ethnic groups could partake as middleman minorities (the Hausa are among the sixth globally accepted middleman minority groups), transnationalism and taking advantage of the usage of English language as the global language of commerce. There is need for Nigerian entrepreneurs to pursue a global vision and not to limit themselves to domestic or West African Market.

We, therefore, recommend that government should sponsor studies that would seek to determine the cultural attitude of Nigerian ethnic groups to entrepreneurship. This study would provide opportunity to identify the best practices and publicize them. It will also be to identify poor entrepreneurship attitudes with some groups and thus use the opportunity to re-orient such communities.

Closely related to the above, we also believe that it is especially important to ensure that steps are taken to introduce entrepreneurship orientation and coaching, right from the beginning of a child's education. There is need to move beyond current policy of teaching entrepreneurship only at tertiary levels of education in Nigeria and many other countries of the world.

Nigerian entrepreneurs should be exposed to modern business processes and approaches, of doing business. They need support from stakeholders for them to be exposed to production and marketing standards that would meet global standards. There is also the need to ensure that compliance with global ethical standards is encouraged, among entrepreneurs, by the government.

REFERENCES

- Aliyu, S.A. 2000. *Christian Missionaries and Hausa Literature in Nigeria, 1840- 1890: A Critical Evaluation*, 99-124, Unpublished PhD Dissertation, Department of English, Ahmadu Bello University, Zaria.
- Aruwa A.S., 2005. Entrepreneurial Patterns and Motivation: The Experience in Kaduna Stte, *Abuja Management Review*, Vol. 2, No. 1, 2005
- Baum, J. R., Olian, J. D., Erez, M., Schnell, E. R., Smith, K. G., Sims, H. P., Scully, J. S., & Smith, K. A. 1993. Nationality and work role interactions: A cultural contrast of Israeli and U.S. entrepreneurs' versus managers' needs. *Journal of Business Venturing*, 8, 449-512.
- Buame, S.K. 1996. *Entrepreneurship: A Contextual Perspective. Discourses and Praxis of Entrepreneurial Activities within the Institutional Context of Ghana*. Lund University: Lund University Press
- Burgelman, R. 1983. A Process Model of Internal Corporate Venturing in the major diversified firm. *Administrative Science Quarterly*, 28, 223-244.
- Cohen, A. 1971.: Cultural Strategies in the Organization of Trading Diasporas. In Meillassoux, C. (ed.): *The Development of Indigenous Trade and Markets in West Africa*. London: 266-284
- Dana, L.-P. (ed.) 2007. *Handbook of Research on Ethnic Minority Entrepreneurship. A Co Evolutionary View on Resource Management*. Cheltenham
- Dana, L.-P. and Morris, M.2007. *Towards a Synthesis – A Model of Immigrant and Ethnic Entrepreneurship*. – In: Dana, L.-P. (ed.) *Handbook of Research on Ethnic Minority Entrepreneurship. A Co-Evolutionary View on Resource Management*. Cheltenham: 803-812.
- Fadahunsi, A., Smallbone, D. and Supri, S 2000. Networking and Ethnic Minority Enterprise Development: Insights from a North London Study. *Journal of Small Business and Enterprise Development*, 7: 228-39.
- Fishman, J.A. 1998-1999. The New Linguistic Order. *Foreign Policy*, 28 (113): 26-4
- Fukuyama, F. 1995. Social Capital and the Global Economy. *Foreign Affairs*, 74 (5): 89-103.

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- Gold, S. 1997. Transnationalism and Vocabularies of Motive in International Migration. The Case of Israelis in the United States. – *Sociological Perspectives* 40: 409-427.
- Gould, D.M. 1990: *Immigrant Links to the Home Country. Implications for Trade, Welfare, and Factor Returns*. – PhD dissertation. – Los Angeles
- Gould, D.M. 1994: Immigrant Links to the Home Country. Empirical Implications for US Bilateral Trade Flows. – *Review of Economics and Statistics* 76 (2): 302-316
- Harris, J. R. 1968. Socioeconomic Determinants of Entrepreneurial Success in Nigerian Industry, presented to the Washington Meetings of the Econometric Society, December 1967, and abstracted in *Econometrica* (Supplement, May 1968).
- Hisrich, R.D., and Brush, C., 1984. “The woman entrepreneur: Management skills and business problems”. *Journal of Small Business Management*, 22 (1).
- Hofstede, G. 1980a. *Culture's consequences: International differences in work related value* Beverly Hills, CA: Sage.
- Hofstede, G. 1980b. Motivation leadership and organization: Do American theories apply abroad? *Organizational Dynamics* (Summer), 42-63.
- Hofstede, G., & Bond, M. 1984. Hofstede's Cultural Dimensions: An independent validation using Rokeach's value survey. *Journal of Cross Cultural Psychology*, 15, 417-433.
- Hofstede, Geert H. 1997. *Cultures and Organizations; Software of the Mind Intercultural Cooperation and its Importance for Survival*, MacGraw Hill
- Hofstede, Geert H. 2000. *Culture's Consequences—Comparing Values, Behaviors, Institutions and Organizations among Nations*, Sage Publications, California.
- Horowitz, D.L. 1985. *Ethnic Groups in Conflict*, Berkeley, CA: University of California Press, p. 57
- Iyer, R. and Schoar, A. 2008. Are there Cultural Determinants of Entrepreneurship? http://www.mit.edu/~aschoar/IyerSchoarNBER_v1.pdf. Accessed October 12, 2011

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Examination of the Antecedent of Cognitive Aspect of Brand Loyalty: Study on Telecommunication Sector in Sudan

INTRODUCTION

Competitive markets stimulate companies to seek customer loyalty and to know how to build and manage it. Brand loyalty has great interest for market researchers, marketing managers and marketing academics. Brand loyalty is a key issue for many marketing managers. Companies spend millions of dollars each year tracking brand loyalty levels through market research organizations. Many market research companies detail brand loyalty research as a key business area, reflecting the importance of this concept for brand management. (Bennett & Rundle, 2005).

In modern marketing competitive business environment, there are many brand choice alternatives for the consumer. The managers must keep competitors from grabbing off the consumer through an accurate method to measure and predict brand loyalty. According to Datta (2003) in a highly competitive market, Along with the major brands, own label brands also have a considerable market share. Even small changes in the market share can have a significant financial impact on company sales. In the face of such competition having brand loyal consumes not only increase sales, also reduce marketing costs.

LITERATURE REVIEW

Brand loyalty has great interest for market researchers, marketing managers and marketing academics. Brand loyalty is a key issue for many marketing managers. Companies spend millions of dollars each year tracking brand loyalty levels through market research organizations. Many market research companies detail brand loyalty research as a key business area, reflecting the importance of this concept for brand management. (Bennett & Rundle, 2005).

Jacoby and Chestnut (1978) state that "If brand loyalty is ever to be managed, not just measured, it will have to be elaborated in a much more detailed description of cognitive activities rather than focusing only on behavioral aspects of brand loyalty (e.g., repeat purchase)".

Ha, (1998), proposed the theory of reasoned action to explain brand loyalty. According to the reasoned action paradigm – based on the theory of reasoned action, introduced by Fishbein (1980). Brand loyalty conceived as a notion that is dependent on normative influences (such as influences deriving from social peers). These influences, in turn, reflected in the behavioral consequences of loyalty, (Ha 1998 & Lutz 1991).

Product Performance

Product and services for several reasons, often acquired based on an evaluation of extrinsic cues only (i.e brand name, price, and package). (Zeithaml, V., 1998). One reason suggested, is that intrinsic cues are not available at the time of purchase. A second reason may be that evaluation of intrinsic cues requires more effort and time than is perceived as worthwhile. Finally, intrinsic cues may not be used because quality is difficult to evaluate. The first opportunity to judge the intrinsic qualities of the service is often at the point where the product is consumed. (Selles, Fred 1993).

RESEARCH HYPOTHESIS

Hypothesis: Product Quality Variables Determined the Brand Loyalty

Palto (2003) investigates the major factors that influence consumers' loyalty towards their brands. The performance of the brand is thought to be one of the most important factors, and also found that if product performance of a brand meets or exceeds the expectations of the customers and customers are highly satisfied, then it influences the customers to be loyal to the brand. These results suggest developing the following hypotheses:

- H.1 There is a positive relation between the price and the brand loyalty.
- H.2 There is a positive relation between the network and the brand loyalty.
- H.3 There is a positive relation between the other services and the brand loyalty.
- H.4 There is a positive relation between the customer care and the brand loyalty.

MEASUREMENT OF VARIABLES

Product Performance

Selles (1993), measures Performance quality with indicators reflecting various aspects of the service. Customer evaluation of perceived quality was defined and measured as evaluation of attribute performance. (Churchill and Surprenant 1982, Oliver 1999 & Olsen 2002). Four indicators were assessed to evaluate performance quality, (price, network, other services and customer care)

Brand Loyalty

The theory of reasoned action was developed to explain how a consumer leads to a certain behavior (Fishbein, 1980). A consumer's response to each element of the TRA (theory of reasoned action): (Ab: attitude toward the purchase behavior, SN: subjective norm, B: purchase behavior) will

considered as “unit brand loyalty” (UBL). TRA model explains the antecedent variables of purchase behavior are attitude toward the behavior (Ab), subjective norm (SN), and intention to perform the behavior (I). Unit brand loyalty is formed at a certain point in time.

DATA ANALYSIS

Statistical Package for the Social Sciences (SPSS) was used to examine the data with the following techniques. Factor analysis (Principal component) used to validate and guarantee the integrity of measures using the following guidelines: (1) Eigenvalue of 1 or greater, (2) VARIMAX rotation method, and (3) the cut-off point for significant factor loading is > 0.35 (Hair et. Al., 1998). Cronbach’s alpha was used to measure the internal consistency. Descriptive statistics were used to examine the respondents’ characteristics. Pearson correlation was used to examine the degree of correlation between the measures. Multiple linear regression used to test the hypotheses.

Modification Conceptual Frame Work:

According to the results of the factor analysis on brand loyalty variables, the hypotheses related to the relationship between product performance and brand loyalty variables be modified. Corollary hypotheses are:

- H.1 There is positive relation between the price and the brand loyalty
- H.2 There is positive relation between network and brand loyalty
- H.3 There is positive relation between other services and brand loyalty
- H.4 There is positive relation between customer care and brand loyalty

Correlation Analysis

Table 1 present the result of inter-correlation among the variables. The correlation analysis was conducted to see the original picture of the inter-correlation aimed the variables under the study. The important of conducting correlation analysis is to identify any potential problems associated with multi-colinearity (Sekaran 2000).

Table 1
Inter-Item Correlations on All Variables

Variables	Price	Net	Services	Customer care
Price				
Network	0.423**			
Other Services	0.252**	0.177**		
Customer care	0.437**	0.386**	0.309**	
Loyalty	0.589**	0.420**	0.230**	0.324**

** $p < 0.01$

The table shows that the price is positively and significantly correlated with loyalty ($r = 0.59$, p -value < 0.01), and significant correlated with network and loyalty ($r = 0.42$, p -value < 0.01), there are significant correlated with customer care and loyalty ($r = 0.32$, p -value < 0.01). There are little correlation with other services and loyalty ($r = 0.23$, p -value < 0.01).

Hypotheses Testing

Multiple Regression Analysis: Table 2 shows the results of the hierarchic regression equation testing the influence of product performance variables on brand loyalty; it shows that the price, network, other services significantly influence brand loyalty ($\beta = 0.41, 0.21$ and 0.38 respectively). Product performance variables explain 96% of the variance in brand loyalty.

Table 2
Multiple Regressions: Product Performance Variables and Brand Loyalty

Variables	Loyalty
Price	0.41
Net	0.21
Other Services	0.38
Customer Care	0.003
R ²	0.96
Adjusted R ²	0.96
ΔR^2	0.96
F change	1463

RESULTS

The objective of this study is test the relationship between product performance variables and brand loyalty. The results have related that the product performance variables price, network and other services are significantly influenced loyalty.

One of the research questions is how product performance affects brand loyalty; this study takes the reasoned action theory as a guide to explain brand loyalty. It considers behavioral and attitudinal aspect .as result of complex of term brand loyalty as much as scholar research. There are different ways to measure brand loyalty according to the different definition and aspect.

THEORETICAL IMPLICATIONS

This research finds that product performance variable price, network and other services are important and affect brand loyalty. This positive and strong relationship between product performance and loyalty, support that brand loyalty not only behavioral but also behavioral and cognitive aspect according to the reasoned action theory.

MANAGERIAL IMPLICATION

This study has several implications for manager. Price, network and other services are important variable in mobile phone service because they affect brand loyalty. From this point manager must follow up the quality of service as a guide for loyalty. In mobile phone service, effort must focused to improve the net work and the area coverage by the network, the reasonable cost for making call and introduce new services. The mobile phone service has strong relation with information technology (IT) and introduce new technology in this sector can effect customer to be loyal.

The research finds strong correlation between quality and loyalty depredating on this result, company by using this finding can keep their customer from switch or grabbing by other company.

LIMITATIONS AND FUTURE RESEARCH

This research examines the effect of product performance on determine brand loyalty on mobile phone service in Sudan. The study focuses one-factor effects brand loyalty; future research can take more than one factor (brand reputation, brand name and habit). The study use non-comparative evaluation for the variable. Future study can evaluate through comparative model.

CONCLUSIONS

The objective of this study is to examine the effect of product performance on loyalty in mobile phone service in Sudan. Price, network and other services are obviously become the important factors that progress the brand loyalty.

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Loyalty is not only behavioral aspect; it is also a cognitive aspect. This means that to measure, build and manage loyalty the behavioral and attitudinal aspect must consider. Behavioral aspect alone cannot give real image for the loyalty.

REFERENCES

- Bayus,B.L. (1992), “Brand loyalty and marketing strategy: an application to home appliances”
Marketing Science, Vol. 11 no. 1 pp.22.
- Choong Lyong Ha (1998) The Theory of Reasoned Action applied to brand loyalty, *Journal of Product & Brand Management*, VOL.7 NO.1 PP51-61.
- Churchill,G.A and Surprenantc 1982 “Customer Satisfaction: An investigation into the Determinates of Consumer Satisfaction ” *Journal of the of Marketing Research Vol19. pp. 491-504.*
- Dick,A.S.and Basu, K. (1994) “Customer Loyalty: Towards an Integrated conceptual Framework,”
Journal of the Academy of Marketing Science,22(2), pp. 99-113.
- Fader, P.S.,Schmittlein, D.C.(1993), “Excess behavioral loyalty for high-share brands: deviations from the Dirichlet model for repeat purchasing” , *Journal of Marketing research*, Vol. 30, pp.478-99.
- Fishbein,M.(1980) “ A theory of reasoned action: some application and implication” ,Nebraska Symposium on Motivation, *University of Nebraska Press, Lincoln,NE*, Vol.27,pp 65-116.
- Frederick E May, (1986) “The Effect of Social Class on Brand Loyalty” *California Management Review* pp 81.
- George H. Brown, ,(1952), “Brand Loyalty-Fact or Fiction” *Advertising Age*, pp. 53-55.
- Guest, L. (1994) “A study of Brand Loyalty” *Journal of Applied Psychology*, Vol. 28, pp. 16-27.
- Harold Demsetz (1962) “ The Effect of Consumer Experience on Brand Loyalty and The Structure of Market Demand” *Econometrica*, Vol. 30 NO. 1.
- JJacoby,J.Chestnut,R.W. (1978), Brand Loyalty: Measurement and Management, *John Wiley & Sons*, New York, N.Y.
- Lim, Kui Suen; Razzaque, Mohammed Abdur (1997) “ Brand Loyalty and Situational Effects: An International Perspective” *Journal of International Consumer Marketing*, Vol. 9(4).
- Lutz,R.J, (1991) “The role of attitude theory in marketing” in Kassarijan, H.H. and Robertson, T.S.(Eds), *Perspective in consumer behavior*, Prentice . Hall, Englewood Cliffs, NJ,pp.39-317.
- Mittal V. P and Tsiros, M 1999 “ Attribute Level Performance, Satisfaction and Behavior Intentions Over Time” *Journal of Marketing Vol63 pp.63 No2.*
- Oliver, L.R.(1999) “Whence Consumer Loyalty” *Journal of Marketing*, Vol.63 (Special Issue),pp.33-44.
- Palto Ranjan Datta, (2003) “The Determinants of Brand Loyalty”. *Journal of American Academy of Business*;3,1/2;138-144.
- Rebekh Bennett; Sharyn Rundle-Thiele, (2005) “The Brand Loyalty Life Cycle: Implications for marketers .*Journal of Brand Management* Vol.12no4,250-263.
- Selnes Fred, (1993) “An Examination of The Effect of Product Performance on Brand Reputation, Satisfaction and Loyalty” *European Journal of Marketing*, Vol. 27 NO.9 pp 19-35.
- Spiros Gounaris, Vlasis Stathakopoulos, (2004) “Antecedents and consequences of brand loyalty: *An empirical study* Vol, 11, NO. 4, 283-306.
- Uncles, M. & Laurent, G. (1997), “Editorial”, *International Journal of Research in Marketing*, Vol. 14, pp. 399-404.

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Knowledge Transfer Performance Study On Sudanese Oil Industry

INTRODUCTION

Nowadays, we are moving steadily from information age to knowledge age, where knowledge has been recognize as the most important aspect in human life. Individuals and organizations are starting to understand and appreciate knowledge as the most valued asset in the emerging competitive environment.

The ability to transfer knowledge from one unit to another has been found to contribute to organizational performance. Sveiby (2001, p.347) argues that knowledge is transferred between individuals not only benefits the organization but also tends to improve competence in both the individuals that are involved in the process. For these purposes, knowledge transfer in an organization is defined as: "A process through which one unit (e.g. group, department, or division) is affected by the experience of another." (Argote and Ingram, 2000,p.151).

RESEARCH HYPOTHESIS

The first area of research is in the organizational culture variables influencing knowledge transfer performance. We propose that:

H1.1: An organizational member's knowledge/information sharing culture has a positive relationship with the performance of knowledge transfer.

H 1.2: A highly job satisfaction has a positive relationship with Performance of knowledge transfer.

The second area of investigation is regarding the organizational structure variables that influence knowledge transfer performance

2.1: Organization procedures have a negative relation with performance of knowledge transfer.

2.2: Positive relationship between communication flow and performance of knowledge transfer.

2.3: The level of incentive policy performance is positively associated with Performance of employee's knowledge transfer.

2.4: The status of the documents confidential has a negative relationship with the performance of knowledge transfer.

DATA SOURCES

Data collected through personal questionnaire, 111 respondent from the senior staff of the Sudanese

oil industry are used for the purpose of this study, the measurements of the study were derived from previous studies. All the questions except on the personal information were elicited on 5 points scale, (1 = strongly disagree 5 = strongly agree).

DATA ANALYSIS

Statistical Package for the Social Sciences (SPSS) was used with the following techniques to examine the data. First, factor analysis (principal component) used to validate and guarantee the integrity of measures subject to conditions of Eigenvalue of 1 or greater, VARIMAX rotation method, and the cut-off point for significant factor loading is > 0.35 (Hair et. Al., 1998). We used Cronbach's alpha for reliability to measure the internal consistency. We examined descriptive statistics to describe the respondent's characteristics while using multiple linear regression to test the hypotheses.

FINDING

The results of the hierarchical regression equation testing the influence of organization culture and organizational structure on speed of knowledge transfer (KT); it shows that only the organization sharing, culture, job satisfaction and Communication flow are significantly influencing speed of KT ($\beta = 0.37, 0.24$ and 0.22 respectively), also the results of the hierarchic regression equation testing the influence of independent variables on reliability of KT shows that only the organization culture, job satisfaction are significantly influencing reliability of KT ($\beta = 0.30$, and 0.26 respectively).

This results indicated that there is a significant positive relationship between organizational sharing culture, speed, and reliability of knowledge transfer performance. This shows that sharing culture is fundamental for any organization seeks to promote their performance and should give priority to it, this result consistent with previous studies (Syed Omer & Fytton Rowland 2004, Pham Thi Bich Ngoc 2006, Kamala Ali Al-Busaidi, 2005)

Also this study showed a significant positive relationship between job satisfaction and performance of knowledge transfer. Also a study done by (Celina Pascoe, Irena M Ali, 2002) supported the significant relationship between job satisfaction and performance of knowledge transfer, they reported that Job Satisfaction & Morale will impact on Motivation to Work Well, and this directly influence employees' Willing to share knowledge..

Neither the status of document confidentiality, incentives, nor the organizational procedures (routine policies), demonstrated a significant relationship with either speed or reliability of knowledge transfer performance. These result may be due to either the survey setting or the selection of the respondents involved in the survey, since more than 67 % of the respondents were from senior staff have access to certain confidential documents in the organization. The results might differ if the research was done in other sector.

THEORETICAL IMPLICATIONS

The research provides an interesting insights for understanding the culture of knowledge sharing and its impact on the performance of knowledge transfer. The study also revealed and support the variable of job satisfaction, and its significant relation with performance of knowledge transfer.

MANAGERIAL IMPLICATION

The result of this study should stimulates managers to concentrate on knowledge sharing culture among employees especially to benefit from the foreign experience in the organization, studies cited from developing countries emphasized that promoting a knowledge- culture is a major issue in knowledge management system deployment. Thus knowledge oriented Culture is needed in

organizations in developing countries to promote the sharing and usage of knowledge, which subsequently develop the performance of knowledge transfer.

LIMITATIONS AND FUTURE RESEARCH

Relationships between knowledge sources and recipients are also an important determinant of knowledge transfer or diffusion, the study does not investigate this relation. Additionally, the present study does not analyze specific organizational processes for putting knowledge transfer into action in the organizations surveyed.

CONCLUSION

The objective of this study is to examine the effect of organizational culture and organizational structure on the performance of knowledge transfer, Sudanese oil Industry was the target of this study.

The study found that organizational sharing culture and job satisfaction are strongly influence the performance of knowledge transfer, the other variables that did not show any relationship should not be isolated or ignored totally, as they are still very important for some organizations.

REFERENCES

- Argote, Linda, and Paul Ingram, (2000). Knowledge Transfer. A Basis for Competitive Advantage in Firms. *Organizational Behavior and Human Decision Processes* 82 (1): 150-69.
- Celina Pascoe University of Canberra ACT, Australia (2002) canberra.edu.au
- Hair J. F., Anderson R.E., Tatham R. L., and Black W. C. (1998). *Multivariate Data Analysis*. Prentice-Hall International, Inc, USA.
- Irena M Ali Department of Defence, Canberra, Australia I pe, Minu. (2003). Knowledge sharing in Organization
- Kamla, Ali Al-Busaidi (2005) An Investigation of the Determinants of KnowledgeManagement Systems Success in Omani Organization.Lorne Oman Journal of Global Information Technology Management. Vol.8, Iss 3, p. 6-27(22pp.)
- Pham Thi Bich Ngoc(2006) National Economics University, Hanoi Doctoral student of Department of Informatics, University of Fribourg, Switzerland Knowledge Bargaining Power, and the Instability of International Joint Ventures. *Academy of Management Review* 22(1): 177-202.
- Sveiby, K. E. (2001), " A knowledge-based theory of the firm to guide in the strategy formulation", *Journal of Intellectual Capital*, Vol. 2 No. 4, pp. 344-58.
- Syed-Ikhsan, S.O.S. and Rowland, F. (2004), "Benchmarking knowledge management in a public organization in Malaysia". *Benchmarking – An International Journal*, Vol. 11 No. 2, in press. NewYork: Oxford University Press.

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Dividends Of Democracy In Nigeria: Is Economic Growth One Of Them?

INTRODUCTION

Like citizens of most recently democratized economies, Nigerians still live with the aspiration of taking delivery of fundamental dividends of political democracy as a precondition for achieving long-term and sustainable economic development. The dividends of democracy are often presumed to include government's swift response to popular demands, adherence to rule of law, protection of property rights, enterprising civil society, due process, freedom of economic choice and an open society - all of which culminates into economic progress (Rodrik, 1999). The wave of democratization that swept through at least 81 countries around the world between 1980 and 2000 might have been driven by the widespread expectation of reaping these dividends. However, Nigerians, having enthroned and sustained democracy since 1999, are still wondering whether the political system really possess the inherent ability to smoothly deliver on its promises giving the mixed realities on ground. But for several decades also, intellectual discourse on democracy-growth nexus has remained a breeding ground for theoretical and empirical arguments. The consensus seems to be that there is an inconclusive relationship between democracy and growth, depending upon the specifics of countries, regions and other relevant channels observed.

Heterogeneous opinions exist on the relationship between growth and democracy in economic literature. Some empirical studies, for instance, Kormendi and Meguire (1985), Scully (1988) and Sierman (1998) found positive effects of measures of political freedom on economic growth. A second group of studies including Marsh (1979), Weede (1983), Cohen (1985) and Landau (1986), using cross-country data found, on average, that democracy exert negative effect on growth. Another set of studies including Russet and Monsen (1975), Baum and Lake (2003); and Przeworski, *et al.* (2000), (Olson (1991), Helliwell (1994), Barro (1996), Rodrik (2000) reported that democracy has no significant effect on growth but rather an indirect effect via a number of channels; maintenance of rule of law, free markets, small government consumption and high human capital, educational expenditure, life expectancy, lower tax rates, less spending on military, and political stability. One of the objectives of this paper therefore is to investigate which of these positions hold true for Nigeria after sustaining democracy for over a decade.

An overview of general performance of the Nigerian economy since the enthronement of democracy in 1999 shows at best, a mixed result. This is because the economy has been characterized by both positive and negative developments domestically and externally. The country, for instance, was able to resuscitate and sustain the face of economic reform programmes which it started in the mid 1980's. Specifically, it resumed privatization of a number of public enterprises, embarked on much needed banking reforms which included recapitalization of banks and more recently, introduced regional banking model to enhance efficiency and survival of Nigerian banks. Developments in the telecom industry have been unprecedented. Also within this decade of democracy, the country has earned more foreign exchange than it ever did in the previous years of oil boom put together, expended more money than it did since independence. Nigeria equally accumulated more foreign reserves than ever before as oil prices reached an all time high of over one hundred dollars per barrel. FDI inflow peaked at \$8.5 billion in 2005 from an abysmal level of \$190m in 1999, even in the midst of global

financial crisis in 2008 Nigeria's FDI was at an appreciable level (Soludo 2011). However, the country had its worst in terms of economic and political crisis; strikes, ethnic and religious crisis, armed struggle, which all resulted in disruptions, destructions, kidnappings and loss of lives and properties. Unemployment situation worsened from 13.1% in the 2000 to 19.7% in 2009. The economy has also been rampaged by poverty, inequality and insecurity within the period. Besides, the global economic downturn which started in the last quarter of 2008, equally took its toll on the economy. Even FDI inflow fell by about 62% in 2010 i.e from \$6bn in 2009 to \$2.3bn 2010 (UNCTAD, 2011).

It is therefore imperative to undertake a study of this nature to assess the effects of democracy, if any, on the growth pattern of the economy from 1999 to the year 2010. The rest of the paper is divided into four sections. Section two contains the review of theoretical and empirical literature, section three presents the research methodology, while section four presents empirical results, the final section contains summary and conclusion of the paper.

SURVEY OF THEORETICAL AND EMPIRICAL LITERATURE

Academic debate on the link between democracy and growth has been on for over three centuries. Three distinct propositions emerged from the review of literature; the "trade-off", "win-win" and the "inverted-U". Trade-off proposition began with the work of Hobbes (1651) which argued that political democracy is injurious to economic growth on the ground that democracy only divides power among factions or groups that pursue conflicting interests rather than common good. Similarly, Lipset (1959) opined that democracy is incapable promoting growth except where per capital income reaches certain level and poor economies require autocratic leaders to reach such level. This is what Gregor (1979) referred to as developmental dictatorship. In the same vein, Huntington (1968) argue that democracy often devote itself to meeting consumption-driven popular expectations such that it neglects necessary profitable investments required for meaningful economic growth. Therefore, resources necessary for investment cannot be accumulated by democratic means" (Rao, 1984). The authors also argued that autocratic government facilitates growth through the forceful suppression of unrest - Hewlett's (1980), cited the case of Brazilian economy in the 1960's. More recently, Nilofar (2009) argues in the case of China, the world's biggest repressive regime and India, world's biggest democracy that china's stunning growth performance could be a reward for repression and India's sluggish growth a price for democracy. Similar views were expressed by Rao (1985), Krueger (1974), Andreski (1968) and Haggard (1990).

The win-win proposition is based on the premise that liberal democracy allows for mutually beneficial deals. Harrington (1656) in his earliest response in favour of democracy argued that autocratic rulers are potential looters whose exploitative tendencies and powers can be limited by democratic institutions. Democracy provides rule of law which gives individuals the confidence to plan and undertake routine economic activities. This is referred to as developmental democracy (Sklar, 1987). In the same vein, North (1990), Olson (1993) and Claque et al. (1996) were of the view that democracy promotes greater incentive for investment by providing better property and contract rights, private liberty and free flow of information. Besides, democratic regimes create a climate of certainty which is suitable for investment because it is difficult for rulers to change 'rules of the game' overnight (Goodell, 1985). Rodrik (1999) and Baum and Lake (2003) also argue that democratic regimes are committed to meeting public demand for infrastructure, justice, education and health all of which are prerequisite for growth. Thakur (2004) argued that both liberal democracies and market economies rely on similar attributes: political freedom, good governance, healthy competition, access to full information, secure property rights, sanctity of contracts enforceable by independent judiciary, etc. In this regards, Scully (1988) concludes that politically open societies, which bind themselves to the rule of law, to private property, and to market allocation of resources, grow faster and are two and one-half times as efficient as societies in which these freedoms are circumscribed or proscribed. Additionally, economic freedom is a positive and significant macroeconomic determinant of growth in per capita income.

Inverted U proposition put forward by Barro (1996) implies that in the worst dictatorships, an increase in electoral rights tends to increase growth and investment because the benefit from the limitation on governmental power is the key matter. In places that already have attained a moderate amount of democracy, however, a further increase in electoral rights tends to impair growth and investment. As electoral rights are increased, the dominant effect becomes an intensified concern with social programs and income redistribution.

Empirically, Kurzman, Werum, and Burkhart (2002) reviewed forty seven (47) empirical studies on the effect of democracy on economic growth and results show that nineteen (19) reported a positive relationship, six (6) show negative relationship, and ten (10) reported no statistically significant relationship. Seven (7) studies found a combination of positive and non-significant results, depending on the model used and the cases included; two (2) found a combination of negative and non-significant results; two (2) found mixed positive and negative results; and one (1) (Barro 1996, 1997) reported an inverted-U effect. Their study, however, shows that of the 106 countries studied, little or no direct effect of democracy on economic growth emerges, but positive indirect effects appear via two mechanisms: a marginally significant effect via investment and a robust effect via government expenditure. They also discover a robust non-linear inverse effect of social unrest on economic growth.

Interestingly, evidence based on some empirical cross country studies suggests that the positive indirect effects of democracy are neutralized by opposite negatives effects and hence the net effect of democracy on growth remains nil – Helliwell (1994), De Haan and Siermann (1995a, 1995b), Granato et al. (1996), Przeworski and Limongi (1993, 1997), Barro (1996, 1997), Feng (1997), Dawson (1998), Siermann (1998), Gasiorowski (2000), Przeworski et al. (2000). Evidence in support of this conclusion was also reported by Amsden (1989), Haggard and Kaufman (1995), Leftwich (1996), and Rodrik (2003). Furthermore, Muller (1985) and later Barro (1996) found evidence in support of the “inverted-U” proposition. Others in support of the proposition include: Comeau (2003), Plumper and Martin (2003) and Murphy et al. (2005). Lastly, Persson and Tabellini (1994) found that a transition towards democracy is not associated economic growth.

It is difficult based on these empirical studies to conclude on the nature of relationship between democracy and economic growth. Kaufmann (2008) opined that there is neither a clear linear and casual link between democracy and growth, nor is there sufficient basis to conclude that political liberalization results in deceleration of growth. However, democracy provides much greater economic stability, measured by the ups and downs of the business cycle. It provides better adjustment mechanisms to external economic shocks (such as terms-of-trade declines or sudden stops in capital inflows). Democracy further serves as a platform for attainment of higher investment in human capital – health and education and produces comparatively more equitable societies. The framework of analysis employed in the paper builds on some of the crucial variables identified in the literature. As economic and political characteristics between countries differ, so also would be the nature and magnitude of effect of democracy on growth. This study, therefore, seeks to investigate the effect of democracy on economic growth in the Nigeria – the biggest democracy in Africa, between 1999 and 2010.

FRAMEWORK OF THE EMPIRICAL ANALYSIS – METHODOLOGY

The methodology employed derives from the theoretical literature on the effect of democracy on economic growth, which focus on several mechanisms through which such an effect might be transmitted (Przeworski, et al. (2000) economic (investment), political (state expenditure), and social (social unrest). This concurs with the growth models proposed by Romer (1986), Lucas (1988), Jones and Manelli (1990), Barro (1990), and Rebelo (1991). Barro (1996), for instance, concludes that the established links between democracy and growth are a result of the connections between democracy and other determinants of growth, such as human capital. Consequently, this study in line other empirical studies in the area adopts a time-series approach, which among other advantages of the

approach, takes account of changes in democracy over time. Using quarterly time series data on some key variables an Autoregressive Distributed Lag (ARDL) estimation technique was applied to assess both the long-term and short-term direct and indirect effects of democracy on growth in Nigeria. Although the choice of time frame is straight forward, the period of smooth democratic rule in the country, the selection of regression variables was, however, influenced by availability of data on our theoretically relevant variables. Economic data was obtained on the following:

Economic growth: this was measured as the quarterly natural log difference of gross domestic product (GDP) obtained from the publications of Central Bank of Nigeria, this are: *Annual Reports and Statement of Accounts and Statistical Bulletin*. Consumer price index for the same period was used to transform the series into real growth rate and the paper uses log difference instead of quarterly percentage difference in line with practice in the growth models. See Barro (1997) and Kurzman, Werum, and Burkhart (2002).

Government spending: this was measured as the natural log of percentage share of quarterly government spending in gross domestic product obtained from the Central Bank's Statistical Bulletin.

Investment: this was measured as the ratio total investment, public and private, to GDP. The data was obtained from the *Statistical Bulletin* of the Central Bank of Nigeria.

Social unrest: to measure this variable, this paper adopts data published by Political Risk Services (PRS) Group, an international firm that provides annual assessment of political risk to foreign investors across the world. Political stability and absence of violence index of PRS is used as proxy for social unrest. This is justified by the composition of the index which comprises ethnic tensions, internal conflicts, external conflicts and government stability. The index is constructed to range from 0 to 1 with higher value indicating higher level of social unrest and vice versa. Adoption of this data is in line with Rivera-Batitz (1999)

Human capital: Econometric growth models over the past decade recommend the inclusion of human capital indicators. This paper in line with Barro's model (1996) uses two human capital measures: quarterly levels of expenditure on education and health. Data on this variable was also obtained from the publication of the Central Bank of Nigeria.

Corruption: the effect of this variable on economic growth has been extensively discussed in the literature. Hussain (1999), for instance, offers empirical evidence which suggests that corruption lowers economic growth through a number of ways which may include; reduced domestic investment, reduced foreign direct investment, overblown government expenditure, distorted composition of government expenditure away from social and economic infrastructures, etc. this study adopts the Corruption Perception Index (CPI) published annually by the *Transparency International* (TI) on Nigeria and other countries in the world for the period under review. The index relates the perceptions business people on the degree of corruption in a particular country. A value of CPI of 10.00 shows a perfect case totally corruption-free country while a value of 0.00 shows an extreme case of a highly corrupt country. Although TI's provides an annual measure, this paper uses *Eviews* version 5.1 to disaggregate the annual index into quarterly series, which was then converted into log.

Democracy: Freedom house measure of political rights and civil liberties are well-recognized measure of democracy in economic literature and as such this study utilizes the index as proxy for democracy. Index of democracy was obtained by finding the average of political rights and civil liberties indices. Based on Freedom House interpretation, lower scores indicate more democracy while higher scores indicate lesser democracy. Hence countries with a score of less than 5.5 are either "free" or "partially free," whereas countries with a score of more than 5.5 are "not free." This is in conformity with Drury, Krieckhaus and Luszitig (1999)

Population growth rate: data was obtained online from Nigerian bureau of statistics website and

world facts data published on index mundi.

Model Specification

In order to capture the relationship between democracy and economic growth in Nigeria, we specified an empirical model in conformity with Kurzman, Werum, and Burkhart (2002). The model is functionally expressed as:

$$\text{GROWTH} = f(\text{INV}, \text{GEX}, \text{SUR}, \text{HMN}, \text{POP}, \text{DEM}, \text{COR})$$

The model takes the form of multiple regression equation as

$$Y = \lambda_0 + \lambda_1\text{INV} + \lambda_2\text{DEM} + \lambda_3\text{SUR} + \lambda_4\text{HMN} + \lambda_5\text{POP} + \lambda_6\text{GEX} + \lambda_7\text{COR} + \mu \quad (1)$$

$$\text{A priori: } \lambda_1, \lambda_2, \lambda_4, \lambda_5, \lambda_6 > 0; \lambda_3, \lambda_7 < 0$$

Where λ_j are parameters to be estimated and μ is a random error term assumed to be normally distributed with zero mean and constant variance. Our model indicate that economic growth (Y), proxied by real gross domestic product is determined by some crucial variables including Investment (INV), Government Spending (GEX), Social Unrest (SUR), Human Capital (HMN), Population Growth Rate (POP), Democracy (DEM) and Corruption (COR). All annual data collected on these crucial variables were disaggregated into quarterly time series before estimating the models.

To the test indirect effect of democracy on growth, we specify the following models

$$\text{INV} = \beta_0 + \beta_1\text{GEX} + \beta_2\text{DEM} + \beta_3\text{SUR} + \beta_4\text{HMN} + \beta_5\text{POP} + \beta_6\text{COR} + \mu \quad (2)$$

$$\text{GEX} = \alpha_0 + \alpha_1\text{DEM} + \alpha_2\text{SUR} + \alpha_3\text{HMN} + \alpha_4\text{POP} + \alpha_5\text{INV} + \alpha_6\text{COR} + \mu \quad (3)$$

$$\text{HMN} = \phi_0 + \phi_1\text{DEM} + \phi_2\text{SUR} + \phi_3\text{GEX} + \phi_4\text{POP} + \phi_5\text{INV} + \phi_6\text{COR} + \mu \quad (4)$$

EMPIRICAL RESULTS AND FINDINGS

Our regression results for model 1 show that democracy impacts positively on economic growth in Nigeria. More interestingly, the impact of democracy on growth is found to be statistically significant at 5% given a t-statistic of 3.37. By implication, a percentage change in democracy index can boost economic growth by up to 4.5%. The result is in agreement with Kormendi and Meguire (1985), Scully (1988), Sierman (1998) Sklar (1987), North (1990), Olson (1993) etc. The estimated model also shows that human capital and population growth impact positively and significantly on economic growth. However, contrary to apriori expectation, the result indicates positive relationship between growth, social unrest and corruption. The model exhibits strong predictive power and robustness given adjusted-R² value 0.85 which implies that the model accounts for 85% of total variation in Nigeria's GDP. Besides, our regression result shows that all the regressors are simultaneously significant at 5% given an F-Statistic of 37.104.

Our estimated regression model 2 which was specified to capture indirect effect of democracy, reveals that there democracy is positively linked to investment in Nigeria. With a t-statistic of 2.57, the relationship is adjudged to be statistically significant as a unit rise in democracy index has the potency of boosting investment by 4.2%. It therefore implies that investment is one of the transmission channels through which democracy impacts on growth. This finding corroborates the report of Goodell (1985). The model also shows that social unrest has deleterious effect on investment, though not significant statistically. This might be due to the fact that the country has seen extreme social unrest like civil war, protracted revolution similar to that of Libya and Egypt within the period under review. Our result also confirms that human capital, government expenditure and population growth impact growth positively in Nigeria.

The result obtained from the third model regressed shows that democracy has a positive and significant effect on government expenditure as is commonly reported in literature. This derives from the fact that democratic governments have the proclivity to lavish resources on popular demands in

order to sustain support of the people. From our result we find that a unit increase in democracy index raises state expenditure by 1.1%. The model also reveals that corruption negatively affects government expenditure as it tends to reduce spending on productive projects and investments in various sectors of the economy.

Estimated model 4 shows that democracy affects human capital positively though not statistically significant given a t-statistic of 0.08. Also, the regression result indicates negative and significant relationship between democracy and social unrest in Nigeria. It shows that government spending impacts positively on human capital but contrary to a priori expectation it shows that investment has negative impact human capital. The model exhibits an interesting goodness of fit with an R² Square of 0.94 which is confirmed by a strong adjusted R² 0.93, suggesting that the model explains 93% of total variation in human capital. Given an F-Statistic of 104.7 exogenous variables in the model are adjudged to jointly statistically significant.

CONCLUSIONS AND RECOMMENDATIONS

The major objective of this paper is to empirically investigate whether democracy has been able to deliver economic growth as one of dividends in Nigeria between 1999 and 2010. Our econometric results have shown that economic growth is indeed one of the dividends of democracy in Nigeria within the period. However, the benefits of this growth have not been adequately delivered to the masses as a result of protracted systemic problems like corruption culture and lack of accountability in Nigeria. The paper also tested the indirect effects of democracy via some crucial growth-transmitting variables like investment, human capital development and government spending. The paper found that democracy positively impacts on investment, human capital and government spending in Nigeria but its impact on human capital is found to be insignificant. In the overall analysis, a unit increase in democracy index has the capacity to boost economic growth by about 4.5%. This finding brings to fore the need to deepen and strengthen democracy in the country. In the light of this, we make the following policy recommendations:

1. The government must ensure that it puts in place a credible electoral process without which it is impossible to conduct free, fair and credible elections. The process should ensure that a credible voters register void biometric anomalies is used for elections.
2. There is the need to ensure training, retraining and repositioning of Nigerian legislators. This will entrench the orientation that their offices are meant to serve the people that elected them rather pursuing personal gains. Besides, government should review downward the excessive luxury and spending on national assembly members done at the expense of infrastructural development of the country.
3. There is the urgent to tackle all security problems in the country as they pose serious threat to democratic development in Nigeria. Insecurity has heightened in the country recent time caused especially by Jos crisis, Niger Delta militancy and more recently Boko Haram. Government must ensure that all culprits are brought to book and fundamental issues properly addressed.
4. Dealing with endemic corruption should not be a thing of lips service. Nigerians have seen many probes without punishments of culprits. President Goodluck Jonathan's administration must adequately punish individuals, institutions and politicians convicted of corruption. Nigeria can borrow a leaf from China in this regard because when corruption is dealt with, dividends of democracy will reach the masses.

REFERENCES

- Andreski, S. (1968). *Military Organization and Society*. Palo Alto: Stanford University Press
- Barro, R., (1996). "Democracy and Growth", *Journal of Economic Growth* 1 (1).
- Cohen, Y. (1985). "The Impact of Bureaucratic-Authoritarian Rule on Economic Growth."

- Comparative Political Studies* 18 (April): 123-36.
- Comeau, L. (2003). "Democracy and Growth: A Relationship Revisited". *Eastern Economic Journal*, 29(1):1-21
- De Haan, J., Clemens L. & Siermann J. (1995a). "A Sensitivity Analysis of the Impact of Democracy on Economic Growth." *Empirical Economics* 20 (2): 197-215.
- Goodell, G. (1985). "The Importance of Political Participation for Sustained Capitalist Development." *Archives Européennes de Sociologie* 26 (1): 93-127
- Feng, Yi. (1997). "Democracy, Political Stability and Economic Growth." *British Journal of Political Science* 27 (July): 391-418.
- Gasiorowski, Mark J. (1993). *The Political Regime Change Dataset*. Baton Rouge, LA: Louisiana Population Data Center, Louisiana State University.
- Gregor, A. J. (1979). *Italian Fascism and Developmental Dictatorship*. Princeton, NJ: Princeton University Press.
- Hewlett, Sylvia A. (1980). *The Cruel Dilemmas of Development: Twentieth Century Brazil*. New York: Basic Books.
- Hussain, H. (1999) "The Detrimental Effects of Corruption in Developing Countries" www.andover.edu/aep/papers/410/hhusain99.pdf
- Hobbes, Thomas. [1651] 1951. *Leviathan*, ed. C. B. Macpherson. Harmondsworth, UK: Penguin.
- Helliwell, John F. (1994). "Empirical Linkages Between Democracy and Economic Growth." *British Journal of Political Science* 24 (April): 225-48.
- Harrington, James. [1656] 1992. *The Commonwealth of Oceana and A System of Politics*, ed. J. G.A. Pocock. Cambridge, UK: Cambridge University Press.
- Haggard, S. (1990). *Pathways From the Periphery: The Politics of Growth in the Newly Industrializing Countries*. Ithaca, NY: Cornell University Press.
- Jones, L. and Manuelli, R. (1990). "A Convex Model of Equilibrium Growth: Theory and Policy Implications." *Journal of Political Economy* 98(5): 1008-1038.
- Krueger, A. (1974). The Political Economy of the Rent-Seeking Society. *American Economic Review*, 64, 291-303.
- Kormendi, Roger C. & Philip G. M. (1985). "Macroeconomic Determinants of Growth: Cross-Country Evidence." *Journal of Monetary Economics* 16 (September): 141-63.
- Kurzman, C., Werum, R., and Burkhart R. E. (2002). *Studies in Comparative International Development*. Vol. 37 No. 1
- Lipset, Seymour M. (1959). "Some Social Requisites of Democracy: Economic Development and Political Development." *American Political Science Review* 53 (March): 69-105
- Landau, Daniel. (1986). "Government and Economic Growth in the LDC's: An Empirical Study for 1960-1980." *Economic Development and Cultural Change* 35 (October): 35-75.
- Lucas, R. E (1988). "On the mechanics of Economic Development". *Journal of Monetary Economics*
- Marsh, Robert M. (1979). "Does Democracy Hinder Economic Development in Latecomer Developing Nations?" *Comparative Social Research* 2:215-48.
- Muller, E. N. (1985). "Income Inequality, Regime Repressiveness, and Political Violence", *American Sociological Review* 50 (February): 47-61.
- Murphy, Robyn, Pleva, Paul, and Ron Sprout (2005): *Economic Reforms, Democracy and Growth in Eastern Europe and Eurasia*. USAID Working Paper on the Transition Countries No. 3
- North, D. (1990). *Institutions, Institutional Change and Economic Performance*, Cambridge, U.K.: Cambridge University Press.
- Olson (1991). "Autocracy, Democracy, and Prosperity." Pp. 131-57 in *Strategy and Choice*, ed. Richard J. Zeckhauser. Cambridge, MA: MIT Press.
- Plumper, Thomas, and Christian W. Martin (2003): *Democracy, Government Spending, and Economic Growth: A Political-Economic Explanation of the Barro-Effect*. *Public Choice*, 117(1-2):27-50
- Persson, Torsten and Guido Tabellini. (1994) "Is Inequality Harmful for Growth?" *American Economic Review* 84 (June): 600-21.

- Przeworski, Adam, Michael E. Alvarez, José Antonio Cheibub and Fernando Limongi. (2000) "Democracy and Development: Political Institutions and Well-Being in the World, 1950-1990", Cambridge, UK: Cambridge University Press.
- Rao, Vaman (1985). "Democracy and Economic Development." *Studies in Comparative International Development* 19 (Winter): 67-81.
- Romer, P. (1986). "Increasing Returns and Long Run Growth." *Journal of Political Economy*, vol. 94, No. 2, p.1002-1037.
- Rebelo, S. (1991). Longrun Policy Analysis and Long run Growth. NBER Working Paper No 3325.
- Rodrik, Dani, (1997) "Democracy and Economic Performance," mimeo., Cambridge, Massachusetts, John F. Kennedy School of Government, 1997.
- Rodrik, D. (2000), "Institutions for High Quality Growth: What They Are and How to Acquire Them." *Studies in International Comparative Development* 35(3), pp.03-31.
- Russett, Bruce M. and R. Joseph M. (1975). "Bureaucracy and Polyarchy as Predictors of Performance: A Cross-National Examination." *Comparative Political Studies* 8 (April): 5-31.
- Scully, Gerald W. (1988) "The Institutional Framework and Economic Development." *Journal of Political Economy*, vol. 96 (June): pp. 652-62.
- Siermann, Clemens L. J. (1998) "Politics, Institutions, and the Economic Performance of Nations", Cheltenham, UK: E. Elgar.
- Sklar, Richard L. (1987). "Developmental Democracy." *Comparative Studies in Society and History* 29 (October): pp. 686-714.
- Weede, E. (1983). "The Impact of Democracy on Economic Growth." *Kyklos* 36 pp: 21-39
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SWOT Analysis of Mobily: How Etihad Etisalat and Subsidiary Mobily Claimed 40% of the Saudi Arabian Cellular Market in 7 Years, and How It Can Retain That Market Share

Keywords: Mobily, Etihad Etisalat, Telecommunications, Saudi Arabia, Strategic forces, SWOT.

INTRODUCTION

Emirates Telecommunications Corporation with branded trade name Etihad Etisalat was born in Abu Dhabi, United Arab Emirates on August 30, 1976. Etihad Etisalat provides telecommunication services to the United Arab Emirates and 16 other countries in the Arabian Gulf and North Africa regions, and leads the telecommunications industry in its region in annual growth rates.

The company currently serves over 19 million mobile phone and 2.3 million broadband subscribers representing 40% of the market share in the Kingdom of Saudi Arabia. It also controls a major stake in a number of regional telecom companies. Nearly half of its royalties go to the UAE government. Etihad Etisalat contributes greatly to the region's non-energy related economy.

In the succinct words of Chairman Abdulaziz Alsaghyir, "Due to our far-sightedness in determining the direction the telecom sector would move over the years and our selective choice of technology we have now taken a clear lead in the mobile broadband market."

Although the Chairman's words indeed came to pass, the strategic forces that paved the company's way into the market realigned five years later. Caught by surprise, the company's management could not quite handle the deluge of challenges that confronted its securities. This paper treats the company's successes as well its disposition toward the nature and character of the challenges that lie ahead.

DEREGULATION PRESENTED OPEN DOORS FOR CAPITALIZATION

Under its subsidiary brand name Mobily, Etihad Etisalat took advantage of the deregulation of the telecommunications industry in Saudi Arabia and launched a highly aggressive bid to penetrate its cellular market and end STC's monopoly of the cellular market. It garnered from the Saudi Arabian government the country's first 3G license, launched the name Mobily in 2005, and listed itself on the Tadawul Stock Exchange under ticker symbol EEC and 7020.SSE (52, 11/11).

The telecom industry represents about 10% and Mobily about 2% of Tadawul's market capitalization. In its first year, Mobily attracted 6 million subscribers, claimed a phenomenal 30% of the Saudi market share of cellular service, and turned its cash-flow to the positive in two years.

At two years of age, Mobily operated 3,600 brick and mortar centers for points of sale, doubled its net income, and rewarded its shareholders with colossal earnings per share of 97%. In three years, or by 2008, it claimed 5 more million subscribers to total 11 million, and raised its net profit by 52% from the previous year. It installed 12,800 km of fiber optic network comprised of 7 rings surrounding 35 Saudi cities connecting 60 hub sites. It also added 1,200 physical points of sale to total 4,800 in the kingdom.

The following year 2009, the company attracted another 3.8 million subscribers to total 14.8 million, and served 300,000 High Speed Packet Access (HSPA) broadband users covering 70% of the Saudi population. It also increased the net worth of its stock holders by a giant 40%.

Last year, it topped the 1 million mark for HSPA users and the 18 million mark for mobile users. It boosted its net profit by 44%, and its point of sale base stations to 8,800. Shareholders celebrated another gigantic dividend increase, this time 60%.

Public shareholders own 40% of the company, while institutional investors claim 34% and Etihad Etisalat holds the balance of 26%. The private sector claims 85% ownership, while the government sector claims 15%, with a par value per share of 10. The company has 3,700 employees.

FINANCIAL AND COST ANALYSIS

Our analysis of Mobily's three key financial reports Balance Sheet, Income Statement, and Consolidated Cash Flows and Shareholder's Equity from its annual report produced the following critical ratios and ascertained the following issues:

Mobily has performed phenomenally well in the last seven years (2005-2011) with a compound annual growth rate (CAGR) of 7.5%. Mobily's revenue growth will likely maintain a vigorous pace due to its consistent international investment strategy, and the continued deregulation of the telecommunications sector in the GCC. Mobily leveraged Etihad Etisalat's significant investments in infrastructure and rolled out a full range of telecommunications services to the region that effectively maximized shareholder value.

Mobily's profitability maintained a solid 23% in 2010 mainly owing to another increase of 4.2 billion SAR in revenues. We computed a 5 year compounded annual growth rate (CAGR) for net profit of 7.5%, and a CAGR for the last three years of 6.1%. The company realized an increase in net income of 4.2 billion SAR representing an extraordinary increase of 40% from last year. Building on its successes, Mobily maintained an efficiency ratio of 2 staff per 1000 telephone lines which coincides

with the most efficient economies. The company sports 700 million shares outstanding with a market capitalization of 36.2 billion SAR.

Our analysis of Mobily's "1-Year vs. 5-Years Financials" from Gulfbase.com chart dated December 23, 2011 ascertained the following issues: Its EBITDA which offers a purer picture of core profitability shows an increase of 1.3 billion SAR, and an EBITDA margin of 38%, largely from big-ticket contracts, increase in net traffic, and cost-cutting operations. Its Net Debt/EBITDA offers an even clearer view of company health with a ratio of 0.95, primarily due to higher note pay-offs.

Mobily has a current Beta of 0.76, a P/E ratio of 7.48, a Price/Revenue ratio of 1.93, a Price/Book Value of 2.17, a Price/Cash Flow of 5.23, and the most attended Dividend Yield of 3.86%. Each of these ratios moderated lower by about an average of 5% from their previous year due to uncharacteristic political circumstances in the region, and that cooling pace should continue for another couple of years. The stock's share price demonstrates this cooling effect by selling at 3.7% below its close a year ago, i.e., from 54SAR to 52SAR.

We analyzed Mobily's 3-year "Other Key Ratios, Mobily, 2009-2011e" from Audi Saradar and <http://research.banqueaudi.com> dated December 10, 2011 and ascertained the following issues: Mobily has reallocated capital investments during the past 3 years to compliment the industry's trend to invest in infrastructure in preparation for the new decade's opportunities. The company's Return on Invested Capital (ROIC) which measures its management's success in serving stockholder interests shows a rise from 19% in 2009 to 22% in 2010 and buoyed again in 2011 to 24%.

All things being equal, and given the industry's trend, Mobily should see a smaller increase in ROIC than what Audi Saradar estimated in <http://research.banqueaudi.com> as of December 1, 2011. The Company should realize an increase of less than 1% for 2012, a relatively marginal increase of 18% from the year before. Mobily showed an apparent flat Weighted Average Cost of Capital (WACC) for the past 3 years, vis-à-vis its gap against the company's ROIC.

As it turns out, WACC indeed shrank in 2010-2011 down to about 13%, leaving a desirable gap of about 10%. We compared Mobily's ROE to ROIC to assess the level of consistency in attitude between management and the market, and found a strong 27% on ROE and 23% on ROIC for 2011. The company managed to reduce its Net Debt/EBITDA ratio by approximately one third for three years in a row, from 1.59 in 2009, to 1.02 in 2010 and to 0.73 in 2011, per chart "EBITDA to Revenues" from Mobily's annual report, ASIB.com, and Banqueaudi.com dated December 1, 2011.

All things being equal, the ND/EBITDA ratio usually affects Total Debt/Equity in similar measure. Mobily's TD/E reflected approximately cuts by one third per year for three consistent years, from 0.70 in 2009, down to 0.51 in 2010 and further down to 0.38 in 2011. EBITDA margins will not keep up with revenue margins due to growth in lower profit margin company contracts. For instance, Mobily garnered new contracts with Google, GOSI (General Organization for Social Insurance) and SABIC thanks to its, albeit expensive LTE and IP-VPN infrastructure.

ANALYST CONSENSUS

Analysts from leading brokerages including Rasmala, Credit Suisse, Al Rajhi, Global Investment, Audi, TAIB, NBK estimated Mobily's Revenue, EBITDA, Net Profit and EPS for the next four years, and believe in a modestly upward trend through 2015, with an emphasis on cautiousness, per chart "Analyst Estimates for Mobily (General Consensus)" from rasmala.com dated December 20, 2011.

Revenues should grow by about 27% in said years, but a slower growing margin of net profit of 22%. Analysts disagree on Mobily's projected EPS, but their consensus shows a growth of about 30% in 4 years, thanks to Tadawul's hard hit correction of the past two years.

Mobily's Revenue Per User (RPU) levels should drop from a current SAR 67 to about SAR 52 during the next two years through 2013, due to a cooling trend in the number of users in the sector. But the Blended Average Revenue Per User (BARPU) may rise if the country sees the same growth rate in Androids, Smart phones and related special apps that Europe has seen in recent months. In other words, the 3G and 4G markets may boost both the company's rate of new customers added.

COMPARISON TO PEERS

Per Figure 1, STC employs six times the staff of Mobily but only nets twice the profits of Mobily. That makes Mobily 300% more efficient! STC owns and operates three times more assets than Mobily but only nets twice the profits of Mobily. STC's net profit growth dropped by 13% while Mobily's rose by 39%. STC realized a measly revenue growth of 1.98 billion compared to Mobily's whopping 22.6 billion. That means Mobily booked 1,000% more than STC in revenue growth with half of STC's market capitalization!

Figure 1: Strategic Comparisons to Peers. Source: Zawya.com 2011

	Etihad Etisalat	Zain	STC
Ownership	Public	Public	Public
# of employees	3600	610	20,000
Market Cap \$	9.7 billion	2.0 billion	18.0 billion
Price / Earnings (TTM)	7.52	(3.92)	8.83
Price/BookValue(TTM)	2.19	1.63	1.48
Total Revenue \$	4.3 billion	1.6 billion	13.8 billion
Revenue Growth	22.63	97.55	1.98
Net Profit \$	1.1 billion	(629 million)	2.5 billion
Net Profit Growth	39.7	23.9	(13.10)
Total Assets \$	8.9 billion	7.5 billion	29.5 billion

From the chart "Earnings Per Share Comparison to STC" from research.banqueaudi.com dated December 20,2011, we observed that Mobily's Price to Earnings ratio hovered at about 85% of STC, which reminds the market that it does not take large capitalization to reward the investor with a high P/E. But since Tadawul's beastly correction in the last three years, speculators largely migrated from telecom securities to greener pastures, namely construction, infrastructure and education.

The burden of extensive infrastructure raised its cost per call and lowered its earnings per share. Mobily and STC suffered a drop in EPS by 25% and 7% respectively during the past two years. Both companies failed to steer that downward trend back to the positive.

The 5-year stock performance chart comparison in **Figure 2** (omitted – contact authors if you'd like a copy of this figure) strikes the viewer with a stark picture of the real world of equities. What goes up must come down. Almost all of the gains that all three stocks cleared since inception not only recoiled to their original introductory price but suffered an equivalent size loss as their historical gains before they settled around their original open. Telecom securities do not show a bright future for the near term. The fundamentals scream bullishly but the technicals only turn over to the other side in their deep slumber.

MAINTAINING A COMPETITIVE EDGE

The strategies that kept Mobily competitive during the past 7 years differ from the strategies it must employ to stay competitive in the future:

Create need - To survive the industry's high rate of birth-death cycles, the telecom industry cannot

merely meet market needs. It must go beyond responding to creating need. It must fashion and craft new needs that lure our imaginative generation. It must introduce fresh convergent applications that exceed customer expectations. It must practice tight reason-to-reality cycles and implement dynamic project deployment time-tables eased by scalability.

Satisfy the region's burgeoning need for broadband – To keep up with corporate and government demand for data, Mobily upgraded its HSPA facilities from 21 to 42 Mbps. To avoid bottle-necking and service disruptions, it extended its fiber optic infrastructure coverage from 75% to 95% of the population.

A Neqaty program that rewards and boosts customer loyalty – Customers who come back to Mobily with repeat business earn loyalty points dubbed Neqaty, or “My Points”, based on usage. Customers can use their points to “purchase” any of over 40,000 products.

Undercut the competition's international call rates – Mobily continues to offer international service at aggressively cut-throat rates. Although it operated its international service at a loss during the first year, it garnered a large enough army of new subscribers to eventually push the operation back in the black.

Know the enemy – Competitor STC could do little more than watch Mobily's prowess. It could hardly sustain Mobily's “in-your-face” tactics. Fat and heavy STC could not keep up with “lean and nimble” Mobily. STC's market adaptation stagnation traces to the following weaknesses: Deficient CAPEX, detached inner-organizational network, outmoded, an aging board of directors, stiff environment for new strategy formulation, sluggish production of new services, low collective efficiency due to departmental independence, isolationism.

Mobily must have known the Chinese General Sun Tzu and his axiom, “Know thy self, know thy enemy. A thousand battles, a thousand victories.” It wasted no time to capitalize on STC's said weaknesses. It empowered line management with decision making authority and equipped it with a generous asset investment pool. In effect, it made sure no one in project management had any legitimate excuse to miss performance targets.

Telecom's deregulation both threatened and secured STC's livelihood. Mobily's limited access to parabolic satellites, LAN's, WAN's, and digital transmitters in the KSA forced it to depend on STC's infrastructure. The revenue generated from leasing infrastructure secured STC's livelihood.

The politics of deregulation offers a unique science of cycles often forgotten by succeeding generations. The past sheds light on the future of this phenomenon as set forth below.

GDP AND POPULATION IN SAUDI ARABIA

Although Saudi Arabia's GDP grew an average of 5.03% per annum since 2000, the chart “Saudi Arabia's GDP Growth Rate” from tradingeconomics.com dated 15 December 2011, highlights the country's over-sensitivity to global currents.

GDP's oversensitivity - The hyper-fluctuation of 7.53% between two consecutive years (2003's 0.13% and 2004's 7.66%) suggests menacingly short expansion/contraction business cycles. In other words, a 10-year peak and trough in two back-to-back years may point to the Saudi consumer's low capacity utilization rate and high dependency on regulatory bodies. The observation may also point to the unusually large variance in relationship between Saudi's oil, revenue and GDP. Oil represents about 80% of Saudi's revenue but only 45% of its GDP, which may suggest the country's decreasing dependency on the petroleum industry and its increasingly diversified profile.

Population milestones - The kingdom experienced an average annual population growth rate of 3% during the past 10 years per chart “IMF Data Specifications, 35-year population growth rate, 1980 – 2015”. It currently hosts approximately 27 million citizens including 5.5 million expatriates. The population should reach 29 million by the end of 2015. About one third of its citizens are under the age of 30. The relatively young population will understandably continue to push the industry and demand cutting-edge technology.

According to UNICEF, last year each 100 population had 143 phones and 31 internet users, suggesting a wire-savvy and wizardry generation of mobile users.

Saudization of the labor market may not have a significant impact on the percentage of expatriates for the foreseeable future because of the government’s growing budget for new infrastructure at a rate of 5.5% per year, hence the growing demand for skilled labor. A population growth from 27 to 29 million in 3 years means an increase of about 2 million new users, multiplied by 1.43 phones per user for a total of 2.86 million devices added to the market.

TELECOMMUNICATIONS OVERVIEW AND FORECAST IN SAUDI ARABIA

KSA hosts a robust population of broadband users with an estimated 4.4 million main lines, 53 million mobiles, and about 10.3 million internet users at this time. Per international comparison chart Figure 3, KSA’s broadband subscribers’ rate stands at 15% per 100 inhabitants.

Figure 3: Active mobile broadband subscriptions per 100 inhabitants, 2010. Source: Banque Audi, ITU, ASIB estimates



We observed from the forecasting chart for the Mobile Market in Figure 4 that while subscribers should rise for the next two years, their rate of growth may drop a whopping 90% in the next two years. Mobily should retain its 40% market share but no more than that for the foreseeable future. Its blended ARBU should also lose ~20% of its value down to SAR 55 by the end of 2014.

Figure 4: Forecasts for the Mobile Market in Saudi Arabia. Source: Informa Database, NBK Capital

	2009	2010	2011	2012e	2013e	2014e
Total subscribers (000)	36,005	43,582	48,536	51,165	53,425	55,277
Growth	26%	21%	11%	5%	4%	3%
Mobily market share	39%	40%	40%	40%	39%	39%
Other market share	61%	60%	60%	60%	61%	61%
Mobily blended ARBU	71	67	67	63	59	55

The telecom industry outperformed the MENA emerging markets indices from 2004 through 2008, but this excess performance did not follow equity market fundamentals. It rolled past expectations with little rhyme or reason. By excess, we mean the divergence between the industry’s cost-of-equity and return-on-equity per chart “Return on Equity % vs. Cost of Equity % Pre and Post Boom in MENA” from Bloomberg.com and WatheeqaCapital.com dated December 20, 2011. Our analysis of the industry’s return-on-equity in the region during boom time (2004-2008) against its cost-of-equity during said time showed a difference of 17% - 10.5% = 6.5%. We analyzed the same ratios during

bust time (2008-2010) and found a huge contraction in said difference from 6.5% down to near 1%. This decline reflects the general trend in Saudi Arabia just the same.

We compared the telecom sector's performance to the overall Saudi market in 2011 and found the following: The sector showed a price-to-earnings of 10% while the overall market showed a much higher 16%. The sector realized a return-on-equity of 14% while the overall market produced a slightly lower 12%. The sector's 7% return-on-assets exceeded the overall market's 4%. Both sector and market tied in their dividend yield at 2%.

STRENGTHS OF MOBILY

Leadership - EEC launched its communication and mobile services in 1982. In 1994 it started GSM services and by 1996 serviced 130,000 mobile customers. From 1996 to present, its customer base grew exponentially to over 21 million. EEC won the Saudi Arabian contract after severe competition with an astronomical bid of SR12.2 billion paid in advance while peer companies offered the following amounts: 11.7 billion from MTN of South Africa, 9.8 billion from Oraikom of Egypt, 9.4 billion from MTC of Kuwait, 8 billion from Samawat of Italy, 6 billion from Telecom of Spain.

Founders - EEC's Founders bring to the company extensive and diverse business experience. Mobily leads in the Middle East with a proven track record for profitable GSM and 3G operations. Mobily successfully applied the strategies and strengths developed in the UAE to the Saudi markets. EEC did a good job drawing on Saudi business prowess.

Strong Technical Operator - Mobily commenced commercial GSM service in the UAE in September 1985. Currently, the Mobily/UAE network includes more than 4,800 GSM Base Stations, serving 21 million customers. UAE mobile services penetrated 85% of the UAE market and became the largest single mobile operation in the Middle East outside the Kingdom. The Company believes that Etihad Etisalat's technical competencies further demonstrate its qualifications to operate Thuraya, an established GMPCS service provider with nearly 185,000 subscribers. The UAE's Fiber Optic Link Around the Globe and Fiber Optic Gulf make it a hub for regional connectivity.

Branding - The Mobily name enjoys a strong image in the region. The company believes that it has built the brand based on understanding customers and a commitment to service and innovation.

Digitization - Digitized telecommunications, a dream only 20 years ago plays an integral role in the social, economic and political fabric of this region. The magnitude of demand for digitization has stretched the industry like never before. Mobily offers near total telecommunications solutions that enable it to compete globally and give it a consistent edge. Mobily introduced 3G PMCS to the MENA region and led the industry in high speed data services. It currently covers about 92% of the broadband population, servicing more than 2.3 million broadband (1G/5G/Unlimited) subscribers.

B-to-B - Mobily has been meeting business-to-business needs with services such as e-Company and e-Commerce applications which provide expertise in telecom IT, and with UAE Labs which provide support in site testing, accepting and commissioning. Its products include G5 cell technology, live satellite IP television, video on demand and multiplayer gaming, broadband@home, Bayanat Al-Oula, LTE, FTTH, Connect Google Package and Cisco TelePresence Suite.

WEAKNESSES OF MOBILY

Corporate Governance - Mobily continues to wrestle for a set of standards and procedures that aim at a management discipline synchronized with international practices that protects the value of stakeholders. It continues to struggle in defending the rights of its shareholders and seems to forget to keep them in a position of supreme importance.

The authors of this paper believe that the company's Board of Directors' and executive management

have no greater responsibility than to increase the net worth of its equity holders. In the wake of the region's financial crises of the past 2 years, the company's governance struggles to regulate its internal operations and maneuver its external politics in a way that protects what it cannot afford to lose, the trust of its investors.

The level of trust in the company's shareholder/executive relationship sits at an all-time low. A 10-time oversubscribed IPO has not only retracted all of its gains but dropped well below its introductory price, and now sits lazily around that threshold. The responsibility should fall squarely on the leadership that formulated a reactionary code of governance and failed to protect the rights of its owners. At the very least, it could have added independent board members and non-executive senior managers to its roster of leadership to shore up its functions of governance.

Customer Service - Mobily has not been able to figure out how to render customer service without relying so heavily on the old fashioned face to face. Too much of the company's customer service takes place at brick-and-mortar centers.

According to the authors' personal experience in the eastern region of the country, customers wait in line an average of one hour on any given evening to get the attention they need. We called the telephone center eight separate times to set up voice mail and spoke with 4 tech-support specialists only to get frustrated with their limited English and conflicting instructions. We eventually had to drive over to a physical center to get the help needed. Friends who use Mobily have expressed similar results from the apparently outsourced customer service telephone center. One user described it as useless. Badly needed empirical studies should shed broader light on this state of affairs.

Employee Development - The industry's pace of change races along faster than the leadership's pace of learning. The pace of the lessons they are learning lags behind the quantity of lessons they need to learn. The company's excessively top-down leadership style slows down its people's ability to change at the same pace as its industry. In due time, it constricts manpower planning and locks line-management to linearism and the syndrome of reductionism in HR administration. Reactive manpower development and static employee maintenance ensue that have brought many-a-company to its knees.

Long Term Debt - The burden of debt weighs heavy as Mobily continues to fight for a 10 billion refinancing deal with Saudi banks.

Recruitment Strategies - Like most companies, Mobily relies too heavily on shot-gun recruitment. It releases ads to a broad labor market and waits for people to respond. Instead, it should spend more time where its future leaders congregate, the university campus. It overlooks the rifle approach which identifies its future leaders one by one before they enter the labor market.

OPPORTUNITIES FOR MOBILY

Regional Growth - According to Alif Arabia and IIF estimates, the GCC region's gross foreign assets will soon hit \$2 trillion against a relatively measly liability of \$0.4 trillion dollars. The breadth of projects in the region will reach an unprecedented \$1.8 trillion dollars during the next 10 years with about one third of that activity in Saudi Arabia. And speaking of the Saudis, according to SAMBA, their GDP will soon pass the SAR 2 trillion mark.

Private Education - According to The Parthenon Group report titled "GCC Insight Report: Investment Opportunities in K-12 and Higher Education in the United Arab Emirates and Kingdom of Saudi Arabia", the region will inject about US\$5 billion dollars into the Private Education sector in 2012, with US\$3.5 billion in K-12, and US\$1.2 billion in Higher Education. A strong trend toward international English curriculum offers the telecom industry great opportunities in the

industrialization of info-structure such as e-publishing communications, in-sourcing institutional portal needs, and building value-added networks around collective interests.

Technology Unimaginable Fifteen Years Ago - The telecom industry faces a load of technological opportunities for offload solutions that go beyond Wifi such as White Spaces (thanks to the White Space Coalition), converging IP networks such as Carrier Ethernet, Long Term Evolution (LTE) networks, and Spectrum Refarming to 1400 megahertz bands (also known as 1.4Ghz).

E-Commerce - According to Zawya.com, Dow Jones Newswires and StartUp Arabia, 32% of those who used the internet in 2010 in the Middle East bought merchandise online. In MENA, business-to-consumer retailers sold around US\$90 billion dollars worth of goods which reflects a 35% increase from the previous year. In GCC, US\$3.3 billion worth of e-commerce goods exchanged hands in 2010, and about US\$4.4 billion in 2011, reflecting a 33% increase from the previous year.

Small Business Start-Ups - Paving a highway of opportunity for small business, the Saudi government streamlined the incorporation process and offered start-up capital to qualified applicants. It also regulated the trading environment in favor of small business. The current figure of 8 million registered businesses should swell to about 8.7 million in 2012, 9.5 million in 2013 and 10.4 million in 2014. This reflects a vigorous 8.5% annual rate of growth.

THREATS TO MOBILY

Search for Sustainable Infrastructure - Unrelenting technological explosions have tested the company's resolve to maintain an infrastructure that keeps up with the explosions. The company cannot quite maximize its return on assets before they turn obsolete. Keeping current infrastructure compatible with advancing ones continues to threaten Mobily's profitability. It must figure out how its current technology can subsist with evolving ones.

Unregulated Market of International Currencies - Currency exchange rate fluctuations lead to normal and healthy macroeconomics. They are part of an efficient capitalistic market. But when fluctuations turn to irrational departures from the norm and divert from the standard 3% swing to a colossal 50% in one trading day, multi-national corporations can suffer severe non-operating losses. The hyper-volatile rate swings of the past 4 years have exposed multi-national corporations to an unprecedented level of risk in a faceless Forex market largely unpoliced.

International regulatory bodies cannot seem to control the market's illogical behaviour. This relatively referee-free playing field has taken the science of risk management to a new level that few understand. Mobily's drive to further penetrate MENA and Africa will expose it to unprecedented currency risk and leave it unusually vulnerable.

Financial Risk - Mobily's obligations to meet creditor servicing requirements and maintain its affairs with the Islamic Financing Facility and its long-term creditors subject the company to economic and social factors beyond its control.

Competition - Increased deregulation, common technology and a franchise-free environment will continue to lower the barriers to new entrants and level the advantages of current players. Fierce competition will force Mobily to offer more favorable terms to undercut rivals. The end result? A lower ARPU. Increased rivalry intensity means increased pressure to differentiate its value-added services with first-offered content in an industry that may soon see an extended period of maturity.

Buyer Power - Lower switching costs, standardization of services, concentration of markets and backward integration will continue to empower buyers and strengthen their hand to negotiate better deals. On the other hand, higher fixed costs, common technology, forward integration and reliance on the source will continue to weaken the supplier's hand.

RECOMMENDATIONS

The authors of this paper specialize in organizational development planning (ODP) and therefore offer recommendations from a behavioural science that re-makes resource enterprise and re-writes leadership doctrine in step with regional trends. The following recommendations focus on the immediate implementation of practical interventions that ride the waves of change in the region:

A move from an all-Arabic to a truly international board – The company should move its 10-member 100% native Arabic speaking Board of Directors to a 70%/30% ratio that includes other native speaking tongues. Mobily should embrace new board members that represent non-Arabic mother tongues from North African, East Africa, India, and Europe to better represent the true geographical map of Mobily and its current playing field.

A move toward innovation – The company has followed well during the past 7 years. It watched the world's leading telecoms and copied their ethos, pathos and logos to the upper limits. The company's management learned well from the successes and failures of peers around the globe and derived a business model like no other in the Middle-East. Bravo!

Now, it's time to rise to greater heights. It's time to transform the company's personality into a richer profile. In keeping with its core values, it's time to add innovation and invention to its list of dominant qualities. As Osman Sultan, CEO of Emirates Integrated Telecomm Company (Du) said last month in an interview about network connections within the UAE, infrastructure development and local content creation, "The Arab world, unfortunately missed the industrial revolution of the previous century. We do not create technology, we do not develop technology, we buy and use technology. The new era of the information age could be a great opportunity for us to catch up a little bit."³

Mobily should play a greater role in creating new devices of communication. It should contribute more to advance our knowledge of telecom technology. More than finances, it should contribute more of its human resources to this worthy cause. Mobily's people are gifted in ways that transcend management and sales. Mobily must ask itself, "What capacities do our people have that have not yet been put to use?" In short, it's time to lead the industry in research and development.

A move from cooperation to consolidation – In keeping with King Abdullah's call this past month at the six-nation Gulf Cooperation Council Summit in Riyadh to strengthen the GCC alliance and move toward a single entity, Mobily should consider an acquisition or merger with a peer in the region. A marriage between the leadership style of Mobily and a corporation better endowed with hard assets could boost both company's bottom line.

A move from shareholder ownership to shareholder/user ownership – Mobily should consider adding its customers to its roster of owners. The company should offer at least 25% of its outstanding shares to the most important people in the company, its customers. Those who play the most strategic role in the company should have a piece of the pie. Telecommunication stocks in the GCC have tumbled in the past 3 years, partially because carriers focused too heavily on the haves at expense of the have-nots. Mobily needs to find ways to invite the have-nots to the party of ownership. Mobily should offer incremental ownership of company stock to its user-ship based on usage and loyalty.

A move from CAPEX to Cloud Computing – Three financial factors will affect the next three years: The swelling time value of money, the growing gap between the company's planned CAPEX and OPEX, and the burgeoning cost of soft IT assets. In light of these three factors, the company should incrementally move toward cloud computing for new IT infrastructure investment. Note that this does not reflect the timing of cash outlays but the timing of financing.

A move toward "employee → customer" to "customer → customer" service – The best customer service often comes from the most satisfied customers. Mobily relies too heavily on its brick-and-

mortar centres and employees to address the needs of its users while an army of customer service personnel go untapped, namely its own loyal base. Mobily should think again how it could reengineer its customer care department in a way that engages its “older” customers to care for its “younger” ones. They should consider ways that empower them as associate representatives to provide ancillary services and address the needs of customers at the grass-roots level.

A move toward a broader use of infrared technology – The powerful potential of infrared technology includes a use of spectrums in C-Band conventional wavelengths that offers great promise for the telecommunications industry. The industry’s consortium should prioritize the technology’s R&D for further deployments.

Endnotes and some references are omitted for space considerations. If you want a copy of the paper with omitted portions restored, you’re invited to contact the authors.

REFERENCES

- Alif Arabia 2011. <http://alifarabia.com/saudi-arabia>. Accessed 15 December 2011.
- Audi Saradar, Banque Audi, ASIB 2011. <http://research.banqueaudi.com>. EBITDA to Revenues. Active mobile broadband subscriptions per 100 inhabitants, 2010. Other Key Ratios, Mobily, 2009-2011e. Accessed 10, 19 December 2011.
- Bloomberg 2011. <http://www.bloomberg.com>. Return on Equity vs. Cost of Equity Pre and Post Boom in MENA. Accessed 10 December 2011.
- Cisco 2011. <http://newsroom.cisco.com/press-release>. Accessed 12 December 2011.
- Dow Jones 2011. <http://dowjonesnewwires.com>. Ecommerce. Accessed 5 December 2011.
- Gulfbase 2011. <http://gulfbase.com/ScheduleReports/GCCTelecom>. Accessed 17 December 2011.
- Inderscience 2011. <http://inderscience.metapress.com/institutional>. Accessed 8 December 2011.
- Informa Database 2011. <http://informa.com>. Accessed 22 December 2011.
- Institute of International Finance 2011. <http://www.iif.com/economicresearch/mena.3Dec2011>
- International Monetary Fund 2011. IMF Data Specifications, 35-year population growth rate, 1980-2015. Accessed 27 December 2011.
- International Telecomm Union 2011. <http://www.itu.int/ITU TELECOM/> Accessed 20 Dec 2011.
- Middle East North Africa Financial Network 2011. http://www.menafn.com/updates/research_center/Saudi_Arabia. Accessed 9 Dec 2011.
- Mobily Annual Report, 2011. <http://www.mobily.com.sa>. Accessed 1 December 2011.
- Mubasher 2011. <http://www.mubasher.info/portal/TDWL>. Accessed 21 December 2011.
- NBK Capital 2011. <http://nbkcapital.com/BR/Research/MER/Telecom>. Accessed 26 December 2011.
- Oxford Business Group. Google Books 2011. The Report: Saudi Arabia 2009. <http://books.google.com.sa/books>. Accessed 27 December 2011.
- Proquest 2011. <http://search.proquest.com.ezp.ud.edu.sa>. Accessed 16 December 2011.
- Rasmala 2011. <http://www.rasmala.com>. Analyst Estimates for Mobily (General Consensus). Accessed 20 December 2011.
- Start Up Arabia 2011. <http://start-up-arabia.com>. Ecommerce. Accessed 5 December 2011.
- The Parthenon Group 2011. GCC Insight Report: Investment Opportunities. <http://www.parthenon.com/Industries/PrivateEquity>. 28 December 2011.

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A Resource-Based Approach to the Antecedents of Export Marketing Performance from a Developing Country Perspective

Key Words: organizational resources, networks, Thailand, export marketing performance, discriminant analysis.

INTRODUCTION

Previous research had focused on the relationship between organizational resources and export marketing performance in a developing country context (Ling-ye and Ogunmokun, 2001; Morgan et al., 2006; Wilkinson and Brouthers, 2006; Singh, 2009) with inconclusive findings still remaining (Dijk, 2002; Kaleka, 2002; Morgan et al., 2006). Furthermore, researchers have also focused on the relationship between networking resources and export marketing performance in a developing country context (Mouzas, 2006; Yiu et al., 2007; Pongpanich and Phitya-Isarakul, 2008) suggesting further research is required on the relationship between institutional, government and research networks and performance (Lee et al., 2001; Yiu et al., 2007). Therefore, in an attempt to overcome this void in the literature and to determine what causes Thai export market ventures to succeed or fail this study investigated the impact of organizational and networking resources on export marketing performance in Thailand using the resource-based theoretical framework (Barney, 1991).

THEORETICAL FRAMEWORK

The Resource-Based View (RBV) of the firm asserts that firms sustain competitive advantages by deploying valuable resources that are superior, scarce, and inimitable (Barney, 1991). It is easier for a business with adequate strategic resources to survive and prosper (Grant, 1991; Chen et al., 2007) than it is for a business that doesn't have those resources. According to Penrose (1959), organizational resources are key constructs that constrain or strengthen the export strategy of a firm.

The literature seems consistent with regards to organizational resources and performance, however, their relationship in different national settings is not always consistent. Organizational resources are internal resources which are an important aspect for business firms which include financial resources, production resources, human resources, R&D resources and reputation resources (Teece et al., 1997; Morgan et al., 2006).

Previous studies have also suggested that there are inconsistent relationships between organizational resources and export marketing performance in a developing country context (Lee et al., 2001; Ling-ye and Ogunmokun, 2001; Gluma, 2005). These studies were conducted in the developing countries of Korea (Lee et al., 2001), China (Ling-ye and Ogunmokun, 2001; Guan and Ma, 2003), Indonesia

(Dijk, 2002), Israel (Carmeli and Tishler, 2004), Malaysia (Gluma, 2005) and India (Singh, 2009) with the findings suggesting that the organizational resources of technology, financial resources, human resources, R&D resources and reputation resources had a significant positive relationship with export marketing performance yet the findings were not always consistent in each developing country suggesting further investigation is needed.

In the Lee et al. (2001) study on Korean manufacturing exporting firms the study findings showed that three dimensions of resources including internal resources, technology resources, and financial resources had a significant positive relationship with organizational performance in international markets.

Evidence from Chinese manufacturing exporting firms reported by Ling-yee and Ogunmokun (2001) and Guan and Ma (2003) also showed that financial resources (i.e. competitive credit terms and working capital) had a significant positive relationship with export marketing performance. Financial resources available for export development assisted the firm to build up its competitive advantages pertaining to product and service issues in international markets (Piercy et al., 1998) and were also essential in enabling the export venture to effectively engage in relationship building and marketing activities (Leonidou and Kaleka, 1998).

In the Dijk (2002) study on Indonesian manufacturing firms in the food and beverage industry the study findings showed that R&D resources had a significant positive relationship with export marketing performance (Wilkinson and Brouthers, 2006; Becchetti and Rossi, 1998) whereas technological and human resources had a non-significant relationship with export marketing performance. Evidence from Israel in a study conducted by Carmeli and Tishler (2004) in the agricultural, food and related industries showed that organizational resources, namely, organizational culture, reputation, communication, and managerial resources had a significant positive relationship with firm performance. The study conducted by Gluma (2005) on Malaysian manufacturing firms provided further support for the Carmeli and Tishler (2004) study that organizational resources had a significant positive relationship with export marketing performance.

Furthermore, Steenkamp et al. (2003) found that reputation resources had a significant positive relationship with export marketing performance. A good reputation can be a key asset that a firm can use to achieve a sustainable competitive advantage which is an underlying fundamental principle of the RBV. However, reputation is a delicate resource that can be easily damaged by unforeseen circumstances thereby reducing the competitive advantage already attained.

The management of human resources can also assist a firm gain a sustainable competitive advantage and enhanced performance (Daily et al., 2000). Pfeffer (1994) and Wei and Lau (2005) found that an organization's members are the real source of competitive advantage and Sinkula (1994) and Mavondo and Farrell (2003) found that human resource practices have significant implications for marketing effectiveness since the skills of the employees are possibly the most important strategic asset of any organization and amongst those most difficult to replicate. Furthermore, production resources (e.g. technology design, quality control etc) in manufacturing firms can also enhance competitiveness, growth and performance (Wilkinson and Brouthers, 2006; Becchetti and Rossi, 1998). As a result, organizational resources have a significant impact on export marketing performance (Becchetti and Rossi, 1998; Daily et al., 2000) yet the findings appear to be inconclusive and inconsistent in different national settings requiring further investigation.

Networking resources is defined as the external resource which includes the partnership of businesses and institutes to acquire knowledge and experience that has advantages for the firm as it pursues foreign markets (Lee et al., 2001). This argument is the core idea in the network approach to internationalization (Johanson and Mattson, 1988). A firm must use networking with external organizations to acquire knowledge and experience not available within the firm (Leenders and Gabbay, 1999; Guillen, 2002). Strategic partnerships of business networks among industry players

must be established to drive the key initiatives forward for long-term success in export markets. Through business networks a firm has the opportunity to identify new opportunities, obtain knowledge, and learn from the experience of other firms (Thompson, 2001).

Mouzas (2006) explained that the business network plays a key role in internationalization, as it facilitates the development of knowledge-intensive and innovative products, resulting in superior performance. This is further supported by Ritter and Gemunden (2003) as they concluded that network competence has a significant positive influence on the extent of technological collaboration between the organization and the firm's product and innovation process success. Similarly Mort and Weerawardena (2006) noted that networking capability has a key role in the internationalization of a global firm as it facilitates the development of knowledge-intensive and innovative products, resulting in superior international market performance in terms of rapid entry to multiple international markets.

Previous studies have also suggested that there is a significant relationship between networking resources and export performance in a developing country context (e.g., Lee et al., 2001; Kim-Soon, 2004; Yiu et al., 2007). These studies were conducted in the developing countries of Korea (Lee et al., 2001), China (Yiu et al., 2007; Zhou et al., 2007), Bangladesh (Shamsuddoha and Ali, 2006), Taiwan (Chen et al., 2007), Malaysia (Kim-Soon, 2004) and India (Elango and Pattnaik, 2007) with the findings suggesting that the networking resources of institutional, government, and research resources had a significant positive relationship with export marketing performance yet the findings were not always consistent in each developing country suggesting further investigation is required.

As such, it is suggested that networking resources as well as organizational resources has a significant positive relationship with export marketing performance yet the findings are not consistent on a country by country basis and requires further investigation in a developing country context.

RESEARCH DESIGN

This study was based on an empirical investigation of manufacturing firms that were involved in exporting to foreign countries from Thailand. The sample of firms came from a wide cross section of industries and was provided by the Department of Export Promotion in Thailand. In order to obtain valid and reliable measures of the variables, previously validated scales were used to measure all variables (Cavusgil and Zou, 1994; Ekeledo and Sivakumar, 2004; Elango and Pattnaik, 2007; Guan and Ma, 2003; Gulati et al., 2000; Hsu and Pereira, 2008; Lee et al., 2001; Morgan et al., 2006; Mouzas, 2006; Prasad et al., 2001; Yiu et al., 2007). All items were measured via five-point bipolar scales with scale poles ranging from strongly disagree (1) to strongly agree (5) and not at all (1) to a great extent (5) (Cavusgil and Zou 1994).

The questionnaire was developed and pre-tested using a small sample of exporters with the final instrument in English and a Thai equivalent with a covering letter and instructions that was mailed to a census sample that included 950 firms who were *apriori* identified as being involved in direct exporting, yielding 217 questionnaires being returned accounting for an effective response rate of 22.84 percent and considered to be adequate. This response rate is normal for most mail surveys (Groves, 1990; McDougall et al., 1994).

To reach the most knowledgeable key informants, the questionnaire was directed to the Managing Director of the export venture. From the results of the pre-test, it was expected that the Managing Director as Chief Executive Officer (CEO) would be the person most knowledgeable about organizational and network resources and the export venture's performance.

The instrument contained items identified by the literature intended to measure organizational resources, network resources and export marketing performance (Cavusgil and Zou, 1994; Ekeledo and Sivakumar, 2004; Elango and Pattnaik, 2007; Guan and Ma, 2003; Gulati et al., 2000; Hsu and Pereira, 2006; Lee et al., 2001; Morgan et al., 2006; Mouzas, 2006; Prasad et al., 2001; Yiu et al.,

2007). Organizational resources were conceptualized as a multi-dimensional construct that included production resources, financial resources, human resources, R&D resources and reputation resources. In this study, reviews of previous organizational resources measurement (e.g., Morgan et al., 2006) enabled the researchers to develop a 22 item measure (6 items for production resources, 5 items for financial resources, 4 items for human resources, 3 items for R&D resources and 2 items for reputation resources) to measure organizational resources. Respondents were asked to evaluate the different organizational resources via five-point bipolar scales with scale poles ranging from strongly disagree (1) to strongly agree (5) (Cavusgil and Zou 1994).

Production Resources: Statements were included in the questionnaire to measure production resources. These included the extent to which the firm had modern production facilities, the extent to which the firm's production facilities were more advanced than its competitors, the extent to which the firm's production facilities used state of the art technology, the extent the firm invested in cutting edge production oriented research and development and the extent the firm provided online catalogs and online distribution support.

Financial Resources: Statements were included in the questionnaire to measure financial resources. These included the extent that the firm had financial resources to pursue business expansion, the extent the firm had financial resources devoted to export activities, the extent the firm had competitive credit terms and the extent the firm had resources to develop international managers.

Human Resources: Statements were included in the questionnaire to measure human resources. These included the extent the firm had managers who were fluent in many foreign languages. The extent the firm had managers who had experience in working in diverse cultural environments and the extent the firm had managers who had held key positions in export oriented associations and were trained in international business negotiations.

R&D Resources: Statements were included in the questionnaire to measure R&D resources. These included the extent to which the firm had invested in recruiting an experienced international manager, the extent to which the firm had invested in cutting edge technology and the extent to which the firm had introduced new products and services.

Reputation Resources: Statements were included in the questionnaire to measure reputation resources. These included the extent to which the firm had a reputation for a distinctive brand image and the firm's product quality compared with its competitors.

Network resources were also conceptualized as a multi-dimensional construct that included institutional networks, government networks and research networks. In this study, reviews of previous network resources measurement (e.g., Lee et al., 2001) enabled the researchers to develop a 15 item measure (5 items for institutional networks, 6 items for government networks and 4 items for research networks) to measure network resources. Respondents were asked to identify the extent the firm had invested resources with the different organizations to establish a network relationship via five-point bipolar scales with scale poles ranging from not at all (1) to a great extent (5) (Cavusgil and Zou 1994).

Export marketing performance: Export marketing performance has been measured via the use of economic indicators, strategic indicators and overall satisfaction with performance. As a result, this study used a composite measure of export marketing performance that incorporated all three measures of export marketing performance (Cavusgil and Zou, 1994; Zou et al., 1998).

DATA ANALYSIS

The data were initially analysed using principal components analysis to assess the psychometric properties of the instrument. Our primary concern was interpretability of the factors. The

organizational resources constructs consisting of production resources, financial resources, human resources, R&D resources and reputation resources and the networking resources consisting of institutional networks, government networks and research networks all loaded appropriately and no cross loadings above .2 were identified with only factor loadings of above .5 being accepted. The final reliabilities for all scales were greater than .70 with the exception of reputation resources that had an alpha reliability of .64, however, a reliability of .6 and above is acceptable for a two-item scale (Anderson and Coughlan, 1987). The preliminary results indicated that the psychometric properties of the scales were acceptable and as such it was appropriate to examine the relationship between production resources, financial resources, human resources, R&D resources, reputation resources, institutional networks, government networks, research networks and export marketing performance.

To explore the influence of production resources, financial resources, human resources, R&D resources, reputation resources, institutional, government and research networks on export marketing performance, a 2-group discriminant analysis was used in order to determine which variables best distinguished between firms with high- versus low- marketing performance. All variables were entered simultaneously in the discriminant analysis so as to determine which variables were the best discriminators, after controlling for all other variables (Jackson, 1983). The antecedent variables of production resources, financial resources, human resources, R&D resources, reputation resources, institutional, government and research networks were each measured on composite scales created by summing the items, respectively. In the discriminant analysis, the two groups were identified by splitting the groups at the median score for the composite measure of export marketing performance that included overall satisfaction with performance, strategic and economic performance.

In the discriminant analysis, marketing performance perceptions were examined by using a composite measure of export marketing performance that included satisfaction with performance, strategic performance and economic performance. In the discriminant analysis, the discriminant function was significant (Chi Square [composite measure of marketing performance] = 38.107, df = 16; p = .001). Table 1 gives the correlations between each discriminating variable and its respective discriminant function. For the composite measure that was used to assess export marketing performance the strongest predictors were institutional, government and research networks together with financial, R&D and human resources. Production resources and reputation resources were found to have no relationship with performance.

Table 1 Discriminant Analysis □ Structure Matrix

Characteristics	Composite Measure of Performance	P<
Institutional Networks	.742	.001
Government Networks	.653	.01
Research Networks	.625	.01
Financial Resources	.559	.01
R&D Resources	.480	.05
Human Resources	.431	.05
Production Resources	.143	NS
Reputation Resources	.078	NS

Pooled within-groups correlations between discriminating variables and standardized canonical discriminant functions

Variables ordered by absolute size of correlation within function.

All variables used for the discriminant analysis were measured on five-point interval scales

Correctly Classified: 77.5%
 Wilks' Lambda = 0.690, p<0.01
 Canonical Correlation = 0.510

Largely, the results indicate that the export marketing performance of Thai export market ventures at an overall satisfaction level and at a strategic and economic level is influenced by institutional, government and research networks and financial, R&D and human resources.

DISCUSSION

This study was founded on the premise that the antecedents of export marketing performance with respect to resources and networks could be country-specific and previous research findings had been inconclusive requiring further investigation. As such, a robust empirical inquiry into the effect of the main antecedent variables on export marketing performance as identified by the literature was needed. Furthermore, many ASEAN countries, particularly Thailand, are an important focus of business as intra-regional trade had continued to increase (Julian and O' Cass, 2002). Importantly, Thailand as a South East Asian Country market was significant because of: (i) strong economic growth, (ii) growth in exports, and (iii) growth in FDI since 1980. Additionally, the export market entry mode is also of significance to Thailand because of its impact on economic development and trade and because of Thailand's reliance on exports for economic prosperity. Therefore, it is important to identify the antecedents of Thai export market ventures.

These issues were considered worthy of investigation and as such the study has provided valuable insights into this market entry mode in Thailand, finding that the strongest predictors were institutional, government and research networks and financial, R&D and human resources. The study findings concluded that three elements of organizational resources, namely, financial resources, human resources and R&D resources had a significant positive relationship with export marketing performance when measured by a composite measure of performance that included economic measures, strategic measures and an overall perceptual measure of performance.

It is important for the management of any company to be aware of these factors when contemplating an export market venture in a developing country. With respect to financial resources the study findings provided evidence that when the firm has the financial resources to pursue business expansion and are devoted to export activities e.g., has a budget to employ managers dedicated to international business, when the firm has working capital to finance export businesses, and when the firm offers competitive credit terms this will have a significant positive impact on export marketing performance.

This study also clearly indicated the human resource issues export managers needed to be aware of for marketing performance success. Export ventures need to employ managers who are fluent in several foreign languages, who are used to working in diverse cultural environments, who hold key positions in export oriented associations and who are trained in international business negotiations. These study findings support the work of Cavusgil and Zou (1994), Pfeffer (1994), Wei and Lau (2005) and others where they suggest that an organization's members are the firm's real source of competitive advantage. These studies as well as Sinkula (1994) and Mavondo and Farrell (2003) concluded that human resource practices have significant implications for marketing effectiveness since the skills of the employees are possibly the most important strategic asset of any organization and the most difficult to imitate and replicate.

As far as R&D resources are concerned, this study clearly indicated that it is important for export managers to be aware of the R&D resources that can influence a firm's export marketing performance. Having the budget to invest in international recruitment and cutting edge technology as well as the regular introduction of new and innovative products are very important for export marketing performance success in a developing country context. Export ventures in a developing country need to ensure the availability and existence of the above if they are to be successful.

With respect to networking resources all three elements of networking resources, namely, institutional networks, government networks and research networks had a significant positive relationship with

export marketing performance when measured by a composite measure of performance that included economic measures, strategic measures and an overall perceptual measure of performance. With respect to institutional networks the study findings provided evidence that when the firm has a relationship with institutional networks like commercial banks, insurance companies, transportation and logistics companies, distributors and raw material suppliers this will have a significant positive impact on export marketing performance. Institutional networks help the firm identify new opportunities, acquire knowledge and learn from the experience of other firms. According to Guillen (2002), institutional networks can provide scarce and precious information and experience that is necessary for international venturing activities that maybe otherwise unavailable and that information maybe the difference between success and failure.

As far as government networks were concerned, the study findings have shown that when the firm has a relationship with government networks like the Thai Board of Investment (BOI), government banks, chambers of commerce, exporters associations and other quasi government organizations this will have a significant positive impact on export marketing performance. This finding supports the work of Yiu et al. (2007) and Zhou et al. (2007) where they concluded in their study in the Peoples Republic of China (PRC) that relationships with government networks were an advantage for exporting firms entering emerging economies and these relationships with these government networks enhanced their likelihood of success. It also maybe as Julian (2005) concluded, if the government is an active partner in the business which is the case with many developing countries e.g., PRC and Thailand, by developing relational networks with key government agencies can only enhance performance.

Similarly with research networks, the study findings suggest that when the export venture had a relationship with research networks like university professors, the Thai Embassy in foreign markets, the media and other research institutes it will have a significant positive impact on export marketing performance.

REFERENCES

- Anderson, E., and Coughlan, A. (1987). International market entry and expansion via independent or integrated channels of distribution. *Journal of Marketing*, 51(1), 71-83.
- Barney, J.B. (1991). Firm resources and sustainable competitive advantage. *Journal of Management*, 17, 99-120.
- Becchetti, L., and Rossi, S. (1998). The positive effects of industrial district on the export performance of Italian firms. *Luiss Working Paper*, 54.
- Carmeli, A., and Tishler, A. (2004). Resources, capabilities, and the performance of industrial firms: A multivariate analysis. *Managerial and Decision Economics*, 25, 299-315.
- Cavusgil, S. T., and Zou, S. (1994). Marketing strategy-performance relationship: An investigation of the empirical link in export market ventures. *Journal of Marketing*, 58 (1), 1-21.
- Chen, C.N., Tzeng, L.C., Ou, W.M., and Chang, K.T. (2007). The relationship among social capital, entrepreneurial orientation, organizational resources and entrepreneurial performance for new venture. *Contemporary Management Research*, 3(3), 213-232.
- Daily, C.M., Certo, S.T., and Dalton, D.R. (2000). International experience in the executive suite: The path to prosperity? *Strategic Management Journal*, 21(4), 515-523.
- Dijk, M.V. (2002). The determinants of export marketing performance in developing countries: The case of Indonesian manufacturing. *Eindhoven Center of Innovation Studies*. The Netherlands, Working Paper 02.01.
- Ekeledo, I., and Sivakumar, K. (2004). International market entry mode strategies of manufacturing and service firms: A resource-based perspective. *International Marketing Review*, 21(1), 68-101.
- Elango, B., and Pattnaik, C. (2007). Building capabilities for international operations through networks: A study of Indian firms. *Journal of International Business Studies*, 38, 541-555.

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Performance from a Developing Country Perspective*

- Gluma, A. (2005). Organizational, marketing resource profile and export performance. Unpublished Doctoral Dissertation, Universiti Sains Malaysia, Malaysia.
- Grant, R.M. (1991). The resource-based theory of competitive advantage: implications for strategy formulation. *California Management Review*, 33 (3), 114-135.
- Groves, R.M. (1990). *Survey Errors and Survey Costs*. New York: John P. Wiley.
- Guan, J., and Ma, N. (2003). Innovative capability and export performance of Chinese firms. *Technovation*, 23, 737-747.
- Guillen, M.F. (2002). Structural inertia, imitation, and foreign expansion: South Korean firms and business groups in China, 1987-95. *Academy of Management Journal*, 45 (3), 509-525.
- Gulati, R., Nohria, N., and Zaheer, A. (2000). Strategic networks. *Strategic Management Journal*, 21 (3), 203-215.
- Hsu, C.C., and Pereira, A. (2008). Internationalization and performance: The moderating effects of organizational learning. *The International Journal of Management Science*, 36 (2), 188-205.
- Jackson, B. (1983). *Multivariate Data Analysis*. Homewood, IL: Irwin.
- Johanson, J. and Mattsson, L.G., (1988). Internationalization in industrial systems: A network approach. In N. Hood and J.E. Vahlne (Eds.), *strategy in global competition* (pp. 205-217). London: Croom Helm.
- Julian, C.C. (2005). *International Joint Venture (IJV) Performance in South East Asia*. Cheltenham, U.K.: Edward Elgar.
- Julian, C.C., and O' Cass, A. (2002). Examining the internal-external determinants of international joint venture (IJV) marketing performance in Thailand. *Australasian Marketing Journal*, 10 (2), 55-71.
- Kaleka, A. (2002). Resources and capabilities driving competitive advantage in export market: Guidelines for industrial exporters. *Industrial Marketing Management*, 31, 273-283.
- Kim-Soon, K. (2004). Value of export information enhancement of marketing competency, environmental characteristics, and export venture performance. Unpublished doctoral dissertation. Universiti Sains Malaysia.
- Lee, C., Lee, K., and Pennings, J.M. (2001). Internal capabilities, external linkages, and performance. A study on technology-based ventures. *Strategic Management Journal*, 22(6-7), 615-640.
- Leenders, R., and Gabbay, S.M. (1999). *Corporate Social Capital and Liability*. Boston, MA: Kluwer Academic Publishers.
- Leonidou, L.C., and Kaleka, A.A. (1998). Behavioral aspects of international buyer-seller relationships: Their association with export involvement. *International Marketing Review*, 15(5), 373-397.
- Ling-Yee, L., and Ogunmokun, G.O. (2001). The influence of interfirm relational capabilities on export advantage and performance: An empirical analysis. *International Business Review*, 10 (4), 399-420.
- Mavondo, F., and Farrell, M. (2003). Cultural orientation: Its relationship with market orientation, innovation and organizational performance. *Management Decision*, 41 (3), 241-249.
- McDougall, P.P., Covin, J.G., Robinson, R.B., and Herron, L. (1994). The effects of industry growth and strategic breadth on new venture performance and strategy content. *Strategic Management Journal*, 15, 537-554.

*A Resource-Based Approach to the Antecedents of Export Marketing
Performance from a Developing Country Perspective*

- Morgan, N.A., Vorhies, D.W., and Schlegelmilch, B.B. (2006). Resource-performance relationships in industrial export ventures: The role of resource inimitability and substitutability. *Industrial Marketing Management*, 35, 621-633.
- Mort, G.S., and Weerawardena, J. (2006). Networking capability and international entrepreneurship how networks function in Australia born global firms. *International Marketing Review*, 23 (5), 549-572.
- Mouzas, S. (2006). Efficiency versus effectiveness in business network. *Journal of Business Research*, 59, 1124-1132.
- Penrose, E. (1959). *The Theory of Growth of the Firm*. Oxford: Blackwell.
- Pfeffer, J. (1994). *Competitive Advantage through People: Unleashing the Power of the Workforce*. Boston, MA: Harvard Business School.
- Piercy, N.F., Kaleka, A., and Katsikeas, C.S. (1998). Sources of competitive advantages in high performing exporting companies. *Journal of World Business*, 33 (4), 378-393.
- Pongpanich, C., and Phitya-Isarakul, P. (2008). Enhancing the competitiveness of Thai fruit exporters: An empirical study in China. *Contemporary Management Research*, 4 (1), 15-28.
- Prasad, V.K., Ramamurthy, K., and Naidu, G.M. (2001). The influence of internet-marketing integration on marketing competencies and export performance. *Journal of International Marketing*, 9 (4), 82-110.
- Ritter, T., and Gemunden, H.G. (2003). Network competence: Its impact on innovation success and its antecedents. *Journal of Business Research*, 56 (9), 745-755.
- Shamsuddoha, A.K., and Ali, M.Y. (2006). Mediated effects of export promotion programs on firm export performance. *Asia Pacific Journal of Marketing and Logistics*, 18 (2), 93-110.
- Singh, D.A. (2009). Export performance of emerging market firms. *International Business Review*, 18, 321-330.
- Sinkula, J. (1994). Marketing information processing and organizational learning. *Journal of Marketing*, 58, 35-46.
- Steenkamp, J.B.E.M., Batra, R., and Alden, D.L. (2003). How perceived brand globalness creates brand value. *Journal of International Business Studies*, 34 (1), 53-65.
- Teece, D.J., Pisano, G., and Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18, 509-533.
- Thompson, G. (2001). Supply chain management building partnerships and alliances in international food and agribusiness. Rural Industries Research and Development Corporation.
- Wei, L.Q., and Lau, C.M. (2005). Market orientation, HRM importance and competency: Determinants of strategic HRM in Chinese firms'. *International Journal of Human Resource Management*, 16 (10), 1901-1918.
- Wilkinson, T., and Brouthers, L.E. (2006). Trade promotion and SME export performance. *International Business Review*, 15 (3), 233-252.
- Yiu, D.W., Lau, C., and Bruton, G.D. (2007). International venturing by emerging economy firms: The effects of firm capabilities, home country networks, and corporate entrepreneurship. *Journal of International Business Studies*, 38, 519-540.
- Zhou, L., Wu, W., and Luo, X. (2007). Internationalization and the performance of born-global SMEs: The mediating role of social networks. *Journal of International Business Studies*, 38(4), 673-690.
- Zou, S., Taylor, C., and Osland, G. (1998). The EXPERF Scale: A cross-national generalized export performance measure. *Journal of International Marketing*, 6 (3), 37-58.

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The Significance of Learning and Innovation for International Joint Venture (IJV) Marketing Performance in China

Key Words: Market-focused Learning, Internal Learning, External Learning, Innovation, Marketing Performance

INTRODUCTION

Although the literature on international joint ventures (IJVs) is already sizeable and steadily growing, there is a paucity of studies on at least one critical issue relating to the growth of IJVs in Asian economies, namely, the salient factors influencing IJV marketing performance. In the international business literature there are many studies that identify important determinants of IJV performance in general (Johnson, Cullen, Bronson and Sakano, 2001; Lee and Beamish, 1995; Makino and Beamish, 1998). However, the literature does not adequately cover the issues relating to IJV marketing performance.

In the international business literature, studies on marketing performance are largely confined to those firms involved in direct or indirect exporting (Cavusgil and Zou, 1994; Julian, 2003) with very little empirical evidence on IJV marketing performance. Given that successful marketing performance is critical to overall successful business performance (Crocombe, 1991), and the deficiency in the level of empirical evidence on IJV marketing performance, it was decided to focus on marketing performance in order to enhance the already significant body of IJV literature. IJV marketing performance being defined as the degree to which the IJV's marketing objectives, both economic and strategic, with respect to a product/service are achieved in a foreign market (that foreign market being China) through the planning and implementation of a specific marketing plan.

In the previous international marketing literature, (e.g., Calantone, Kim, Schmidt and Cavusgil, 2006; Zou, Fang and Zhao, 2003) most studies adopted the industrial organization approach to evaluate a firm's strategy, characteristics, and external factors as determinants of performance. Industrial organization theory states that the external environment imposes pressure on the firm to which it must respond. In line with this theory, Zou and Stan (1998) suggested that exporters who respond successfully to their external environments by developing and implementing an appropriate strategy would enjoy superior performance. The strategy factors that have been frequently studied as determinants of export marketing performance include adaptation, different channel relationships, together with the different types of channels (Zou et al., 2003). However, Zou et al. (2003) also suggest that the industrial organization framework only focuses on the impact of a firm's strategy and its external environment on performance, and places very little emphasis on the impact of idiosyncratic internal capabilities, such as learning and innovation, on the firm's performance (Barney, 1991).

In order to overcome this void in the literature Barney (1991) introduced a new theoretical perspective that is the resource based-view of the firm. The resource-based view of the firm views the firm not in the light of its activities or strategy in the product market but as a unique bundle of tangible and intangible resources. In addition, the firm's resources, not its strategy, are at the heart of

the firm's competitive advantage (Peteraf, 1993). In other words, the resource based-view states that the principal determinants of a business' marketing performance and its strategy are its internal resources.

In recent years, there has been an increasing number of international marketing studies conducted using the resource based-view of the firm (Calantone et al., 2006; Dhanaraj and Beamish, 2003; Zou et al., 2003). Additionally, Knudsen and Madsen (2002) have suggested that the resource-based view of the firm has emerged as the dominant paradigm yet no studies to our knowledge have used the resource-based view to understand or explain IJV marketing performance. As such, in order to overcome this void in the literature and the limited understanding of IJV marketing performance in the literature this study uses the resource based view of the firm as its theoretical underpinnings and examines the impact of learning and innovation in predicting IJV marketing performance in the context of Chinese IJVs.

Premised on Porter's contributions to the literature (1991) it is suggested that a successful firm within a turbulent industry environment is one with an attractive relative position that has been achieved via one of the generic strategies i.e. cost leadership, differentiation or focusing on a specific niche. Firms intending achieving either of these positions must perceive new ways of performing activities of the value chain which is an act of innovation (Porter, 1990). Organizational learning capabilities are key antecedents of this process and performance outcomes. Accordingly it is suggested that firms operating within a highly competitive industry tend to pursue innovation as a key thrust of their competitive strategy. Such firms tend to build and nurture distinctive learning capabilities which enable them to achieve higher levels of performance. As such, this paper addresses the relationship between learning, innovation and an IJV's marketing performance.

THEORETICAL FRAMEWORK

Market Focused Learning

Learning from markets is cited as a key to innovation and greater firm performance. The literature on the market-driven firm paradigm suggests that 'market driven firms stand out in their ability to continuously sense and act on events and trends in their markets. They are also better equipped to anticipate how their markets will respond to actions designed to retain or attract customers, improve channel relations, or thwart competitors' (Day, 1994: 9). Sinkula (1994) indicates five reasons which make market-based organizational learning unique in the creation of knowledge. First, it is a core competency pertaining to external foci and it is less visible than most internally focused organizational learning competencies. Second, market-based learning results in fundamental bases of competitive advantage. Third, market-based organizational learning is distinct from other types of organizational learning in that observation of others is essential. Fourth, the market information that resides in organizational memory is typically more difficult to access. Finally, market-based learning is unique in that market-based learning is more equivocal. Market-focused learning capability is defined as the capacity of the firm relative to its competitors, to acquire, disseminate, unlearn and use market information for organizational change. This definition extends the concept of market orientation in that entrepreneurial firms possessing a high level of market-focused learning capability not only learn from markets but also disseminate such knowledge within the organization and integrate the waves of new knowledge acquired into the firm's value-creating activities thereby enhancing performance. As such, it is hypothesised that:

H1: Market-focused learning will have a significant impact on IJV marketing performance.

Internal Learning

Internal learning includes trial and error learning and experimental learning (developing new ways of doing things) (Dixon, 1992; Huber, 1991). A commonly pursued experimental learning activity in a manufacturing firm is in-house R&D activity. R&D activity is interpreted as a search process to learn

and generate cumulative technical advances in specific directions (Hyvarinen, 1990) and a source of technological capability of the firm (Durand, 1988). In-house R&D activity is a key source of knowledge acquisition (Macpherson, 1992) and there is overwhelming evidence to suggest that in-house R&D is essential for effective innovation (Kim, Song and Lee, 1993) and enhanced performance. By definition, R&D as a flow is directly related to innovation because it modifies the existing stock of technologies (Allen, 1977). Cohen and Levin (1989) found that incentives for R&D are predominantly shaped by industry-specific characteristics such as the degree of competition, demand and appropriability conditions, and technological opportunities. They found that industry effects explain half of the variance in R&D expenditure. Internal learning is defined as the capacity of the firm, relative to its customers, to develop technological and non-technological knowledge through internal sources and to disseminate, unlearn, and use this knowledge for organizational change. This definition moves beyond the scope of traditional R&D activities; that is, firms engaging in internal learning not only learn from internal sources but also disseminate such knowledge within the firm and this wide dissemination of knowledge has the capacity to enhance performance (Weerawardena, O’Cass and Julian, 2006). As such, it is hypothesised that:

H2: Internal learning will have a significant impact on IJV marketing performance.

External learning

There is strong evidence to suggest that the ability to exploit external knowledge is a critical component of organizational performance (Cohen and Levinthal, 1990). Although in-house R&D and other forms of internal learning may be necessary, firms have to access external technological resources and modify them in order to develop the technological capabilities needed to respond to technological changes effectively (Dodgson, 1990). Collaborative linkages or ‘networking’ improves the innovation potential of the organization (Mowary, 1988) and its subsequent performance. Firms collaborate with other firms that possess critical and complementary resources to reduce uncertainty (Styles, Patterson and Ahmed, 2008) and to overcome their resource constraints to serve the market efficiently (Gouri, Lutz, Tesfom and Eritsrea, 2003). Most of the innovations result from borrowing rather than from invention (March and Simon, 1958). As such, external capability is a source of competitive advantage for the firm (Lipparini and Sobrero, 1994).

Building on this viewpoint, external learning is defined as the capacity of the organization, relative to its competitors, to acquire technological and non-technological knowledge through external linkages, and to disseminate, unlearn, and to use such knowledge for organizational change and enhanced performance. This definition makes the use of networking activity for knowledge acquisition explicit. It is suggested that a turbulent industry environment forces the firm to develop a knowledge base which will enable it to exploit emerging market opportunities for enhanced performance. This involves internal learning as well as from external sources (March, 1991). Therefore, external learning is a critical learning capability of the firm in its quest to gain positional competitive advantages in a turbulent industry environment. As such, it is hypothesised that:

H3: External learning will have a significant impact on IJV marketing performance.

Innovation

Although the literature suggests that innovations can occur in any value-creating activity, suggesting that it should be conceptualised to cover a broad range of activities (Schumpeter, 1934; Porter, 1990; Rothwell, 1992), past innovation research is biased towards technological innovation. However, firms undertake both technological and non-technological innovations and all such innovations can lead to a competitive advantage (Hyvarinen, 1990). This discussion, whilst suggesting that innovation can be a key source of enhanced firm performance, highlights the need to conceptualise this construct broadly in examining its influence on sustained competitive advantage and performance. In this study innovation is defined as the application of ideas that are new to the firm, to create added value either directly for the enterprise or indirectly for its customers, whether the newness and added value are

embodied in products, processes, services, or in work organisation, management or marketing systems.

Our earlier discussion suggested that organizational learning capabilities are prerequisites for innovation. In reality what we may see is that firms operating within a competitive industry environment undertake greater learning through market focused, internal and external learning activities. These learning activities enable the firm to pursue innovative ways of delivering superior products and services which in turn enable the firm to gain positional competitive advantages in the target market. As such, it is hypothesised that:

H4: Innovation will have a significant impact on IJV marketing performance

Broadly defined an IJV is an equity sharing arrangement between two companies (one local, one foreign) that pool their resources, share risks and operational control to operate an independent business unit on a continuous basis to attain strategic objectives (Geringer and Hebert, 1991). IJV marketing performance in this study is defined as the degree to which the IJV's marketing objectives, both economic and strategic, with respect to a product/service are achieved in an emerging economy (that emerging economy being the Peoples Republic of China [PRC]) through planning and implementation of a specific marketing plan. An IJV usually has a number of marketing objectives, which can be economic (i.e. profits, sales, return on investment, costs, return on assets etc.) and/or strategic (market expansion, access to raw materials, technology transfer, economies of scale, gaining a foothold in a foreign market, blocking a competitor etc.). Subsequent to the formulation and implementation of its marketing plan, some of the IJVs marketing objectives can be achieved fully, others only marginally, and others none at all. The extent to which an IJV's strategic and marketing objectives are achieved will therefore be a gauge of its marketing performance.

There appears to be no uniform definition of marketing performance in the literature. There has been a variety of marketing performance measures adopted by previous researchers. These include sales (Zou et al., 2003), sales growth (Madsen, 1989; Rose and Shoham, 2002), market share, profitability (Geringer and Hebert, 1991; Johnson and Arunthanes, 1995), technology transfer, durability, organisational learning, access to markets etc (Johnson, Black and Sakano, 1993).

The most frequently used marketing performance measures appear to be economic in nature. However, as an IJV is a hybrid formed from two separate organisations, which may have completely different marketing objectives for the IJV and different time frames, in this study both economic and strategic measures of marketing performance and subjective and objective measures of marketing performance have been used.

RESEARCH DESIGN

The empirical link between learning, innovation and IJV marketing performance were examined via an empirical investigation of 313 IJVs located in the People's Republic of China (PRC). The administration of the survey was via mail and a survey packet including a personalised cover letter and self-administered questionnaire was sent to the Chief Executive Officer (CEO) of each venture. The sample came from a wide cross section of industries. The questionnaire was developed from existing measures and pre-tested using a small sample before the final instrument was mailed to the sample. All independent variables were measured via seven-point bi-polar scales (Weerawardena et al., 2006).

In this study CEOs were used as the key informants. To reach the most knowledgeable key informants, the questionnaire was directed to the Managing Director of the IJV. From the results of the pre-test, it was expected that the Managing Director would be the person most knowledgeable about the organisation's marketing performance. The case, where the Managing Director was not directly responsible for the organization's marketing function it was expected that the Managing

Director, as Chief Executive Officer, would re-direct the questionnaire to the appropriate executive within the organization.

2 The measures for each of the distinctive organizational learning capabilities encompassed the four learning activities that constitute the firm's overall organizational learning processes (Huber, 1991; Sinkula, 1994; Slater and Narver, 1995; Schein, 1990). These activities are knowledge acquisition, knowledge sharing, knowledge utilization and unlearning. A key element of the capability constructs is the extent to which a particular capability has been instrumental in outperforming competitors. This approach to measure the distinctiveness of organizational capabilities is based on the work of Snow and Hrebnick (1980).

Market-focused learning - High scores on the market-focused learning scale indicated that the firm possessed distinctive capabilities in the acquisition of knowledge on consumer preferences and competitor behavior in terms of the four learning activities indicated above. Firms that scored highly on this scale collected market information frequently and had a thorough understanding of market preferences. The measure developed for this construct was an adaptation of the market learning scale developed by Day (1994). The measure had 8 self-report items that demonstrated acceptable reliability and internal consistency, above the .7 recommended by Nunnally (1967), with a coefficient alpha of .92.

Internal learning - The internal learning scale captured the extent to which the firm generated knowledge through internal experimental and experiential sources of learning. High scores on this scale suggested the firm's internal learning capabilities were in some way distinctive. The measure developed for this construct was an adaptation of the internal learning scale developed by Atuahene-Gima (1993). The measure had 8 self-report items that demonstrated acceptable reliability and internal consistency, above the .7 recommended by Nunnally (1967), with a coefficient alpha of .79.

External learning - High scores on the external learning scale indicated that the firm possessed distinctive capabilities in the acquisition of technological and non-technological knowledge through links formed with external organizations. The external learning scale was developed from past literature (e.g., Cohen and Levinthal, 1990; Rothwell, 1989). The measure had 6 self-report items that demonstrated acceptable reliability and internal consistency, above the .7 recommended by Nunnally (1967), with a coefficient alpha of .72.

Innovation - The innovation intensity scale captured the extent of the firm's product, process, marketing, and managerial system innovations. This definition reflected the importance of a broader conceptualization of innovation that incorporated both technological and non-technological innovations (Damanpour, 1991; Hyvarinen, 1990). High scores on the innovation intensity scale indicated that the firm had introduced radical innovations in its product, process, marketing and managerial systems. The innovation measure had 8 self-report items that demonstrated acceptable reliability and internal consistency, well above the .7 recommended by Nunnally (1967), with a coefficient alpha of .85.

IJV marketing performance - was assessed using a composite measure of IJV marketing performance. Respondents were asked to indicate their level of agreement with statements identifying the extent to which the IJV had achieved its objectives on a seven-point bipolar scale with scale poles ranging from a small extent (1) to a great extent (7). Respondents then indicated their perceived overall performance of the IJV on a 7-point bipolar scale (1=very poor, 7=very good). Finally, they were asked to indicate the IJVs sales growth and market share growth on a 7-point bipolar scale (1=very poor, 7=very good). These four indicators were then summed into a composite scale for measuring IJV marketing performance (Julian, 2005).

After the pilot test the questionnaire was directed to a purposeful sample of 313 IJVs in the PRC from a wide cross-section of industries, yielding 200 useable questionnaires being returned accounting for an effective response rate of 63.9 percent and considered to be adequate.

DATA ANALYSIS

The data were initially analysed using principal components analysis to assess the psychometric properties of the instrument. The primary concern was interpretability of the factors. All items loaded appropriately and no cross loadings above .2 were identified with only factor loadings of above .5 being accepted. Each scale was reviewed using factor analysis to establish that they were unidimensional. The final reliabilities for all scales were greater than .70.

The preliminary results indicated that the psychometric properties of the scale were acceptable and as such it was appropriate to examine the research hypotheses. To what extent is IJV marketing performance in the PRC influenced by market focused learning, internal learning, external learning, and innovation when measured by a performance measure that includes overall satisfaction, economic and strategic measures of performance.

To test the hypotheses a multiple regression analysis was undertaken to examine the effect of “market focused learning”, “external learning”, “internal learning”, and “innovation” on IJV marketing performance. Table 1 indicates that the four factors “market focused learning”, “external learning”, “internal learning” and “innovation” together explained 24.2 percent of the variation in the IJV marketing performance of IJVs in the PRC when measured by a composite measure of IJV marketing performance that included satisfaction with performance, strategic and economic measures of performance as explanatory variables, with an F statistic of 15.523 which is significant at $p < .001$ indicating that the independent variables do help explain the variation in IJV marketing performance. The results also show only three factors – innovation (t-value 4.93, $p < .001$), market focused learning (t-value 2.17, $p < .05$) and internal learning (t-value 1.99, $p < .05$) had a significant effect on the IJV marketing performance of IJVs in the PRC.

Table 1 – Multiple Regression Analysis

Variable	Coefficient	T-Statistic	Sig T
Innovation	.441	4.93	.001
External Learning	-.048	-0.541	ns
Internal Learning	.236	1.99	.05
Market Focused Learning	.213	2.17	.05

$R^2 = 0.242$ $F = 15.532$, $\text{sig} < .001$

Largely, the results indicate that the IJV marketing performance of IJVs in the PRC at an overall satisfaction level and at a strategic and economic level is influenced by market focused learning, internal learning, and innovation.

DISCUSSION

This study sought to examine the influence of market focused learning, internal learning, external learning, and innovation on IJV marketing performance of IJVs located in the PRC. The results of the study support the hypothesized relationships to a large extent with market focused learning, internal learning and innovation having a significant impact on IJV marketing performance.

Market focused learning had a significant impact on IJV marketing performance. The findings of this study, therefore, contribute to the rationale in using the Resource Based View (RBV) to explain IJV marketing performance. The study findings suggest that IJVs confronted with a competitive environment learn primarily from customers, competitors and links with external organizations

(Weerawardena et al., 2006). This is a significant contribution to the body of knowledge as learning from markets can now be added as a new antecedent variable of IJV marketing performance and included in any multivariate model developed to explain IJV marketing performance in emerging economies.

Internal learning also had a significant impact on IJV marketing performance. This finding highlights the role of firm specific effects on a firm's profitability (Eriksen and Knudsen, 2003) and suggests the need to explore the internal factors driving a firm's knowledge acquisition efforts through internal sources. Furthermore, it highlights the need to learn from both internal and external sources for enhanced IJV marketing performance. As with market focused learning this is a significant contribution to the body of knowledge as internal learning can also be added as a new antecedent variable of IJV marketing performance and included in any multivariate model developed to explain IJV marketing performance in emerging economies.

Although the innovation literature provides evidence to suggest that firms learn through markets, internal and external sources, these learning activities have received limited attention as organizational capabilities having the potential to contribute significantly to performance outcomes in international marketing. This study's finding overcomes this void in the literature finding that organizational innovation enables IJVs to achieve enhanced marketing performance. Furthermore, prior research has focused primarily on product and process innovations paying scant attention to managerial systems and marketing innovations. The findings suggest that the broader innovative activities of products, processes, marketing and managerial systems enable a firm to build an effective and differentiated customer value proposition enabling enhanced marketing performance outcomes.

REFERENCES

- Allen, T. J. 1977. *Managing the Flow of Technology*. Cambridge, MA: MIT Press.
- Atuahene-Gima, K. 1993. Determinants of technology licensing intentions: An empirical analysis of Australian engineering firms. *Journal of Product Innovation Management*, 10: 230-240.
- Barney, J. B. 1991. Firm resources and sustainable competitive advantage. *Journal of Management*, 17: 99-120.
- Calantone, R. J., Kim, D., Schmidt, J. B., & Cavusgil, S. T. 2006. The influence of internal and external firm factors on international product adaptation strategy and export performance: a three country comparison. *Journal of Business Research*, 59(2): 176-185.
- Cavusgil, S.T., & Zou, S. 1994. Marketing strategy-performance relationship: An investigation of the empirical link in export market ventures. *Journal of Marketing*, 58(1): 1-21.
- Cohen, W., & Levin, R. 1989. Empirical studies in innovation and market structure. In R. Schmalensee, (Ed.), *Handbook on Industrial Organization*, Vol. 2: 1059-1101. New York: Elsevier.
- Cohen, W. M., & Levinthal, D. A. 1990. Absorptive capacity: a new perspective on learning and innovation. *Administrative Science Quarterly*, 35: 128-152.
- Crocombe, G. 1991. *Upgrading New Zealand's Competitive Advantage*. New Zealand: Oxford University Press.
- Damanpour, F. 1991. Organisational innovation: a meta-analysis of effects of determinants and moderators. *Academy of Management Journal*, 34(3): 555-590.
- Day, G.S. 1994. The capabilities of the market-driven organization. *Journal of Marketing*, 58: 37-51.
- Dhanaraj, C., & Beamish, P. W. 2003. A resource-based approach to the study of export performance. *Journal of Small Business Management*, 41(3): 242-261.
- Dixon, N. M. 1992. Organisational learning, a review of literature with implications for HRD professionals. *Human Resource Development Quarterly*, 3: 29-49.
- Dodgson, M. 1990. Technology strategy in small and medium-sized firms. In Z. J. Acs and D. B. Audretsch (Eds.), *The Economics of Small Firms: A European Perspective*: 157-167. Boston, MA: Kluwer Academic Publishers.

- Durand, T. 1988. R&D programmes competencies matrix: analysing R&D expertise within the firm. *R&D Management*, 18: 312-320.
- Eriksen, B., & Knudsen, T. 2003. Industry and firm interaction: Implications for profitability. *Journal of Business Research*, 56(3): 191-199.
- Geringer, J.M., & Hebert, L. 1991. Measuring performance of International Joint Ventures. *Journal of International Business Studies*, 22(2): 249-263.
- Gouri, P., Lutz, C., Tesfom, G., & Eritrea, A. 2003. Using networks to solve export-marketing problems of small and medium-sized firms from developing countries. *European Journal of Marketing*, 37(5/6): 728-752.
- Huber, G. 1991. Organizational learning: the contributing processes and literature. *Organisation Science*, 2: 88-115.
- Hyvarinen, L. 1990. Innovativeness and its indicators in small and medium-sized industrial enterprises. *International Small Business Journal*, 9: 64-74.
- Johnson, J. L., & Arunthanes, W. 1995. Ideal and actual product adaptation in U.S. exporting firms. *International Marketing Review*, 12(3): 31-46.
- Johnson, J. L., Black, G. S., & Sakano, T. 1993. The consequences of culture and conflict in international strategic alliances. In R. Varadarajan, and B. Jaworski (Eds.), *Marketing Theory and Applications*, Proceedings of the American Marketing Association Conference; 20-23 February; Newport Beach, CA: 32-37. American Marketing Association.
- Johnson, J. L., Cullen, J. B., Sakano, T., & Bronson, J. W. 200. Drivers and outcomes of parent company intervention in IJV management: A cross-cultural comparison. *Journal of Business Research*, 52: 35-49.
- Julian, C. C. 2005. *International Joint Venture Performance in South East Asia*. Cheltenham, U.K.: Edward Elgar,
- Julian, C. C. 2003. "Export marketing performance: A study of Thailand firms. *Journal of Small Business Management*, 41(2): 213-221.
- Kim, Y., Song, K., & Lee, J. 1993. Determinants of technological innovation in the small firms in Korea. *R&D Management*, 23: 155-162.
- Knudsen, T., & Madsen. T. K. 2002. Export strategy: A dynamic capabilities perspective. *Scandinavian Journal Management*, 18: 475-502.
- Lee, C., & Beamish, P. W. 1995. The characteristics and performance of Korean joint ventures in LDCs. *Journal of International Business Studies*, 26(3): 637-654.
- Lipparini, A., & Sobrero, M. 1994. The glue and the pieces: Entrepreneurship and innovations in small-firm networks. *Small Business Venturing*, 9: 125-140.
- Macpherson, A. D. 1992. Innovation, external technical linkage and small firm commercial performance: an empirical analysis from western New York. *Entrepreneurship and Regional Development*, 4: 165-183.
- Madsen, T. K. 1989. Successful export marketing management: Some empirical evidence. *International Marketing Review*, 6(4): 41-57.
- Makino, S., & Beamish, P. W. 1998. Performance and survival of joint ventures with non-conventional ownership structures. *Journal of International Business Studies*, 29(4): 797-818.
- March, J. G. 1991. Exploration and exploitation in organizational learning. *Organization Science*, 2: 71-87.
- March, J. G., & Simon, H. A. 1958. *Organisations*. New York: Wiley.
- Mowary, D. 1988. *International Collaborative Ventures in US Manufacturing*. Cambridge: Ballinger.
- Nunnally, J. C. 1967. *Psychometric Theory*. New York: McGraw Hill.
- Peteraf, M. A. 1993. The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, 14(3): 179-191.
- Porter, M. E. 1991. Toward a dynamic theory of strategy. *Strategic Management Journal*, 12: 95-117.
- Porter, M. E. 1990. *Competitive Advantage of Nations*. New York: Free Press.
- Rose, G. M., & Shoham, A. 2002. Export performance and market orientation: Establishing an empirical link. *Journal of Business Research*, 55: 217-225.
- Rothwell, R. 1992. Successful industrial innovation: critical factors for the 1990's. *R&D Management*, 22(3): 221-239.

- Rothwell, R. 1989. SMEs, inter-firm relationships and technological change. *Entrepreneurship and Regional Development*, 1: 725-739
- Schein, E. H. 1990. Organizational Culture. *American Psychologist*, 45: 109-119.
- Schumpeter, J. A. 1934. *The Theory of Economic Development*. Cambridge: Harvard University Press.
- Sinkula, J. M. 1994. Market information processing and organizational learning. *Journal of Marketing*, 58(1): 35-45.
- Slater, S. F., & Narver, J. C. 1995. Market orientation and the learning organization. *Journal of Marketing*, 59: 63-74.
- Snow, C. C., & Hrebnick, L. G. 1980. Strategy, distinctive competence and organizational performance. *Administrative Science Quarterly*, 25(2): 317-336.
- Styles, C., Patterson, P. G., & Ahmed, F. 2008. A relational model of export performance. *Journal of International Business Studies*, 39(5): 880-900.
- Weerawardena, J., O'Cass, A., & Julian, C. C. 2006. Does industry matter? Examining the role of industry structure and organizational learning in innovation and brand performance. *Journal of Business Research*, 59: 37-45.
- Zou, S., Fang, E., & Zhao, S. 2003. The effect of export marketing capabilities on export performance: An investigation of Chinese exporters. *Journal of International Marketing*, 11(4): 32-55.
- Zou, S., & Stan, S. 1998. The determinants of export performance: A review of the empirical literature between 1987-1997. *International Marketing Review*, 15(5): 333-356.
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The Effects of Entrepreneurial Orientation on SME Performance

Keywords: Innovativeness, Proactiveness, Risk Taking, SMEs performance

INTRODUCTION

In Malaysia, Small Medium Enterprises (SMEs) consists of three sub sectors: (1) general business (services), (2) manufacturing, (3) agriculture (National SME Development Council, 2010). SMEs are defined based on three criteria: micro enterprise, small enterprise and small medium enterprise. Micro enterprise as defined with annual sales turnover of RM250,000, and have less than 5 full time employees. Small enterprise are defined as company with annual sales turnover of RM250,000 to less than RM10 million, and have minimum 5 and maximum 50 full time employees. Meanwhile, small medium enterprise defined based on earning between RM10 million to RM25 million sales turnover annually, and between 51 to 150 full time employees (National SME Development Council, 2010). SMEs represent the backbone of the local economies in Malaysia, and SMEs are recognised as engines of economic growth behind Malaysia's industrial development. For example, SMEs accounted for 99.2% of all business establishment, SMEs contributed 32% of real GDP, and 19% of exports (Zubaidah & Gerry 2010).

SMEs' is plays important role in Malaysia, there are numerous challenges and barriers faced by SMEs in pertaining to the globalization market. For example, Saleh and Ndubisi (2006) explained that in globalized environment, SMEs are facing challenges such as lack of financing, low productivity, lack of managerial capabilities access to management and technology, and heavy burden from regulatory. Furthermore, lack of contribution from SMEs to the total value added due to their limitation to adopt technologies, employs skilled labors, increase production capacity, and expand their market. Meanwhile, high failure rates of small firms are largely attributed to weakness in financial management and marketing (McCaran-Quinn and Carson, 2003). These complications are bigger for SMEs as their economies of scale and their resources are fewer than those of big organizations. For example, MacGregor (2004) explained that SME characteristics are unique and significant different from big firms, and they have a flat structures organization, few management layers, and flexible and informal (Wiklund, 1999). Similarly, SMEs owner/manager are fully involved in daily operations due to the skills they have and lack of management expertise compared with large organization. The lack of resources is critical and has fundamental impact of SMEs performance. Although, SME's may be distinct from larger organizations in terms of how they integrate various elements such as knowledge, information, and innovations into a unique strategic orientations, however, SME's ability to develop distinguish strategy could be a key factor to compete with them. Therefore, SMEs need to emphasize on productivity, product quality, and radically innovative offering in order to compete successfully and gain competitive advantages in global market. Prominent entrepreneurship scholars argued that innovation, proactive, and risk taking are a constitutive element of entrepreneurship (Schumpeter, 1982, Lumpkin and Dess, 1996). Yet, does empirical research support this assumption? Are innovativeness, proactiveness, and risk taking lead the better performance for SMEs. Thus, this study attempts to investigate the effects of entrepreneurial orientation dimensions (innovativeness, proactiveness, and risk taking) on SMEs performance in globalization market.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Entrepreneurial Orientation (EO) and SMEs Performance

Entrepreneurial Orientation (EO) is defined as organization's predisposition to accept entrepreneurial processes, practices, and decision making, characterized by its preference for innovativeness, risk taking, and pro-activeness (Matsuno, Mentzer, & Ozsomer, 2002). Similarly, Lumpkin and Dess (1996, 2001) explained that an entrepreneurial orientation refers to the process, practices, and decision-making activities that lead to new market. Furthermore, Lumpkin and Dess (1996) identified entrepreneurial orientation into five dimensions: autonomy, innovativeness, risk taking, pro-activeness, and competitive aggressiveness. Previous research has identified various factors that determine entrepreneurial orientation across industries, countries, and cultures that cannot be generalized. For example, Kemelgor (2002) concludes that EO is characterized by cultural differences, and there are significant differences in the intensity of EO between U.S and Netherlands firms. Additionally, numerous scholars have been measured EO from innovativeness, risk-taking, and proactiveness (Li et al., 2008; Kreiser et al., 2002; Morries et al., 2002; Wiklund and Shepherd, 2005). However, there has been some debate in the literature concerning the dimensionality of EO. They argued that the EO construct is unidimensional (Covin & Slevin, 1989; Knight, 2000) and, consequently, the different dimensions of EO should relate to firm performance. Although, all EO dimensions are interrelated, however, the dimension of EO may vary independently (Kreiser et al., 2002), depending on the environmental, organizational, and cultural context when a firm engages in new entry (Rauch et al., 2009). In this context, EO refers to the willingness of a firm to be innovate in order to rejuvenate market offerings, take risks to try out new and uncertain products, services, and markets, and be more proactive than competitors toward new marketplace opportunities (Knight, 2007; Wiklund and Shepherd, 2005; Zahra and Covin, 1995).

Innovativeness

The innovativeness dimension of EO reflects a tendency to engage in and support new ideas, novelty, experimentation, and creative processes that may represents a basic willingness to depart from established practices and technologies (Lumpkin and Dess, 1996). A high level of technological

and/or product market innovation, it reflect an important indicators by which firms pursue new opportunities. Innovativeness is necessary to triumph over the barriers that threaten business performance, therefore, firms need to be more innovative in order to achieve competitive advantage. In this context, innovativeness plays important role in developing research and product development, technical expertise and knowledge transfer for future development (Li et al., 2008; McFarlin, 2005). Previous studied suggests that innovative firms will create extraordinary firm performance, economic growth, and applied creativity in business environment (Eisenhardt et al., 2010; Kropp et al., 2006; Rosenbusch et al., 2011; Wiklund and Shepherd, 2005). Therefore, hypothesize is:

H1. The relationship between innovativeness and SMEs performance will be high or low in globalization

Proactiveness

Proactiveness refers to how a firm relates to market opportunities in the process of new entry, seizing initiative and acting opportunistically in order to shape the environment, that is to influence trends and create demand (Lumpkin and Dess, 1996). Similarly, Knight (2000) defined proactiveness as taking initiative and aggressively pursuing ventures in an effort to shape environment in ways that benefit the firm. Additionally, Kropp et al. (2006) explained proactiveness is a opportunity seeking and forward looking in introducing new products for future demand. Although, proactive firms can achieve target premium segments, move faster advantages, and high return in capitalizing a market opportunity (Lumpkin and Dess, 2001; Zahra and Covin, 1995), however, it was unclear how proactiveness leads for SME's performance. For example, while a market oriented small firms which their resources and skills to compete with a big firms are limited, the small firms chance to capture competitive advantage from the big markets are slim. Therefore, the small firms competitive advantages depend on ability and capability to meet market environment. Thus, hypothesize is:

H2. The relationship between proactiveness and SMEs performance will be high or low in globalization

Risk taking

Risk taking reflects the propensity to devote resources to projects that have substantial possibility of failure associated with opportunity to achieve high profit (Knight, 2000; Miller and Friesen, 1982). In this sense, the risk taking SMEs may successfully lead to high performance if they able to turn the risk taking into profitable firms by performing their capabilities and skills in the marketplace (Lumpkin and Dess, 1996). Although, previous research find to support that risk taking will lead to high firm performance variation, it may some projects fail and others succeed (McGrath, 2001), however, the relationship between risk taking and firm performance is lack of consensus (Wiklund and Shepherd, 2005). For example, Kropp et al. (2006) suggests that SMEs perception of risk as the uncertainty and potential losses associated with the outcomes which may follow from a given set of behaviors. In this sense, for SMEs who are more concern about risk that are more perform better. Therefore, hypothesize is:

H3. The relationship between risk taking and SMEs performance will be high or low in globalization

METHODOLOGY

Questionnaire development

A seven-point Likert scale was used to measure entrepreneurial orientation dimensions and SMEs performance. Innovativeness, proactiveness, and risk taking were measured by adapting indicators suggested by Knight (2000), and Lumpkin and Dess (2001). Meanwhile, SMEs performance indicators were adapted from Li et al. (2008), Knight (2000), and Wiklund and Shepherd (2005)

Research design and sampling

Malaysia Federation of Manufacturing Companies (FMM) directory and Malaysian SME listing business directory handbook were used as sampling frame for this study. A total of 200 SMEs from electronic and electrical sector, and 250 SMEs from food and beverage industries were chosen randomly. SMEs involved in this study were SMEs have annual sales between RM10 million to RM25 million, and between 51 to 150 full time employees. A total of 450 SMEs were successfully contacted by mail and follow up by phone requesting them to participate in this study, yielding a response rate of 15.6 percent (70 SMEs). The questionnaires were mailed along with a cover letter introducing and explaining the purpose of the study, stressing the confidentiality of responses and enlisting the response of the participant as well as a smaller envelop for the SMEs reply purpose. The majority of manufacturing companies are located in the central parts of Malaysia and around the country's major industrial regions (Kuala Lumpur, Selangor, and Melaka).

ANALYSIS AND RESULTS

Descriptive statistic

The descriptive statistic shows that 67.1 percent (47 SMEs) came from consumer products, and 32.9 percent (23 SMEs) came from industrial. While for number of employees, notice that majority of SMEs having less than 50 employees (61.4%) while 38.6% of SMEs owned more than 50 employees.

Factor analysis

Table. 1 shows the factor analysis results. The principal component factor analysis with varimax rotation approach were used, and resulted in five factors with factor loading ranging from 0.783 to 0.957 indicating that each item loaded significantly in the corresponding factor. In addition, Cronbach alpha for each factor ranging from 0.731 to 0.947 for innovativeness, proactiveness, risk taking, globalization, and performance, respectively.

Table 1. Factor Analysis

Item	Factor Loading
Factor 1: Globalization (alpha = 0.933)	
Growth opportunities for seller have significantly increased/decreased	0.889
The market of our competitor have become substantially less/more predictable	0.783
Our key competitor have become <u>substantially</u> more/less hostile	0.858
Many of our key competitor are headquartered abroad (not in Malaysia)	0.823
Most of our key competitor have distribution channels in Asia and Europe	0.872
Good and capital in our industry flow across national border with relative ease	0.901
Competition from firms based in Asia has substantially	0.806
Factor 2: Proactiveness (alpha = 0.927)	
Is very seldom / often the first business to introduce new product or service, <u>administrative</u> techniques, operating technologies, etc.	0.932
Typically avoid competitive clashes, preferring 'live and let live' posture / adopt a <u>very</u> competitive 'undo the competitors' posture	0.896
<u>typically</u> adopts a cautious, 'wait and see' posture to minimize costly decision/adopts a bold, aggressive posture to maximize exploiting potential opportunities	0.885
Factor 3: Innovativeness (alpha = 0.919)	
No/very many new lines of product or service	0.927
Changes in product or service line have been mostly a minor nature/been quite dramatic	0.907
Strong emphasis on the marketing of tried and true products or services/strong emphasis on R&D, technological leadership, and innovations	0.857
Factor 4: Risk Taking (alpha = 0.731)	
Have strong proclivity for low-risk projects / high-risk projects	0.853
Believe that, owing to the nature of the environment, it's best to explore it gradually <u>via</u> careful, incremental <u>behavior</u> / bold and wide ranging acts are necessary to <u>achieve</u> the firm's objective	0.850
Factor 5: Performance (alpha = 0.947)	
The market share of our #1 largest volume product <u>line</u> is	0.957
The market share of our #2 largest volume product line is	0.878
Our sales growth since 2000 has been	0.830
Our average ROA is presently	0.862
Our pre-tax profitability is presently	0.888
Average profit of our international sales	0.887
Our average ROI over last 3 years has been	0.845

Regression Analysis

The hypotheses testing was tested by the simple regression analysis for high and low globalization group. SMEs were categorized into high and low globalization group using the median of globalization. Subsequently, 35 SMEs were under low globalization group, and other 35 SMEs formed in the high globalization group. Table. 2 (next) shows result of regression analysis.

Table 2. Regression Analysis

	Globalization		Hypothesis
	Low	High	
Innovativeness ==> Performance	0.305**	0.618**	Supported
Proactiveness ==> Performance	0.240*	0.558**	Supported
Risk Taking ==> Performance	0.178*	0.928**	Supported

* p < 0.05, ** p < 0.01

From Table 2 showed that there were significant relationship between innovativeness, procativeness, and risk taking on SMEs performance, thus, H1, H2, and H3 were supported. Interestingly, the finding of this study was consistent with previous studies of (Knight, 2000; Li et al., 2008; Mostafa et al., 2006; Rauch et al., 2009; Wiklund and Shepherd, 2005).

DISCUSSION AND IMPLICATION

The results of this study show that innovativeness, proactiveness, and risk taking have a significant relationship with SME's performance. The finding suggest that SMEs involved in high globalization are more innovative, proactive, and risk taking. These findings suggest that those SMEs which were highly exposed to globalization or actively involved in import and export will tends to pursue for innovativeness, proactiveness and risk taking compared with low globalization. For example, Rosenbusch et al. (2011) explained that SMEs benefit significantly more from a strategic innovation orientation, and SMEs can benefit from a positive perception by market participants, obtaining better collaboration partners, and attracting highly skilled employees.

Although, majority SMEs views that globalization may achieve the better profit and performance. However, some SMEs viewed that involved in globalization market are high risk business, and struggling with globalization forces than domestic markets. For example, Kropp et al. (2006) suggests that opportunities in globalization market tend to be more attractive and profitable, but this suggestion may not be accurate as majority SMEs in this study exported their product and service in ASEAN countries where some of country have lack of market stability. In order to achieve competitiveness in globalization market, SMEs need to focus on promotion program, trade fare exhibition, and export market conference in order to encourage export to other countries (Middle East, Europe, and US). This finding has significant implication for SMEs to better understanding how innovativeness, proactiveness, and risk taking can effectively be turned to globalization market. In order to get benefits of this dimensions, SMEs need to be dedicated and managed diligently in innovative task force.

REFERENCES

- Covin, J.G., & Slevin, D.P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, 10: 75-87
- Eisenhardt, K. M., Furr, N. R., & Bingham, C. B. (2010). Microfoundations of performance: balancing efficiency and flexibility in dynamic environments. *Organization Science*, 21(6), 1263-1273.
- Kemelgor, B. H. (2002). A comparative analysis of corporate entrepreneurial orientation between selected firms in the Netherlands and the United States. *Entrepreneurship and Regional Development*, 14(1), 67-87.
- Knight, G.A. (2000). Entrepreneurship and marketing strategy: The SME under globalization. *Journal of International Marketing*, 8(2), 12-32.
- Kreiser, P.M., Marino, L.D., & Weaver, K.M. (2002). Assessing the psychometric properties of the entrepreneurial orientation scale: a multi-country analysis. *Entrepreneurship Theory and Practice*, 26(4), 71-94.

- Kropp, F., Lindsay, N.J., & Shoham, A. (2006). Entrepreneurial, market, and learning orientations and international entrepreneurial business venture performance in South African firms. *International Marketing Review*, 23(5), 504-523.
- Li, Y., Zhao, Y., Tan, J., & Liu, Yi (2008). Moderating effects of entrepreneurial orientation on market orientation-performance linkage: Evidence from Chinese small firms. *Journal of Small Business Management*, 46(1), 113-133.
- Lumpkin, G.T., and Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(1), 135-172.
- Lumpkin, G. T. and Gregory G. Dess. (2001). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of Business Venturing* 16, 429-451.
- Matsuno, K., Mentzer, J.T., & Ozsomer (2002). The effects of entrepreneurial proclivity and market orientation on business performance. *Journal of Marketing*, 66(3), 18-32.
- McCaran-Quinn, D. and Carson, D. (2003). Issues which impact upon marketing in the small firm. *Small Business Economic*, 21(2), 201-213.
- McFarlin, D. (2005). The role of entrepreneurial orientation in stimulating effective corporate entrepreneurship. *Academy of Management Executive*, 19(1), 147-156.
- McGrath, R. G. 2001. Exploratory learning, adaptive capacity and the role of managerial oversight. *Academy of Management Journal*, 44(1): 118-131.
- MacGregor, R.C. (2004). Factors associated with formal networking in regional small business: some findings from a study of Swedish SMEs. *Journal of Small Business and Enterprise Development*, 11(1), 60-74.
- Miller, D., & Friesen, P. (1982). Innovation in conservative and entrepreneurial firms: Two models of strategic momentum. *Strategic Management Journal*, 3(1), 1-25.
- Morries, M., Schindehutte, M., & LaForge, R. (2002). Entrepreneurial marketing: a construction for integrating emerging entrepreneurship and marketing perspectives. *Journal of Marketing Theory and Practice*, 10(4), 1-18.
- Mostafa, R.H.A., Wheeler, C., & Jones, M.V. (2006). Entrepreneurial orientation, commitment to the Internet and export performance in small and medium sized exporting firms. *Journal of International Entrepreneurship*, 3, 291-302.
- Rauch, A. , Wiklund, J., Lumpkin, G.T. , Frese, M. (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrepreneurship Theory and Practice*, 33(3), 571-814.
- Rosenbusch, N., Brinckmann, J., & Bausch, A. (2011). Is innovation always beneficial? A meta-analysis of the relationship between innovation and performance in SMEs. *Journal of Business Venturing*, 26, 441-457.
- National SME Development Council. (2010). *SME Annual Report 2009/2010*. Kuala Lumpur: National SME Development Council.
- Saleh, A. S. and Ndubisi, N. O. (2006). An evaluation of SME development in Malaysia. *International Review of Business Research Papers*. 2 (1), 1-14.
- Schumpeter, J.A. (1982). *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*. Transaction Publishers, Piscataway, N.J.
- Wiklund, Johan. (1999). The sustainability of the entrepreneurial orientation-performance relationship. *Entrepreneurship Theory and Practice* 24, 37-48.
- Wiklund, Johan and Dean Shepherd. (2005). Entrepreneurial orientation and small business performance: A configurational approach. *Journal of Business Venturing*, 20: 71-91.
- Zahra, S.A., & Covin, J.G. 1995. Contextual influences on the corporate entrepreneurship performance relationship: A longitudinal analysis. *Journal of Business Venturing*, 10: 43-58.

Zuraidah, Mohd Don. & Garry, K. (2010). Planning for the future SMEs in Malaysia. In Zuraidah Mohd Don et al (Ed.). *Small and Medium Enterprises in Malaysia: Potential and Prospects*, 1-15. MOHE, Putrajaya.

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Branding in Malaysia's Small and Medium Sized Enterprises: Perspective, Practice and Performance

INTRODUCTION

Businesses all over the world recognize the phenomenal value of brand as a driver for companies' profitability. A strong competitive brand differentiates a company from its rivals, attracts attentions, represents quality, generates confidence and gains consumers' loyalty. Significant literature reviews in marketing have substantiated that branding management has become a very important strategy that transforms transactional marketing to relationship marketing and ordinary companies to successful companies (Aaker 1991; Keller 2003; Gregory 2004). Rationally, branding should be the main focus for all businesses, big or small, in attempt to be ahead of their competitors (Keller 2003; Kotler 2005; Wong and Merrillees 2005; Abimbola 2005; Sexton 2008, Ille and Chailan 2011).

Malaysian businesses in general lack branding appreciation and suffer from branding misconceptions (Sh. Ahmad *et al.* 2007). In a more unfavorable situation, Malaysian products are being repackaged and rebranded by other countries and lose the deserved profits. A report by Malaysia's Industrial Master Plan 3 (IMP 3) pointed that Malaysian companies have the tendencies to regard branding as necessary only during the product introduction stage (Malaysia, 2006a). Branding is often wrongly referred to as an exercise involving the launching or changing of company logo, design style, color scheme and corporate slogans. However the fundamental strategic developments that involve the process, people, and programs for value creation purposes are often ignored. There are two obvious problems resulted from this misconception: first, the inability to realize the real value of branding or its intangible benefits for long term competitiveness and sustainable customer relationship; second, the failure to grow brand as a strategic asset for a company performance and value.

To improve the situation, the country must start with a sufficient analysis on its current branding situation. In particular, there is no statistically validated measure of branding efforts amongst SME entrepreneurs and their impacts on business performance to lend a satisfactory guideline for branding stakeholders to maneuver their policies and programs to assist the SME entrepreneurs. Unlike branding issues on big businesses which have gained wider academic coverage, the interest on SME branding is still in early stage of recognition and attention. However, although few in numbers, recent in its development, and mostly based on cases from advanced nations, the previous studies on small businesses branding have shed some lights in the field and suggested the pivotal role of branding for small businesses and SME entrepreneurs (for example: Abimbola 2005; Wong and Merrillees, 2005; Krake, 2005; Napoli *et al* 2005). It is also interesting to note that many emerging countries are starting to embrace branding strategy to achieve marketing maturity, visibility and efficiency (Ille and Chailan, 2011).

In exploring and explaining the significance of branding as a strategic element or a prerequisite for SME business performance, this research has relied on previous literatures to propose a new theory based model referred to as SME branding dynamics model as a research framework. The concept is based on a premise that branding belief or perspectives among SME entrepreneurs determine their actual branding practices which consequently predicts business performance. The proposition bridges gaps in the existing literature in several ways. First, it synthesizes theories from previous researches particularly from disciplines of marketing, branding and entrepreneurship to achieve a more holistic perspective of the issue. Second, in establishing elements for branding practices, the study incorporates both of the general branding basics and specific SMEs branding essential. Thirdly it enriches the analysis techniques in branding studies by the adoption of structural equation modeling (SEM) which is a comprehensive multivariate technique that combines aspects of factor analysis and multiple regressions to simultaneously examine a series of relationships in the branding realization model and test the model fit.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

SME Entrepreneurs and Branding in Malaysia

The word “entrepreneur” was initially institutionalized in Malaysia in the middle of 1970 during the conception and establishment of the New Economic Policy (NEP). Since then, entrepreneurship development has become important economic and political agendas and regarded as crucial to balance the achievement structure of economy in this multi-race society. The word ‘entrepreneur’ reflects people who create and run an enterprise and the tendency to emphasis on the word ‘entrepreneur’ instead of trader in the NEP is due to different characters of entrepreneurs and the size of their start-ups (Adnan Alias, 1992). With the encouragement on entrepreneurship, SME business openings are flourishing in the country. However, most are regarded as backroom boys for the global players and stay in the comfort zone of servicing original equipment manufacturer (OEM) and business process outsourcing (BPO) industries. They normally act as commodity suppliers or market followers without brand dominance. Obviously those that get the limelight and reap the profits are the center stage performers or the brand players mostly from the west.

It is a very high time for Asian companies, particularly from Malaysia, to undergo a paradigm shift from being backroom players, commodity manufacturers or “me too” producers to being effective brand creators. The shift obviously requires the brand entrepreneurs to brace and overcome their branding issues and challenges which may be of general global branding problems or local peculiarities. Schutte in Roll (2006) estimates that the contribution of intangible assets to market value of Asian companies is only between 30 to 50 percent when most of the western branded consumer goods companies are enjoying more than 75 percent. This branding endeavor must start with the identification on the existing critical branding factors and their relationships to performance which may serve as a benchmark for further improvement agendas. Branding for SMEs also considerably requires the perspective and involvement of the entrepreneurs in influencing change as well as the understanding on possible budgetary constraints (Horan *et. al.* 2011). It also entails different strategy as SMEs are mostly young companies. As new start-ups, their branding practices should not be compared to established or multinationals firms (Bresciani and Eppler, 2010). It is interesting to note that many of innovations today are the result of creative mind of entrepreneurs operating from small scale businesses. The flexible structure of small entrepreneur organizations and the entrepreneurial spirit within the organizations act as a catalyst for the creative process towards innovations. However, the very same entrepreneurs and organizations normally lack the capital and sophistications in branding to push forward their innovations. There are also visible variation between academic theory and actual SMEs marketing practice (Parrott, *et al.* 2010) which SMEs must address in strengthening their competitiveness.

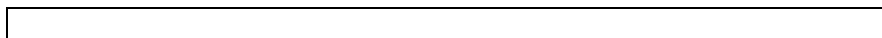
Conceptual Framework

Brand is about customer perceptions towards the offerings and many times it is larger than the product itself. It is also about consumer goodwill resulting from favorable perceptions, associations, and satisfactions with the brand experience (Kerin and Peterson 2004). According to Aaker (1991),

brand building is a distinguishing character for modern marketing with the idea to move the product beyond commodities, to reduce price sensitivity and to accentuate differentiation. Randal (1997) argues that brands are the fundament basis for business survival and managers must really understand how their brand works and manage them effectively. Furthermore, Keller (2003) point out that branding is about enlarging products and services with the power of brand equity which is an added value to a brand name and its actual functions. Brands, whether they are manufacturer or retail owns, have great influence in customers' purchase decisions (Broyles, *et. al.* 2011) and involves the whole organization including the people, the structure, the program and the market environment to work together in a well integrated manner to the advantage and profitability of the organization (Haigh and Knowles, 2005; Kerin and Peterson, 2004). In the context of Asian companies, Roll (2006) emphasized that companies could no longer rely on low cost and manufacturing prowess as competitive advantages. To move forward, they must be able to build strong brands and leveraging on high brand performance.

The conceptual framework for SME branding dynamic model as well as the relationships hypothesizes between the constructs is shown in Figure 1. Branding perspective is an exogenous variable to branding practice and both of these variables are predictors to branding performance. Branding performance consequently predicts financial performance. The major theories contributing to the model are namely theory of resource based view (RBV) and theory of reasoned action (TRA). RBV theory basically argues that the competitive advantages of firms are determined by their resources which are not easily imitable or substitutable by competitors (Barney, 1991; Peteraf, 1993; Hoopes, 2003). RBV forms the most fundamental aspect in explaining the importance of accomplishing competitive advantages for firms aspire to achieve sustainable business performance. In this research, the competitive advantage is translated into branding resources including certain branding practice which are considered as inimitable and unique assets of businesses. The resource-based view asserts that sustainable competitive advantage derives from certain key resources which are apposite and have obstacles to duplication (Fahy and Smithee 1999).

TRA contributes in explaining the role of branding perspective in determining branding practice. TRA was first introduced by Fishbein and Ajzen (1975). The theory basically claims that people's attitude towards a behavior predict their behavioral intention and consequently the behavior itself. It also argues that subjective norm affects behavioral intention. However, reviews done on 185 independent studies related to TRA found that subjective norm construct is in general a weak intention predictor (Armitage and Conner, 2001). TRA, however, has some limitations as some researchers argue that in actual practice, the presence of self-efficacy which comprises of not just attitudes but also abilities and cognitive skills may facilitate or impede performance of the behavior (Bandura, 1977). Fazio *et al.* (1986) argued that behavior are directly guided by attitude that are highly accessible from memory and have shown high correlations between attitudes and behavior among people with highly accessible attitudes and thus revising TRA into Attitude Accessibility Theory (AAT). This suggests a drop on 'intention' variable from TRA.



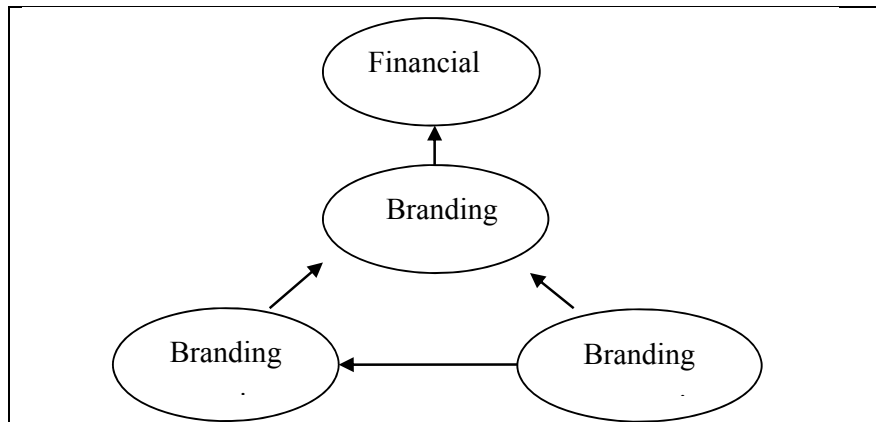


Figure 1: The Conceptual Framework for Branding Dynamics Model

Relationship between Branding Perspective and Branding Practice

To achieve effective branding, Bearden, Ingram and La Forge (2001) point out that marketers need to adopt appropriate marketing perspective in responding to marketing opportunities. As branding is an integral part of marketing and there is no earlier guide on branding perspective, the marketing perspective may serve as a basis for branding perspective. Spence and Essoussi (2010) suggest that the founders' belief determines core competencies of a firm which are also relate to brand identity. Amongst the important perspective include beliefs in the importance of long term customer relationships, social responsibilities, technology orientation, entrepreneurial innovations, global approaches, productivity and customer value (Bearden *et. al.* 2001). Global approaches, although considered as integral by many businesses may not able to offer sufficient explanation for SME behavior. Instead of globalization attitude, SMEs are suggested to adopt "localization" perspective which includes community inclusiveness and meaningful interpersonal relations with customers (Stefaniak *et. al.* (2010). Ethical considerations particularly of social responsibility and green ecology perspectives must be prioritized. The focus of social responsibility should not just be on customers but also other related stakeholders and the initiatives should be integrated with marketing activities (Maignan and Ferrell, 2004) and relevant to ensure its positive contribution and avoid harming market value (Luo and Bhattacharya, 2006). In addition, technology is regarded as an enabler of branding (Wright, 2002) and an integral factor for realizing business visions (Willcocks and Plants, 2001). O' Cass and Ngo (2007) suggest that businesses with strong innovative culture resulted in better brand building. In other words, the branding perspective is expected to shape the branding management practice and thus the first hypothesis is established:

Hypothesis 1: Branding perspective is a positive determinant of branding practice.

Relationship between Branding Practices and Branding Performance

Branding Practices is a complex management practice that involves the design and implementation of marketing programs and activities to build competitive brand and achieve the brand vision (Keller 2003, Temporal 2006). Branding management is an integral aspect of brand building (Aaker, 1991, Keller, 2003, Krake, 2005, Kapferer, 1999). For example, Krake (2005) explains that effective branding management is a fundamental basis for branding performance while Chao and Spillan (2010)'s study links marketing responsiveness significantly to SME firm performance. Aaker (1991) suggests that branding management is associated to establish brand equity elements of brand loyalty, brand awareness, brand associations, perceived quality, and branding performance. Although a substantial research on branding management have been studied in several industries (Napoli *et.al* 2005, Krake 2005, Keller 2003, Abimbola 2001), little attention have been given in the context of SMEs. At this juncture, the branding perspective and practice are both anticipated to influence branding performance and thus the following hypotheses are established:

Hypothesis 2: Branding perspective is a positive determinant of branding performance.

Hypothesis 3: Branding practice is a positive determinant of branding performance.

Relationship between Branding Performance Leads to SMEs Financial Performance

Kotler (2005) describes brand as the crucial element of business performance. There are several criteria suggested to evaluate performance of SMEs which include the sales turnover and profit margin growth and trend. Besides financial performance, branding performance is also a good predictor for business performance (Wong and Merrillees 2008). As there are many ways of measuring brand performance, the more realistic approach is to select performance measure based on the practicality and accessibility of the required data. Branding performance may be assessed subjectively or objectively using many available measures such as brand equity and brand strength. Branding performance may also be based on the perceptions of the brand owners on their branding achievements (Wong and Merrillees 2008). Aaker (1991) points out that brand loyalty, awareness, associations, quality and other proprietary brand assets may also be applied to assess brand value from managerial perspective. Branding performance must be continuously monitored as it forms the basis of company's goodwill which is the most valuable asset to ensure the financial performance and survivability of a business. Thus the third hypothesis is suggested:

Hypothesis 4: Branding performance is a positive determinant of financial performance.

METHODOLOGY

A stratified random sampling was used in this study. To develop this stratified technique, the sampling of the entrepreneurs was initially based on the list of SME entrepreneurs derived from relevant authorities for Malaysia SME's development namely Small and Medium Industry Development Corporation (SMIDEC) and Majlis Amanah Rakyat (MARA). As the list was not comprehensive, it was later extended to cover those SMEs which were not listed but were in operation and willing to participate in the survey. The research was conducted in three new economic regions of Malaysia namely the Iskandar Malaysia, Northern Corridor Economic Regions (NCER) and East Coast Economic Region (ECER). NCER covers Penang, northern Perak, Kedah and Perlis, while ECER covers Terengganu, Kelantan and Pahang.

For questionnaire design, branding perspective was measured by adapting the scale items from Bearden *et al.*, (2001) while branding practice was measured by adapting from Keller (2003) and Aaker (1991). Branding performance was adapted from Aaker (1991) and Kapferer (1997), and financial performance was adapted from Wong and Merrillees (2007). For each of the construct, the researcher proposed a set of theory-based reflective scale items judged by three marketing experts that were considered sufficient and appropriate to represent the construct domain. With minor adjustments, all experts were highly agreed with the established items, lending face validity to the study. A pretest on a sample of thirty (30) entrepreneurs was also administered for normality check and further item purifications. Based on the pretest feedbacks, few items were reworded for a comfortable length of time reading and answering the survey.

ANALYSIS AND RESULTS

Demographics

A total of 900 questionnaires were distributed to SME entrepreneurs of new economic regions of Malaysia (300 to NCER, 300 to ECER and 300 to Iskandar) and 184 were returned (20.4% response rate). About 11 of the returned survey were not completed and thus rejected for the analysis. The sample characteristics includes male (n=138, 79.8%) while female is only about one fifth of the total respondents (n=35, 20.2%). Meanwhile, in terms of race, the sample comprised of Malay (n=104, 60.1%), Chinese (n=55, 31.8%), Indian (n=12, 6.9%) and other (n=2, 1.2%).

Measurement Model Evaluation

Confirmatory factor analysis (CFA) was used to specify the pattern by which each measure loads on a particular factor (Anderson & Gerbing, 1998; Byrne 2001; Hair *et. al* 2006). Prior to this analysis, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, Bartlett's test of sphericity and Cronbach α test for reliability are measured and the result as shown in Table 1 indicates the data appropriateness for further testing.

Table 1: Test of Sphericity, Measure of Sampling Adequacy and Reliability

Constructs	Bartlett's Test	KMO	Cronbach α
Branding Perspective	$\chi^2 = 126.640$, df =6, sig.<0.001	0.73	0.71
Branding Practice	$\chi^2 = 207.992$, df =6, sig.<0.001	0.80	0.80
Branding Performance	$\chi^2 = 116.240$, df =3, sig.<0.001	0.58	0.69
Financial Performance	$\chi^2 = 305.871$, df =3, sig.<0.001	0.68	0.87

Table 2 shows the CFA result on good fit indices for exogenous variables of branding perspective and branding practice as well as endogenous variables of branding performance, and financial performance. The incremental index for this analysis is revealed by the Comparative Fit Index (CFI) and Tucker Lewis Index (TLI) while the absolute fit index is shown by the Root Mean Square Error of Approximation (RMSEA). For goodness of fit test χ^2 , the preferred value is non significant χ^2 with $p > .05$ and $1 < \chi^2/df$ ratio < 2.00 . The preferred value for CFI and TLI is above 0.90 while the preferred value for RMSEA is below 0.08. These selected indices are considered sufficient to determine model fit (Schreiber, *et al.*, 2006; Mohamad Sahari Nordin 2001; Hair *et. al.*, 2006). Explaining the four latent variables or constructs validity are indicators with a rule of thumbs that the standardized loading estimates should be 0.5 or higher and ideally 0.7 or higher (Hair, *et. al.*, 2006).

Table 2: CFA Result

Fit Indices	branding perspective & practice	branding performance & financial performance
χ^2	23.35 (19 df, $p = 0.22$)	8.08 (8 df, $p = 0.42$)
CFI	0.98	1.00
TLI	0.97	1.00
RMSEA	0.054	0.008

Table 3 displays complete standardized loadings of indicators of each constructs where all 14 loadings meet the requirement with an exception of only one indicator with falls slightly below 0.5. However, with strong fit indices, the indicator is retained for further structural test. Another important concern with the measurement model is on the issue of sample size adequacy. The model assumption on adequate sample size for this research is based on several SEM experts. Loehlin (1992) concluded that for a model with two to four constructs, the number of cases should be within the range between 100 to 200 cases. Smith and Langfield Smith (2004) suggested a rule of thumb of 100 for a minimum sample and encouraged a sample of 200 to generate valid fit measures and avoid inaccurate inferences. Schreiber's *et al.* (2006) reviews on 16 educational articles applying SEM between 1994 and 2002 revealed that there are no exact rules on the number of participants but most research opts for a ratio of 10 participants per estimated variables. Hair, *et al.*, (2006) argued that previous guidelines of "maximize sample size" are no longer appropriate. Sample size should be based on a set of factors. For example, for a SEM model with five or fewer constructs and each with 3 or more observed variables and with high communalities of 0.6 or higher, the model can be estimated with sample size from 100 to 150. As this analysis shows competing models before suggesting the one that best fit the data, the number of latent constructs considered proceeds from six to five or less. Considering each construct has between three and four observed variables where most communalities or squared multiple correlations for measured variables are adequate, the usable sample of 173 gathered is sufficient to estimate the model.

Table 3: Complete Standardized Factor Loadings of Indicators to Constructs

Indicators	Constructs	Estimate
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*Branding in Malaysia's Small and Medium Sized Enterprises:
Perspective, Practice and Performance*

Customer relationship (pv2)	<---	Branding Perspective	.623
Social responsibility (pv4)	<---	Branding Perspective	.619
Technology (pv6)	<---	Branding Perspective	.553
Innovation (pv7)	<---	Branding Perspective	.698
Brand delivery (p1)	<---	Branding Practice	.722
Brand positioning (p3)	<---	Branding Practice	.779
Brand pricing (p6)	<---	Branding Practice	.679
Brand policy (p14)	<---	Branding Practice	.670
Brand awareness (b1)	<---	Branding Performance	.725
Brand quality (b3)	<---	Branding Performance	.879
Brand competitiveness (b5)	<---	Branding Performance	.422
Sales growth (g1)	<---	Financial Performance	.955
Profit before Tax growth (g2)	<---	Financial Performance	.869
Market growth (g4)	<---	Financial Performance	.707

Structural Model Evaluation

Using SEM, the structural model was tested. Each indicator or measured item is set to load on only one latent construct and there is no cross-loading. As such the measurement model for each construct is considered congeneric or sufficiently constrained for good measurement properties and constructs validity (Hair, *et al.*, 2006). Based on the available theories, the following Table 4 indicates the selected values used for this research to determine the fit indices.

Table 4: Characteristics of Fit Indices Demonstrating Goodness of Fit

Fit Indices	Characteristics
Goodness of fit test χ^2	The χ^2 to degrees of freedom ratios should be in the range of 2 to 1 or 3 to 1 for an acceptable fit between the hypothetical model and the sample data (Carmines and McIver, 1981). <i>Selected Value:</i> Preferably non significant χ^2 with $p > .05$ and $1 < \chi^2/df$ ratio < 2.00
CFI	<ul style="list-style-type: none"> • .90 or better (Mohammad Sahari Nordin, 2001) • .95 or better for $N < 250$ and $12 < m < 30$ (Hair, <i>et al.</i>, 2006). <i>Selected Value:</i> CFI $\geq .90$
TLI	<ul style="list-style-type: none"> • .90 or better (Mohammad Sahari Nordin, 2001) • .95 or better for $N < 250$ and $12 < m < 30$ (Hair, <i>et al.</i>, 2006). <i>Selected Value:</i> TLI $\geq .90$
RMSEA	<ul style="list-style-type: none"> • Values $< .08$ (Hair, <i>et al.</i>, 2006; Mohammad Sahari Nordin, 2001) <i>Selected Value:</i> RMSEA $< .08$

The subsequent Figure 2 shows the fitted research model which indicates the acceptable goodness-of-fit indices. The standardized parameter estimates and significant values for the hypothesis relationships are presented in Table 5. The research model indicates the acceptable goodness-of-fit indices model. The chi-square is significant ($\chi^2 = 92.209$, $df = 73$, p -value = $> .064$) with χ^2/df ratio of 1.263 which are desirable to reflect good fit. The incremental fit index of TLI, the goodness of fit index of CFI and the absolute fit index of RMSEA also performed very well for the structural model with value of 0.97, 0.98 and 0.039 respectively. Overall, the values are close to the threshold and thus they represent an acceptable model fit.

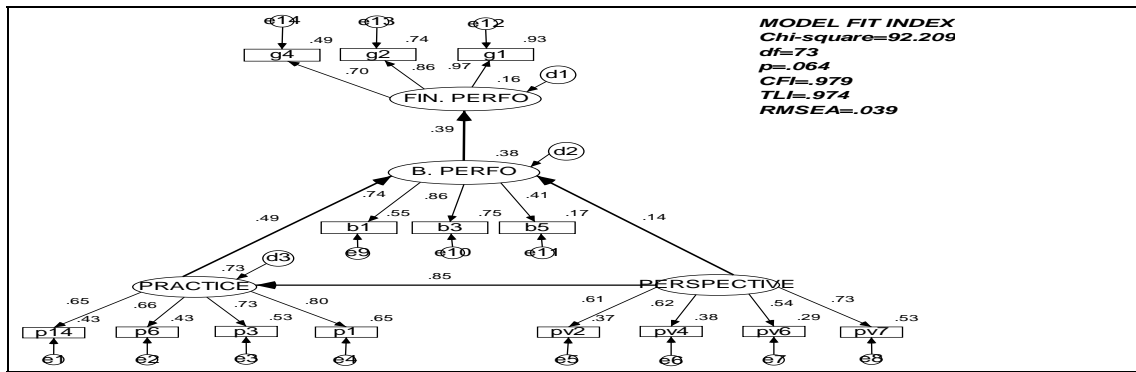


Figure 2: Fitted SME Branding Dynamics Model

The path coefficients in Table 5 indicates significant estimates for all the hypothesized relationships between constructs ($p < 0.001$). Therefore, this research fails to reject all the hypotheses. In this study, the most significant path is related to hypothesis 1 where branding perspective is a positive determinant of branding practice with standardized coefficients as high as 0.85 meaning that when branding perspective goes up by one standard deviation, branding practice goes up by 0.85 standard deviations. The least significant path is on hypothesis 2 where branding perspective is a positive determinant of branding performance with a low coefficient of 0.14. For the hypothesis 3 path where branding practice is a positive determinant of branding performance, the coefficient is at a high 0.49 indicating that when branding goes up by 1 standard deviation, branding performance goes up by 0.49 standard deviations. For hypothesis 4 where branding performance is a positive determinant of financial performance, the standardized coefficient is at significant 0.39 indicating that for every standardize point increase in branding performance will enhance the financial performance by 0.85 standardized points.

Table 5: Standardized Regression Weight Estimates

Description	Estimates
Branding perspective ← Branding practice	0.85**
Branding perspective ← Branding performance	0.14**
Branding practice ← Branding performance	0.49**
Branding performance ← Financial performance	0.39**

Chi-square ($\chi^2 = 92.209$), df = 73
 CMIN/DF = 1.263, CFI = 0.98, TLI = 0.97, RMSEA = 0.039
 Notes: **significance at the 0.01 level

CONCLUSION

The purpose of this study is to empirically examine the relationships among various branding dynamics constructs of entrepreneurs in Small Medium Enterprises (SMEs) through a new proposed SMEs branding dynamics model. The particular contribution of the model is the adoption of branding perspective as a predictor to branding management practice with significant indicators like customer relationship, social responsibility, technology and innovative orientation. Another important finding is the importance of internal assessment of branding performance by the entrepreneurs as a predictor to financial performance, supporting the recent suggestion by Wong and Merrilees (2007). The study also contributes to the development of sound instrument to assess and measure the critical factors of SME branding practice and its relation to performance. Although the proposed model has shown its robustness to explain branding practice to performance relationship, it is not necessarily the most effective or the only model to explain SME branding situation in emerging economies. In future, more relevant constructs could be added to the model such as local environment assessment and local entrepreneurs' personality to serve as exogenous variables to management and performance. In fact

the researcher is currently working on this direction for a more holistic approach in SEM branding. At the moment, it is sufficed to say that the existing branding dynamics model 'fails to reject' the null hypotheses suggesting that the model fits the data.

REFERENCES

- Aaker, D. A. (1991). *Managing brand equity: Capitalizing on the value of a brand name*. Canada: Maxwell Macmillan Inc.
- Abimbola, T. (2005). Branding as a competitive strategy for demand management in SMEs. *Journal of Research in Marketing and Entrepreneurship*. Vol 3 Issue 2, 97-106.
- Adnan Alias (1992). *Konsep Keusahawanan*. In Malaysian Development Entrepreneurship Centre (MEDEC). *Asas Keusahawan*. Shah Alam: Unit Percetakan ITM.
- Anderson, J.C., & Gerbing, D.W. (1988). Structural equation modelling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411-423.
- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckmann (Eds.), *Action control: From cognition to behavior*. Berlin, Heidelberg, New York: Springer-Verlag.
- Armitage C.J. and Conner M. (2001). Efficacy of the theory of Planned Behaviour: A Meta-Analytic Review. *British Journal of Social Psychology*. Vol 40, 471-499.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.
- Barney, J. B. (1991). The Resource Based View of Strategy: Origins, Implications, and Prospects. *Journal of Management*. Vol 17, 97-211.
- Bearden, W., T. Ingram and R. La Forge (2001). *Basic Marketing, Principles and Perspectives*. (3rd Edition). Boston: McGraw Hill.
- Bresciani S. and Eppler M.J (2010). Brand new ventures? Insights on start-ups' branding practices. *Journal of Product & Brand Management*. 19 (5).
- Broyles S. A, Ross R. H, Davis D. and Leingpibul T. (2011). Customers' comparative loyalty to retail and manufacturer brands. *Journal of Product & Brand Management*. 20 (3).
- Byrne, B. M. (2001). *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming*. Mahwah, NJ: Erlbaum.
- Carmines, E.G. and J. Mc Iver, (1981). Analysing models with unobserved variables. In G. Bohrnstedt and E. Borgotta, (eds.) *Social Measurement: Current Issues* (61-73). Beverly Hills: Sage.
- Chailan C. and Ille F.R (2011). Improving global competitiveness with branding strategy: Cases of Chinese and emerging countries' firms. *Journal of Technology Management in China*. 6(1).
- Chao M. CH and Spillan J. E (2010). The journey from market orientation to firm performance: A comparative study of US and Taiwanese SMEs. *Management Research Review*. 33 (5).
- Fahy, J. and A. Smithee (1999). *Strategic Marketing and the Resource Based View of the Firm*. *Academy of Marketing Science Review*. Vol 10, 1-20. Academy of Marketing Science.
- Fazio R.H., D. M. Sanbomatsu, M. C. Powell, and F. R. Kardes (1986). On the automatic activation of attitudes. *Journal of Personality and Social Psychology*. Vol. 50, 229-238.
- Fishbein, M., & Ajzen, I. (1975). *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. Reading, MA: Addison-Wesley
- Gregory J. R. (2004). *The Best of Branding: Best Practices in Corporate Branding*. New York: McGraw Hills.
- Hair, J., W. Black, B. Babin, R. Anderson, and R. Tatham (2006). *Multivariate Data Analysis* (6th Ed.). New Jersey: Prentice Hall.
- Haigh, D. and J. Knowles (2004). How to define your brand and determine its value. *Marketing Management*. Vol 13 No 3, 24-28.
- Horan G., O'Dwyer and Tiernan S. (2011). Exploring management perspectives of branding in service SMEs. *Journal of Service Marketing*. 25 (2).
- Hoopes, D.G., T.L. Madsen, T.L. and G. Walker, (2003). Guest editors' introduction to the special issue: why is there a resource-based view? Toward a theory of competitive heterogeneity. *Strategic Management Journal*. Vol 24, 889-902

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Perspective, Practice and Performance*

- Kapferer, J.N. (1997). *Strategic Brand Management – Creating and Sustaining Brand Equity Long Term*. (2nd Ed.). London: Kogan Page.
- Keller, K. L. (2003). *Strategic Brand Management – Building, Measuring and Managing Brand Equity*. New Jersey: Pearson Prentice Hall
- Kenny D. A (2010). *Measuring Model Fit* [On line] Available at <http://davidkenny.net/cm/fit.htm>
- Kerin, R.A. and R. Peterson (2004). *Strategic Marketing Problems- Cases and Comments*. (10th Ed.). New Jersey: Pearson Prentice Hall.
- Kotler, P. (2005). *Marketing Management*. (11th Ed.). New Jersey: Prentice Hall.
- Krake, F. (2005). Successful Brand Management in SMEs: A New Theory and Practical Hints. *Journal of Product and Brand Management*. Vol 14/4, 228-238.
- Lal, R., J. Quelch, and V. Rangan (2005). *Marketing Management: Text and Cases (Int. Ed.)*. Singapore: Mc Graw Hill.
- Luo, X. and C.B. Bhattacharya (2006). Corporate Social Responsibility, Customer Satisfaction, and Market Value. *Journal of Marketing*, 70 (4), 1-18.
- Maignan I. and O.C Ferrell (2004). Corporate Social Responsibility and Marketing: An Integrative Framework. *Journal of the Academy of Marketing Science*. Vol. 32/1, 3-19.
- Malaysia (2006a). Ministry of International Trade and Industry IMP3 Third Industrial Master Plan 2006-2020- Malaysia Towards Global Competitiveness. Putrajaya: MITI.
- Malaysia (2006b) The Economic Planning Unit (2006). Ninth Malaysia Plan 2006-2010. Putrajaya: Prime Minister's Department
- Malaysia (2007). Koridor Utara. Northern Corridor Economic Region Socioeconomic Blueprint 2007-2025. Sime Darby Berhad.
- Mohamad Sahari Nordin (2001). Teachers' orientation to students' note taking: Scale validation. *Proceedings of the International Conference on Educational Measurement and Evaluation*. November 2001, Universiti Sains Malaysia, Penang.
- Napoli, J., M. Ewing and P. Berthon (2005). Brand Matters: An Examination of Small to Medium Sized Enterprises, ANZMAC Conference. December 2005, Fremantle Perth, 65-69.
- Niehm L.S., J. Swiney and N. Miller (2008). Community social responsibility and its consequences for family business performance. *Journal of Small Business Management*. 46(3), 331-350.
- O'Cass A. G. and Ngo L. V. (2007). Market Orientation versus Innovative Culture: Two Routes to Superior Brand Performance. *European Journal of Marketing*. Vol. 41, 868-887.
- Parrot G., Roomi M.A and Holliman D. (2010). An analysis of marketing programmes adopted by regional small and medium-sized enterprises. *Journal of Small Business and Enterprise Development*. 17 (2).
- Peteraf, M. A. (1993). The Cornerstones of Competitive Advantage: A Resource-Based View. *Strategic Management Journal*. Vol. 14, No. 3, 179-191
- Randal, G. (1997). *Branding*. London: Kogan Page.
- Roll, M. (2006) *Asian brand strategy: how Asia builds strong brand*. New York: Palgrave McMillan.
- Schumpeter, J. (1939). *A Theoretical, Historical and Statistical Analysis of Capital Process*. USA: McGraw Hill.
- Sexton D. (2008). *Branding 101: How to Build the Most Valuable Asset of Any Business*. New Jersey: John Wiley and Sons Inc.
- Schreiber, J. B., A. Nora, F.K Stage, E.A. Barlow, and J. King (2006). Reporting Structural Equation Modeling and Confirmatory Factor Analysis Results: A Review. *The Journal of Educational Research*. Vol. 99/6, 323-337.

- Sh. Ahmad F, Baharun, R and Mohammad, A.H (2007). Glocal approach for Asian brands. Asia Pacific Marketing Conference. October 2007. University Malaysia Sarawak.
- Spence M. and Essoussi L. H (2010). SME brand building and management: an exploratory study. *European Journal of Marketing*. 44 (7/8).
- Stefaniak J.A.C, Parker C. and Rees P. (2010). Localization as a marketing strategy for small retailers. *International Journal of Retail & Distribution Management* . 38 (9).
- Temporal, P. (2006). *B2B Branding in Malaysia: A Guide to Building Successful Business to Business Brands*. Selangor: Kanyin Publications.
- Wheaton, B. (1987). Assessment of fit in over identified models with latent variables. *Soc. Methods and Research*. Vol. 16, 118-154.
- Willcocks, L. P. and R. Plants (2001). Pathways to e-business leadership: getting from bricks to clicks. *MIT Sloan Management Review*. Vol. Spring 2001, 50-59.
- Wong, H.Y. and B. Merrilees (2005). A brand Orientation Typology for SMEs : A Case Research Approach. *Journal of Product and Brand Management*. Vol 14/3: 155-162.
- Wong, H. Y. and B. Merrilees (2007). Multiple Roles for Branding in International Marketing. *International Marketing Review*. Vol. 24 No. 4: 384-408.
- Wright, A. (2002) Technology as an Enabler of the Global Branding of Retail Financial Services. *Journal of International Marketing*. Vol. 10/2, 83-98.
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Tacit Knowledge Sharing in SMEs: The Effect on Product Innovation

Keywords: Tacit knowledge sharing, product innovation, organizational performance, SMEs

INTRODUCTION

The environment of the firm and its internal environment give an impact for firm to be involved in innovation. Internally, a firm should be supported by its strategy, structure, system and people (Afuah, 2003). In dynamic and competitive environment, innovation is expected to become an increasingly critical component for firms to create value and sustain competitive advantage (Madhavan and Grover, 1998 as cited by Huang and Li, 2009). Even though, SMEs are said the best platform to embark innovation, however, SMEs are more inclined towards product and process innovation (Daneels, 2002). Knowledge is the main resource of creativity and innovation. New products with low cost, improved and new attributes come from competences and assets of the function of technological and market knowledge. Knowledge can be explicit and tacit. While explicit is readily available to everyone, tacit knowledge is considered the most valuable knowledge where it is difficult to be extracted from its owner. Recently, most of researchers highlighted the importance of tacit knowledge sharing in elevating the organizational performance as well as an antecedent for innovation towards higher performance. As knowledge management is emphasizing on human perspective rather than focusing on IT alone, this study shown how much tacit knowledge sharing has influence on product innovation for better organizational performance. Innovation has a positive impact on the firms' profitability as well as sustaining it against the competitors. Innovation has helped countries like Japan, South Korea, Taiwan, Hong Kong and Singapore to be major economy

powers in Asia when SMEs support the fundamental growth of nation. Innovation derived from creativity and knowledge. As tacit knowledge sharing is important for innovation, this study would highlight the interactions of the variables.

BACKGROUND AND HYPOTHESES

Tacit knowledge Sharing and Organizational Performance

Knowledge sharing is a behavior of disseminating and assimilating one's acquired knowledge with other members within one's organization (Zheng and Bao, 2006). Knowledge especially tacit is valuable compared to explicit. Tacit knowledge can be either knowledge embodied or knowledge embedded (Horvath, 2007). Embodied knowledge resides in the people minds while knowledge embedded is shown in products, processes or documents. The value of tacit knowledge is only known through its outcomes - innovation and organizational performance (Cavusgil et al., 2003). It is argued that the most effective means to transfer valuable tacit knowledge is actually not to codify it, but rather to transfer it through an implicit mode (Schenkel and Teigland, 2008). In SMEs the knowledge management model which is basically based upon knowledge sharing – through constant and open communication (often SMEs strength) – the making explicit of often buried or tacit knowledge held by all employees (Gray, 2006).

H1: Tacit Knowledge sharing has positive impact on organizational performance.

Tacit Knowledge Sharing and Product Innovation

An individual's tacit knowledge does not contribute much to an organization (Leonard and Sensiper, 1998). However, if this tacit knowledge is shared and combined to become collective tacit knowledge, then it will lead to creativity and innovation (Leonard and Sensiper, 1998). The concept of tacit knowledge is very important in the context of innovation and its diffusion (Nooteboom, 1993). The process of innovation depends heavily on knowledge (Nonaka and Takeuchi, 1995). Nonaka (1998) further explained that tacit knowledge consists partly of technical skills – the kind of informal, hard to capture in the terms of “know-how”. Nooteboom (1993) refers to this tacit knowledge, “know-how”, of the small business as craftsmanship. Innovation is a distinction drawn in communication (Pohlmann, 2005), which is the root of knowledge sharing. Liao and Chuang (2006) found that knowledge sharing has a significant relationship with innovation. Knowledge sharing promotes the innovation development relative to competitors and creates innovation of novelty. Innovation is the use of new technology and market knowledge to offer new products or services that the customers want (Afuah, 2003). Darroch and McNaughton (2002) state that many studies reported aspects of KM as antecedents of innovation but none explicitly examined this relationship. However, Nooteboom (1994) stresses that the concept of tacit knowledge is important in the context of innovation. Therefore, it is important to stimulate knowledge sharing activity in order to transfer and share tacit knowledge in the organization. In addition, the ability of SMEs to innovate and improve continuously is related to the employees' skills and knowledge (Nonaka, 1991). However, Chan et al. (2006) argue that although SMEs' strive for innovative ideas in products and services, the organizational members find it difficult to transform or verbalize what they know into comprehensible formats to be shared among team members.

H2: Tacit Knowledge sharing has positive impact on innovation

Product Innovation and Organizational Performance

Deshpande et al. (1993) found that innovativeness is an important determinant of organizational performance even after the culture has been controlled. Previous studies on innovation and organizational relationship indicated mixed results, some positive, some negative and some showed no relationship at all (Capon et al. 1990, Atuahene-Gima, 2001). The relationship between innovation and organizational performance has been found by many researchers (Hurley and Hult, 1998; Kohli and Jaworski, 1993; Keskin, 2006; Atuahene-Gima, 2001; Damanpour, 1991, 1996). Damanpour et al. (2007) argued that the association between innovation and firm performance depends on the performance measurement and the characteristics of a given organization. Danneels (2002) emphasized that product innovation should be utilized in investigating the impact on organizational

performance. This is further supported by Montequin et al. (2006) in studying innovation in SMEs. Lin and Chen (2007) found that 53.5% of SMEs of in the manufacturing and service industries in Taiwan engaged in a combination of radical and incremental innovation. Innovativeness is an important direct driver of performance (Hult et al. 2004).

H3: Product Innovation has positive impact on organizational performance

Tacit knowledge sharing, product innovation and organizational performance

Based on his research, Keskin (2006) suggested that tacit knowledge sharing should be incorporated into the framework as in SMEs, tacit knowledge sharing is the foundation of SME’s innovativeness. Besides, tacit knowledge sharing frequently takes place in SME ((Pathirage, Amaratunga, et al. 2007).

Horvath (2007) suggests that tacit knowledge is the source of innovation is often found in the tacit knowledge of people in the organization. Knowledge management process capability (KMPC) enhance the firm’s performance through innovation (Liao and Chuang 2006).

H4: Product innovation mediates the relationship between Tacit Knowledge Sharing and Organizational performance.

RESEARCH METHODOLOGY

Procedure and sample

The empirical study employed a questionnaire approach designed to collect data for testing the validity of the model and research hypotheses. Variables in the questionnaire included background information, tacit knowledge sharing, product innovation and organizational performance. All the independent and dependent variables were based on a seven-point Likert-type scale ranging from 1= “strongly disagree” to 7 = “strongly agree”. The items are adopted from several authors to reduce common method bias. The population of this study was a Small and Medium Enterprises (SMEs) of manufacturing and services in Malaysia listed under SMEs Corporation database. The respondents were owners and executives of SMEs. Convenience random sampling was used to select 1000 SMEs. A total of 336 usable questionnaires are used in this study which showed a 33.6% of response rate. Table 1 presents the characteristics of respondents.

Table 1 Respondent Profile

Profile	Fre	%
Type of Industry		
• Manufacturing	213	59.8
• Services	143	40.2
Number of employees		
• Small (Between 5 to 19 employees)	161	4
• Medium (Between 20 to 150 employees)	195	5
Annual Turnover (Sales)		
• Small (between RM200,000 and less than RM1 million)	208	5
• Medium (between RM1 million and RM5 million)	128	4
Type of Ownership		
• Sole-proprietor	84	24.2
• Family-owned	69	19.0
• Partnership	20	56,8
Length of Business		
• Less than 2 years	30	8.5
• 2 – 4 years	80	22.7
• 5 – 8 years	88	25.0
• 8- 10 years	36	9.9

Profile	Fre	%
• More than 10 years	11	33.9

All analysis (excluding structural equation modelling, SEM) is performed using SPSS version 16. Amos version 16 is used to analyze the proposed research framework through SEM.

Reliability

Reliability test is an assessment of the degree of consistency between multiple measurements of a variable. The Cronbach alpha coefficient was used to measures (Nunnally, 1978). Table 2 presents the alpha coefficients that were above the required level of 0.7 as suggested by Malhotra et al. (1999).

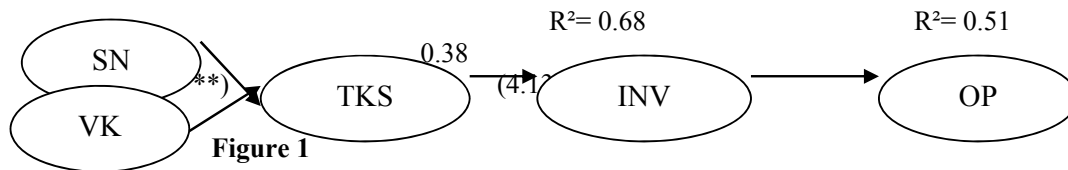
Table 2 Reliability Tests

Factors	Items	Cronbach's Alpha
Tacit Knowledge Sharing	10	0.943
Product Innovation	6	0.840
Organizational Performance	5	0.920

The result of reliability test showed that the items measured are reliable.

FINDINGS

The study employed confirmatory analysis (CFA) to assess the quality of the measurement model prior to hypotheses testing. Tacit knowledge sharing tested as second factor comprises of social network (SN) and value of knowledge (VK). The CFA fit indexes for the proposed models ranged from adequate to excellent (Tacit Knowledge sharing: CFI= 0.985, TLI= 0.980, RMSEA= 0.053; Product Innovation: CFI= 0.99 , TLI= 0.90, RMSEA= 0.035; Organizational Performance: CFI=0.991, TLI=0.988, RMSEA= 0.048). Additionally, three models had chi-square less than three times of their degrees of freedom (TKS= 1.937, PD= 2.794 , OP= 2.709). Overall, CFA results suggested that the models of tacit knowledge sharing, product innovation and organizational performance provided a good fit for the data. The study attempts to understand the relationships among tacit knowledge sharing, product innovation and organizational performance. The study employed AMOS to test the hypotheses. Figure 1 show the path coefficients, t-values and construct relationships. The normed chi-square is 2.80, CFI = 0.959, TLI = 0.950 and RMSEA is 0.073. This shown that the model fit is acceptable.



Model of study

As hypothesized, a positive relationship between tacit knowledge sharing and organizational performance is confirmed ($\gamma_1 = 0.79$, $t = 11.847$). Therefore H1 is supported. The finding indicates that the firms would achieve higher organizational performance when members of firms have active in sharing their tacit knowledge through their social networking and their appreciation of the value of knowledge. A positive relationship between tacit knowledge sharing and product innovation ($\gamma_2 = 0.94$, $t = 14.562$) is established. Therefore H2 is supported. Supported by previous researches, tacit knowledge sharing is antecedent to product innovation. Tacit knowledge is definitely a key factor in developing product innovation. Product innovation was found to be positively related to organizational performance ($\gamma_2 = 0.65$, $t = 12.332$). Innovation is known as one of the organizational performance elements and indicators. Therefore H3 is supported. To test the mediating effect of product innovation, procedure outlined by Baron and Kenny (1986) is adopted and tested the three conditions using AMOS analysis. The first condition is to establish that the independent variable, tacit knowledge sharing influences the mediator, product innovation. The result shows that tacit knowledge sharing has positive relationship with product innovation ($\lambda = 0.97$, $t = 15.195$) support the first condition for mediating effect. Then the relationship between tacit knowledge sharing has

significantly positive relationship with organizational performance ($\lambda = 0.37, t=3.346$), supports the second condition. Lastly, the mediator, product innovation was included in the model examine the effects of the antecedent. Results show that product innovation has mediating effect on relationship of tacit knowledge sharing and organizational performance ($\lambda = 0.0.38, t=4.133$). Therefore, product innovation plays a mediating role between tacit knowledge sharing and organizational performance (Lee and Sukoco, 2001; Lee and Choi, 2002). Tacit knowledge is an antecedent to product innovation. Table 3 shows the difference of chi-square of two models and found that when product innovation was included, the chi-square improved significantly which prove that product innovation has strong influence in the relationship of tacit knowledge sharing and organizational performance.

Table 3: Comparison of chi-square

Model	Chi-square
Tacit Knowledge Sharing and Organizational Performance	115.534
Tacit knowledge sharing, product innovation and organizational performance	276.855
Difference	161.321

DISCUSSION AND CONCLUSION

The finding of the study has shown that tacit knowledge sharing that comprises of social networking and value of knowledge is an antecedent to product innovation in elevating for better organizational performance in firms. Tacit knowledge is known as the most valuable knowledge asset in the organizational and if it collectively gathered and accumulated would help firms towards better product innovation creation (Darroch, 2005, Lee and Sukoco, 2001, Lee and Choi, 2002). The process of innovation depends heavily on knowledge (Gloet and Terziovski, 2004), therefore, tacit knowledge sharing is important in innovation in SMEs. The strong effect of knowledge sharing on innovation is consistent with the study done by Mei and Nie (2007) that highlights the importance of a firm's knowledge interaction. This shows that knowledge sharing is a key issue in order to enhance the innovation capability of organizations (Saenz et al., 2009; Lee and Choi, 2006), which, in turn, enhances the organizational performance (Lee and Sukoco, 2007). A study done by Huang and Li (2008) reveals that knowledge sharing is coupled with mutual trust and that communication helps organizations to be innovative (Gilbert and Cordey-Hayes, 1996). This empirical result suggests that organizations with a high degree of knowledge sharing among its employees can produce more innovation.

In promoting and encouraging innovation, SMEs also should establish flexible, competitive environments to nurture employees' creativity through active and productive tacit knowledge sharing. Innovation culture helps the employees in SMEs own the sense of innovation and get use to regarding innovation as their behavior norms. In addition, effective incentive mechanism should be established to motivate employees to share knowledge and innovate. Since the capacity of employees especially their innovative capabilities determine the enterprises' sustained innovation competence, SMEs should establish effective training system. The established effective training system is to develop their employees' creativity, expand the workers' skills and enables their staffs innovative and productive. As tacit knowledge sharing of SMEs are divided into social networking and value of knowledge, SMEs should focus in encouraging employees in improving their relationship for closer knit and promote the value of individual knowledge in persuading employees to actively sharing their tacit knowledge.

This study is not without limitations. First limitation is having single-informant per firm is another limitations. Future research may also focus more explicitly on micro-foundations of routines, for example, by obtaining self-reports of knowledge sharing practices from individual members of each organization. Although obtaining multiple respondents data per organization is challenging, it would allow for a more rigorous testing of micro-foundation to tacit knowledge sharing and innovation

perspectives. The data presented in this study is cross-sectional. These influencing factors were measured at a static point rather than as they were developing, thus, losing the richness of time explanation. It is important to focus on long-term effects, especially on knowledge sharing behaviour and innovation practices. Future research can gather longitudinal data to examine the causality and interrelationships between variables that are important to tacit knowledge sharing and innovation.

REFERENCES

- Huang, J-W., and Li, Y-H. (2009). The mediating effect of knowledge management on social interaction and innovation performance. *International Journal of Manpower*, 30(3) 285-301.
- Leonard, D. and S. Sensiper (1998). The role of tacit knowledge in group innovation. *California Management Review*. 40 (3) 112-132.
- Nooteboom, B. (1993). Innovation and Diffusion in Small Firms: Theory and Evidence. *Small Business Economics*. 6 327-347.
- Nonaka and Takeuchi, 1995.. Managing innovation as an organizational knowledge creation process, In: *Technology Management and Corporate Strategies: A Tricontinental Perspective*, J.Allouche and G. Pogorel (Editors), Netherlands: Elsevier Science B.V.
- Pohlmann,M. (2005). The evolution of innovation: Cultural Backgrounds and the Use of Innovation Models. *Technology Analysis & Strategic Management*. 17(1) 9–19.
- Afuah, A. (2003). *Innovation Management: Strategies, Implementation, and Profits*. Oxford University Press , Oxford.
- Darroch, J. (2005). Knowledge management, innovation and firm performance. *Journal of Knowledge Management*, 9(3) 101-115.
- Darroch, J. and Mac Naughton, R. (2002). Examining the link between knowledge management practices and types of innovation. *Journal of Intellectual Capital*, 3 (3) 210-222.
- Chan, I., Au, A.K.K., Chao, K.C.K. (2006). Barriers in knowledge sharing in Hong Kong. *Knowledge Management Review*. <http://www.encyclopedia.com/doc/1P3-1041192791.html>. Accessed 20 May 2009.
- Zheng, M. and Bao, G. (2006). An Empirical study on knowledge sharing, affective commitment, perceived task interdependence and job involvement in Chinese accounting firms. *PICMET 2006 Proceedings, 9-13 July, Istanbul, Turkey*.
- Horvath , J.A. (2007). *Working with tacit knowledge*. IBM Institute of Knowledge Management.
- Schenkel, A. and Teigland, R. (2008). Improved performance through communities of practice. *Journal of Knowledge Management*, 12 (1) 106-118.
- Gray, C. (2006). Absorptive capacity, knowledge management and innovation in entrepreneurial small firms. *International Journal of Entrepreneurial Behavior & Research*, 12 (6) 345-360.
- Gloet, M. and Terziovski, M. (2004). Exploring the relationship between knowledge management practices and innovation performance. *Journal of Manufacturing Technology Management*. 15(5) 402-409
- Daneels, E. (2002). The dynamics of product innovation and firm competences. *Strategic Management Journal*, 23 (12) 1095-1122.
- Deshpandé,R., Farley,J.U., and Webster, F.E. Jr. (1993). Corporate culture, customer orientation, and innovativeness in Japanese firms: a quadrad analysis. *Journal of Marketing*, 57. 23-27
- Capon, N., Farley, J.U, Lehmann, D.R, Hulbert, J.M (1992). Profiles of product innovators among large US manufacturer. *Management Science*, 38(2) 157-68.
- Damanpour, F. (1991). Organizational innovation: a meta-analysis of effects of determinants and moderators. *Academy of Management Journal*. 34(3) 555-90.
- Damanpour, F. (1991). Organizational innovation: a meta-analysis of effects of determinants and moderators. *Academy of Management Journal*. 34(3) 555-90.
- Kohli, A. K. and B. J. Jaworski (1990). Market orientation: The construct, research propositions, and managerial implications. *Journal of Marketing*, 54 (2) 1-18.
- Atuahene-Gima, (2001). An empirical investigation of the effect of market orientation and entrepreneurship orientation alignment on product innovation. *Organization Science*, 12(1) 54-74.

*Enhancing Malaysian Graduates' Employability Skills:
An Application of Importance Performance Analysis (IPA)*

- Montequin, V.R., Fernandez, F.O., Cabal, V .A. and Gutierrez, N.R. (2006) . An integrated framework for intellectual capital measurement and knowledge management implementation in small and medium-sized enterprises. *Journal of Knowledge Management* 32(6) 525-538.
- Hurley, R.F. and Hult,G.T.M. (1998). Innovation, Market Orientation, and Organizational Learning: An integration and empirical examination. *Journal of Marketing*. 62(3) 42-55.
- Pathirage, C. P.and D. G. Amaratunga. (2007). Tacit knowledge and organizational performance. *Journal of Knowledge Management*. 11 (1) 115-126.
- Liao , C. and Chuang, S. (2006). Exploring the role of knowledge management for enhancing firm's innovation and performance. *Proceedings of the 39th Hawaii International Conference on System Sciences*.
- Nunally, J.C. (1978). *Psychometric Theory*. 2nd Ed. McGraw Hill, New York
- Lee, H. and Choi, B. (2003). Knowledge Management Enablers. Process and organizational performance; an integrative view and empirical examination. *Journal of Management Information Systems*. 20 1 179-228.
- Lee, L.T-S. and Sukoco, B.M. (2007). The effects of entrepreneurial orientation and knowledge management capabilities. *International Journal of Management*. 24(3) 549-574.
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INTRODUCTION

The rapid growth in the number of Higher Education Institutions (HEI) in Malaysia is aligned with the government's agenda to prepare a skilled and professional workforce, to achieve the status of a developed country by the year 2020. Presently, there are 20 fully-fledged public universities and 48 private universities in Malaysia. In a challenging economy, the role of HEI is not only to produce graduates with specific areas of specialization, but more importantly, to develop graduate employability skills that are most demanding in the 21st Century (Lee and Tan, 2003).

If the increasing number of graduates is not aligned with the number of jobs created, this could contribute to a serious unemployment problem in the country. According to Wong (2011), the number of jobless graduates in Malaysia (in 2009) was as many as 60,000. Several factors have been identified that have led to an increasing number of unemployed graduates. Firstly, the supply of graduates from HEIs exceeded the number of job vacancies in the workforce market. This situation created an imbalance between workforce supply and demand. As a result, some graduate employees only managed to get jobs that were below their qualifications (Salina, Nurazariah, Noraina Mazuin & Jagatheesan, 2011) and others fail to find work at all. Another factor that contributes to the unemployment of graduates is their skills and abilities competency. Employers complain about the

lack of various graduate's skills. According to Rahmah, Ishak, and Wei Sieng (2011), graduates are found to be lacking in employability skills, and have low performance in the work place. Zabeda (2009) revealed that job vacancies for graduates do exist; but employers found that candidates are not equipped with the relevant skills and knowledge needed by their companies. This finding was also supported by Shukran, Hariyati Shariman, Saodah, and Noor Azlan (2006), who revealed that students lack the relevant skills, abilities, knowledge, and other characteristics, required by employers. Salina *et al.* (2011) revealed that as many as 30,000 graduates only managed to get casual or temporary work that was below their qualifications, mainly because of their lack of English.

This study attempts to identify a list of employability skills, examine the importance of these employability skills to an employer, their satisfaction with these skills, and the gap between employers' importance and satisfaction with a skill.

LITERATURE REVIEW

Over the past few decades, employers' needs and job requirements in the work environment have changed dramatically. In a challenging economic condition, new graduates are not only required to possess knowledge of an academic subject, but they must also be equipped with the relevant soft skills that will enhance their competency to join the job market (Zubaidah & Rugayah, 2008). A study to determine the types of graduates' soft skills required by employers is essential, in order to provide details about the relevancy of soft skill development programmes to the current employment market. Most studies found in literature, showed that the highest ranking of employability skills from an employer's perspective was communication skills (Azian & Mun, 2011; Rahmah *et al.*, 2011; Rasul, Ismail, Rajuddin & Rauf, 2010; Zubaidah & Rugayah, 2008). This was supported by Billing (2003), who revealed that the importance of communication skills amongst graduates also existed in the United Kingdom, the United States, New Zealand, Australia, and South Africa.

According to Azian and Mun (2011), a survey conducted by the Malaysian Employers Federation showed that 68% of employers named communication skills as being the most needed skill in a job application. This was followed by work experience (67%), interpersonal skills (56.2%), passion and commitment (55.7%), being a team player (47.8%), having the right degree (46.3%), good academic results (37.9%), a desire to learn (37.9%), can work well under pressure (34.0%), and is able to take the initiative (32.5%).

Meanwhile, Zubaidah and Rugayah (2008) examined the attributes of non-technical skills required by foreign and local companies in Malaysia's manufacturing industries. They identified seven important non-technical skills from an employer's perspective, namely communication, creative thinking and problem-solving, information management, leadership and organization, group effectiveness and teamwork, work-related disposition and attitudes, and personal traits and self-management. Under the communication skill's category, they found that English was the most important language used by both local and foreign companies. However, Bahasa Melayu was only found to be important within local companies. Meanwhile, in the creative thinking and problem solving category, both local and foreign companies placed importance on problem-solving, the ability to prioritize assignments and tasks, critical thinking through observation, and effective questioning. Furthermore, on computer skills, both foreign and local companies were looking for graduates that were able to analyse information, in order to make better decisions. They also found that teamwork commitment, group cooperation, and leading and managing groups, were most important. Foreign and local companies also placed significant importance on job commitment.

Munir, Aniswal, and Haslina (2005) listed the skills and abilities required by graduates in the arts and related fields (i.e., Humanities, Social Sciences, Communication, Management, and Information Technology) by Malaysian employers. Their study showed that the order of the list reflected the importance of each attribute from the surveyed employer's point of view. This indicates that the ranking of competencies of potential graduates, as needed by employers, is as follows: management skills, personal qualities, communication skills, interpersonal skills, thinking skills, and ICT skills.

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However, they also found that the ranking of competency skills and abilities of graduates varied according to the type of firm. For example, industry related firms placed high weightage on personal qualities (i.e., helpful, knowledgeable, skilful, obedient, and compliant); and service-related firms placed considerable emphasis on management skills (i.e., able to delegate work, positive expectations, and comments towards others' potential).

Furthermore, Zulaikha, Ariffin, Ezanee, and Fazli (2005) examined employers' perceptions of Bachelor of Information Technology alumni, from the Faculty of Information Technology, Universiti Utara Malaysia. From their literature review, they devised a competency list consisting of 56 elements, concentrating on various performance and soft skills. In their study, they identified graduate competency gaps, based on the differences between employers' rated importance levels and competency levels. They found that the top three gaps were non-verbal interpersonal skills, verbal presentation skills, and written interpersonal skills. They also realized that most of the elements with wide gaps were the soft skills related to effective communication and teamwork.

Salina *et al.*, (2011) applied Importance-Performance Analysis (IPA) to identify the gap between importance of employability skills and performance of business school graduates, on the skills used in their post graduate employment. They found that factors such as soft skills and personality development should be concentrate on for improvement in the future. Meanwhile, factors such as explicit knowledge, hard skills, intellectual abilities, conscientiousness, and emotional stability, needed to be maintained with current resource allocations.

In another study, Rasul *et al.*, (2010) developed an employability skills assessment tool, for technical graduates in the manufacturing industry, using the Kepner-Tregeo (K-T) method. They found that the highest ranking of employability skills was interpersonal skills, which includes working in a team, negotiation, and working with cultural diversity. These are followed by employability skills, such as thinking, resource skills, personal qualities/values, system and technology skills, basic skills, and information skills. Using this tool, graduate employability levels can be measured before joining a workforce.

According to Shukran *et al.*, (2006) employers' expectations of graduate's skills and abilities go beyond the mastery of academic subjects. Other factors exist, outside of the academic curriculum, which graduates need to prepare before they join the employment market. These include involvement in co-curricular activities, training and development programmes, and other activities that can enhance a graduates' competence. Also, apart from providing students with technical knowledge, universities should also engage in an effort to equip students with soft skills that are required by employers.

IMPORTANCE-PERFORMANCE ANALYSIS

Importance-Performance Analysis (IPA) was introduced by Martilla and James in the 1970s to improve marketing strategy. Later, it was widely used to understand customer satisfaction and service quality (Ainin & Hisham, 2008; Siniscalchi, Beale & Fortuna, 2008). It has been used in various areas of research, including information systems (Ainin & Hisham, 2008), education (Siniscalchi *et al.*, 2008), and sports (Rial, Rial, Varela & Real, 2008). As an evaluation tool, IPA graphically depicts the comparison of importance and performance of service quality attributes. The basic concept of the IPA method is to examine the importance of an attribute, and customer's satisfaction with that attribute. According to Rial *et al.*, (2008) the main advantage of the IPA technique, is its ease of application. There are three steps in IPA, which are as follows (Hendricks, Schneider & Budruk, 2004):

- i) Identify a list of attributes to evaluate
- ii) Rate these attributes in terms of how important they are to customers and how well an organization performs on them
- iii) Plot the importance-performance rating on a two dimensional grid

Graphically, importance and performance data are plotted on a pair of coordinate axes; where “importance” is displayed along the y-axis and “performance” is displayed along the x-axis. Then, the data is mapped into four quadrants (Martilla & James, 1977), as shown in Figure 1. Each quadrant shows the rating of importance and performance of an element of the service assigned by customers (Rial *et al.*, 2008).

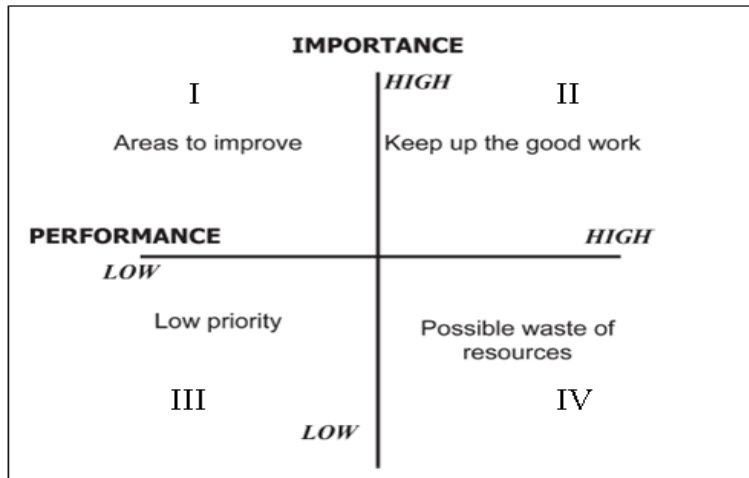


Figure 1 Importance-Performance Map
(Source: Martilla & James, 1977)

Quadrant I: Represents the attributes that are perceived to be important by the respondents, but whose performance levels are low. This suggests that improvement efforts should be given top priority and corrective action must be taken in order to improve overall satisfaction.

Quadrant II: Represents the attributes that are perceived by the users as high, both in importance and performance. This indicates that the performance of the existing system is already good and should continue.

Quadrant III: Represents the attributes that are perceived low in performance, and at the same time, these attributes are not perceived as important. Even if the performance of the organization is perceived as low, the management should not overly concentrate, since these attributes are not perceived as very important. Limited resources should be spent on these low priority attributes.

Quadrant IV: Represents the attributes that are perceived as low in importance, but high in performance. This indicates that the management should realize that the present effort on these attributes is unnecessary and might consider reallocating the resources elsewhere.

Importance-performance analysis helps organizations to identify the attributes that need to be concentrated on for improvement and the action that should be taken to minimize the gap between importance and performance. Therefore, the IPA will be used to identify the gap between importance and performance of graduates' employability skills. According to Martilla and James (1977), “importance” represents customers' wants or desires and “performance” represents customers' perception of the service received. Customers have an importance level of service, or in other words, the level of service that they expect to receive. In this study, the gap between importance and performance of graduates' employability skills was studied. Respondents were asked to respond on a scale of one to five, their degree of desirability - from very unimportant to very important, and their degree of satisfaction – from very unsatisfactory to very satisfactory. Mean and standard deviation scores for each of item were calculated for importance and satisfaction levels, and then the gaps were calculated. The mean importance and satisfaction scores were compared for all attributes, so as to identify the gap scores.

METHODOLOGY

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Generating a list of attributes is an important part of the IPA procedure. For the purpose of this study, a list of graduate employability skills was developed by reviewing previous studies by other researchers. This procedure generated a list of 52 graduate employability skill attributes. These attributes focused on computational skills, management skills, critical thinking skills, enterprise and entrepreneurial skills, interpersonal skills, communication skills, and thinking skills. This list was reviewed by five Malaysian public universities. Respondents were asked to respond to an evaluation form of the statements, in term of understanding, missing data, length of the questionnaire, and redundant and ambiguous questions. The feedback from the experts were examined for improvement, and decisions were made to maintain, modify or exclude items from the final questionnaire draft of the. Feedback from respondents resulted in a final list of 49 attributes.

The focus of this study is to identify and evaluate the perception of employers towards graduates' employability skills who have has completed their degree in business-related fields (i.e., Business, Economics, Accounting, Finance, Banking, etc.) from schools/faculties of business in Malaysian public universities. A random sampling method was used for data gathering. Targeted respondents came from organizations listed in the Federation of Malaysian Manufacturers (FMM) and government and semi-government agencies. A covering letter explained the objectives and significance of the study, and attached to a survey questionnaire, was sent to the Human Resources Manager/ Executive or General Manager of the company. The covering letter assured that all responses would be kept confidential. Furthermore, instructions within the covering letter requested that questionnaires should be returned in the self address stamped envelope provided, within three weeks. Of the 942 questionnaires mailed, 233 questionnaires were found to be usable for further analysis; giving us a 25% response rate.

RESULTS

The mean scores, standard deviations, and Cronbach's alpha, of the importance and satisfaction of graduates' employability skills perceived by employers, are provided in Table 1. The mean scores of the attributes ranged from 3.07 to 4.57 for importance, and 2.90 to 4.03 for satisfaction. Meanwhile, the standard deviations of all attributes were less than unity. The Cronbach's alpha sores for both performance and satisfaction were greater than 0.7.

Table 1: Importance of graduates' employability skills and satisfaction level on those skills

Variables	Means (s.d.)		
Interpersonal Skills	Importance ($\alpha = 0.898$)	Satisfaction ($\alpha = 0.909$)	Difference (S - I)
1. Ability to work and contribute to the group/team	4.57 (0.61)	3.64 (0.74)	-0.93
2. Ability to understand other peoples' problems, emotions, concerns, and feelings, related to work	4.31 (0.79)	3.42 (0.78)	-0.89
3. Ability to negotiate with subordinates or colleagues	4.39 (0.69)	3.46 (0.78)	-0.93
4. Ability to encourage and motivate others	4.35 (0.71)	3.27 (0.85)	-1.08
5. Ability to network	4.36 (0.71)	3.53 (0.79)	-0.83
6. Ability to work in a diverse environment (ethnic group, religion, and gender)	4.38 (0.67)	3.46 (0.77)	-0.92
7. Ability to deal with superiors	4.48 (0.65)	3.56 (0.76)	-0.92
8. Ability to manage others	4.32 (0.71)	3.30 (0.80)	-1.02
Computing skills	Importance ($\alpha = 0.854$)	Satisfaction ($\alpha = 0.901$)	Difference (S - I)
9. Level of keyboard competency	4.33 (0.73)	3.89 (0.72)	-0.44
10. Ability to use word processing software	4.28 (0.64)	3.85 (0.76)	-0.43
11. Ability to use statistical software packages	3.94 (0.83)	3.45 (0.79)	-0.49

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Variables	Means (s.d.)		
12. Ability to deliver effective presentations using computer software	4.33 (0.62)	3.51 (0.75)	-0.82
13. Ability to use database programmes for data management	4.06 (0.78)	3.42 (0.76)	-0.64
14. Ability to use spreadsheets for data analysis	4.16 (0.69)	3.48 (0.73)	-0.68
15. Ability to search and manage the relevant information from various sources	4.30 (0.65)	3.39 (0.83)	-0.91
Enterprise and entrepreneurial skills	Importance ($\alpha = 0.912$)	Satisfaction ($\alpha = 0.914$)	Difference (S - I)
16. Ability to explore and identify business opportunities	3.97 (0.90)	3.16 (0.81)	-0.81
17. Ability to develop a business plan	3.91 (0.88)	3.12 (0.92)	-0.79
18. Ability to develop business opportunities	3.87 (0.86)	3.07 (0.88)	-0.80
19. Ability to capitalize on business opportunities	3.85 (0.88)	3.06 (0.89)	-0.79
20. Ability to be self-employed	3.75 (0.99)	3.07 (0.91)	-0.68
Communication skills	Importance ($\alpha = 0.840$)	Satisfaction ($\alpha = 0.951$)	Difference (S - I)
21. Ability to listen attentively and give appropriate feedback	4.56 (0.58)	3.49 (0.78)	-1.07
22. Ability to negotiate and reach consensus	4.47 (0.58)	3.42 (0.78)	-1.05
23. Ability to write effectively in Bahasa Malaysia	4.15 (0.92)	3.86 (0.76)	-0.29
24. Ability to write effectively in English	4.55 (0.58)	3.26 (0.98)	-1.29
25. Ability to write effectively in other languages	3.18 (0.99)	2.90 (0.91)	-0.28
26. Ability to speak fluently in Bahasa Malaysia	4.19 (0.88)	4.03 (0.80)	-0.16
27. Ability to speak fluently in English	4.54 (0.57)	3.32 (0.99)	-1.22
28. Ability to speak fluently in other languages	3.07 (0.99)	2.95 (0.90)	-0.12
29. Ability to communicate formally and informally with people from different backgrounds	4.41 (0.61)	3.46 (0.80)	-0.95
30. Ability to present a case/project effectively	4.35 (0.61)	3.32 (0.83)	-1.03
31. Ability to express own ideas clearly, effectively, and with confidence	4.51 (0.55)	3.34 (0.89)	-1.17
Thinking skills	Importance ($\alpha = 0.904$)	Satisfaction ($\alpha = 0.951$)	Difference (S - I)
32. Ability to recognize and analyse problems	4.53 (0.55)	3.41 (0.78)	-1.12
33. Ability to explain, analyse, and evaluate data and information	4.47 (0.59)	3.35 (0.86)	-1.12
34. Ability to generate creative ideas	4.46 (0.63)	3.33 (0.82)	-1.13
35. Ability to think critically	4.52 (0.59)	3.29 (0.83)	-1.23
36. Ability to learn and apply new knowledge and skills	4.50 (0.56)	3.42 (0.84)	-1.08
37. Ability to understand statistical and numerical data	4.11 (0.72)	3.37 (0.79)	-0.74
38. Ability to think out-of-the-box	4.37 (0.65)	3.15 (0.93)	-1.22
39. Ability to make logical conclusions by analysing relevant data	4.35 (0.63)	3.26 (0.85)	-1.09
Management skills	Importance ($\alpha = 0.939$)	Satisfaction ($\alpha = 0.957$)	Difference (S - I)
40. Ability to lead a project	4.43 (0.65)	3.52 (0.83)	-0.91
41. Ability to supervise group members	4.47 (0.63)	3.55 (0.81)	-0.92
42. Ability to optimize the use of resources	4.53 (0.59)	3.53 (0.79)	-1.00

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Variables	Means (s.d.)		
43. Good time management	4.67 (0.51)	3.54 (0.87)	-1.13
44. Ability to plan, coordinate, and organize a project	4.61(0.56)	3.54 (0.89)	-1.07
45. Ability to monitor group members to achieve targets	4.49 (0.61)	3.46 (0.86)	-1.03
46. Ability to plan and implement an action plan	4.54 (0.57)	3.52 (0.81)	-1.02
47. Ability to work under pressure	4.54 (0.60)	3.52 (0.93)	-1.02
48. Ability to work independently	4.63 (0.55)	3.55 (0.91)	-1.08
49. Ability to deliver expected results	4.63 (0.55)	3.58 (0.84)	-1.05
Mean	4.30	3.41	

The results of this study reveal that the employers were satisfied with the graduates' employability skills; as indicated by their mean scores (see Table 1). Employers were particularly satisfied with the following attributes: level of keyboard competency, ability to use word processing software, ability to write in Bahasa Malaysia, and the ability to speak in Bahasa Malaysia. In contrast, respondents were least satisfied with the ability to encourage and motivate others, the ability to explore and identify business opportunities, ability to write effectively and speak fluently in English, and the ability to make logical conclusions.

Table 1 shows that the employers' importance scores were greater than their satisfaction scores for graduates (negative value for differences in mean). Attributes with the biggest gaps between means were the ability to write effectively and speak fluently in English. This implies that universities should improve graduates' ability to write and speak in English, in order to prepare them for the job market. According to Melissa Norman (managing director of Kelly Services (M) Sdn Bhd), an average of six out of ten Malaysian graduates cannot communicate effectively during interviews. Consequently, they cannot explain their knowledge effectively during an interview, due to a poor command of English. In addition, the surveys conducted by the Federation of Malaysian Manufacturers (FMM) on ICT workers in 2004, also found that the majority of employees were poor in English (Hii, 2007). However, the items with the lowest gap scores were the ability to use word processing software, the ability to be self-employed, the ability to write effectively and speak fluently in Bahasa Malaysia, and the ability to speak fluently in other languages.

In order to validate the results of this gap analysis, a paired-sample T-test was performed between the means of importance and satisfaction of graduates' employability skills. As shown in Table 2, the biggest employability skills gap is in thinking skills and the smallest gap is in computing skills. Overall, all gaps between importance and satisfaction on skills are statistically significant ($p < 0.05$), and thus, confirms that employers are not satisfied with the performance of graduates' employability skills.

Table 2: Paired-sample T-test for the means of importance and satisfaction of employability skills

Variables	Mean Importance	Mean Satisfaction	T	Significance
Interpersonal Skills	4.3976	3.4318	18.249	0.000*
Computing Skills	4.2136	3.5782	13.976	0.000*
Enterprise and Entrepreneurial Skills	3.8636	3.0583	12.455	0.000*
Communication Skills	4.1085	3.3824	16.612	0.000*
Thinking Skills	4.4197	3.2986	18.709	0.000*

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Management Skills	4.5551	3.5145	18.727	0.000*
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Note: *Significant at the 0.05 level

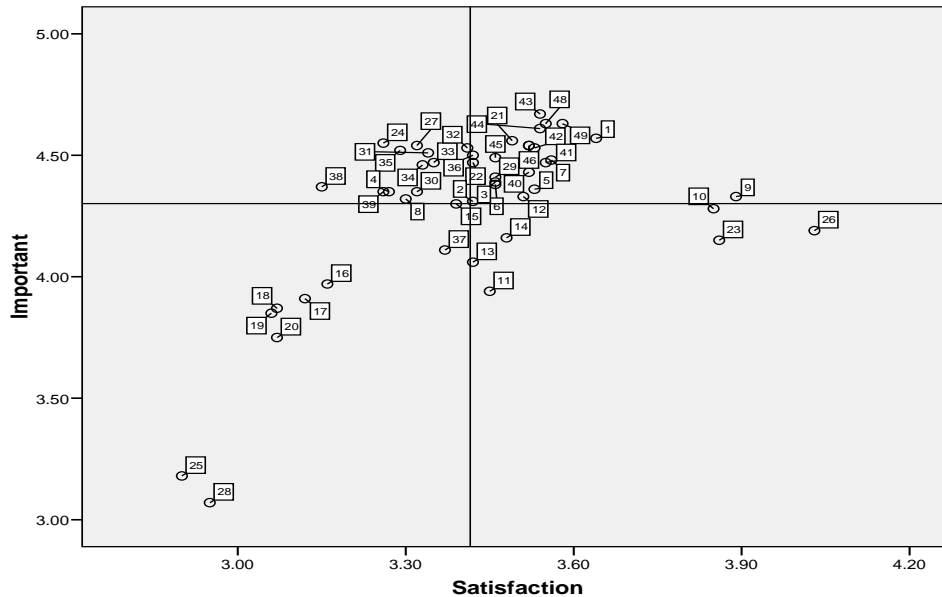


Figure 2: Map of employability skill attributes

Based on the gap analysis results, an IPA map was constructed, as shown in Figure 2. Referring to Figure 2, the X-axis shows the mean levels for satisfaction and the Y-axis shows the mean levels for importance. The figure also shows that most of the attributes fell into the upper-right quadrant (i.e., keep up the good work), suggesting that the importance and satisfaction of these attributes to employers are high. Therefore, all of these activities and resources should be maintained. In contrast, 13 attributes fell into the upper-left quadrant (i.e., concentrate here), which mean that these attributes are perceived as important by employers, but their satisfaction levels are low. This suggests that improvement efforts and corrective actions must be taken, in order to improve the overall satisfaction of these 13 attributes. These attributes are:

- i) The ability to encourage and motivate others
- ii) The ability to manage others
- iii) The ability to search for and manage relevant information from various resources
- iv) The ability to write effectively in English
- v) The ability to speak fluently in English
- vi) The ability to present a project effectively
- vii) The ability to express own ideas clearly, effectively, and with confidence;
- viii) The ability to recognize and analyse problems
- ix) The ability to explain, analyse, and evaluate data/information
- x) The ability to generate creative ideas
- xi) The ability to think critically
- xii) The ability to think out-of-the-box, and
- xiii) The ability to make logical conclusions by analysing relevant data.

It was also noted, that eight attributes received low scores for both importance and performance, which indicates that these attributes possess a low priority and are not perceived as important. Hence, universities may not overly concentrate on these attributes. These attributes are:

- i. The ability to explore and identify business opportunities
- ii. The ability to develop a business plan
- iii. The ability to develop business opportunities

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- iv. The ability to capitalize on business opportunities
- v. The ability to be self-employed
- vi. The ability to write effectively in other languages
- vii. The ability to speak fluently in other languages, and
- viii. The ability to understand statistical and numerical data.

Lastly, six attributes received low in importance but in contrast the satisfaction levels of the employers on that attributes are high. Since the employers' satisfaction on these attributes is high, and not so important them, universities should restructure their resources and activities towards other attributes that give a significant impact on graduates' employability skills development.

CONCLUSIONS

Importance Performance Analysis (IPA) is an effective evaluation tool in identifying the gap between the importance of a service and the performance of that service to a customer. Data is mapped in four quadrants, namely 'concentrate here', 'keep up the good work', 'low priority', and 'possible overkill'. IPA can identify areas of concern and thus help to close the gap between the importance and performance of attributes. The attributes that fell into the 'concentrate here' quadrant, should be given priority for improvement. This is because these attributes are perceived as very important to the customer, but their organizational performance is low.

In this study, the importance and performance attributes of graduate employability skills were examined amongst employees in Malaysia. The key results show that employees had a lower mean data of all performance attributes, rather than importance attributes, and most notably, the ability to write effectively and speak fluently in English and the ability to encourage and motivate others. Furthermore, 13 attributes fell into the 'concentrate here' quadrant, which means that further investigation should be made for their improvement.

The results of this study can help universities to improve their curriculums, in accordance with current market requirements. Furthermore, universities should conduct a study to determine the level of graduates' competency on employability skills. Therefore, this information can assist them to re-allocate their resources and implement improvement programmes, such as facilities development, financial re-allocation, and curriculum development, in order to improve graduate's employability skills.

REFERENCES

- Ainin, S., & Hisham, N. H. (2008). Applying importance-performance analysis to information systems: and exploratory case study. *Journal of Information, Information Technology, and Organizations*, 3, 95-103.
- Azian, H., & Mun, L. Y. (2011, April 10). English work: top jobs only for those who know the language well. *The Star*, p. 1 & 5.
- Billing, D. (2003). Generic cognitive abilities in higher education: an international analysis of skill sought by stakeholders. *Compare*, 33, 335-350.
- Hariati, A. (2007). Congratulations, you fit our bill! Retrieved 14 October, 2009, from <http://www.starjobs.com/services/printerfriendly.asp?file=/2007/2/4/starjobs/16757105&sec=starjobs>
- Hendricks, W. W., Schneider, I. E., & Budruk, M. (2004). Extending importance-performance analysis with benefit-based segmentation. *Journal of Park and Recreation Administration*, 22(1), 53-74.
- Hii, C. (2007). Soft skills essential for success in today's workplace. Retrieved April 10, 2011, from <http://thestar.com.my/news/story.asp?file=/2007/9/23/focus/18887876 &sec=focus>
- Lee, F. T., & Tan, J. H. (2003). Project management skills demand for engineering graduates in Malaysia. *IEM Bulletin*, June, 16-25.
- Martilla, J. A., & James, J. C. (1977). Importance-performance analysis. *Journal of Marketing*, 41(1), 77-79.

- Munir, S., Aniswal, A. G., & Haslina, H. (2005). Employers' views on local graduates. In A. Pandian & A. G. Aniswal (Eds.), *University curriculum: an evaluation on preparing graduates for employment*. Penang: Institut Penyelidikan Pendidikan Tinggi Negara.
- Rahmah, I., Ishak, Y., & Wei Sieng, L. (2011). Employers' perception on graduates in Malaysia service sector. *International Business Management*, 5(3), 184-193.
- Rasul, M. S., Ismail, M. Y., Ismail, N., Rajuddin, M. R., & Rauf, R. A. A. (2010). Development of employability skills assessment tool for manufacturing industry. *Jurnal Mekanikal*, 30, 4-61.
- Rial, A., Rial, J., Varela, J., & Real, E. (2008). An application of importance-performance analysis (IPA) to the management of sport centers. *Managing Leisure*, 13, 179-188.
- Salina, D., Nurazariah, A., Noraina Mazuin, S., & Jegatheesan, R. (2011). Enhancing university business curriculum using importance-performance approach: a case study of Business Management Faculty of a university in Malaysia. *International Journal of Educational Management*, 25(6), 1-21.
- Shukran, A. R., Hariyati Shariman, A. M., Saodah, W., & Noor Azlan, M. N. (2006). *Employee knowledge, skills, abilities, and others characteristics: expectation of industries*. Paper presented at the First International Conference of Muslim Psychologist, Khartoum, Sudan.
- Siniscalchi, J. M., Beale, E. K., & Fortuna, A. (2008). Using importance-performance analysis to evaluate training. *Performance Improvement*, 47(10), 30-35.
- Zabeda, A. H. (2009). Enhancing graduate employability through knowledge management. In Munir, Shukran & Morshidi (Eds.), *Strengthening higher education for a successful workforce*. Kuala Lumpur: IUM Press International Islamic University Malaysia.
- Zubaidah, & Rugayah. (2008). Imperative attributes for graduate employability in manufacturing firms: issues for internationalising Malaysia's curricula. In Sarjit, Morshidi & Norzaini (Eds.), *Globalization and internationalisation of higher education in Malaysia*. Pulau Pinang: Penerbit Universiti Sains Malaysia.
- Zulaikha, J., Ariffin, A. M., Ezanee, M. E., & Fazli, A. (2005). *Employer ratings on recent IT graduates competency*. Paper presented at the Konvensyen Teknologi Pendidikan ke-18, Kuala Terengganu
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Profiling Malaysian Firms Exporting to the Middle East

INTRODUCTION

Hence, this study aims to explore potential mutually beneficial Malaysia-Middle East partnership through the seeking for factors affects firm's performance. In spite of good relationship between Malaysia with Iran and Persian Gulf States (Bahrain, Kuwait, Qatar, Oman, Saudi Arabia and United Arab Emirates), these countries are not in Malaysia's top ten export markets. Besides of this relationship, they are also their membership in developing eight countries (D8), organization of Islamic Conference (OIC) and World Trade Organization (WTO).

Most Malaysian companies have been involved in trade and industry for generations, and many have excelled in international and regional markets. Foreign investors seeking joint-venture partners in Malaysia will be able to select from a wide range of companies to find one that matches their needs (MIDA, 2007). Current emphasis of the Malaysian government is in diversifying export market. There have been serious efforts initiated to encourage Malaysian firms to enter West Asian markets, particularly the nations surrounding the Persian Gulf. Besides relationships with Western and Asia Pacific countries, Malaysia also had long relationships with West Asian countries (Jeshurun, 2007).

Trade between Malaysia and Iran has increased substantially since 1997, when developing eight countries established. In July 2002, during the visit the relevant authorities of Iran and Malaysia signed two agreements and six memoranda of understanding which further enhance the bilateral relations particularly in the field of economic and trade (Islam Bank, 2009). Recently, in December 2, 2008, Iran and Malaysia signed three cooperation agreements on oil and gas (Industrial info resources, 2008). In 1965 the King of Malaysia had paid state visits to several West Asian countries; include United Arab Republic and Saudi Arabia. This relationship improved when these countries became members of the Organization of the Islamic Conference (OIC) in 1969 (Shikoh and Zain, 2008; Mun, Ling, and Yi, 2009).

This objective of this paper is to profile Malaysian firms exporting to the nations surrounding the Persian Gulf means Iran and Persian Gulf States (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirates). In addition analysis is done to determine if there are differences in their export performance arising from the differences in their demographic and structural factors.

Keywords: Export Performance, Demographic variables, Malaysian firms, Middle East.

LITERATURE REVIEW

Firm's propensity to export and continuously service overseas market are often associated with internal and external factors. Internal factors include the demographic and management characteristics of the company while external factors comprised of industry features, government support and foreign market forces (Bilkey, 1978; Cavusgil and Nevin, 1981; Zou and Stan, 1998; Leonidou et al. 2002; O' Cass and Julian, 2003). Another stream of research that investigates determinants of firm's performance in foreign markets also attributed to the same group of explanatory factors. There are mixed results on the influence of firm characteristics on export performance (Aaby and Slater, 1989; Baldauf et Al. 2000; Kantapipat, 2009; Sousa et al., 2008). Most of the studies focus on firms from industrialized nations and there is a dearth of information on exporting firms from developing nations. This study attempts to fill the gap by investigating exporters from nation classified as a Muslim nation entering non-traditional export markets, nations around the Persian Gulf. It is a region known to be root of Islam.

METHODOLOGY

This is a cross-sectional study using a survey approach. Exporters to the Persian Gulf nations were identified from the 2010 Directory of Federation of Malaysian Manufacturers. The data was collected using highly structured survey questionnaire and was addressed to the top management in the company. A total of one hundred and twenty useful returns were received.

Profile of Responding Firms

Table 1 presents the profile of Malaysian manufacturing firms exporting to the nations around the Persian Gulf. Approximately 48.3 per cent, indicated that the United Arab Emirates is their significant export market followed by Saudi Arabia with a total of 16.7 per cent, Iran with a total of 15 per cent, Kuwait 8.3 per cent, Qatar 5 per cent, Bahrain 3.3 per cent and Oman with a total of 3.3 per cent. In terms of export experience in the respective export market, firms that were found to have operated for less than 5 years were 40 per cent, between 5 to 10 years, 40.8 per cent, and more than 10 years, 19.2 per cent. The responding firms with 150 employees and less were classified as small and medium

enterprises (SMEs) while those with more than 150 employees were classified as large firms (FMM, 2010). Both groups of exporters are represented in this survey, approximately 43.3 per cent are SMEs while 56.7 per cent are large firms. As regards to export organization, approximately 59.2 per cent of the responding firms indicated that they have a separate department or division responsible for exporting. The remaining 40.8 per cent indicated that they did not have a separate export department.

Table 1 General Characteristics and Demographic Exporting of the respondents

Variable	Categories	Frequency (n=120)	Percentage (%)
Significant export market	Iran	18	15.0
	Bahrain	4	3.3
	Kuwait	10	8.3
	Oman	4	3.3
	Qatar	6	5.0
	Saudi Arabia	20	16.7
	United Arab Emirates	58	48.3
Export experience in Significant market	Less than 5	48	40.0
	Between 5-10	49	40.8
	More than 10	23	19.2
Entry mode to Significant market	-Direct entry mode to significant export market	35	29.17
	-Indirect entry mode to significant export market	46	38.33
	-Both, direct and indirect entry mode to significant export market	39	32.5
Industry	Electronics, Electrical machinery	8	6.7
	Textiles, Apparel and Footwear	5	4.2
	Wood products	8	6.7
	Rubber and Plastic products	13	13.3
	Food, Beverages and Tobacco	25	20.8
	Petroleum products	2	1.7
	Chemicals and Chemical products	11	9.2
	Non-Metallic Mineral products	5	4.2
	Iron, Steel and Metal products	19	15.8
	Transport Equipment	3	2.5
Other Manufactured products	18	15.0	
License requirement import	Yes	44	36.7
	No	76	63.3
Firm Size	Less than 150 fulltime employees	52	43.3
	More than 150 fulltime employees	68	56.7
Separate export department	Yes	71	59.2
	No	49	40.8
Quality certificate	ISO	49	40.83
	Other (QS, HACCP, HALLAL, GMP)	21	17.5
	Both	45	37.5
	Missing	5	4.17
Current major export market in the world	Asia Pacific & Australasia	69	57.5
	Europe	47	39.2
	America	18	15
	Middle East	44	36.7
	Missing	14	11.7
Export Intensity	Less than 25 percent	23	19.2
	Between 25-50 percent	27	22.5

Variable	Categories	Frequency (n=120)	Percentage (%)
	Between 50-75 percent	28	23.3
	More than 75 percent	37	30.8
	Missing	5	4.2

Three alternative entry modes were used. Approximately 38.33 per cent disclosed that they entered the export market using indirect entry mode. This is followed by 32.5 per cent of the firms entering to the significant export markets using both direct and indirect, and finally 29.17 per cent of the firms using direct entry mode. As regards to industry classifications, about 20.8 per cent of the responding firms are from the food, beverages and tobacco industry. The table also shows that 15.8 per cent comprises iron, steel and metal products, 13.3 per cent rubber and plastic products, chemicals and chemical products include 9.2 per cent, electronics, electrical machinery and appliances 6.7 per cent, wood products 6.7 per cent, non-metallic mineral products are each 4.2 per cent. Textiles, apparel and footwear consist of 4.2 per cent, transport equipment includes 2.5 per cent, petroleum products consist of 1.7 per cent and 15.0 per cent comprises other products.

Approximately 36.7 per cent of the responding firms indicated that the significant export market requires a license to import products. The remaining 63.3 per cent indicated that they did not require a license to import products. In terms of possessing quality certifications, the majority of respondents, which comes to 40.83 per cent, stated that they possess ISO. This is followed by 17.5 per cent of the firms having other quality certificates such as QS, HACCP, HALLAL and GMP. This is followed by 37.5 per cent of the firms have both of these certificate means ISO and one or more other quality certificates.

Regarding the firms' current major export markets in the world, most Malaysian firms besides exporting to the targeted markets also export to other countries in the world. Thus, their current major export markets may not be among the targeted markets and may be among other countries. In this case, the data shows that Asia Pacific and Australasia includes more than half, 57.5 per cent, of their current major export market. Europe includes 39.2 per cent of their current major export market, the Middle East and Africa 36.7 per cent, and America includes only 15 per cent. In terms of firms' export intensity, the table shows that a total of 19.2 per cent of the export sales is less than 25 per cent. This is followed by 22.5 per cent between 25 to 50 per cent, 23.3 per cent is between 50 to 75 per cent and 30.8 per cent is more than 75 per cent of the firm's export sales.

Export Performance

The findings on export performance are presented in Table 2. On the whole, the responding firms' evaluation of their export performance stood at the modest level.

Table 2 Export Performance

Export market	Economic measures	Non-Economic measures
	Mean value	Mean value
Iran (n=18)	2.97	3.33
Bahrain (n=4)	3.25	3.33
Kuwait (n=10)	3.10	3.03
Oman (n=4)	3.00	3.08
Qatar (n=6)	3.17	3.07
Saudi Arabia (n=20)	3.40	3.36
United Arab Emirates (n=58)	3.20	3.25

DATA ANALYSIS

This study intend to determine if there is variation in export performance, measured by both economic and non-economic measures, based on the selected characteristics of exporters. These variables include export experience in significant export market, separate export department, entry mode to significant market, industry, export intensity and firm size. A series of t-tests and one way ANOVA are used to determine whether there are significant differences in the mean scores on the export performance of Malaysian firms across the groups.

Export Performance based on Economic Measures

Table 3 shows the results of t-test and Table 3 shows the results of one-way ANOVA. SMEs and those firms that have separate export department register slightly higher performance compared to their counterparts. However the difference is not statistically significant. As shown in Table 4, firms with export intensity ranging from 25-50 percent registered the highest mean value of 3.37 and this is followed by those exporters in the category of “more than 75 percent”. The results however indicated that there is no significant variation in the export performance among the four groups of exporters. Export experience and entry mode too do not produced any significant differences in performance.

Table 3 Comparing export performance – Economic Measures

Variables	Mean Value	T- Value	Sig. (2-tailed)
Size:			
SMEs (n=52)	3.22	.52	.60
Large (n=68)	3.15		
Separate export department:			
Yes (n=71)	3.23	.94	.35
No (n=49)	3.11		

Table 4 Comparing export performance – Economic Measures

Variables	Mean Value	F- Value	Sig. (2-tailed)
Export Intensity:			
Less than 25 percent (n=23)	3.04	1.18	.32
25-50 percent (n=27)	3.37		
50-75 percent (n=28)	3.09		
More than 75 percent (n=37)	3.18		
Export Experience:			
Less than 5 (n=48)	3.19	.23	.80
5 – 10 (n=49)	3.14		
More than 10 (n=23)	3.26		
Entry Mode:			
Direct (n=35)	3.21	.08	.92
Indirect (n=46)	3.15		
Both (n=39)	3.19		

Export Performance based on Non-Economic Measures

Table 5 shows the results of t-test and Table 6 shows the results of one-way ANOVA. Similar pattern of results were noted as regards to non-economic measures of performance. Firm’s size, separate export department, export intensity and export experience do not explain the variation in export performance. The exception is on entry. This variable does explain the variation in export performance. The exporters using direct and indirect entry modes register significantly higher export performance compared to those that use both method of entry mode. Table 7 shows that two group means both (direct and indirect entry mode) and direct entry mode are significantly different from one another in terms of non-economic measures of export performance, at the $p > .05$ level, the value is .02 for both of them.

Table 5 Comparing export performance – Non-Economic Measures

Variables	Mean Value	T- Value	Sig. (2-tailed)
Size:			
SMEs (n=52)	3.34	1.28	.21
Large (n=67)	3.17		
Separate export department:			
Yes (n=71)	3.26	.22	.83
No (n=48)	3.23		

Table 6 Comparing export performance – Non- Economic Measures

Variables	Mean Value	F- Value	Sig. (2-tailed)
Export Intensity:			
Less than 25 percent (n=23)	3.38	.62	.61
25-50 percent (n=27)	3.11		
50-75 percent (n=28)	3.23		
More than 75 percent (n=36)	3.28		
Export Experience:			
Less than 5 (n=47)	3.15	.78	.46
5 – 10 (n=49)	3.33		
More than 10 (n=23)	3.28		
Entry Mode:			
Direct (n=35)	3.43	4.23	.02
Indirect (n=45)	3.33		
Both (n=39)	2.99		

Table 7 Duncan’s test results

Variables	N	Alpha=0.05	
		1	2
Both	39	2.99	
Indirect	45		3.33
Direct	35	1.00	3.43
Sig.			.51

Industry comparison

As shown in Table 8 shows in terms of economic measures of export performance to compare firm’s products (F value = 1.37) the value of .20 is more than alpha value of .05, so we can conclude that our result is not significant. It means that there is not a

statistically significant difference in the economic measures of export performance for the eleven groups means Electronics, Textiles, Wood, Rubber, Food, Petroleum, Chemicals, Non-Metallic, Iron, Transport and Other manufactured products. It shows these eleven groups are not differing significantly in terms of their economic measures of export performance.

Table 8 Comparing export performance – Industry

Industry classifications	Economic Measures	Non-Economic Measures
Electronics, Electrical machinery	3.44	3.63
Textiles, Apparel and Footwear	3.10	2.87
Wood products	2.69	2.58
Rubber and Plastic products	3.34	3.35
Food, Beverages and Tobacco	3.38	3.39
Petroleum products	3.25	2.83
Chemicals and Chemical products	3.41	3.42
Non-Metallic Mineral products	2.90	2.87
Iron, Steel and Metal products	3.08	3.00
Transport Equipment	2.67	3.11

Industry classifications	Economic Measures	Non-Economic Measures
Other Manufactured products	3.03	3.52
F-value	1.37	2.23
Sig.	.20	.02

As Table 8 shows in terms of non-economic measures of export performance to compare firm's products (F value = 2.23) the value of .02 is less than alpha value of .05, so we can conclude that our result is significant. It means that there is a statistically significant difference in the non-economic measures of export performance for the eleven groups means Electronics, Textiles, Wood, Rubber, Food, Petroleum, Chemicals, Non-Metallic, Iron, Transport and Other manufactured products. It shows these eleven groups are differing significantly in terms of their non-economic measures of export performance. As shown in Table 8 there is a statistically significant difference in the non-economic measures of export performance for the eleven groups. Table 9 shows Duncan's test results that illustrate the group sizes for these eleven groups are unequal.

Table 9 Duncan's test results

Variables	N	Alpha=0.05	
		1	2
Wood Products	8	2.58	
Petroleum Products	2	2.83	2.83
Textiles, Apparel and Footwear	5	2.87	2.87
Non-Metallic Mineral Products	5	2.87	2.87
Iron, Steel and Metal Products	19	3.00	3.00
Transport equipment	3	3.11	3.11
Rubber and Plastic Products	16	3.35	3.35
Food, Beverages and tobacco	24	3.39	3.39
Chemicals and Chemical Products	11	3.42	3.42
Other Manufactured products	18		3.52
Electronics, Electrical Machinery and Appliances	8		3.62
Sig		.06	.09

DISCUSSION AND CONCLUSION

It is often argued that large sized firms tend to be more ready to venture overseas and they are posited to be successful exporters than small firms. The larger firms have much more resources and more reasonable to export which permit economics of scale to be realized. The results of the t-test found that there is no a statistically significant difference in the mean of economic and non-economic measures of the export performance for firm size and separate export department. The results of one way ANOVA also indicated that there is no a significant difference on export performance for export experience and export intensity. Analysis based on entry mode show there is no significance difference on economic measures of export performance, the results is quite different when non-economic measures of export performance is used.

Another variable that is significant difference in the non-economic measures of export performance is industry of eleven groups of products. These eleven groups are Electronics, Textiles, Wood, Rubber, Food, Petroleum, Chemicals, Non-Metallic, Iron, Transport and Other manufactured products. This results analogous with the prior study which done by Fischer (2007) in five Euro countries such as UK, Spain, Italy, France and Germany. Fischer revealed export performance is positively related to product quality means exports of higher quality products for some products and also negatively for other products. The present results are differ from study from Greece done by Athanasoglou et al., (2010) who found trade performance was negatively influenced variety and quality of commodity composition and competitiveness because of underlying structure of production.

The insignificance of various internal factors in explaining the difference in performance could be attributed to the nature of the market. The Persian Gulf states are relatively new to Malaysian exporters. The initiatives to get Malaysian companies to venture into this region have often been undertaken by the government. So any organizations irrespective their characteristics are encountering new experience and are on the same level of learning curve.

REFERENCES

- Aaby, N.E., & Slater, S.F. 1989. Managerial influences on export performance: a review of the empirical literature 1978-88. *International Marketing review*, 6(4): 53-68.
- Athanasoglou, P.P., Backinezos, C., & Georgiou, E.A. 2010. Export performance, competitiveness and commodity composition. Working paper. *Bank of Greece, Euro system*. 1-56.
- Baldauf, A., Cravens, D.W., & Wagner U. 2000. Examining the determinants of export performance in small open economies. *Journal of World Business Research*, 35(1): 61-79.
- Bilkey, W.J. 1978. An attempted integration of the literature on the export behavior of firms. *Journal of International Business Studies*, Spring-Summer 9, 33-46.
- Cavusgil, S.T., & Nevin, J.R. 1981. International determinant of export marketing behavior: an empirical investigation. *Journal of Marketing Research*, 18(1): 114-119.
- Fischer, C. 2007. *Food quality and product export performance: an empirical investigation of the EU situation*. 105th EAAE Seminar International Marketing and International Trade of Quality Food Products, Bologna, Italy, 8-10 March.
- Industrial info resources, 2008. Iran and Malaysia sign \$14 billion of oil and gas corporation agreements. Global news. <http://www.pump-zone.com>. Accessed 12 January 2009.
- Islam Bank, 2009. Iran-Malaysia trade ties further boost, increase three folds. IRNA. <http://www.menafn.com>, Accessed 12 August 2009.
- Jeshurun, C. 2007. Malaysia fifty years of diplomacy. Kuala Lumpur: The other press.
- Kantapipat, W. 2009. The determinant of successful export marketing strategy in Thai processed agricultural products. *RU.Int. J.* 3(1): 91-102.
- Leonidou, L.C., Katsikeas, C.S., & Samiee, S. 2002. Marketing strategy determinants of export performance: a meta analysis. *Journal of Business Research*, 55(1): 517-567.
- Malaysian Industrial Development Authority (MIDA), 2007. <http://www.mida.gov.my/beta/view.php>.
- Mun, H.W., Ling, L.Z., & Yi, L.K. 2009. Malaysian-West Asia Relations and Foreign Direct Investment: Proposal for an Ummah Network based on Social Capital Concept. *Uluslararası Sosyal Arastirmalar Dergisi*, 2(6): 434-445.
- O' Cass, A., & Julian, C. 2003. Examining firm and environment influence on export marketing mix strategy and export performance of Australian exporters. *European Journal of Marketing*, 37 (3/4): 336-384.
- Shikoh, R., & Zain, M. 2008. OIC Trade: Malaysia, Turkey and Saudi Arabia Driving Increased Intra-OIC Trade. October 21, 2008. <http://www.dinarstandard.com/intraoic/intraoic052708.html#malaysia>.
- Sousa, C.M.P., Martinez-Lopez, F.J., & Coelho, F. 2008. The determinants of export performance: A review of the research in the literature between 1998 and 2005. *International Journal of Management Review*, 10 (4): 343-374.
- Zou, S., & Stan, S. 1998. The determinants of export performance: a review of the empirical literature between 1987 and 1997. *Journal of International Marketing Review*, 15(5): 333-350.

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Statement of Range of Jordanian Islamic Banks Observance of International Audit Standards and their Effect upon the Application of Accounting System

THE IMPORTANCE OF THIS RESEARCH

The importance of this search is clear through the illustration of range of effect of audit norms on the efficiency and the quality of services offered from Islamic banks to individuals of society and their efficiency upon the by-laws applied in Islamic banks. This study may be of great importance to higher administration in commercial banks in Jordan through evaluation of audit that give a hint to the possibility of dependence on internal auditors reports and evaluation of performance.

The research questions

How do Islamic banks commit to the adopted international audit norms?

What is the efficiency and qualification of administration in application of international audit adopted and their effect upon the accounting system?

The aim of the research is to state the range of observance of Islamic banks with international audit norms, to state their importance, to illustrate the effect of these criteria on efficiency and qualification of accounting system. It attempts to adopt between the international audit criteria applied in Islamic banks.

The research suppositions:

- The Islamic banks commit to known international audit norms.
- International audit norms influence the efficiency of accounting system.
- Islamic banks commit to international audit norms issued by accounting organizations and Islamic financial establishment.

Methodology of research: The researcher studies one case of Islamic bank and international Islamic Arabian bank. We will revert to books and references to complete the theoretical part of the research.

PREFACE:

THE IMPORTANCE & FINANCIAL DEVELOPMENT OF ISLAMIC BANKS

Islamic banks have developed in the last decades considerably as they now cover all sectors of Islamic financial services including the investment and commercial banking services common in many worlds; Arab (secular and Islamic), European, and American. Their capacity begins to occupy an important sector in financial market.

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Starting off this importance which the Islamic financial industry obtains and what is expected for it is a future based on the indicators which indicate the considerable increase in its preparation and its work load, there is an urgent need for set uniform norms which all banks and financial Islamic establishments should observe that matter which facilitate foundation the principles of audit and control.

The goals and functions of an Islamic bank (Board 1994) include the covering of the social the economic needs in the field by offering banking services based on principles other than interest. These include expanding the opportunities of dealing with banking sector, developing the abilities of gathering and collecting reserves and directing them for participation in investment, securing substitute finance to meet the different needs of economic sectors.

Islamic banks undertake some of the following functions in order to achieve such goals and purposes: they operate funds via investment, they offer banking services, they offer social services and they do other services and works.

The qualities of Islamic bank which distinguish it from traditional bands and which can be summed up as follows:

- 1-The doctrinaire quality: it obtains its work reference, control and conditions from Islamic law, more specifically from the jurisprudence of Islamic formalities – legal opinion, independent opinion and legal opinions based on avoiding usury of different forms and kinds.
- 2-The comprehensive quality: it gathers between the characteristic of commercial bank and investment bank and tends towards comprehensive bank characteristic.
- 3-Participation quality: it tends towards the forms of provisional and permanent ownership, in addition to participation in investment and use of money.
- 4-Development quality: it means that the Islamic bank derives its strength from norms of interaction with national economy and challenge of economic developmental issues, therefore, to support in promotion of society.
- 5-Investment quality: the real chance of Islamic bank is to tend towards investment via participation as a principal source of income and consequently continuity.

Audit & check commission for Islamic financial establishments:

This commission has been founded in Bahran as non profitable commission on 27/3/1991. It consists of supervision committee (profession higher authority), council of financial accountancy norms for banks and financial Islamic establishments and the executive committee for follow-up and planning. The committee cooperates with consultants and experts in the field of Islamic law and accountancy & its practitioners, and workers in Islamic banks.

Islamic Banks audit standards:

Audit and accountancy board of financial Islamic establishment has determined the target of criterion, is to put rules and instructions of general principles to control financial lists, which are prepared by the financial establishment according to rules and regulations of Islamic law.

The general principles of audit:

The board has determined the general principles of comptroller which he should observe in his professional liabilities performance as follows:

Straightness	virtuousness.
Loyalty	fairness.
Faithfulness	independency.
Objectivity	profession adequacy.
Concern	obligation.
Secrecy	vocational behavior and technical criterions.

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Audit range:

Assembly determines audit range by some measures, which are seen by auditor necessary to achieve this audit:

The measures required to fulfill audit works according to audit criteria issued by board and he should take into consideration what may be fit to the requirements of the following:

The rules and principles of Islamic law and audit criteria issued by the professional boards, regulations and rules which do not contradict the rules and regulations of Islamic law.

We mention some standards issued by accountancy board of financial Islamic establishments: (board):

- 1- Audit criterion no. (2) aims and principles of audit: Its helps the external auditor to give his opinion about the way of preparing financial lists according to Islamic doctrine and accountancy and financial Islamic establishments criterion and practices of accountancy and laws in state where the establishment work.
- 2- Audit criterion no. (3) The responsibility of administration: the administration of the bank must prepare financial lists and find good system for internal supervision for suitable documentation and protection of assets, and submit the faithful offer of financial lists. The auditor's report must make bank administration commit to work according to Islamic doctrine and legal opinion in addition to the decisions of the board of legal banks control.
- 3- Criterion no. (4) Examination of external auditor: its target is to set foundation, to submit instructions concerning the external auditor commitment to the Islamic law rules and regulations when he revised the financial lists, which are prepared by the financial establishment.
- 4- Criterion no. (5) The responsibility of external auditor to find out the forgery and errors in financial lists audit: its target is to give instructions related to forgery and the responsibility of external auditor, and the rules of submitting reports to the executive administration in bank. It also targets to make the external auditor know the min. limits of measures which must be taken when he finds forgery or errors.
- 5- Criterion no (6) legal internal control: its target is t put foundation and to submit instructions about legal internal control in establishments that work according to Islamic law and principles. It consists of legal internal control, independency, objectivity, profession adequacy, work range, achievement of control work, quality and control
- 6- Criterion no. (7) Sale and parallel sale: it is described as receivables sale to be paid later. It is a contract in which the ownership is proved when price is paid immediately.

Parallel Sale: it is a contract in which the seller depends on execution of his liabilities in what he should clear of the sold in his capacity as a Muslim.

It deals with accountancy rules for financing sale and parallel sale process including capitals, which are submitted or being taken by the bank. The parallel sale deals with treatment of funds, expenditure, profit and loss related to finance in sale and parallel sale process.

7- Criterion no. (11) Almsgiving accountancy:

It aims to put the accountancy rules which control dealing with determination of almsgiving base measurement of items entering this base and their declaration in financial lists of Banks and financial Islamic establishment.

8- Criterion no. (12) General giving expression and offer in financial lists:

It shows the financial lists which the establishment should spread periodically. It determines the general rules to show the information and the requirements of declaration in such lists.

9- Criterion no. (14) Saving Funds:

It aims to determine the form of financial lists for investments vessels (box) that work according to Islamic doctrine and principles. Its aim is also to put the accountancy basis to prove the comparison, supply the assets, credits, funds and expenditure in these funds of financial lists and how to announce about them.

10- Criterion no. (15) Reserves and appropriations:

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It aims to put the accountancy basis to prove the comparison, supply and aru10unce about appropriation which is made by Islamic bank to evaluate the receivables, finance and investment. The report of international auditing about the actions of banks which are legitimate by International Committee for Audit which is related to The International United Accountants:

- Report no, (1 000) the procedures of legalization between banks
- Report no, (1 004) the relation between the inspectors of Bank activities and external auditors.
- Report no, (1006) audit of the financial banking data.

Preface:

The International Union Of Accountants

It is the international organization of accountancy, founded in 1977, to serve the public interest and support accountancy profession all over the world, and strengthen the international economies with highly adherence with high work quality and international agreement of these criteria and to express the subject matters related to public interest whereas the profession experience is the most relevant matter.

International Audit and Assurance Criteria council:

It works as an independent board to set the criteria under the auspices of the international union of accountancy. Its target is to serve the public interest via setting criteria of audit and assurance criteria of high quality, to facilitate the agreement between the national and international criteria, in order to upgrade the level of quality and consistency of practice all over the world and to strengthen the public trust in profession of international audit and assurance.

International Audit and assurance criteria council achieves this aim through the following:

- To set up high quality audit and assurance criteria for auditing the financial data
- To set up high quality audit and assurance criteria for various kinds of services to all related to financial and non- financial works.
- To set up high quality audit and assurance criteria for other relevant services.
- To set up audit criteria on quality including range of services addressed by the council.

HYPOTHESIS ANALYSIS

Study feature sample:

1-Job Title:

Position	Repetition	Percentage
Supervisor	-	-
First auditor	11	64.7%
Department Director	6	35.3%
Beginner auditor	-	-
Total	17	100%

It is noticed that 64.7% of the sample is from first auditors. 35.3% are from department directors.

2- Experience:

Group	Repetition	Percentage
Less than one year	-	-
From one to lesser than 5 years	4	23.5%

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Group	Repetition	Percentage
From 5 to lesser than 10 years	7	41.2%
From 10 to lesser than 15	2	11.8%
Total	4	23.5%
	17	100%

We observe that 23.5% of sample, their experience ranges from (I-less than 5 years) and 41.2% of sample, their experience ranges from 5 to less than 10 yeas From 10 to lesser than 15rs. 11.8% of sample, their experience ranges from 10 to less than 15 years. And 23.5% of san1ple, their experience is more tan than 15 years.

4- Scientific Qualification:

Certificate	Repetition	Percentage
Diploma	-	-
Bachelor	12	70.6%
Higher diploma	4	23.5%
Master	1	9.5%
PH.D	-	-
Total	17	100%

We observe that 70.6% of sample is from those who have bachelor. 23.5% of sample is from those who have higher diploma, and 9.5% of sample is from those who have master.

4- Professional certificates: We notice that 64.7% of samples are from those who have (CPA) and 11.8% of sample have (CIA).

5-Specialization:

Specialization	Repetition	Percentage
Accountancy	15	88.2%
Financial administration	-	-
Business administration	-	-
Economics	2	11.8
Other	-	-
Total	17	100%

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We notice that 88.2% of sample are of those who have studied accounting 1.8% of sample are those who have certificate in Economics.

Steadiness test:

It has been used kronpagh Alpha test to measure the limit of steadiness of measurement tool wheremat its. Its value is added up to 74.20% which excellent percentage is being higher than the accepted percentage 6%.

Hypothesis test:

Ho: 1: Islamic Banks do not adhere to adopted international audit criteria.

HA: Islamic Banks adhere to adopted international audit criteria.

The results of testing hypothesis:

Computation T	Tabulation T	Sig T	The result of nothingness
13.222	2.1199	0.000	Refusal

One sample T-Test has been used We find out from computer report in previous table that the value of computation T=13.222 bigger than its Tabulation value and refuse the nothingness hypothesis (HO) if the value of computation is less than its Tabulation value consequently, we refuse the nothingness hypothesis (HO) and we accept the alternative hypothesis (HA). It means that Islamic banks adhere to international audit criteria.

HO:2: Adherence to international audit criteria does not affect the efficiency and influence of computation.

HA: Adherence to international audit criteria affects the efficiency and influence of computation.

The results of hypothesis test

Computation T	Tabulation T	SIG T	The result of nothingness hypothesis
9.866	2.1199	0.000	Refusal

One sample T- Test has been used. We find out form results of computer in previous table that the value of computation T=9.866 is bigger than its Tabulation value.

Whereas the base of decision accepts the nothingness hypothesis (HO) if the computation value is less than tabulation value and refuse the nothingness hypothesis (HO) if the value of computation is less than Tabulation value Consequently, we refuse the nothingness hypothesis (HO) and we accept the alternative hypothesis (HA). It means that Islamic Banks adhere to international audit criteria issued from accounting board and Islamic financial institutions. Ho:3: Islamic Banks do not adhere to international audit criteria, which are issued from accounting board and Islamic financial institutions HA: Islamic Banks adhere to international audit criteria, which are issued from accounting board and Islamic financial institutions.

The results of hypothesis test:

Accountancy T	Table T	SIG T	The result of nihilism hypothesis
14.667	2.1199	0.000	Refusal

Statement of Range of Jordanian Islamic Banks Observance of International Audit Standards and their Effect upon the Application of Accounting System

One sample T-Test has been used. We find out from results of computer in previous table that the value of computation $T=14.667$ is bigger than its Tabulation value.

Whereas the base of decision accepts the nothingness hypothesis (HO) if the computation value is less than tabulation value and refuse the nothingness hypothesis (HO) if the value of computation is less than Tabulation value. Consequently, we refuse the nothingness hypothesis (HO) and we accept the alternative hypothesis (HA). It means that Islamic Banks adhere to international audit criteria issued from accounting board and Islamic financial institutions.

The results of study:

- 1- The result of study shows the Islamic Banks in Jordan apply and adhere to international audit criteria.
- 2- It shows that there are some differences in auditors' evaluations upon applying international audit criteria. These personal variables are referred auditors, such as (job title, years of experience, academic qualification and specialization).
- 3- The study shows application of international audit criteria and adherence of banks to these criteria affect the efficiency of computation system applied in Islamic Banks.
- 4- It shows that Islamic Banks in Jordan adhere to application of legal audit criteria in addition to international audit criteria.

RECOMMENDATIONS

This part aims to offer some recommendations and proposals which drives at development of audit function in Islamic Banks sector. These recommendations are derived from:

- 1- The necessity of supply the Audit departments with well qualified personnel because their current number is not enough in Islamic Bank sector, so far employees work in this sector must be trained well to know the importance of audit.
- 2- The researcher advices with the necessity of application of international auditing criteria because of the gap between what is done and what is required to be done by auditors in Islamic Banks sector.
- 3- He advices to appoint well- qualified chartered auditors to facilitate his job efficiently and accurately.
- 4- Central Bank of Jordan gives annual reports in cooperation with chartered auditors about internal control systems in addition to evaluation of internal audit department in Islamic Banks.

REFERENCES

- Publications of International criteria for practice of audit process and its professional ethics
International Union of Accountants, 2004. Translation of Legal Arabic Accountants
Complex.
- Board of accountancy and audit for financial Islamic establishments: "Criteria of Accountancy and
audit for Islamic financial establishments. 3-Omiya, AI-Bahrain 1994, 1999.
- Dr.Youns Ebrahim Al-Tamimi, "Audit and control in Islamic Banks"; second chapter. Institute of
Banking study.
- Study**
"nalytical study". Dr.Alaishi Fadad. "Needs for legitimate control criteria and their influence on
Islamic financial industry".
Study of Dr.Hekmat Ahmed Al-rawi. "International Accountancy". Amman. Dar Hanin. AI-Falah
Library 1995.
Ad Al-satar abo Ghedh. "The responsibility of auditor and his behavior in the light of doctrinal rules,
Daleh papers 1998
- Web-Site**
www.al-igtissadiya.com

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Different kind of power market and recognition of structure and model of Iran power market

Key words: Power, Electric Energy, Power Market, Pool Market Model, Iran.

INTRODUCTION

In the 1980s some economists expressed that the exclusive concession of power companies caused unnecessary investment and decrease of effective operation motive. It was also posed that the consumers should not to be sustaining the expenses of power company's mistakes. Therefore political issues can affect on economical status power system. Economists suggest that electricity should be delivered based on market principles instead of exclusive requirements and governmental policies, which it results is price decreasing and general benefits increasing. This aim has been set as a base of a "deregulation" or restructuring of general structure of Western economy. This approach had affected transportation and fuel industry before being taken attention in power industry (Kirschen, 2007, pp. 2-3).

If power is assumed as a product, it like a product in counter, as flour or a TV set, should be ready to use when the consumer turns on the lamp or starts his industry process. So a kilo watt of power can be deal as a product in the power market.

What is difference between a megawatt-our of power and barrel of oil?

Development of power markets is based on assumption of dealing electricity as a product. However there are basic differences between electricity and other products such as wheat, oil barrels and gas. The most basic difference is that power is coupled inseparably by physical system and it behavior quicker than any other market. In this physical power system, supply and demand should be balanced second by second, otherwise not only the supply system fails, but also a whole region or country may be powerless for several hours (Kirschen, 2007, p. 78).

Because an economical way hasn't been invented yet in order to save a large amount of power, this energy should be generated at the same time that it is consumed. So, the trading of power that should be delivered is definite amount of mega watt hours during a definite period of time. Because the delivered power during a time period isn't equal delivered power during another period, price is often different in each time period. So in order to balancing the system, some regulations should be done in generation in shorter time periods. Because these types of regulations are done with dealing power, it mostly behaves similar services than goods (Kirschen, 2007, pp. 77- 78).

Another main difference is that the direct delivering of generated power by a generator to a definite consumer is impossible. So, a consumer can't receive energy just from a definite generator. Instead, the production capacity of all generators towards charges become as a pool. Forming of this pool is possible because the generated amount of power by different generators isn't distinguishable. Also the pool forming is desirable, because it leading to valuable economical results in these cases:

The maximum capacity of generating power should be proportional with the maximum of cumulative demand, not with the maximum of individual demand. In other words, interruption in a system in which a product has been changed into a pool, affect to all individuals, not only two participants involved in a special contract (Kirschen, 2007, p. 79).

Finally, the power demand represents predictable changes of weekly and daily periods. Although it doesn't mean that power is the only product that has periodic demand. Because the change of demand price in short term is very small, the regulation of supply and demand needs to production equipments to be able to follow the great and quick changes occurring during a day (Kirschen, 2007, p. 79). Regarding the trend of economical data, economists believed that small and temporary changes are never related to wide and long term changes. Mandelbrut, a sophisticated mathematician, studied this topic but didn't separate small changes from big ones. He considered a system as a whole and concluded that the daily and monthly changes curve of economical data were completely matched with each other and the changes rate had been stable for sixty years (Elahi Rad, 2007, p. 24).

When demand is less, the generators with the highest output compete with each other. Because the final generator changes with the increase and decrease of charge, changes in marginal cost of power generating (and also the spot price of this energy) may be expected during the day. These periodic changes about cost and price of a product are very unusual (Kirschen, 2007, p. 80).

Power market types

While dealing between seller and purchaser some issues as the date of product delivering, the final settle method and the requirements involved in this dealing should be determined. The way of solving these issues between the seller and purchaser is depends on the type of contract between them and so on the type of the market in which they are dealing (Kirschen, 2007, pp. 50-51).

Spot market: spot market is a natural market in which the sellers and purchaser negotiate about price as they are expecting the product (power) delivering (Johnston, 1992, p. 314). In this market, the price isn't predictable and the planning possibility is very low (Hossein, 1991, p.4).

In a spot market, the seller delivers the product immediately and the purchaser pays at the same time. There aren't any requirements involved in delivering. It means that nobody of the two parties of dealing has the time to relinquish. Spot market has the advantage of being temporary. As a producer, a person can sell exactly the amount of product that is available to him and as a purchaser, a person buys exactly the amount of product that he needs. But great and unpredictable changes of a product price in a spot market and in long term, cause problems for the producer and the consumer. The necessity of avoiding to facing with the great changes of current prices in the spot market, results in introducing another types of exchanges and markets (Kirschen, 2007, pp.51-52).

Forward Markets and Forward Contracts: forward markets refer to forward transactions and is a method for planning commercial activities and in this way, forward transactions have higher flexibility than spot markets transactions (Hossein, 1991, p.4).

A forward contract is an agreed for delivering a product in future with a definite price. The conditions may be changed and these types of forward transactions have risk, for example if a marketer agrees on delivering 100000 mega watt hours electricity in one year at the stable price of 20 dollars for each mega watt hour and the real cost of receiving and delivering of electricity would be 30 dollars for each mega watt hour, this marketer will lose 10 dollars for each mega watt hour (Spiewak, 1998).

A forward contract has been a standard contract in which all of the requirements involved in delivering, the place of delivering, quality and quantity have been identified and standardized but the price is an exception and it's restricted area is opened to be discussed about. Forward transactions related to power are carried out in some markets as New York Mercantile exchange/ NYMEX and Chicago board of trade/ CBOT. Most of forward contracts aren't regulated at the aim of delivering but as a financial tool. Less than 2 percent of forward contract lead to product delivering (Treat, 1984, p. 4).

Forward contracts enable the contractors to trade on the agreed price, so provides the opportunity to divide the price between them. If the spot price at the time of delivering is higher than agreed price,

the forward contract will be beneficial to the purchaser and unprofitable to the seller. These benefits and damages are overtone on the sheet, because they just represent that one side of contract has better situation and another one faces a worse situation of trading in spot market. But this damage possibility on the sheet decreases the competition capacity, because the company has to sell or buy the product with an undesirable price than its other rivals (Kirschen, 2007, p. 54).

Anderson and his associates in their paper reviewed the existing literature on forward contracts and explored the contracting process as it operates in Australia. They have designed interviews with participants in Australia's National Electricity Market (NEM) to understand the contracting process and the practice of risk management in the Australian energy-only pool market. Their survey was revealing some significant gaps between the assumptions made in the academic literature and actual practice in the Australian market place (Anderson, 2007, p. 3089).

Futures Markets and Futures Contracts: existence of a secondary market in where producers and consumers can trade forward standardized contracts helps the contractors to cope with oscillation of spot prices. Involved persons in this market aren't restricted to those companies which produce or consume the product; there are some people who aren't physically able to deliver the product but may want to participate in this market. These people are traders who want to buy a contract to deliver it in future, because they hope to sell it with a higher price. Similarly, a trader can sell a contract by hoping to buy another contract with lower price in future. Because these contracts aren't with physical delivering they are called future contracts rather than forward ones. By closing to the delivering time, traders should decide on their situations because they lack the ability of production, consumption or stocking of the product (Kirschen, 2007, pp. 56-57).

Options: future and forward contracts, regarding their unproved condition of product delivering, are firm contracts. Each seller who isn't able to deliver the agreed quantity should supply the leakage amount from the spot market. Also, each purchaser who can't receive the whole product should sell the extra amount in the spot market. In other words the imbalances at the time of delivering are changed to cash with the spot price (Kirschen, 2007, p. 58).

In some cases the participants may prefer those contracts with conditional delivering in which the contract is carried out just when the contract owner wants it. These contracts called as options contracts are two types: calls and put contracts. Call option contract authorizes its owner to buy a definite amount of product with a price called exercise price. Put option contract authorizes its owner to sell a definite amount of product with the exercise price. Decision of option contract owner regarding of the mentioned laws depends on the spot price of product (Kirschen, 2007, pp. 58-59).

Power market management

Power marketing managers may buy from utility and nonutility generators, as well as other power marketing managers. At the wholesale level they may sell to private and public utilities, other marketers and resellers and at the retail level may sell to industrial, commercial and governmental end users. They take title to the power being transacted, thus they assume price and market risk (Denny, 2000, chapter 4). So process of power market management includes the analysis of market forces, planning, implementing and controlling of contracts related to electricity power with the aim of obtaining a desirable level of contracts in the given market. Achieving this aim requires the regular and continuous analysis of effective factors in the market and identification of consumers needs and demands in order to make decision on pricing, communication way and distribution methods (Rezaian, 2003, p.408).

Power market in Iran

In the last decades the power industry has been under fundamental changes all around the world which is called by such different titles as "deregulation", "reconstruction in power industry", "rules revival" and so on. Various countries have entered into the new stage of power industry with different motives.

Power market in Iran was established in 2003/10/23 by introducing a law of “identify method, price and the condition of trading in the country power grid”. The most important reasons and motives of reconstructing and running power market in Iran are:

- 1- Creates competitive environment in power production and distribution sections.
- 2- Supplies required resources through nongovernmental section for investment.
- 3- Increases economical efficiency.

The structure of Iran power market is based on purchasing agency model, requires that all of the purchasers and sellers to exit in power market. Most outstanding features of Iran power market can be referred to the following:

- 1- Market model in Iran power market is the previous day’s market.
- 2- Auction model in Iran power market is one-side auction.
- 3- Paying to sellers is based on offering.
- 4- Iran power market is a wholesale market.
- 5- Purchasing rate from Iran power market is equal and based on the market settle rate.
- 6- Payment on transmitting services is based on readiness of generators.

Power market model in Iran is “pool model”, in which participation in the market is obligatory for all purchasers and sellers (Iran Power Grid Management Company’s web site). In pool market there is only a price for delivering and for production and those producers or consumers who cannot adapt oneself to current market price, are voided from the cycle. In this model which is also called as centric transaction model or transaction based on pool, producers and consumers present their bids and others to the system operator who acts as the market operator. The system operator who should be independent from all of the contractors chooses those bids and others that adjust the market optimally. The system operator also identifies market settle rate as a part of this process (Kirschen, 2007, p. 226). Payment to the sellers in the Iran market is differentiated and based on offering. In Iran power market the seller’s competition is in energy section. The sellers are authorized to provide the curves of energy supplying in ascendant steps and maximum in 10 steps in the power market. When these prices are accepted in the power market, the generators will be paid money based on the suggested price (Iran Power Grid Management Company’s web site).

At this time, power sellers in Iran include the Regional Electrical Companies, Tavanir Company and power stations with warranted purchase. On the other hand the Regional Electrical Companies in the market have the role of purchaser. It should be noted that regarding the passing of single provision of provincial Electrical Distribution Companies independence by Iran Islamic Parliament, these companies will soon participate as a purchaser in the power market. Also the Regional Electrical Companies as the owner of transporting equipments in Iran power market have the role of providing transporting services.

CONCLUSION

Among the different types of markets, spot market has the advantage of being temporary; in way that the producer can sell exactly the amount of product which is available and the consumer buys exactly the amount of product which he needs. The forward markets are suitable for planning the business activities than spot market and has high flexibility. In this market forward transactions are carried out and these transactions are usually regulated as a financial tool. Also in the forward contracts if the agreed price is less than spot price, the purchaser benefits and the seller loses. In the future markets not only producer and consumer but also some contractors exist that aren’t able to deliver the product physically and participate in these type of market. They are traders who buy a contract because they are in hopes that they sell it with a high price in the future. The future contracts don’t lead to physical delivering. In option contracts the contract owner’s decision on conducting the mentioned laws in contracts depend on the spot price of product.

The managers of power market dealing energy being transported, so they face with risk of price and market. Electric energy has been integrated with physical system in a way that behavior is faster than each market. In this physical power system, supply and demand should be balanced second by second; otherwise not only the transaction system fails but also the whole region or country may be powerless for several hours. Also because the delivered electrical energy in one time period isn't equal as the delivered electrical energy in another period, the price is different in each period, and in order to set balance in system, some regulations in generation in shorter time periods should be conducted and because these regulations are done with energy transaction they mostly behave as services than goods. When generating power of all generators to charges, become as a pool and because in this case the maximum capacity of generating power should be proportional with the maximum cumulative demand, it will be conduct to important economical results of forming this pool.

The power market model in Iran is pool or purchasing agency model that participating in power market is obligatory for all of the purchasers and sellers. Iran power market is a wholesale market and payment to the sellers is based on the offering. The purchasing rate in Iran power market is equal and based on the market settle rate.

REFERENCES

- Anderson, Edward J., Xinin Hu and Donald Winchester, "Forward contracts in electricity markets: The Australian experience", *Energy Policy*, Volume 35, Issue 5, May 2007.
- Denny, Fred and David E. Dismukes, "Power system operations and electricity markets", CRC press LLC, 2002.
- Elahi Rad, Jabbar, David Feiz, "Chaos theory and management", *Journal of management* (ISSN 1023-7445), Iran Management Association, Vol. 15 No. 115 & 116, Dec & May 2007.
- Hossein, R., "Fundamentals of petroleum trading", New York, Praeger, 1991.
- Iran Power Grid Management Company's web site, www.igmc.ir.
- Johnston, D., "Oil company financial analysis in non technical language", Tulsa, Penn Well Books, 1992.
- Kirschen, Daniel Sadi, Goran Strbac, "Fundamentals of power system economics", chich ester, England, 2004.
- Rezaian, Ali, "Fundamentals of Organization and Management", the organization for researching and composing University textbooks in the humanities (SAMT), Tehran, 2003.
- Spiewak, S., "Power Marketing: Price creation in electricity markets", Arlington, The power marketing Association, 1998.
- Treat, J. E., "Energy Futures: Trading opportunities for the 1980s", Tulsa, Penn Well Books, 1984.

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Authentic leadership, trust, and employees' work engagement: A comparative study of Islamic and conventional banks in Malaysia

Key words: Islamic banks, situational strength, authentic leadership, trust, work engagement

INTRODUCTION

It is generally recognized in psychological studies that human behavior results from the interaction of person and situational factors (Chatman, 1989; Cronbach, 1957; Weiss & Adler, 1984). In a recent review of literature on situational strength construct Meyer, Dalal, and Hermida (2010) argued that situational strength factor has not been given adequate attention while examining the difference or similarities in individual responses in organizational studies. According to them "situational strength pertains to the idea that various characteristics of situations have the ability to restrict the expression and, therefore, the criterion related validity of individual differences (p.121)." Situational strength is defined as "implicit or explicit cues provided by external entities regarding the desirability of potential behaviors" Meyer, Dalal, and Hermida, 2010, p. 122). Depending upon the strength of the situation it is posited that it results in psychological pressure on individual to engage in and/or refrain from particular courses of actions; thus reducing the relevant variance.

Combined with social desirability effect in self-report survey researches the result may attenuate or exacerbate cause effect relationships. To illustrate how situational strength restricts individual differences in attitude and behavior the example of bureaucracy and bureaucrats come very handy. Max Weber (1922/1978) argued that bureaucracy provided a set of rationally developed, rule based procedures designed specifically to overcome the processing shortcomings of individuals, and at the same time minimizing freedom of choice. Forehand and von Gilmer (1964) argued that formal and informal characteristics of organizational situations have the potentiality to influence the behaviors of employees. The organizational factors may include structure and hierarchy, systems complexity, leadership style, and nature of organization's goal. Similarly, Davis-Blake and Pfeffer (1989) maintained that most organizational settings are strong situations that have a large impact on individual attitudes and behavior. Schneider and Hough (1995) include norms, roles, expectations of others, social relationships, the nature of tasks, and physical characteristics of the job among the constituents of situational strength factor.

Meyer, Dalal, and Hermida (2010) suggested that situational strength is a multi level construct that included national culture, organizational climate, occupational climate, and temporal fluctuations. Drawing evidence from other studies they posit that various aspects of national culture may contribute to the situational strength that may facilitate or inhibit certain types of behavior. For example, evidence from GLOBE study (House *et al.*, 2002) suggests

that individuals in high uncertainty avoidance culture may discourage individuals to use discretion and rather go by historical precedents. Likewise, a strong organizational climate—in which there is a high degree of consensus among employees regarding the types of behavior that are expected and/or desired by the organization—is a good exemplar of a strong situation. Meta-analysis of occupational constraints influencing employees such as accountants work behavior provided support to the situational strength proposition. Temporal fluctuations may also contribute to the situational strength factor. This may include task structure, time pressure, elements of obligations, deadlines nearness, and evaluation.

Based on the above arguments we conducted a study to compare employees' perception of supervisors' leadership style, interpersonal and organizational trust, and work engagement in two groups of banking organizations. The first one represented Islamic banks and the second conventional banks. Islamic banking transactions follow *sharia* (Islamic law) and adhere to specific sets of norms and values that guide employees' attitude and behavior. Employees, in general, are practicing Muslims. On the other hand, conventional banks are not faith based and follow secular values. Employees belong to different religions. Abd. Rahman (2007) identifies several distinguishing features of the two banks. For instance the functions and operating modes of conventional bank is based on fully manmade principles whereas Islamic bank is based on the principles of Islamic *Sharia*. In the case of former investors are assured of a pre-determined rate of interest whereas the later promotes risk sharing between the provider of the capital and the user of the fund. Similarly, while the conventional bank aims at profit maximization without any restriction, Islamic banks aim at profit maximization subject to *shariah* restrictions. Research Objectives and Hypothesis

As conventional and Islamic banks serve different purposes and have operational as well as ideological differences it would be interest to understand how these contextual differences account for the way employees perceive authenticity in supervisors' leadership behavior, as well as interpersonal and institutional trust and how these factors contribute to employees work outcome i.e., work engagement. Since Islamic banks are based on Shariah principles it is expected that these institutions will exhibit strong organizational culture resulting in normative pressure on employees to follow Islamic code of ethics and therefore it was hypothesized that:

Compared to conventional banks supervisors of Islamic banks will be perceived more authentic in their leadership style. This in turn will promote higher level of trust and employees work engagement.

LITERATURE REVIEW

Authentic Leadership

Authentic leaders are those who are deeply aware of how they think and behave and are perceived by others as being aware of their own and others' values/moral perspectives, knowledge, and strengths (Avolio *et al.*, 2004; Avolio and Gardner, 2005; Gardner *et al.*, 2005a; Luthans and Avolio, 2003; Ilies *et al.*, 2005). Authentic leadership theory has been advanced as an approach to leadership that includes behaviors such as transparency (Avolio *et al.*, 2004), altruistic actions (Michie and Gooty, 2005), and behavioral consistency (Gardner *et al.*, 2005; Eagly, 2005). Authentic leadership theory leverages synergies from Avolio's past research on transformational (Bass and Avolio, 1994; Avolio and Bass, 1988; Bass and Avolio, 1993) and full-range leadership (Avolio *et al.*, 1999; 2002; 2005) and Luthans' past work in positive organizational behavior (Luthans, 2002), psychological capital (Luthans *et al.*, 2004; Luthans and Youssef, 2004; Luthans, *et al.*, 2008), and positive approaches to leadership (Luthans, *et al.*, 2001).

In the Avolio *et al.* (2004) leadership framework, trust is a key intervening variable linking authentic leadership to followers' attitudes and behaviors. Although research in authentic leadership is relatively new, studies have shown that relational transparency is a key component of authentic leadership and is a significant predictor of trust in the leader (Gardner *et al.*, 2006; Hughes, 2005; Norman, 2006).

Interpersonal trust

Trust is defined as the mutual understanding between two persons that vulnerabilities will not be exploited and that the relationship is safe and respectful (Morrow *et al.*, 2004; Rousseau *et al.*, 1998). According to Doney *et al.* (1998), trust is "a willingness to rely on another party and to take action in circumstances where such action makes one vulnerable to the other party".

Interpersonal trust is conceptualized as a belief about a set of particular characteristics of another specific individual(s). These characteristics have typically included the dependability or reliability, caring or benevolence, competence and integrity of coworkers (lateral) and leaders (vertical) (Cummings & Bromiley, 1996; McAllister, 1995; Mishra, 1993; Hosmer, 1995; & Mayer *et al.*, 1995). Interpersonal trust was measured within the dimensions of *competence*, *benevolence* and *reliability* (Mayer and Davis, 1999; McKnight *et al.*, 2002).

Little attention has been given to leadership studies on the role of trust in influencing follower's behavioral outcomes. Trust is the building block of social exchange and role relationship. Leader member relationship needs trust. Leadership is considered trustworthy based on leadership's conduct, integrity, use of control, ability to communicate, and ability to express interest for members (Whitener *et al.*, 1998). When trust is broken it can have serious adverse effects on a group's performance (Dirks & Ferrin, 2002).

Leadership trust is defined as a leader-member relationship based on mutual respect, cooperation, commitment, reliability and equity (Brower *et al.*, 2000; Dirks and Ferrin, 2002). Effective leadership trust is also based in exchange theory, which proposes that leaders and members create a mutual reciprocal relationship (Rusaw, 2000). When followers trust leader, they are willing to be vulnerable to the leader's action—confident that their rights and interests will not be abused (Hosmer, 1995).

Leaders have a significant responsibility to increase member involvement to breed leadership trust. Honesty, for instance, consistently ranks at the top of most people's list of characteristics they admire in their leaders. It is also important that leadership trust only exists if leadership is aligned with organizational values, demonstrates fairness with members, and does not exploit members. Furthermore, organizations that experience greater trust in leadership can compete more effectively in economic markets and maintain organizational viability (Whitener *et al.*, 1998).

Institutional trust

Institutional trust can be characterized as the trust of its members in the organization's vision and strategy, its technological and commercial competence, its fair processes and structures, as well as its HR policies (Ellonen *et al.*, 2008). Many studies have indicated that trust is a necessary and viable component of organizational success (Bracey, 2002; Csorba, 2004; Dirks and Ferrin, 2002; Galford and Drapeau, 2002; Kouzes and Posner, 2002; Morgan and Zeffane, 2003; Reina and Reina, 1999; Whitener, Brodt, Korsgaard, and Werner, 1998). Institutional trust (i.e., trust in an organization) involves employees' willingness to be vulnerable to their organization's actions or policies (Schoorman *et al.*, 2007). Different from interpersonal trust, employees' trust toward their organization is likely boosted when their satisfaction about economic offers in the job context (e.g., payoff or promotion) is obtained

(Williams, 2005). The dimensions of Institutional trust include benevolence and reliability, vision, strategy and communication, competence, and structural assurance.

Authentic Leadership and Trust

Luthans and Avolio (2003) describe an authentic leader as one who is “genuine, reliable, trustworthy, real, and veritable”. Thus, trustworthiness is proposed to be an intrinsic feature of authentic leadership. In this sense, trustworthiness is also viewed as an antecedent to authenticity. That is, trustworthy leaders are seen as more authentic.

Luthans and Avolio (2003) viewed that consistency, integrity, openness, promise fulfilment, and receptivity to suggestions and input are also some of the core components of authenticity. Moreover, reliability and dependability are usually seen to be fundamental components contributing to cognitive trust levels (McAllister, 1995).

Employee Work Engagement

Work engagement is a broad concept that comprises as core features like high involvement, affective energy, and self-presence at work (Britt *et al.*, 2007; Macey and Schneider, 2008). The concept of employee engagement was first promoted by Kahn (1990, 1992) who described it as different from other constructs such as job involvement, commitment or intrinsic motivation.

According to Kahn (1990) employee engagement is a multi-dimensional construct in that employees could be emotionally, cognitively and physically engaged. Studies reviewing the burnout literature argued that employee work engagement is a distinct construct characterized by vigor, dedication, and absorption in one's work (Schaufeli and Bakker, 2004). Unlike satisfaction, work engagement includes a person's attachment towards his/her organization (Luthans and Peterson, 2002), it is not momentary and specific state (Rothbard, 2001) but rather more persistent and pervasive affective-cognitive state that is not focused on any particular object, event, individual, or behavior (Schaufeli *et al.*, 2002a). *Vigor* reflects the readiness to devote effort in one's work, an exhibition of high levels of energy while working and the tendency to remain resolute in the face of task difficulty or failure (Schaufeli and Bakker, 2004). *Dedication* refers to a strong identification with one's work and encompasses feelings of enthusiasm, inspiration, pride, and challenge (Schaufeli and Bakker, 2004; Chughtai and Buckley, 2008). *Absorption* is characterized by being fully concentrated and happily engrossed in one's work whereby time passes quickly and one has difficulty with detaching oneself from work (Schaufeli and Bakker, 2004).

Employee Work Engagement and Trust

This study posits that the relationship between trust and work engagement is mutually reinforcing and leads to an upward spiral effect (Chughtai, *et al.*, 2008). Research evidence indicates that a climate of trust leads to wide and diverse benefits for individuals who are engaged in particular organizations. Previous studies have demonstrated that increase in trust result directly or indirectly in more positive workplace behaviors and attitudes like organizational commitment and employees work engagement (Dirks and Ferrin, 2002).

Employee Work Engagement and Leadership

When employees recognize that their immediate superiors and top management have the skilful insight and ability to augment the growth and productivity of the organization by making competent decisions, it would give them increased assurance of a more profitable future with the organization (Spreitzer and Mishra, 2002). In other word, there can be an increase in work engagement amongst employees if there is a sound sense of trust in the competence and capability of their immediate supervisors. Furthermore, supervisory coaching in the form of assisting employees in locating their goals, organizing their work, highlighting

drawbacks, taking a keen interest in their professional and career advancement, and offering advice as needed, has been positively related to work engagement (Schaufeli and Salanova, 2007).

METHOD

Population and the Sample

Data were collected from Islamic and conventional banks located around Kuala Lumpur, the capital of Malaysia's special province of the Federal Territory (Malay: *Wilayah Persekutuan*) and Klang Valley, the nation's biggest metropolitan area of Malaysia's most populous state of Selangor. The two areas are regarded adequately representing both Islamic(s) and conventional banking sector as most of their HQs and branches are to be found around here. A total of 800 survey questionnaires were distributed to the bank employees of two Islamic banks and four conventional banks. Out of that 395 (almost 50%) valid questionnaires were returned and used for further analysis.

Table 1 presents the background profile of the sample from Islamic and conventional banks.

Table 1: Demographic characteristics of respondents from Islamic and conventional banks

Demographic Variable	Characteristics	Islamic (N=189)		Conventional (N=206)	
		Frequency	%	Frequency	%
Gender	1) Male	78	41%	101	49%
	2) Female	111	59%	105	51%
Current Job Position	1) Clerical	55	29%	34	17%
	2) Supervisory	25	13%	38	18%
	3) Executive/Officer	69	37%	117	57%
	4) Managerial	40	21%	17	8%
Length of Service in the Organization (Years)	1) 1~4	101	53%	84	41%
	2) 5~9	42	22%	35	17%
	3) 10~14	30	16%	29	14%
	4) 15~19	11	6%	22	11%
	5) 20 & above	5	3%	36	17%
Level of Education	1) SPM	28	15%	49	24%
	2) STPM	29	15%	23	11%
	3) Diploma	55	29%	37	18%
	4) Degree	58	31%	87	42%
	5) Masters & Above	19	10%	10	5%

INSTRUMENTATION

Standardized tools such as Authentic Leadership Questionnaire (ALQ), (Avolio *et al.*, (2007); Interpersonal Trust (IPTS) and Institutional Trust Scales (ITS), (Mayer and Davis, 1999) and (McKnight *et al.*, 2002); and Utrecht's Work Engagement Scale (UWES), (Schaufeli and Bakker, 2004) were used to collect data. A 5-point Likert scale ranging from 'strongly agree' to 'strongly disagree' was used. The original ALQ comprised of 19 items. The research tools were slightly modified based on the lower Alpha value and poor factor loading in the pilot study. The modified final versions of the instruments consisted of 14, 15, 17 and 9 items

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respectively in ALQ, IPTS, ITS and UWES. Table 2 reports mean standard deviation, and reliability measures of the study variables and the measures used.

Table 2: Means, Standard Deviations, and Cronbach's Alpha (N=395)

Variable	Mean	Std. Dev.	Alpha
Authentic Leadership	3.55	.53	.91
Interpersonal Trust	3.51	.53	.94
Institutional Trust	3.56	.56	.91
Employee Work Engagement	3.66	.66	.92

Table 3 displays the result of t-test to examine the significance of mean differences on study variables between conventional and Islamic bank employees.

Table 3: Test of mean differences between Conventional (N = 206) and Islamic banks (N = 189) on leadership styles, interpersonal and institutional trust, and employees' work engagement.

	Banks	Mean	SD	t – value
Authentic Leadership	Conventional	3.40	.45	5.36***
	Islamic	3.69	.61	
Interpersonal Trust	Conventional	3.34	.55	5.95***
	Islamic	3.68	.59	
Institutional Trust	Conventional	3.40	.55	5.65***
	Islamic	3.72	.57	
Employee Engagement	Conventional	3.56	.60	3.16***
	Islamic	3.77	.73	

*** p<.000

As displayed in Table 3 the mean differences between conventional and Islamic banks were significant in all the variables under study. The mean scores were consistently lower in conventional compared to Islamic banks.

Model Testing

The data from the two categories of banks were further subjected separately to model testing using SEM. The purpose was to test the model fitness of authentic leadership, interpersonal and institutional trust, and employees work engagement in two different organizational contexts. Relationship of one exogenous latent variable, namely leadership authenticity and two endogenous latent variables, that is organizational trust and employee engagement were tested. (see Figure 1, and Figure 2)

The results of goodness-of-fit indices favoured the structural model of data from Islamic banks (Figure 1) compared to its counterpart (Figure 2), in terms of model fitness, statistical significance and path coefficient values. AMOS output indicated that the relationship between authentic leadership and both types trusts, i.e., interpersonal and institutional trust were highly significant (p<.001). Furthermore, path relationship between employee engagement and institutional trust was significant at p<.05 level. More interestingly, direct path coefficient

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from authentic leadership to employee engagement was also significant at $p < .05$. All the model fitness statistics seems to be very good (chi-square value 99.413 with degree of freedom 69, thus, $\chi^2/df = 1.440$; GFI = .926; TLI = .986 CFI = .989 and RMSEA = .048).

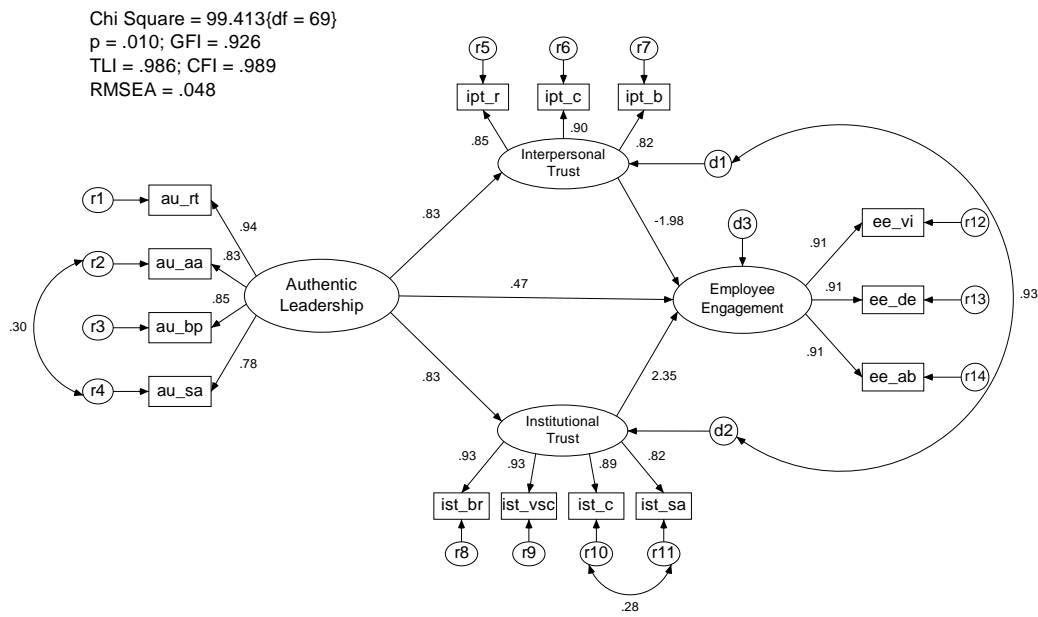


Figure 1: Structural Model for Islamic banks (N=189)

Table 4: Regression Weights of structural model (Islamic banks)

			Estimate	S.E.	C.R.	P
Interpersonal_Trust	<---	Authentic_Leadership	.813	.076	10.664	***
Institutional_Trust	<---	Authentic_Leadership	.816	.078	10.401	***
Employee_Engagement	<---	Authentic_Leadership	.580	.209	2.778	.005
Employee_Engagement	<---	Interpersonal_Trust	-2.508	1.538	-1.631	.103
Employee_Engagement	<---	Institutional_Trust	2.944	1.457	2.021	.043

The conventional structural model (Figure 2) exhibited insignificant path coefficients and poorer model fit. Other than path coefficient between authentic leadership and organizational trust which was significant ($P < .001$), the direct path coefficient of leadership authenticity to employee engagement as well as interpersonal and institutional trust to employee work engagement were not statistically significant ($p > .05$). Even though the cases ($N=206$) were relatively larger than the Islamic ($N=189$), the fit indices were poor (chi-square value 190.680 with degree of freedom 70, hence, $\chi^2/df = 2.724$; GFI = .881; TLI = .908 CFI = .929 and RMSEA = .092).

Thus the comparison of the two models (See Table 6) and their goodness of fit statistics suggested that supervisors in Islamic banking sector were perceived to be more authentic and likely to be more trusted by the subordinates that contributed to their work engagement.

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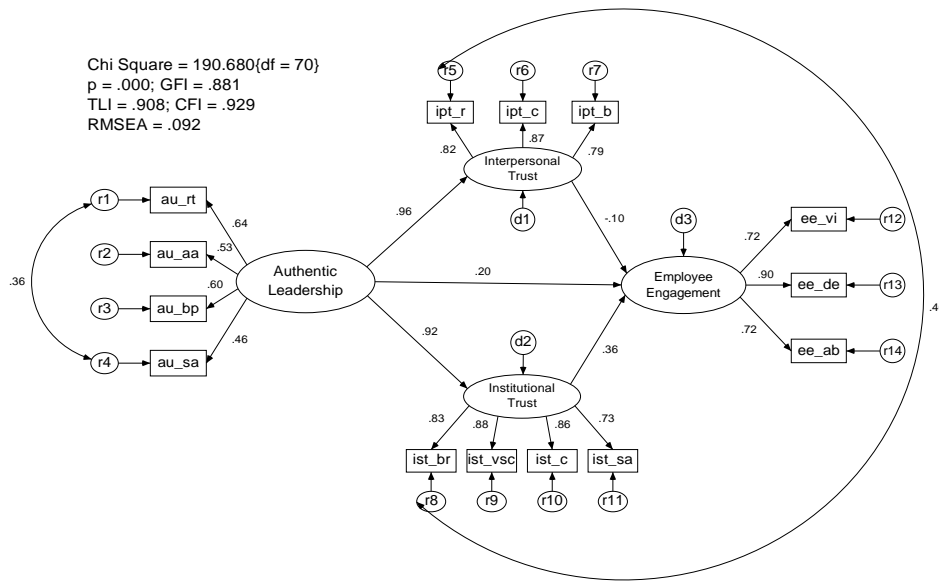


Figure 2: Structural Model for Conventional banks (N=206)

Table 5: Regression Weights of structural model (conventional)

			Estimate	S.E.	C.R.	P
Interpersonal_Trust	<---	Authentic_Leadership	1.534	.240	6.389	***
Institutional_Trust	<---	Authentic_Leadership	1.595	.261	6.106	***
Employee_Engagement	<---	Authentic_Leadership	.319	1.555	.205	.837
Employee_Engagement	<---	Interpersonal_Trust	-.099	.681	-.145	.885
Employee_Engagement	<---	Institutional_Trust	.328	.342	.960	.337

Table 6: Comparison of fit indices between Islamic (N=189) and Conventional (N=206) banks

Index	χ^2	Df	χ^2/df	GFI	TLI	CFI	A
Cut-off-point	-	-	< 3	> .90	> .90	> .90	< .0
Islamic Bank	99.413	69	1.441	.926	.986	.989	.048
Conventional Bank	0	70					

DISCUSSION

The study proposed to examine how employees' perception of supervisors' leadership authenticity, interpersonal, and institutional trust contribute to work engagement. It was also of interest to examine the differences between Islamic and conventional banks on these measures to test if organizational contexts play any significant role on employees' perception of supervisory behavior, trust and resultant work outcome. The result of the t-test demonstrated that mean ratings of employees from Islamic banks were significantly higher compared to conventional banks on all the measures, i.e., perception of authentic leadership style of their supervisors, interpersonal and institutional trust and work engagement.

Furthermore the two data sets (Islamic and Conventional) were subjected to SEM to examine which organizational contexts better explain the relationships among authentic leadership style, trust, and work engagement variables. The SEM result suggested that Islamic bank had a better model fit in all aspects compared to conventional banks. The differences were quite significant both in terms of model fitness as well as level of statistical significance among the path coefficients. Factors that may have contributed Islamic banks scoring higher on all the measures and displaying a robust model fitness should include the beliefs, ethical values, norms and standards, rituals, religious obligatory practices, Muslims faith in hereafter, and the divine inspiration etc. Such religious values and philosophy probably seems to be the major driving force in faith based Islamic institution. That seems to have provided a strong situational context that contributed to their authentic actions and behavior, level of interpersonal and institutional trust and work engagement. The role of shared values among employees, supervisors and/or within the organization's culture has been investigated by a number of organizational researchers, who have typically reported a positive relationship between the level of congruence and performance at various levels in organizations. For example, Chatman (1991) reported that value congruence between employees and organizational culture had a positive relationship with level of employee commitment. Meglino and Ravlin (1989) also explained the positive effect of value congruence on individual outcomes, suggesting that individuals with similar personal values tend to share certain aspects of the way they process information, and thus these similarities foster smoother communication.

One of the unique and salient characteristics of Islamic banks is the integration of ethical and moral values in its daily banking operations. In Islamic banking institution each and every activity or conduct, regardless of whether it is formal or informal draws upon Islamic values. These values, serving as the basic foundation of behavior, are embedded in religious consciousness. Some of the Islamic features are noticeable in employees' dress code. The female staffs wear jilbab (hijab), while the male staffs wear long sleeve batik. For many Malaysians, these costumes reflect Islamic values (Amin, 2004). According to Brennan, by dressing appropriately one can make the best impression; doing so "encourages self-confidence and shows you have given thought to others and the situation" (Brennan, 2004). Congregating mid-day prayers, without interrupting services, allow the customers and staff to do the prayer together. This is probably, intended to foster good relations among employees as well as with customers (Amin, 2004).

CONCLUSIONS

In conclusion the study lends support to the argument that formal and informal characteristics of organizational situations have the potentiality to influence the behaviors of employees (Forehand & von Gilmer, 1964). Davis-Blake and Pfeffer (1989) maintained that most organizational settings are strong situations that have a large impact on individual attitudes and behavior. This includes norms, roles, expectations of others, social relationships, the nature of tasks, and physical characteristics of the job etc. The Islamic banks exhibit strong culture based on Islamic worldview and behavioral prescriptions that emphasizes on relational transparency, authentic or moral behavior, and self-awareness, as well as reliable and benevolent actions that should build interpersonal trust. Similarly at the institutional level there is an added emphasis on vision and mission based on Sharia principle. Thus being Muslim and working in institution that follows Islamic law provides a distinct work environment that is different from those who belong to different faiths and work in secular institutions. As a result the situational strength of Islamic banks accentuated authentic leadership style produced more interpersonal and institutional trust and more engaged workforce.

REFERENCES

- Abd.Rahman, Z. 2007. Differences Between Islamic Banks & Conventional.
http://www.zaharuddin.net/index.php?option=com_content&task=view&id=297&Itemid=72
- Amin, R. 2004. *The Celestial Management*. Jakarta: Bening Publishing.
- Avolio, B. J., & Bass, B. M. 1988. Transformational leadership, charisma, and beyond. In J. G. HuB. R. Baliga, H. P. Dachler & C. A. Schriesheim (Ed.), *Emerging leadership vistas*: 29-49. Lexington, MA: Lexington Books.
- Avolio, B. J., Bass, B. M., & Jung, D. I. 1999. Re-examining the components of transformational and transactional leadership using the multifactor leadership questionnaire. *Journal of Occupational and Organizational Psychology*, 72(4): 441-462.
- Avolio, B. J., Dvir, T., Eden, D., & Shamir, B. 2002. Impact of transformational leadership on follower development and performance: A field experiment. *Academy of Management Journal*, 45(4): 735-744.
- Avolio, B. J., & Gardner, W. L. 2005. Authentic leadership development: Getting to the root of positive forms of leadership. *Leadership Quarterly*, 16(3): 315-338.
- Avolio, B. J., Gardner, W. L., Walumbwa, F. O., Luthans, F., & May, D. R. 2004. Unlocking themask: A look at the process by which authentic leaders impact follower attitudes and behaviors. *Leadership Quarterly*, 15(6): 801-823.
- Bass, B. M., & Avolio, B. J. 1993. Transformational leadership: A response to critiques. In M. M. Chemers & R. Ayman (Ed.), *Leadership theory and research: Perspectives and direction*: 49-88. San Diego, CA: Academic Press.
- Bass, B. M., & Avolio, B. J. 1994. Transformational Leadership and Organizational Culture. *International Journal of Public Administration*, 17(3&4): 541-554.
- Bracey, H. 2002. *Building trust.How to get it. How to keep it*. Taylorsville, GA: HB Artworks, Inc.
- Brennan, Lynne 2003. *Business Etiquette for the 20st Century: What To Do and What Not To Do*. London: Judy Piatkus Limited.
- Britt, T. W., Dickinson, J. M., Greene-Shortidge, T. M., & McKibben, E. 2007. Self engagement at work. In C. L. Cooper & D. Nelson (Ed.), *Positive organizational behavior*: 143-158. Thousand Oaks, CA: Sage.

<p>For a complete references list, please contact the author(s) The remainder of the references were edited out because of space restrictions</p>

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The Effect of Antecedent of Purchase Intention of Saudi Consumers Purchase Behaviour Towards Foreign Products

Keywords: Animosity, Religiosity, Ethnocentrism, Purchase Intention, United States (US), Saudi Arabia

BACKGROUND

Globalization of the markets has enabled countries to easily trade between each other and products and services to be distributed all over the world. Exporting and importing of products and services which continue to increase across the countries in the world, has significantly affect the scenario of business and marketing activities. This circumstance not only provides greater opportunities for marketers to market their products abroad, but also at the same time creates greater competition for marketers. In marketing the products internationally, the marketer has to explore markets outside the national boundaries of the domestic market. The outside national boundaries however posed vast differences from the home country in terms of consumers' attitude and these differences vary from countries to countries. Despite the globalization concept which views global market as homogeneous, marketers acknowledge that consumers in the various markets are diverse and their behaviours remain distinct and unique socially and culturally.

This phenomenon has generated major implications in marketing primarily pertinent to the behaviour of the consumer. These diverse consumer behaviours need to be understood as different ways and methods are required to manage such behaviours. Marketing scholars label the cultural diversities of markets as multicultural marketplaces and marketers have to confront such multicultural environment to compete in the international market place. The influx of globalization has somehow created various markets in which the consumers are influenced by their own cultures. These variations in the multicultural environment are heavily influenced by the local cultures which eventually shape their perceptions and buying behaviours towards the products and services offered.

As culture differs from one market to another, it is essential for marketers to understand the cultural differences as such diversities posed a significant impact on their attitudes and buying decisions. Sung and Tinkham (2005) affirm that cultural differences of consumers have the potential impact on the perceptions of products. Foxall et al., (1994) claimed that the consumer's motivation of product and service choices as well as lifestyle could be shaped by cultural dimensions. Indeed, Blackwell et al., (2001) asserts that culture has a significant influence on 'how' and 'why' consumers purchase a range products and services. Therefore, culture can influence an individual's interaction with a product and ultimately the purchase. Jeannet and Hennessay (in Doole& Lowe, 2008) argue that culture influences consumer behaviour through cultural forces which includes the religion, history, family, language, education and arts. These forces determine the belief and values and set the standard behaviour for the individual in that society. It would result to form a way of thinking and living that is shared by those individuals from that society. Therefore, culture can influence consumers' perceptions and understandings of a given product, subsequently consumers would behave accordingly. Based on these, cultural

attributes are essential and need to be taken into consideration for marketing managers in examining the purchasing behaviour.

Therefore, it is fundamental for marketers to understand how, what, when and why people buy the product as they do. In the light of increasing globalization, it is a necessity for marketers to have a deep understanding of the behaviour of the consumers in different parts of the world particularly related to their buying patterns and decisions. Learning and recognizing the differences of the markets will enable marketers to strategically formulate their marketing strategies in segmenting the markets as well as creating brands and image of the products. Similarly, marketers will be able to identify and understand the needs and wants of the local consumer in various markets accordingly as well as develop the right strategies in managing such behaviours.

CONSUMER PURCHASE BEHAVIOR AND FOREIGN PRODUCT

Globalization has increased the opportunities for companies to distribute their goods to consumers all over the world. At the same time, consumers have a wider range of products and services to choose from in almost any category. However, due to consumer unfamiliarity with foreign products or vice versa, foreign consumers may find it difficult to gauge or decide on the foreign products. This might disturb the consumers which may lead to rejecting foreign products because they are not unfamiliar with the foreign products and vice versa. In addition, socio-psychological factors such as consumer ethnocentrism (CE) and country-of-origin (COO) can act as mechanisms that “disturbing factor” in the decision in selecting products and firms from different countries. When consumers have to take a decision under conditions of asymmetrical information and limited rationality, they may be motivated to seek additional information related to the product before buying it. As a result, consumers’ knowledge on products and countries produced is increased thus would generate changes in the consumers’ purchasing pattern and behaviour. Consumers also are sometimes being influenced by nationalism or sentiment on products manufactured locally and this created a dilemma in buying products; they might prefer to buy locally made products to support their local industries, yet they also appreciate the superior quality, price, or brand image of foreign products.

Previous research indicates that consumers may hold different appraisals related to products from different countries, thus significantly influencing their purchase intention (e.g. Schooler, 1965; Roth and Romeo, 1992; Yasin et al., 2007). While some consumers prefer global or foreign products and view them as symbols of status, others exhibit strong preferences for domestic-made products and have negative attitudes towards foreign or imported products (Nijssen, Douglas 1994). Such negative attitudes towards foreign products can arise from a number of sources. Consumers may think products from certain countries are of inferior quality (Han 1988), hold feelings of animosity toward a country (Klein et al 1998), or consider it wrong, almost immoral, to buy foreign products (Shimp and Sharma 1987).

Kleinand Ettenson (1999) suggest that an ethnocentric person believes that buying foreign products is unpatriotic and amoral, hurts the economy and can reduce employment levels (Shimp and Sharma, 1987; Javalgi et al., 2005; Ruyter et al., 1998). Ethnocentrism has a negative influence on the evaluation and purchasing intentions of consumers, although that may vary within cultures and between different country-of-origin products (Balabanis and Diamantopoulos, 2004; Grier et al., 2006). Granzin and Painter (2001) affirm that ethnocentrism causes consumer tendencies to protect their domestic economy and to help domestic workers with whom they identify.

Shimp and Sharma (1987) found that consumers' ethnocentrism determines their perceptions of domestic versus foreign products (cognition), as well as their attitudes and behaviour.

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Brodowsky (1998) assert that there is a strong positive relationship between high ethnocentrism and country-based bias in the evaluation of automobiles. With the kingdom of Saudi Arabia being one of the largest importers of automobiles in this continent, it is pertinent to investigate how the consumers in the kingdom determine the selection in automobiles. The industry analysts in Saudi Arabia for instance had predicted that by 2013, car sales in the Kingdom would hit 880,000 units a year. On the other hand, Balabanis et al. (2001) found that the determinants of consumer ethnocentrism may vary from country to country and culture to culture. In Turkey, patriotism was found to be the most important motive for consumer ethnocentrism because according to Turkey's collectivist culture, patriotism is an important expression of loyalty to the group. With the kingdom sharing a similar collective culture, it is paramount that marketers as well as scholars determine the relationship of these constructs.

Subsequently, the study by Ettenson and Klein (2005) suggests that negative consumer emotions towards a country (animosity) and their consequences are associated with political behaviour; where consumers indirectly protest about international events. Political or war animosity is believed to derive from acts of aggression or warlike behaviours of a country or a nation-state, while economic animosity results from feelings of economic dominance or aggression. Hence, with the current global political upheavals in various parts of the globe where the superpowers which are also the main producers of global products and services would undoubtedly have an impact towards their products. Both ethnocentrism and animosity have some influence on consumer behaviour which is preceded by cognitive and affective aspects (Russell and Russell, 2006; Balabanis et al., 2002; Ang et al., 2004). Jung et al. (2002) distinguish between national and personal animosity; national animosity represents resentment at how a country has suffered because of the actions of another particular country, whereas personal animosity involves resentment toward another country because of a negative personal experience with the particular country or people from that country.

Finally, research on predictors of purchasing behaviour has confirmed that consumers usually hold prior purchase intentions before they behave (Lin y Chen, 2006; Grier et al., 2006; Agarwal and Teas, 2002). Purchase intention is the willingness of a consumer to buy a particular product (Doods et al., 1991; Grewal et al., 1998). Social psychology suggests that intentions should be the best predictor of individual behaviour, because purchase intentions reflect the consumer's own expression of purchase probability, independently of other relevant factors that could affect consumer behaviour and decisions (Young et al., 1998). As consumers in different countries give dissimilar priorities to the factors that affected their purchase intentions (Lee and Green, 1991), it is pertinent that a study is conducted to unearth the differences.

BUYING BEHAVIOUR IN MIDDLE EAST AND SAUDI ARABIA

The Middle East primarily Gulf Cooperation Council (GCC) which comprise of rapidly growing economies such as Bahrain, United Arab Emirate, Oman, Qatar, Kuwait and Saudi Arabia, has been among the most attractive market for marketers. The region which is undergoing rapid economic development through their oil and industrial wealth is a market that cannot be resisted by marketers. Saudi Arabia for instance is rapidly developing and has become the most lucrative market for consumer products and services.

The economies of the member states of the GCC countries have attracted increasing attention over recent years. In the wake of high and rising oil prices since 2003, they have developed into a pole of global economic growth where global investors and trade partners play a crucial role in global energy markets (Sturm et. al, 2008). In terms of population and nominal GDP, Saudi Arabia is by far the largest of the six countries, comprising about 24 million inhabitants, about two thirds of the GCC's total population, and accounting for around half of the total GDP of GCC countries. GDP per capita (in purchasing power parity terms) in Saudi Arabia is USD

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16,500 per year. Saudi Arabia is the world's largest oil producer, with an average production of 8.75 million barrels per day in 2007 and by far the largest net oil exporter. Saudi Arabia holds more than one fifth of global oil reserves and accounts for more than half of all oil reserves in GCC countries. Having such economic potential and growth as well as the increasing market size, this country offers golden opportunities for marketers to market products and services. In addition, the country is open to a variety of products from all over the world enabling consumers to have variety of choices.

Nonetheless, as the consumer awareness and knowledge in this region began to advance in terms of the origins of the products and the global issues pertaining to them such as political upheavals, socio-cultural and ethics; their perspectives of the products coming from such countries also began to change. Consequently, this would affect their buying intentions and purchase. A lucid example can be seen after the Gulf Crisis of 1991 where consumers tend to show their support to US products as gratitude when US brought its military presence across the region. The nation welcomed the United States troop and looked at its participation as insurance for their security and safety. Consequently, United States products were perceived as acceptable and the responses on them were good. However, such scenario underwent a dramatic turnaround in the repercussion of tragic events of September 11, 2001. Muslims in the country condemned the way United States manage the terrorists' attack where Muslims were being accused as terrorists. This situation has created a hostile environment and tensions among the consumers, thus resulted changes in their perception of United States and its products.

The United States (US) has been Saudi's largest trading partner for a long time until now (US-Saudi Business Council, 2011). The US is the number one source of foreign direct investment in Saudi Arabia and the country is among the top 10 recipients of foreign direct investment in the world. Saudi Arabia also is the world's 15th largest exporter and 31st largest importer of products and services. Saudi Arabia is the 15th largest trading partner of the US. These facts indicate that Saudi Arabia is a great marketplace for US products and this trend will continue in the long run. Hence, with the ongoing events depicting negativity on the US country image in the eyes of the Muslim, the future is uncertain.

At the moment, little is known about the perspective of Saudi consumers towards foreign products. Bhuian (1997) study for instance explains the general attitudes of Saudi consumers towards foreign products and the corresponding marketing practices. He found that there is a significant difference in the attitudes of Saudi consumers with regard to products in general and the associated marketing practices of the USA, Japan, Germany, Italy, the UK and France. The study highlights several general product attributes and marketing practices but not much is known regarding the Saudis' perception and antecedents of purchase intention on foreign products primarily American products. Hence, it is pertinent to understand the behaviour of the Saudi consumers regarding the US products in the country as the former represents a major stake in the industry market share. Knowing the Saudis' perceptions and the antecedents of such perception will enable marketer's better understanding of the consumers and ability to respond to such perception. Consequently, firms competing in Saudi market could also formulate the right marketing strategies such as advertising and positioning in the country and gain a more competitive position in the Saudi Arabian consumer market specifically and other similar markets generally.

RESEARCH PROBLEM

International incidents that are perceived as offensive can lead citizens of one country to experience animosity toward the "offending" country, with potential negative repercussions on the respective companies. In fact, consumers may opt to boycott products from the offending country as an expression of disapproval and protest (Ettenson and Klein, 2005). Many past and

recent incidents illustrate that company sales often suffer severely as a consequence of consumer anger toward the country associated with the product (Riefler and Diamantopoulos, 2007).

Previous research examining consumer attitudes towards foreign or imported goods has typically focused on the impact of a single construct such as consumer ethnocentric (CET) attitudes or "made in" cues. Recent research (Klein et al 1998) suggests, however, that the influences on foreign product evaluations may be actually more complex, resulting from the interaction of various different factors. In addition, most studies have been conducted in large industrialized countries where a range of domestic alternatives or brands are available. The generalisation of findings to small countries, where there are limited or to some extent no domestic brands or products in many product categories, however, is somewhat questionable.

The empirical studies find evidence for varying degrees of consumer ethnocentrism in different countries. For instance, Acharya and Elliott (2003) observe that highly ethnocentric consumers have a strong preference for domestic products and that other consumers are more receptive to high-quality products from developed countries. The Hamin (2006) study of Indonesian consumers verifies the modifying effect of ethnocentrism. Despite the importance of consumer ethnocentrism and consumer demographic characteristics; a number of researchers (Caruana, 1996; Pharr, 2005; Shankarmahesh, 2006) point out that the findings in the consumer ethnocentrism literature regarding the impact of age, gender, and income are unclear, conflicting, and present a research gap. Another aspect which is uncharted in the consumer ethnocentrism literature relates to whether the age, gender, and income of consumers not only predicts levels of consumer ethnocentrism, but also moderates the impact of such tendencies on willingness to buy. Recent studies argue that there is no consensus regarding how these characteristics impact consumer ethnocentrism (Shankarmahesh, 2006).

While the study by Lantz and Loeb (1996) makes an important contribution by investigating the impact of ethnocentrism on consumers' attitudes toward foreign products, its significance is perhaps limited through its use of undergraduate students as subjects. Demographic differences with regard to age and educational level for ethnocentrism have been found to be significant (Shimp and Sharma, 1987); thus, there is a potential for bias in the establishment of ethnocentrism levels. Another potential limitation of the study conducted by Lantz and Loeb (1996), and perhaps a limitation of other research examining the country-of-origin effect, concerns the lack of precision as to the definitions of similar and dissimilar countries. For Lantz and Loeb (1996), Canada was regarded as having a shared identity with the USA "due to a considerable history of trade and social relations," while Mexico was deemed to be culturally dissimilar, seemingly because it lacked this historical connection. Many previous studies have also relied on perceptions of cultural similarity and dissimilarity that are only loosely grounded in theory (Kaynak and Cavusgil, 1983). Individual perceptions of cultures as similar or dissimilar may vary considerably, but for the purposes of academic research, a theoretical rationale for the classification of cultures seems advisable.

During the last three decades, numerous articles have examined various aspects of country-of-origin (COO) influence. Some studies found that consumers display a preference for products made in some countries more than others (Cattin et al., 1982; Gaedeke, 1973; Papadopoulos et al., 1989; Schooler, 1965). Meanwhile, some studies examined the relationship between consumers' preference for products made in different countries and the level of economic development of those countries, and have found that consumers' preference tends to be related to the level of economic development of nations (Lumpkin and Crawford, 1985; Schooler and Sunoo, 1971). Other studies have found that there are other sources of biases that can influence consumers' preference for products made in different countries, including ethnocentric bias (Han and Terpstra, 1988; Wang, 1978), patriotic sentiments (Daser and Meric, 1987), different demographic characteristics of consumers (Hester and Yuen, 1987), product type (Lumpkin and

Kim, 1985; Nagashima, 1970; Wall and Heslop, 1986), and product familiarity (Heimbach et al., 1989; Johansson et al., 1985; Tse and Gorn, 1993). A few others have surveyed consumers of different countries to see if they differ with respect to country-of-origin influence and have found that consumers from different countries respond differently to the country-of-origin cue (Papadopoulos et al., 1987; Stephens et al., 1985).

COO effects on product evaluations also vary by product category (Papadopoulos and Heslop, 1993; Roth and Romeo, 1992). The economic, social and cultural systems of countries as well as their relative stage of economic development are pieces of information which serve to position countries hierarchically in consumers' mind. Despite the significant amount of research on consumers' perceptions and purchase decisions, accumulated findings show that the effects of COO vary across product categories, making it difficult for researchers to make theoretical generalisations. A large variation exists in the way that products are associated with their country origins. In addition, there is variation in the size of the COO effects across products, as a COO may have high value in certain product categories but not in others (e.g. Germany has a high value for cars but not perfumes). The above mentioned variations have been shown in the literature with little theoretical explanation. Moreover, some researchers, such as Nebenzahl et al. (1997), Jaffe and Nebenzahl (2001), and Balabanis and Diamantopoulos (2004), suggest that a product-specific approach to COO effects is worthwhile and that a theory that can explain for such product variations of COO effects is warranted.

Reviewing the controversial COO literature, Verlegh and Steenkamp (1999) assert that the weight of evidence supports the presence of a significant COO effect. Although it is important to determine whether or not the COO effect exists, an equally important question is when it exists. In fact, researchers investigating how consumer, product, and context characteristics modify the strength of the COO effect are essentially asking "when" questions. Among the numerous investigated modifiers, consumer characteristics have received the most attention. The COO effect has been found to vary with age (Insch and McBride, 2004; Schooler, 1971), sex (Heslop and Wall, 2004), income (Sharma et al., 1995), education (Anderson and Cunningham, 1972; Sharma et al., 1995), nationality (Ahmed and d'Astous, 2008), social class (Levin et al., 1997; Okechuku, 1994), personal values (Balabanis et al., 2001), ethnocentrism (Kaynak, 2000) and incidental emotions and cognitive appraisals (Maheswaran, 1994). Among these characteristics, psychographic variables received the most attention.

Nevertheless, although some research has linked the evaluation of countries-of-origin to antecedents and moderators such as the familiarity with a country, demographic characteristics, shopping behaviour, attitudes and human values (Balabanis et al., 2001; Kaynak et al., 2000; Samiee et al., 2005), or manufacturing dimensions such as country of design (COD) and country of assemble (COA) across products of varying degree of complexity, little is known about how these variables jointly work in an international setting. Understanding how country evaluations are related to the product and manufacturing dimensions of a COO and antecedents such as demographics, and personal traits, and moderators such as product familiarity and shopping behaviour across a variety of nations may help international marketing researchers to better understand the contributing factors underlying the formation of COO evaluations and how these vary across nations. It may also help to uncover gaps in our knowledge of the COO concept and suggest further research avenues to fill these gaps. This research argues that COO is a complex construct, perhaps much more complex than originally conceived and encompasses symbolic and emotional components, as well as cognitions.

Linking the two constructs that we have discussed earlier (CET, COO), previous research has investigated experiences of animosity and how animosity may have a negative impact for multinational corporations (Klein et al., 1998; Ettenson and Klein, 2005; Nijssen and Douglas, 2004). However, such models have stemmed mostly from most behavioural frameworks in

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marketing which assess the impact of consumer product judgments on product responses (Klein, 2002; Heslop et al., 2008). How animosity modifies the existing perceptions and mediates the purchase intention is not clearly understood. As we have argued earlier in this section, CET and COO could be influenced by culture or mainly religion. For instance, religion's impacts on customer behaviour have been modestly studied in the specialized marketing literature. Studies focus mainly on the impacts of religiosity on behaviours or the application of the marketing concepts to the religious institutions such as church membership. The impact of religion as a cultural factor on conducts of customers has however grabbed less attention. A brief search with the keywords, religious, instead of, religion, consumer behaviour and marketing provide with only four articles which are Delener(1990), founded in the previous search, Jung(2002), Andeleeb, Syed Saad (1993) and McDaniel and Burnett (1990).

Although religion has always been a cultural element in consumer behaviour framework, religion and its influences has long been perceived as a taboo subject matter for investigation in marketing areas (Hirschman, 1983). There is not much known about the influence of religion on consumer, buyer decision making and marketplace behaviours in marketing areas. In fact, there is little common understanding among previous marketing studies in measuring the effects of religion. Conceptualisation of religion's influences available in marketing areas seems to be inconsistent with religious psychology's findings, which is the domain area for religious influences study on human behaviour. Hence, clear framework of religion's influences factors is urgently needed in marketing areas to assist understanding of the concept to consumers' marketplace behaviours. Based on previous findings from the main discipline studying religious influences such as religious psychology and marketing areas, it is timely that a study that bridge the knowledge gap between the areas is conducted to offer an alternative view of how religion influences consumers and buyers in the marketplace.

Religion's role in culture and subsequently consumer behaviour were identified to differ between Eastern and Western cultural contexts. From an Eastern perspective, religion appears to be a central tenet of culture and societal behaviour manifesting through a need to engage with in-groups through consumption encounters. Hence, the kingdom of Saudi Arabia being a conservative religious country while at the same time "offering" a promising consumer market is an important issue to study. Marketers would be advised to acknowledge the centrality of the group in their marketing activities in Eastern cultures. Western culture on the other hand emphasis on the individual becoming more pertinent when religiosity declined. As we have reiterated earlier, not much research has been done on religion and consumer behaviour (Hirschman 1982). Hirschman (1982) argues that consumption process is affected by religion and its affiliation. Effect of religious affiliation on consumer behaviour were reported later by Esso and Dibb (2004) Mokhlis (2006), but no similar study was ever conducted. Hence, it is pertinent that study that link religion and its belief with consumer durable purchase criteria is conducted as religiosity and its intensity could influence consumer purchase behaviour.

RESEARCH QUESTION

Based on the above discussion in the previous sections and research problems, there are several questions that this research hopes to answer. The following are the questions for this research:

1. How do consumer ethnocentrism and animosity simultaneously influence consumer purchase intention?
2. Does religion has a significant effect on the consumer purchase intention?
3. Are there any influences of religiosity on the COO and its constructs (country and product image)?
4. Are there any influences of religiosity on the consumers' ethnocentrism and animosity?
5. Does religiosity mediate ethnocentrism and animosity in the consumer purchase intention

THEORETICAL CONTRIBUTION

The findings of this study would provide evidence and clarify the arguments made by previous studies on the inter relationship of the various constructs. In fulfilling the gap in the current literature, this study specifically would provide new empirical evidence on whether the demographic variables predict consumers' tendencies for consumer ethnocentrism. It is also expected that the findings of this study would extend the literature on consumer ethnocentrism by investigating not only the influence of demographic variables on predicting consumer ethnocentrism, but also whether these demographic variables moderate the extent to which consumer ethnocentric tendencies translate into consumer willingness to buy.

Another contribution that this study hopes to deliver is in the religious influences (i.e. religious psychology) on marketing areas. This study attempts to bridge the knowledge gap between the areas and offer an alternative view of how religion influences consumers and buyers in the marketplace. This effort could assist marketers and future researchers in investigating religious influences in the marketplace. Although this study initially looks at Muslims "against" other religion, namely Christians, the spin-off could actually range from other major religion such as Hindus and Buddha. Consequently, one would also be able to look at the sect within the religion such as Sunnis and Shias.

Finally, the study contributes to the growing body of literature related to cross-cultural comparisons of "country-of-origin influence. By utilizing a developing country as a setting for the research, the present study contributes to the generalisability of the existing body of research where mostly are carried out in industrialized countries. In short, the study extends the theory reasoned action in a different cultural and contextual setting.

SCOPE OF THE STUDY

This study is confined to the Middle East region and Saudi Arabia is the control variable. The country is selected due to the fact that the country is the most rapidly growing country in the region and the size of the population which is the largest among the GCC countries. Given the purchasing power that the country has, the market is seen as among the most lucrative for marketers to be in thus understanding the market is crucial to refine the marketing strategies. The findings of this study can be generalized to GCC countries or other countries that share similar characteristics like Saudi Arabian consumers.

CONCLUSIONS

This research describes and argues the significance of determining the relationship of consumer ethnocentrism, country of origin, consumer animosity and religiosity towards consumer purchase intention. Initially, it provides the evidence on the lack of research in this area in addition to the vague and at times confusing description and definition of some of the concepts. In providing a sense of direction to this study, this research outlines the research questions that it hopes to answer. Finally, the research ends by elaborating the theoretical contribution and significance of this study.

REFERENCES

- Ahmed, S.a.; d'astous, A. (2008), 'Antecedents, moderators and dimensions of country-of-origin evaluations,' *International Marketing review*, Vol. 25, No.1, pp.75-106.
- Anholt, S. (2005), "Anholt nation brands index: how does the world see America?", *Journal of Advertising Research*, Vol. 45 No. 3, pp. 296-304.

*The Effect of Antecedent of Purchase Intention of Saudi
Consumers Purchase Behaviour Towards Foreign Products*

- Andeleeb, Syed Saad (1993) Religious affiliation and consumer behavior, *Journal of Health care Marketing*, Winter, Vol. 13, Issue 4
- Anderson, W.T. and Cunningham, W.H. (1972), "Gauging foreign product promotion", *Journal of Advertising Research*, February, pp. 29-34.
- Acharya, C. and Elliot, G. (2003), "Consumer ethnocentrism, perceived quality and choice – an empirical investigation", *Journal of International Consumer Marketing*, Vol. 15 No. 4, pp. 87-106.
- Agarwal, S. and Teas, R. K. (2002): "Cross-national applicability of a perceived quality model", *Journal of Product & Brand Management*; 11:4, pp.213-236.
- Ang, S.H., Jung, K., Kau, A.K., Leong, S.M., P, C. and Tan, S.J. (2004), "Animosity towards economic giants: what the little guys think", *The Journal of Consumer Marketing*, 21 (3), pp. 190-207.
- Balabanis, G. and Diamantopoulos, A. (2004), "Country of origin knowledge among consumers: an empirical study", *Proceedings of the Annual Conference of the European Marketing Academy*, May 17-21, Murcia, Spain..
- Bhuiyan, S.N. (1997), 'Saudi consumers' attitude towards European, US and Japanese products and marketing practices, *European Journal of Marketing*, Vol.31, No.7, pp.467-86.
- Brodowsky, G. H. (1998). The effects of country of design and country of assembly on evaluative beliefs about automobiles and attitudes toward buying them: A comparison between high and low ethnocentric consumers. *Journal of International Consumer Marketing*, 10(3), 85-113.
- Caruana A (1996). The effects of dogmatism and social class variables on consumer ethnocentrism in Malta. *Mark. Intel. Plan.* 14: 39-44.
- Lantz, G. and Loeb, S. (1996), "Coo and ethnocentrism: an analysis of Canadian and American preferences using social identity theory", *Advances in Consumer Research*, Vol. 23, pp. 374-8.
- Cattin, P., Jolibert, A., & Lohnes, C. 1982. A Cross-Cultural Study of "Made in" Concepts. *Journal of International Business Studies*, 13(3), 131-41.
- Daser, S., and Meric, H. J. 1987. Does patriotism have any marketing value: exploratory findings for the crafted with pride in U.S.A., *Advances in Consumer Research*, 14, 536-537.
- Dodds, W.B. (1991), "In search of value: how price and store name information influence buyers' product perceptions", *Journal of Services Marketing*, Vol. 5 No. 3, pp. 27-36.
- Essoo, N. and Dibb, S. (2004), "Religious influences on shopping behaviour: an exploratory study", *Journal of Marketing Management*, Vol. 20, No. 7/8, pp. 683-712.
- Foxall, G.R. and Goldsmith, R.E. (1994), *Consumer Behaviour : A Practical Guide*, London, Groom Helm Ltd.
- Grewal, D., Monroe, K.B., Krishnan, R. (1998): "The effects of price comparison advertising on buyers' perceptions of acquisition Value, Transaction Value and Behavior Intentions", *Journal of Marketing*, 62:2, pp. 46-59.
- Grier, S.A., Brumbaugh, A.M., Thornton C.G. (2006): "Crossover Dreams: Consumer Responses to Ethnic-Oriented Products", *Journal of Marketing*, 70:2, pp. 35-51.
- Granzin, K.L. and Painter, J.J. (2001): "Motivational influences on buy domestic purchasing: Marketing management implications from a Study of Two Nations", *Journal of International Marketing*, 9:2, pp. 73-94.
- Gaedeke, Ralph (1973), "Consumer Attitudes Toward Products 'Made In' Developing Countries", *Journal of Retailing*, 49,3, (Summer) 13-24.
- Han, C.M. (1988). The Role of Consumer Patriotism in the Choice of Domestic versus Foreign Products. *Advertising Research*, 28, pp. 25-31.
- Hamin EG, Elliot G (2006). A less-developed country perspective of consumer ethnocentrism and country of origin effects: Indonesian evidence. *Asia Pac. J. Mark. Log.*, 18(2): 79-92.
- Hester, S.B. and Yuen, M. (1987), "The influence of country of origin on consumer attitude and buying behavior in the United States and Canada", in Wallendorf, M. and Anderson, P.

The Effect of Antecedent of Purchase Intention of Saudi Consumers Purchase Behaviour Towards Foreign Products

- (Eds), *Advances in Consumer Research*, Vol. 14, Association for Consumer Research, Provo, UT, pp. 538-42.
- Hirschman, E. (1983), "Religious affiliation and consumption processes", in Sheth, J. (ed.), *Research in Marketing*, JAI Press, Greenwich, CT, pp. 131-70.
- Hirschman, E.C., (1982), "Religious Affiliation and Consumption Processes: A Preliminary Paradigm", in Sheth, J. (Ed.), *Research in Marketing*, Vol. 6, JAI Press, Chicago, IL, 1982, pp. 131-70.
- Heslop, L.A., Papadopoulos, N., Dowdles, M., Wall, M. and Compeau, D. (2004), "Who controls the purse strings: a study of consumers' and retail buyers' reactions in an Americas FTA environment", *Journal of Business Research*, Vol. 57 No. 10, pp. 1177-88. Hills, CA, Sage Publications, 1980.
- Heimbach, A.E., Johansson, J.K. and McLachlan, D. (1989), "Product familiarity, information processing and country-of-origin cues", in Srull, T.K. (Ed.), *Advances in Consumer Research*, Vol. 16, Association for Consumer Research, Provo, UT, pp. 460-7.
- Heslop, L.A., Lu, I.R. and Cray, D. (2008), "Modeling country image effects through an international crisis", *International Marketing Review*, Vol. 25 No. 4, pp. 354-78.
- Hale, J.L.; Householder, B.J. & Greene, K.L. (2003). The theory of reasoned action. In J.P. Dillard & M. Pfau (Eds.), *The persuasion handbook: Developments in theory and practice* (pp. 259–286). Thousand Oaks, CA: Sage.
- International Finance Corporation (IFC), (2010), "Doing Business Report", World Bank Annual Report. Issued for 2010.
- Javalgi, R. G., Khare, V. P., Gross, A. C., and Scherer, R. F. 2005. An application of the consumer ethnocentrism model to French consumers, *International Business Review*, 14, 325-344.
- Jaffe, E. D./Nebenzahl, I. D., (2001), On the Measurement of Country Image: An Alternative Approach, in Sagafi-nejad, T., (ed.), *Proceedings of the Academy of International Business*, Bermuda: Academy of International Business 1991.
- Jung, K., Ang, S. H., Leong, S. M., Tan, S. J., Pornpitakpan, C., and Kau, A. K. (2002). A typology of animosity and its cross-national validation. *Journal of Cross-Cultural Psychology*, 33(6): 525–539.
- Johansson, J. K./D, S./Nonaka, I., Assessing the Impact of Country of Origin on Product Evaluations: A New Methodological Perspective, *Journal of Marketing Research*, 22, November 1985, pp. 388-396.

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Examining the Critical Success Factors of Mobile Website Satisfaction in Malaysia

Key words: Mobile Satisfaction, perceived usefulness (PU), Perceived ease of use (PEOU), trust and Malaysia

INTRODUCTION

The mobile phone can be perceived to be a ubiquitous communication device in our life (Matti, 2011). Mobile marketing, which involves two or multi way communication and promotion of an offer between a firm and its customers using the mobile, a term that refers to the mobile medium, device, channel, or technology, is growing in importance in the retailing environment (Shankar, Venkatesh, Hofacker, & Naik, 2010). With the rapid advancements of mobile network technologies, provision of various kinds of value-added services by mobile service providers is on the rise around the world (Zhao, Lu, Zhang, & Chau, 2011). According to Z. Tao (2011b) mobile commerce is developing rapidly but still in its infancy. A marketing perspective suggests that end users of m-commerce can be seen as the ultimate customers, since satisfaction with an m-commerce system is one of the outcomes of the exchange between systems and end users (Wang & Liao, 2007).

Background of Research

Delivering value added, interactive, and/or location-based mobile services (e.g., banking, content download, emergency/ roadside assistance, etc.) to customers seems to be increasingly important in gaining a competitive edge by strengthening relationships with key customers (Lin & Wang, 2006). In most of countries mobile marketing is subject to government regulation, which dictates that prior permission from the customer has to be sought before a mobile marketing message can be sent (Chanaka, Andreas, Heikki, & Teemu, 2009; Teemu, Heikki, Chanaka, & Andreas, 2007). Mobile marketing defined as “the use of wireless media as an integrated content delivery and direct response vehicle within a cross media or standalone marketing communications program” (G. Tao, Fareena, & Andrew, 2010). Specially in the field of marketing strategies for telecommunications services it is frequently pointed out that once customers have been acquired and connected to the telecommunications network of a particular operator, their long-term links with the focal operator are of greater importance to the success of the company in competitive markets than they are in other industry sectors (Gerpott, Rams, & Schindler, 2001). Customer satisfaction can, however, be viewed as a necessary prerequisite, but does not as such guarantee loyalty (Matti, 2011). According to Revels, Tojib, & Tsarenko (2010) there is a dearth of research that focuses on customers’ satisfaction with and intention to use mobile services. While customer satisfaction and loyalty regarding most physical goods and services have been well explored in academic literature, there exists little research on these factors with respect to mobile telecommunications services (Turel & Serenko, 2006). According to (Shankar, et al., 2010; Zhao, et al., 2011) understanding the antecedents and consequences of customer satisfaction in

the mobile communications market is important. Therefore, this study contributes new knowledge into mobile commerce literature to enhance mobile service satisfaction among users. Mobile marketer should implement and set their strategy based on attitudes and behavior of users which in this study is going to discover.

Significance of Study

Previous researches on mobile marketing have mainly focused on e-commerce web site success and seldom examined the factors affecting mobile web site success. Rapid proliferation in the business potential of mobile marketing attracts researchers from various fields to contribute to the growing body of knowledge on the phenomena (Varnali & Toker, 2010). Accordingly study constructs include consumer-based variables that influence the acceptance of mobile marketing, attitudes, trust, satisfaction are interesting to examine by researcher in field of mobile marketing satisfaction. The mobile marketing is a very important tool for all marketers, for the simple reason that the combined benefits of mobile marketing are simply not yet available through any other medium (Chanaka, et al., 2009). However, it has seldom been used to explain the success of mobile sites, which represent an emerging information technology and have features including ubiquity, immediacy and local ability (Z. Tao, 2011b). Customer satisfaction is a critical factor for mobile service providers to maintain or improve their market share and profitability (Zhao, et al., 2011). This study addresses the concern of PU, PEOU and trust on mobile commerce satisfaction.

LITERATURE REVIEW

Mobile Commerce

The number of mobile phones in use throughout the world is now more than 4.6 billion (CBS News, 2010) and the International Telecommunication Union is expecting that mobile application downloads will reach 48 billion in 2015 (Rouibah, Abbas, & Rouibah, 2011). Among the different telecommunication and communication industries, one of the fastest growing is the mobile phone services industry, with its rapidly increasing share of daily communications (Keramati & Ardabili, 2011). Given the fast growth of mobile technology services in some countries and the relatively slow growth in others, it is important to understand the factors that contribute to the adoption of these applications (Revels, et al., 2010). Many studies have been conducted to investigate the structures of the relationship between the affective responses and product designs for various product categories, such as consumer electronic products, cars, mobile phones, chairs, etc (Hong, Han, & Kim, 2008). From a user's perspective, a mobile device is not only a tool for communication but also as a tool for commerce. In this context, the emphasis of mobile carriers' strategy has shifted from the traditional telecommunications service to value-added m-commerce service (Lu, Zhang, & Wang, 2009). As a mobile phone has various advanced functionalities or features, usability issues are increasingly challenging. Due to the particular characteristics of a mobile phone, typical usability evaluation methods and heuristics, most of which are relevant to a software system, might not effectively be applied to a mobile phone (Heo, Ham, Park, Song, & Yoon, 2009).

Marketing on the Mobile Phone

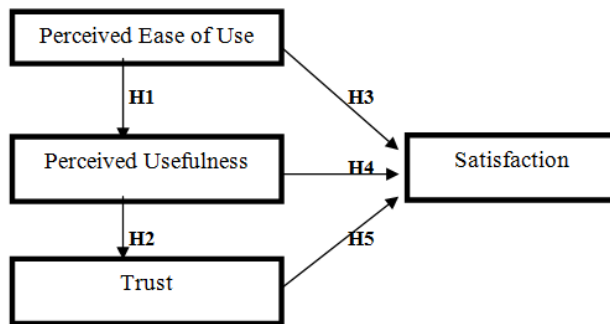
Practitioners and academics alike argue that mobile marketing, the most common current form of which is text messaging, will turn into an active direct marketing medium as part of the promotion mix (Z. Tao, 2011a). The application of third generation (3G) mobile communication technologies has triggered the rapid development of mobile commerce (Z. Tao, 2011a). It is evident that the mobile phones are deeply rooted in every person's everyday life (Matti, 2011). Mobile phones are one of the most widely embraced technological devices in the consumer market (Revels, et al., 2010). The interesting characteristic of the mobile phone industry is its rapidly evolving nature, short product life-cycles (Matti, 2011). Many of the instruments for measuring user-perceived system quality and user information satisfaction were developed in the

context of mainframe, PC and wire-based technologies of a bygone era then with the proliferation of wireless technologies, users are increasingly interfacing and interacting with mobile commerce (m-commerce) systems (Wang & Liao, 2007). From a marketer's perspective, the benefits of mobile marketing include a high rate of personalization, interactivity, and a low cost of reaching large target audiences at the right time and in the right place (Chanaka, et al., 2009).

THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

Derived from the Theory of Reasoned Action (TRA) (Fishbein and Ajzen, 1975) the TAM includes five constructs: perceived usefulness, perceived ease of use, attitude towards use, intention to use, and actual use. Technology Acceptance Method (TAM) has been widely used to explain mobile adoption behavior so, the main construct of this research framework has been proposed as shown in figure 1. In TAM, behavioral intention to use is jointly influenced by attitude and usefulness, where the latter affects the former directly. Moreover, ease-of-use directly influences usefulness and attitude. In general, TAM functions to explain and predict the technology adoption (Li & Yeh, 2010). Pervious related studies, for example in China by (Z. Tao, 2011b), has employed TAM to examine mobile user satisfaction.

Figure 1: Theoretical Research Framework



Perceived Ease of Use (PEOU)

Another important motivational influence for consumers' technology usage intention is perceived ease of use (Revels, et al., 2010). PEOU, on the other hand, refers to the extent to which a person believes that by using a technology they will be free from any mental effort (Rouibah, et al., 2011). PU is also found to be more useful than PEOU in predicting consumer attitudes toward using M-commerce. The findings also concur with earlier TAM research that consistently finds that PU is a more powerful predictor than PEOU (Kenneth C.C, 2005). Many researchers studied and explored influential factors on customer acceptance of e-commerce technologies, which vary from social to technical and further to economical (Rouibah, et al., 2011). (Revels, et al., 2010) found that perceived ease of use is a strong predictor of perceived usefulness in mobile commerce context. Thus the proposition as follows:

H1. Perceived ease of use significantly affects perceived usefulness.

H3. Perceived ease of use significantly affects user satisfaction.

Perceived Usefulness(PU)

Perceived usefulness is one of the fundamental antecedents of innovation usage which is related to the utilitarian value that mobile technology provides to customers (Revels, et al., 2010). It is

well known that usability is a significant quality attribute of mobile phones and thus usability evaluation is becoming increasingly important in the mobile phone industry (Heo, et al., 2009). PU refers to the extent to which a person believes that using a technology would have a value for his tasks (Rouibah, et al., 2011). M-services aim to provide customers with flexibility of access and use of many applications, however, perceived usefulness of this technology is not regarded by consumers as the main antecedent (Revels, et al., 2010). Lin & Wang (2006) found that perceived trust had direct and positive impacts on the overall satisfaction and loyalty of customers. PU has been found to be a significant factor affecting initial usage and continuance usage (Z. Tao, 2011a). Thus, the proposition as follows:

H2. Perceived usefulness significantly affects Trust.

Trust

Similar to online transactions, mobile commerce also involves great uncertainty and risk. Thus trust is critical to facilitating mobile user behavior (Z. Tao, 2011a). The growth of mobile commerce (m-commerce) has motivated a better understanding of how trust can be built on a mobile device (Li & Yeh, 2010). Customer satisfaction was therefore considered to be a mediating variable between trust and customer loyalty (Lin & Wang, 2006). Understanding the sources of trust that the consumers deem important is a central aspect in any initiative that aims to build consumer trust to mobile marketing (Teemu, et al., 2007). Thus the proposition as follows:

H5. Trust significantly affects user satisfaction.

Mobile satisfaction

Satisfaction is a consumer's post-purchase evaluation and affective response to the overall product or service experience (Lin & Wang, 2006). A variety of studies have been conducted to assess affective satisfaction of mobile phones (Cho, Park, Han, & Kang, 2011). Customer satisfaction is probably one of the most researched topics in the area of marketing. Hundreds if not thousands of articles have been published during last 40 years or so around this subject (Matti, 2011). Affective satisfaction can be defined as user's subjective feelings about product images and/or impressions that are perceived when users are experiencing products (Hong, et al., 2008). Overall, satisfaction refers to the customers' rating of the brand, based on all encounters and experiences. Therefore, user satisfaction has become the prevailing proxy construct for measuring system success, and it is therefore frequently measured in past studies (Wang & Liao, 2007). Past research has indicated that customer satisfaction has a positive effect on future repurchase intention (Revels, et al., 2010). Thus the proposition as follows:

H4. Perceived usefulness significantly affects user satisfaction.

PROPOSED METHODOLOGY

Target Population

The target populations of this study are Maxis mobile phone fair visitors at Klang Valley. The overall sample size of study will be 300 respondents. To enhance the validity of the proposed model's measurement item, a pretest and a pilot survey will be conducted before the main survey. Twenty set of questionnaires will be distribute randomly to Twenty (20) Kuala Lumpur residents in Malaysia. To measure research variables, nominal scale will be use in section A (Demographic information) and ordinal scale will be employ in section B (Variables Item). To analyze collected data by modified questionnaire, this study will use SPSS software and employed below analysis. This study will use multiple regression analysis to examine relationship between dependent and independent variables. This research will employs (1) descriptive, (2) goodness of data (reliability) analysis, and (3) hypotheses testing. The indicator

uses in this study are: Mean, Standard Deviation, Pearson Correlation, Adjusted R2 value, F statistics, significant level $p < 0.005$ and Standardized β .

Questionnaire Development

Items selected for the constructs primarily adapted from prior studies to ensure content validity. Likert scales (ranging from 1 to 5), with anchors ranging from “strongly disagree” to “strongly agree” use for all questions.

Table 1: Questioner’s item

	Variable Name	Questionnaire Item	Source
1	PU	PU1 This mobile site improves my work and life efficiency. PU2 This mobile site allows me to easily acquire the information I need. PU3 Overall, this mobile site is useful.	(Z. Tao, 2011b; Wang & Liao, 2007)
2	PEOU	PEOU1 Learning to use this mobile site is easy. PEOU2 Skillfully using this mobile site is easy. PEOU3 Overall this mobile site is easy to use.	(Z. Tao, 2011b)
3	Satisfaction	SAT1 I am satisfied with this m-commerce website. SAT2 The m-commerce website is successful. SAT3 The m-commerce website has met my expectations. SAT4 I feel pleased with your overall experience of mobile services use	(Lin & Wang, 2006; Revels, et al., 2010)
4	Trust	T1 Based on my experience with the m-commerce vendor in the past, I know it is honest. T2 Based on my experience with the m-commerce vendor in the past, I know it cares about customers. T3 Based on my experience with the m-commerce vendor in the past, I know it is not opportunistic. T4 Based on my experience with the m-commerce vendor in the past, I know it is predictable. T5 Based on my experience with the m-commerce vendor in the past, I know it knows its market.	(Lin & Wang, 2006)

CONCLUSION

Mobile shopping as an emerging service has not been widely adopted by users. User satisfaction was traditionally employed as a surrogate of IS success, and therefore has been frequently measured in past studies (Wang & Liao, 2007). Product designers need to consider a variety of consumers’ tastes and preferences to design a product that appeals to consumers. As suggested by our proposed model, customer satisfaction should develop if the formation of perceived usefulness, perceived ease of use and trust appropriately managed. In conclusion, this article proposes a theoretical framework of intention to use m-services in a Malaysian context which is based on the Technology Acceptance Model. Recently, the potential for using Mobile commerce applications led many organizations to expend substantial resources on these technologies. Therefore, this study has implication for both academicians and practitioners. The mobile service providers could expand their activities and gain more customer satisfaction by implementing the finding of this study.

REFERENCES

- Chanaka, J., Andreas, K., Heikki, K., & Teemu, K. (2009). Antecedents to permission based mobile marketing: an initial examination. *European Journal of Marketing*, 43(3), 473-499.
- Cho, Y., Park, J., Han, S. H., & Kang, S. (2011). Development of a web-based survey system for evaluating affective satisfaction. *International Journal of Industrial Ergonomics*, 41(3), 247-254.
- Gerpott, T. J., Rams, W., & Schindler, A. (2001). Customer retention, loyalty, and satisfaction in the German mobile cellular telecommunications market. *Telecommunications Policy*, 25(4), 249-269.
- Heo, J., Ham, D.-H., Park, S., Song, C., & Yoon, W. C. (2009). A framework for evaluating the usability of mobile phones based on multi-level, hierarchical model of usability factors. *Interacting with Computers*, 21(4), 263-275.
- Hong, S. W., Han, S. H., & Kim, K.-J. (2008). Optimal balancing of multiple affective satisfaction dimensions: A case study on mobile phones. *International Journal of Industrial Ergonomics*, 38(3-4), 272-279.
- Kenneth C.C, Y. (2005). Exploring factors affecting the adoption of mobile commerce in Singapore. *Telematics and Informatics*, 22(3), 257-277.
- Keramati, A., & Ardabili, S. M. S. (2011). Churn analysis for an Iranian mobile operator. *Telecommunications Policy*, 35(4), 344-356.
- Li, Y.-M., & Yeh, Y.-S. (2010). Increasing trust in mobile commerce through design aesthetics. *Computers in Human Behavior*, 26(4), 673-684.
- Lin, H.-H., & Wang, Y.-S. (2006). An examination of the determinants of customer loyalty in mobile commerce contexts. *Information & Management*, 43(3), 271-282.
- Lu, Y., Zhang, L., & Wang, B. (2009). A multidimensional and hierarchical model of mobile service quality. *Electronic Commerce Research and Applications*, 8(5), 228-240.
- Matti, H. (2011). Mobile phone feature preferences, customer satisfaction and repurchase intent among male users. *Australasian Marketing Journal (AMJ)*, 19(4), 238-246.
- Revels, J., Tojib, D., & Tsarenko, Y. (2010). Understanding consumer intention to use mobile services. *Australasian Marketing Journal (AMJ)*, 18(2), 74-80.
- Rouibah, K., Abbas, H., & Rouibah, S. (2011). Factors affecting camera mobile phone adoption before e-shopping in the Arab world. *Technology in Society*, 33(3-4), 271-283.
- Shankar, V., Venkatesh, A., Hofacker, C., & Naik, P. (2010). Mobile Marketing in the Retailing Environment: Current Insights and Future Research Avenues. *Journal of Interactive Marketing*, 24(2), 111-120.
- Tao, G., Fareena, S., & Andrew, J. R. (2010). Factors influencing Chinese youth consumers' acceptance of mobile marketing. *Journal of Consumer Marketing*, 27(7), 574-583.
- Tao, Z. (2011a). An empirical examination of initial trust in mobile banking. *Internet Research*, 21(5), 527-540.
- Tao, Z. (2011b). Examining the critical success factors of mobile website adoption. *Online Information Review*, 35(4), 636-652.
- Teemu, K., Heikki, K., Chanaka, J., & Andreas, K. (2007). Permission-based mobile marketing and sources of trust in selected European markets. *Journal of Systems and Information Technology*, 9(2), 104-123.

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Consumer Responses To CSR Driven Microfinance Strategy Of Banks - An Empirical Investigation Based On India

INTRODUCTION

Millions of dollars are set aside for corporate social responsibility (CSR) programmes by retail banks to strengthen both their reputations and their relationships with stakeholders, in particular, the customers (McDonald and Rundle-Thiele, 2008). A great deal of research has been done in recent years in the area of retail banks commitment to CSR principles and its implications (Snider et al 2003, Maitland 2002; and Kok et al 2001). In the wake of increased competition among retail banks, researchers have now focussed a lot of their attention towards finding out whether retail banks are undertaking sustainable business practices (Sweeny et al., 2001). Importance of Microfinance surfaces in this context. Microfinance is seen as an important means to increase productivity of the poor (Joseph, 1993). The increased popularity of microfinance among different financial institutions is due to the underlying belief that involvement in microfinance programmes would help them to retain credibility as development agencies (Remenyi and Quinones, 2000). This is particularly important for banks entering into the microfinance arena under the CSR banner. Banks and Microfinance finance Institutions (MFI) are implementing CSR by using financial initiatives such as microcredit and microfinance schemes, ethical, social and environmental funds, low-income banking, and removal of barriers to credit access (Prior and Argandona, 2008).

There is a strong belief that CSR initiatives have the powerful potential to make positive contributions to addressing the needs of disadvantaged communities in developing countries. The business rewards of CSR tend to be greater when the social initiative is related to a company's core competency (CSR fit) and deals with issues that consumers care about (Kotler and Lee, 2005, Menon and Kahn, 2003, Sen and Bhattacharya, 2001). Social and business interests are not necessarily contradictory but can indeed reinforce each other (Kotler and Lee, 2005, Porter and Kramer, 2002, Prahalad, 2005). Based on the literature, the strategy of banks offering microfinance under the banner of CSR, one could argue that there is a perfect CSR fit. This strategy could lead to business rewards like increased reputation, consumer repurchase, and favourable evaluation from stake holders. However there is a dearth in the marketing literature especially in bank marketing exploring efficacy of the aforementioned strategy, which in theory claims to have a perfect CSR fit (Banks offering microfinance under CSR banner).

Banks like Hong Kong and Shanghai Banking Corporation (HSBC), Angemene Bank Netherland (ABN Amro) have large clientele in microfinance spreading across different countries, including India. The microfinance market in India is becoming increasingly competitive with local banks, like the Industrial Credit and Investment Corporation (ICICI) Bank, also joining the fray. This raises a few fundamental questions: How effective is this strategy of retail banks (offering microfinance under the CSR Banner) in achieving sustainable development? How do managers and customers perceive these strategies? These claims are being examined in the light of relevant theory and primary data. The paper begins with a review relevant studies connecting CSR, customers, banks followed by data analysis, finally based on

the results the paper ends with a discussion on the rationale behind the aforementioned strategy of the financial institutions.

Banks and CSR

Many studies have been conducted into the reasons why customers choose a particular bank (Erol et al., 1990; Gerrard and Cunningham, 1997; Naser et al., 1999; Sudin et al., 1994). These studies have identified a number of such factors: friends' recommendation, convenience (i.e. the location), reputation of the banks, and availability of credit, competitive interest rates, friendliness of banks staff, low service charges, adequate banking hours, availability of ATMs, special services and the quality of services on checking accounts. The key stakeholders for the banks have been specifically identified as owners, borrowers, depositors, regulators and managers (Yamak and Suer, 2005). In the context for this study, discussion will focus on customers. The needs of the consumer in the banking industry are security, access, liquidity, interest and social responsibility. Hodgson (2002) and Orgizek (2002) argue that banks have an inherent social responsibility to know the customer. Understanding the customer's requirements imposes a broad responsibility on having to know the financial affairs of the customers. This guards customers from being sold inappropriate policies or investments. The banking industry provides society with tools for managing savings and investing money. They also provide funds for productive uses in the form of investment projects and, thereby, play a role in sustainable economic and social development.

One challenge the entire retail banking industry is currently facing is overcoming the negative perception of the industry's concern for consumer welfare (Decker, 2004). Orgizek (2002) argues that banks that integrate CSR policies by investing in socially responsible investments and improving CSR awareness achieve market benefits and competitive advantage. He further suggests that to realise any advantage from CSR a bank has to translate the CSR agenda into its core business activity. Numerous bank managers have responded to the necessity for complying with social responsibility requirements (Orgizek, 2002). Researchers have debated the advantages and disadvantages of social responsibility in banking and other marketing efforts. The primary debate centres on the cost of investing in CSR activities and the benefits for the bank (Bloom et al., 1995). Asher (1991) studied the effect of green marketing on consumer behaviour at ATMs. He examined the advertising campaigns around environmentally friendly contributions, which resulted in the increase of ATM withdrawals. It was found that ATM withdrawals went up by 56% in 1988-1990 (Asher, 1991). Fenn (1995) examined the result of corporate policy of banks in hiring disabled employees. The result revealed an increase in productivity and a decrease in staff turnover. Bosone (2001) emphasises the public relations benefits of the bank as a result of engaging in socially responsible marketing. Green marketing and charitable causes have also been shown to be important in bank marketing (Bosone, 2001).

Pomering and Dolnicar (2006) conducted a quantitative study surveying four hundred customers of different banks in Australia to assess the comparative sensitivity of customers to different CSR activities in the banking industry. The findings demonstrated that a considerable proportion of customers look favourably upon CSR initiatives once made aware of them (Pomering and Dolnicar, 2006). Rugimbana et al; (2005) reported in their study that customers of retail banks in New South Wales, Australia, were discontent with their banks, particularly their product strategies, followed by their communications. In Malaysia, Dusuki and Dar (2005) conducted a quantitative study with 1500 respondents from the Islamic banking industry to examine their perceptions toward CSR of various stakeholders, which comprised of managers, employees, regulators, Islamic legal advisers, customers, depositors and local communities. The results revealed that various stakeholders disagreed that being socially responsible was costly and not good for the sustainability of the bank. Various stakeholders agreed that Islamic banks should show a higher level of social responsibility compared to conventional banks, and that they should have greater commitment to social responsibility.

The new age banks in India, namely ICICI bank and ABN Amro, selected for this study have clearly stated that they are pursuing microfinance as part of their CSR. Despite the commercial nature of the banks and the heavy competition in India's financial sector, the above statement clearly indicates that these banks are trying to make a difference by positioning themselves as responsible corporate citizens through their microfinance initiatives in the form of CSR. The banks have ventured into the microfinance sector to achieve these goals by partnering with Microfinance institutions which act as inter mediatory between bank and the customers. This is very similar to the strategic approach towards CSR suggested by (Kotler and Lee, 2005; Menon and Kahn, 2003; Sen and Bhattacharya, 2001; ,Ogrizek, 2002). The banks are trying to fulfil the social need of providing financial aid to the poor through microfinance. By targeting the rural poor of India, these banks have developed a key strategic market segment. By following this strategy, new age banks are trying to achieve the dual advantage of being good corporate citizens while also embarking on profitable ventures. Those who support the adoption of CSR policies strongly feel that such practices may enhance the reputation of the bank and, subsequently, enable companies to reap long term strategic benefits by maintaining its legitimacy, competitiveness and sustainability in the market (Burke and Logsdon 1996, Lantos 2001, Porter and Kramer, 2002, Johnson 2003). CSR is seen as a medium for sending and receiving relevant information to the target audience, which has an impact on an organisation's legitimacy. Research conducted on financial institutions points out to the benefits of being socially responsible. Noted studies include Orgizek (2002), Asher (1991), Pomeroy and Dolnicar (2006). The result of all these studies suggests that consumers are generally satisfied with the CSR commitment of the banks and this could result in repurchase intention by the consumers. In the case of some new age banks in India, microfinance is included as part of CSR and the microfinance interventions are expected by banks to carry messages regarding organisational legitimacy to the target audience. For example, ICICI Bank is the pioneer in establishing microfinance in India among the new age banks, and to date has the largest number of consumers in microfinance. It would be quite interesting to know the contentment of consumers about the CSR commitment of the banks and whether it would affect the repurchase decision of the customers. Hence, the research proposed the following hypotheses.

H 1 a- Customers of microfinance are content with the CSR commitment of the MFI

CSR commitment and Purchase Intention

The evidence from literature on CSR suggests that consumer responses to CSR could be different. Studies by some researchers found that consumers respond to CSR in a positive way if they identify an organisation as having similar perspectives as their own (Maignan and Ferrell, 2001; Webb and Mohr, 1998). Sen and Bhattacharya (2001), in their research, focused on the key mediating and moderating factors on consumer responses to CSR activities. The authors suggested that the company's CSR activities led to more favourable company evaluations and greater purchase intentions through building consumer-company congruence. Congruence aligns a company's interests with the customer's interest, which results in favourable consumer attitudes. The consumer will have a more favourable evaluation and high purchase intention if the company's trait expressed through CSR activities overlap with the consumer's values. The results of the survey will also find out if there is any link between consumer (dis)contentment of CSR activities and purchase intention. In other words, would the consumer who is happy with the CSR activities of the MFI show more loyalty towards MFI. This phenomenon was tested by the following hypothesis.

H 1 b-The degree of Contentment on CSR commitment is positively related to purchase intention

RESEARCH METHODOLOGY

A representative sample of banking customers from ICICI and ABN Amro Bank located in the state of Tamilnadu and Kerala was recruited through a microfinance institution funded by the abovementioned banks. The State of Tamilnadu and Kerala are located in the Southern part of India having large numbers of rural customers of microfinance. The approach of the study was to determine consumer experience and contentment with regard to the CSR strategy of the banks. A cluster sampling approach was followed, with each State representing a cluster. The cluster sampling approach can be based on any natural occurring grouping (Saunders, et al, 2008).

The main instrument to survey customers was the Consumer Discontentment Scale (CDS), developed by Lundstrom and Lamont (1976). The questionnaire was designed to collect the contentment and discontentment of customers. In this context, consumer discontent was defined as the collection of attitudes held by consumers toward the strategies deployed by new age banks, mainly in areas related to CSR. Statements were modified from the original pool of items developed by Lundstrom and Lamont (1976) to measure the (dis)contentment of customers of microfinance. The questionnaire consisted of 17 statements measuring consumer (dis)contentment on CSR. The widely used Likert scale was used for this instrument. A Likert scale requires the respondent to indicate the degree of agreement and disagreement with a variety of statements.

The original Consumer Discontent Scale (CDS) was an eighty-two item self-report measure. However, they were pruned to 17 items for this study. Moreover some of them were found to be redundant as they did not match the objectives of the study. The 17 items can be considered to be a subset of the 82 original items. In the original model, each item is scored on a six-point Likert scale from “strongly agree” to “strongly disagree” (Lundstrom & Lamont, 1976; Rugimbana et al., 2005). While the scale contains both positive and negative statements, most of the items have a negative orientation (Lundstrom & Lamont, 1976). Positive statements are scored from 1 to 6 for “strongly agree” to “strongly disagree”, and negative statements are reversed, scoring from 6 to 1 ranging from “strongly disagree” to “strongly agree” (Lundstrom & Lamont, 1976). The 17 statements for this study used a scoring of 1-5 to ease responses and data entry for analysis. A five point scale is quite simple for the researcher to read out and analyse the complete list of scale descriptors. This clarification is lengthier for the higher point format (Dawes, 2008). Each set of statements measured one aspect of the consumer (dis)contentment towards the CSR strategies examined for the study.

Data Collection and Analysis

The customers of microfinance organised themselves into Self Help Groups (SHGs) and they held meetings every week. Each SHG consisted of 15 to 20 members. The data was collected by visiting 10 SHGs each in Kanyakumari and Trichur district of Tamilnadu and Kerala respectively. The questionnaire was distributed at the end of the meeting. After each SHG meeting the researcher gave a brief introduction, explaining the purpose of the study assuring the respondents of strict anonymity. Out of the total of 316 questionnaires collected, eight of them were found to be incomplete. The response rate was 97.5 percent. This is in line with the claims of Saunders et al (2006) that delivery and collection questionnaires by following this method can receive up to 98 percent response rate. After checking for outliers the final set of data comprised 151 Malayalam questionnaires (Language of Kerala) and 150 Tamil (Language of Tamilnadu) questionnaires, which make a total data set to 301. The final 301 questionnaires, were all used for analysis of the research.

Contentment and Discontentment Analysis of Variables-Reliability Test

Consumer sentiments cannot be measured by one or two questions. The relevant information is extracted through a number of questions. Questions are like jigsaw puzzles which when taken together give the answer without prejudice. Therefore the questions asked must have some amount of correlation. Reliability tests measure the extent of correlation among the questions

asked. If the questions are irrelevant the correlation will be poor. The researcher has selected internal consistency and the split-half reliability tests for the questionnaires framed for quantitative analysis. The internal consistency was estimated by Cronbach's alpha (α). The analysis was done using SPSS. A combined analysis of both the respondents from State of Kerala and Tamilnadu was undertaken to gauge the (dis)contentment on various issues. The reliability tests conducted produced statistically significant results.

CSR

A total of 17 questions were used to measure the contentment/discontentment of consumers on the CSR angle of microfinance. The reliability test produced statistically significant results. There were two types of questions asked under the CSR banner. First type are questions whose answers in the affirmative increased the credibility of banks in the context of CSR. These are positive questions. A low score shows agreement. In this case a mean score of less than 3 is considered as contentment. The second type of question was whose answers were in the affirmative, which reduced the credibility of the banks in the context of CSR. They are negative questions. When respondents produce answers negating negative questions the result is positive. A high score shows agreement. On individually analysing each statement it is quite clear that the consumers of microfinance are satisfied with the way banks handle microfinance activities and their commitment towards CSR.

Out of 17 questions, 16 of them were negative questions. Issues that prompted responses of strong discontentment were very few. The consumers expressed strong contentment on some important issues like statement 2.8, "*Microfinance is another example of banks trying to make profits at the expense of the poor community*". The mean of the aforementioned statement is 3.86 and the standard deviation is 0.940. Eighty one percent of the recipients disagreed with this statement and only 8 percent agreed with it. Ten percent took a neutral attitude. It is clear that most of the respondents do not feel that they are being exploited by the banks. This is an expression of contentment on the part of recipients.

MFI's are often accused of pushing people into virtual spirals of poverty by providing them with more loans. However, when responding to question number 2.25, 78% of consumers disagreed with the statement that the MFI encouraged them to borrow more. Another criticism of MFI's is that some of them express traits of a pure money lending organisation. It seems that the majority of the consumers of this survey did not agree with this. Responding to the statement "*As soon as the Microfinance provider gets your business, they forget you*", 74 percent of the respondents disagreed with the statement, only 26 percent of recipients agreed with the statement. This shows that the majority of the recipients were content with the way the banks were running the business. However, one important element that has to be noted here is that the recipients of microfinance do not deal directly with the banks. Only the members of the field staff of the MFI are directly involved with the recipients. Therefore this contentment should be indirectly attributed to the banks. On issues like helping the local industry, catering towards the needs of society, consumers expressed strong contentment. One interesting point to note is the opinion of the consumers, on statement 2.2, "*Primary motive of the Microfinance provider is to increase profits*". This statement produced a mean of 2.85 and the standard deviation is 1.371. A standard deviation of 1.371 for a mean of 2.85 is high. Forty three percent of the respondents agreed to the statement and 43 percent disagreed. 14 percent gave a neutral answer. The results clearly show the wide disparity in thinking on this issue.

Out of the 17 statements, consumers expressed discontentment on only two statements, questions 2.35 and 2.28. Responding to the negative statement 2.28, consumers felt that they were less important to the bank when compared to the shareholders. The mean for the statement is 2.87 and the standard deviation is 1.482. A standard deviation of 1.482 for a mean of 2.87 is indicative of the diverging opinions in this item. It is interesting to note that 46 percent of

respondents felt that the statement was true. At the same time, 46 percent felt the opposite. This shows that banks have not taken the recipients of microfinance into their confidence and made them feel important. Had there been contentment, there would have been more recipients disagreeing with the item. In fact, recipients felt less important. This shows their discontentment. This supports Johnson's (1971) view of CSR, Johnson's main argument was that a socially responsible firm should look after the interests of stockholders.

Overall mean for CSR. The overall mean for the 17 statements was computed using SPSS. All negative questions were reverse coded and the common mean for CSR and standard deviation was determined using SPSS taking all 17 questions into account. The result is given in Table below. The overall mean is 2.59 (<3) indicating that consumers of microfinance were relatively content with CSR commitment of the MFI.

Ho: Customers of microfinance are discontent with the CSR commitment of the MFI ($\mu \geq 3$) and the discontentment will not result in future purchase intention.

HA: Customers are content with the CSR commitment of the MFI ($\mu < 3$) and the contentment will result in future purchase intention.

The hypothesis *H 1 a (Customers of microfinance are content with the CSR commitment of the MFI) and H 1 b (The degree of Contentment on CSR commitment is positively related to purchase intention)* are individually tested in this section which is divided into two parts. The first part tests the contentment and discontentment on CSR commitment. The second part tests the relationship between contentment and purchase intention.

On the overall analysis of the 17 statements related to CSR, it is quite clear that consumers of microfinance are generally satisfied with the strategies related to CSR. There are some disagreements on certain aspects. Those consumers tested generally disagreed with negatively worded statements, showing clearly that they have firm opinions on this matter. Therefore it is to be presumed that consumers of microfinance are content with regard to the services offered by the banks and SHGs.

Sixteen questions related to CSR were negative. The overall CSR score was computed as the mean of 17 CSR items after reversing the 16 questions using SPSS. The overall mean of CSR is found to be 2.6 and the standard deviation is 0.50. The corresponding standardised test statistic to be tested Ho: $\mu \geq 3$ against HA: $\mu < 3$ is -11.31 . The corresponding p value is 0.024, which is less than the level of significance $\alpha=0.05$. Therefore the null hypothesis Ho: $\mu \geq 3$ (customers of microfinance are discontent with the CSR commitment of the MFI) should be rejected. This means there is enough evidence to support the alternate hypothesis, HA: $\mu < 3$ that the "customers of microfinance are content with the CSR commitment of the MFI".

Correlations between CSR and Purchase Intention. The correlation between purchase intention and CSR is 0.273 indicating the correlation is very weak. As can be seen from the above table, the p-value to test Ho: Correlation=0 against the HA : Correlation >0 is 0.000. Since the p-value is less than level of significance $\alpha=0.05$, the null hypothesis is rejected, and concludes that the correlation is significantly different than zero and positive. This result indicates that there are many other factors that influence the repurchase intentions. The coefficient of correlation is only 0.273, coefficient of determination is 0.075. This value shows that 7.5% of the repurchase intentions are explained by the CSR component of the schemes.

DISCUSSION AND CONCLUSION

On the issue of CSR, Consumer perceptions are varied, and there was a lot of indecision on the part of consumers in giving a clear cut verdict. CSR as a social obligation has been one of the

most prominent streams in the CSR literature. Numerous researchers have explicitly put forward the view that business should look after society's welfare. For many of them, CSR meant sacrificing profits and giving out dole. Carroll (1999) defined discretionary activities as philanthropic obligation, which is about actively giving back to society. Similar views were put forward by Donaldson (1982) and Fredrick (1987) when they argued that businesses and society were interdependent and that they coexisted (Donaldson, 1982, Fredrick, 1987). The banks who selected for the study seemed to follow this CSR stream from the literature and did not insist on pursuing the CSR angle. This attitude led to a situation where new age banks and MFIs remained as money lenders to the consumers of microfinance. This duty they did well, and consumers were happy with it. However, on specific queries, consumers were not happy, namely:

1. Bank profits are high, yet they keep raising fees.
2. Primary motive of the bank is to increase profits.
3. The consumer of microfinance has lesser importance to a microfinance provider when compared to a shareholder.
4. Microfinance providers encourage the consumer to borrow more than they need.

Though, on overall analysis, (CSR mean is 2.59 < 3) consumers were content with the level of CSR activity.

Relation between Contentment and Purchase Intention

On the analysis of results, the research found only a weak link between contentment and purchase intention. The correlation figure computed using SPSS was 0.27—a value of 0.90 and above is considered to be strong (Tabachnick and Fidell, 2001). The correlation figures do not substantiate a strong relationship. This result suggests the presence of other factors which influences repurchase, responding to another question, the majority of customers said that they would use the same microfinance provider for their future needs. This irony might indicate that consumers do not have any alternative financial options. Usually the only provider of alternative finance would be local money lenders who charges exorbitant interest rates.

The literature on CSR talks in detail about the relationship between CSR and customers. The consumer responds to CSR initiatives in different ways. Evidence from the literature on consumer responses seems to be divided on this issue. Researchers like Sen and Bhattacharya (2001) argue that the consumer will show favourable company evaluation and purchase intention if they are satisfied with the CSR efforts of the company. However, studies have also revealed that CSR initiatives do not always generate positive effects (Fairclough, 2002; Landman et al., 2002). The results of this study indicate that although consumers showed purchase intention, it was not related to the CSR initiatives of the organisation. Thus the study provides empirical support to the view that CSR does not always generate positive effects. Furthermore, researchers like Kotler and Lee (2005); Menon and Kahn (2003); Sen and Bhattacharya (2001); talks about the business rewards for maintaining a CSR fit between company's core competency and CSR initiatives. However, the result of this study seems to suggest that it is not the CSR fit of microfinance and banks which is bringing rewards in the form of consumer repurchase.

Potential reasons on why banks still pursuing CSR strategy

Many organisations now use CSR to differentiate their organisation from competitors (Fombrun and Shanley, 1990; Sen and Bhattacharya, 2001; Turban and Greening, 1997). Albinger and Freeman (2000) suggest that when firms engage in CSR activities they are improving their reputations, which in turn may provide competitive advantage. This view reinforces Greening and Turban's (2000) research conclusion that companies demonstrating higher levels of CSR are perceived as having better reputations. Decker (2004) argues that the challenge the entire retail banking industry is currently facing is overcoming the negative perception of the industry's concern for consumer welfare (Decker, 2004). New age banks in India have a history of being warned by public authorities and consumer watch dogs about their unethical business practices. This could have affected their public image, so disclosing CSR strategies through microfinance

might be an attempt to regain and enhance their public image. However to substantiate these claims further research is required into the underlying motives of Banks in pursuing microfinance under the umbrella of CSR.

REFERENCES

- Albinger, H. and S. Freeman. 2000. "Corporate Social Performance and Attractiveness as an Employer to Different Job Seeking Populations." *Journal of Business Ethics* 28(3):243-253.
- Asher, J. (1991) When a good cause is also a good business. *Journal of bank marketing*, 23, 30-32.
- Bloom, P. N., Hussein, P. Y. & Szykman, L. R. (1995) Benefiting society and the bottom line. *Journal of Marketing Management*, 4, 8.
- Bosone, B. (2001) A study of banking and finance as we move into the new millennium. *Journal of Banking and finance*, 25, 2239-76.
- Burke, L. & Logsdon, J. M. (1996) How Corporate Social Responsibility Pays Off. *Long Range Planning*, 29, 495-502.
- Dawes, J. (2008). Do Data Characteristics Change According To The Number Of Scale Points Used? An Experiment Using 5-Point, 7-Point and 10-Point Scales. *International Journal Of Market Research* 50(1): 61-76.
- Decker, O. S. (2004) corporate social responsibility and structural change in financial services. *Managerial Auditing Journal*, 19, 712.
- Dusuki, A. W. & Dar, H. (2005) Does Corporate social responsibility pay off? An empirical examination of Stakeholder perspectives *Department of economics, Loughborough University, Leicestershire, UK*.
- Erol, C., Kaynak, E. & El-Bdour, R. (1990) Conventional and Islamic banks: patronage behaviour of Jordanian customers. *International Journal of Bank Marketing*, 8, 25-35.
- Fairclough, G. (2002) Study slams Philip Morris ads telling teens not to smoke-How a market researcher who dedicated years to cigarette sales came to create antismoking ads. *Wall street journal*, 13.
- Fenn, D. (1995) The unexpected advantage. *Inc. Magazine*, 17, 119.
- Fombrun, C. & Shanley, M. (1990) What is in a name? Reputation Building and corporate strategy. *Academy of Management journal*, 33, 233-258.
- Gerrard, P. & Cunningham, J. B. (1997) Islamic banking: a study in Singapore. *International Journal of Bank Marketing*, 15, 204-216.
- Hodgson, D. (2002), "Know Your Customer: Marketing, Govern mentality and the new consumer of Financial Services", *Management Decision*, 40(4), pp. 318-328.
- Johnson, H. H. (2003) Does it Pay to be Good? Social Responsibility and Financial Performance. *Business Horizons*, 46, 34-40.
- Joseph, S. (1993) The role of state in Financial markets. *World Bank annual conference on Development Economics*. Washington DC.
- Kok, P., T. V. D. Weile, R. McKenna and A. Brown:2001, 'A Corporate Social Responsibility Audit within a Quality Management Framework', *Journal of Business Ethics* 31(4), 285-297.
- Kotler, P. & Lee, N. (2005) *Corporate Social Responsibility Doing The Most Good For Your Company And Your Cause*, New Jersey, John Wiley & Sons.
- Landman, A., Ling, P. M. & Glantz, S. A. (2002) Tobacco industry youth smoking prevention programs -Protecting the industry and hurting Tobacco control. *American journal of public health*, 92, 917-930.
- Lantos, G. P. (2002) The Ethicality of Altruistic Corporate Social Responsibility. *Journal of Consumer Marketing*, 19, 205-230.
- Lundstrom, W. J. & Lamont, L. M. (1976) The Development Of A Scale To Measure Consumer Discontent. *Journal Of Marketing Research*, 13, 373-381.

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Banks - An Empirical Investigation Based On India*

- Maignan, I., Ferrell, O. C. & Hult, T. M. (1999) Corporate citizenship: Cultural antecedents and business benefits. *Academy of Marketing science journal*, 27, 455-469. |
- Maitland, A.: 2002, 'How to Become Good in all Areas: Corporate Social Responsibility: CSR is Here to Stay – But It is Unfamiliar Territory for Most Managers', *The Financial Times (London)*(September 11), 15.
- McDonald, L.M. and Rundle-Thiele, S. (2008), "Corporate social responsibility and bank customer satisfaction: a research agenda", *The International Journal of Bank Marketing*, Vol. 26 No. 3, pp. 170-82.
- Naser, K., Jamal, A. & Al-Khatib, K. (1999) Islamic banking: a study of customer satisfaction and preferences in Jordan. *International Journal of Bank Marketing*, 17, 135-150. No. 3, pp. 170-82.
- Ogrizek, M. (2002) The effect of Corporate Social responsibility on the branding of financial services. *Journal of Financial service marketing*, 6, 215-228.
- Paul, P. (2002) 'Corporate Responsibility', *American Demographics* 24(5), 24.
- Pomeroy, A. & Dolnicar, S. (2006) Customers' Sensitivity to Different Measures of Corporate Social Responsibility in the Australian Banking Sector. *ANZMAC CD Proceedings (Australia and New Zealand Marketing Academy Conference)*, Brisbane, Queensland, 4-6 December 2006.
- Porter, M. E. & Kramer, R. M. (2006) Strategy and society -The link between Competitive advantage and Corporate social responsibility. *Harvard Business review*, 84, 78-92.
- Porter, M. E. and Kramer, M. R. (2002) The Competitive Advantage Of Corporate Philanthropy. *Harvard Business Review*. 80, 56-65.
- Prahalad, C. K. (2005) *The Fortune At The Bottom Of The Pyramid*, Pennsylvania, Wharton School Of Publishing.
- Prior, F. and Argandona, A. (2008), "Best practices in credit accessibility and corporate social responsibility in financial institutions", *Journal of Business Ethics*, Vol. 87 No. 1, pp. 251-65.
- Remenyi, J. & Quinones, B. (2000) *Microfinance and poverty Alleviation*, London.
- Rugimbana, R., Strachan, G., Quazi, A. & Keating, B. (2005) Social impact of bank closures on a small rural community: The case of Marriwa. *ANZMAC 2005 Conference: Service Marketing*.
- Saunders, M., Lewis, P. And Thornhill, A. (2006). *Research methods for business students*. London, Prentice Hall.
- Sen, S. & Bhattacharya, C. B. (2001) Does Doing Good Always Lead To Doing Better? Consumer Reactions To Corporate Social Responsibility. *Journal of Marketing Research*, 38, 225-243.
- Snider, J., Hill, R. P. & Martin, D. (2003) Corporate Social responsibility in the 21st century: A view from the world's most successful firms. *Journal of Business Ethics*, 48, 175-187.
- Sudin, H., Norafifah, A. & Planisek, L. (1994) Bank patronage factors of Muslim and non-Muslim customers. *International Journal of Bank Marketing*, 12, 32
- Sweeney ,M.E., Armstrong, A. O'Donovan,G. & Fitzpatrick,M.(2001) Australian Banks As Corporate Citizens:Are They Toeing The Triple Bottom Line?
- Tabachnick, B. G. & Fidell L.S. (2001). *Using Multivariate Statistics*. New York:, Harper Collins.
- Turban, D. B. & Greening, D. W. (1997) Corporate social performance and organizational attractiveness of prospective employees. *Academy of management journal*, 40, 658-672.
- Webb, D. J. & Mohr, L. A. (1998) A typology of consumer responses to cause related marketing -From sceptics to socially concerned. *Journal of public policy and Marketing*, 17, 226-238.
- Yamak, S. & Sürer, O. (2005) State as a stakeholder. *Corporate Governance* 5(2), 111..

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Factors Influencing Performance of Women Entrepreneurs in Establishing and Expanding their SMEs in Somalia

INTRODUCTION

Somali women owning businesses are highly increasing in the economies of almost all regions in the country. The entrepreneurial potentials of women have gradually been changing with the growing sensitivity to the role and economic status in the society. This paper investigates the Factors affecting the performance of women entrepreneurs in Somalia especially in Banadir region were the capital city locates.

The concept of entrepreneur has been variously defined and all definitions revolve around either the activities/functions performed or committing capital and taking risk or the psychological disposition of the actors.

Suleiman (2006) defined entrepreneurship as “the willingness and ability of an individual to seek for investment opportunities to establish and run enterprises successfully”. On the other hand, Drucker (1970) viewed an entrepreneur as a person who perceives business opportunities and takes advantage of the scarce resources and uses them profitably.

Entrepreneur is someone who undertakes new thoughts does things in novel way, carries new combinations, discovers new markets and introduces changes as well. In short, an entrepreneur brings about innovation. (Schumpeter in Rutashobya & Nchimbi, 1999) defines an entrepreneur as innovative, imaginative, skillful, predictive, optimistic and venturesome.

He/she takes the initiative and exploits the business environment of the moment through an economic activity. Another definition reads ‘an entrepreneurs is anyone who makes an innovation; it can be a businessperson, an employee or manager of a firm,’ (Hult, Sonow & Kandemir, 2003).

Although different definitions have diverse focus, qualities for entrepreneurial success can be identified as innovative, risk taking and proactive personalities. And these personal traits is both born with and shaped by experience, background and social culture (Burns, 2005).

The definition of entrepreneur is varied whereas this research pays attention to those entrepreneurs who creates a new business in the face of risk and uncertainty for the purpose of achieving profit and growth by identifying opportunities and assembling the necessary resources to capitalize on them.

Gender perspective within Entrepreneurship study is not a new topic and plentiful academic publications about feminism research have been published in recent years. This matches the trend that the society has drawn more attention in gender equality, which to larger extent helps women eliminate their subordinate social status to men. It is doubtless that the rising

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consciousness of gender equality lets people put more attention on female role in entrepreneurship.

A women entrepreneur is one who owns and runs commercial enterprise independently, often at a personal financial risk. ILO-India study of women entrepreneurs gave the definition of women's enterprise as "*small unit where one or more women entrepreneurs have not less than 50 per cent financial holding,*" (Raju, 2000).

Women have owned and operated businesses for decades, but they were rarely recognized or given credit for their efforts. Often women entrepreneurs were "invisible" as they worked side by side with their husbands, and some only stepped into leadership positions when their husbands died. However, a variety of factors have combined in recent years to contribute to the visibility and the increase of women who start their own businesses.

Somalia has been a country in chronic complex emergency since 1991 when the Somali government collapsed. The ensued civil war and frequent natural disasters have led to a lack of basic services and great human suffering and humanitarian crises. In the two decades that followed the players have changed but the conflicts continued resulting in the displacement of 1.4million Somalis.

In this context, it is not hard to understand the negative effect that the ever-present lawlessness and violence in war-torn countries like Somalia may have on women. Many Somali women lost their husbands, fathers, brothers and male cousins to protect their families. Most of the men were killed, went missing, or were incapacitated. Somali women become functioning as heads of households to provide for themselves and their dependents.

The traditional-bound civilian regime (1960-1969) did not make women's rights a high priority. Men held all top political and administrative posts in the post colonial administration. Although women's right to vote or stand for elections were guaranteed in the constitution, women were de facto able only to vote for men and did not run for office. However, during the Barre regime the rights of Somali women gained wider public acknowledgement. The government introduced a number of laws that brought about significant changes in women's status. As a consequence of this legislation, as well as increasing access to education, Somali women were able, in the 1970, and 1980s, to break down some of the socio-political barriers that inhibited their advancement. New opportunities opened up for women in both private and public sector (CRD, 2004).

A small but significant number of women rose to executive positions in the government and to midlevel ranks within the armed forces. But the most dramatic change occurred in the number of women employed as clerks, teachers, nurses and veterinarians.

Somali women had very few employment options, usually secretaries and nursing. When women married, they were encouraged to retire and become housewives and raise children they might have (CRD, 2004).

When the central government collapsed and civil war began, Somali women took over men's roles because they become primary bread winners. Shukria Diini notes that Somali women have been constructive forces in peace building Efforts in Somalia, at the regional and national levels, [Somali] women played major roles in diffusing major confrontations between armed groups, (Shukria Diini, 2009).

Women of today are in several ways different from the women of yester years. They seek social and economic independence and are prepared to take risk as well. They have come out of the traditional boundaries of cooking, child bearing and serving within the family limits.

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From the role of dependence on father (childhood), and on husband and son (middle and old age), they have taken up administrative and managerial roles where policy formation and decision making are crucial. Women are leaders for many part of Somali life today: they are leaders of Non-governmental organization such as (COCWA, INHA), members of Somali federal parliament, and owners of major of micro business entity in South and central Somalia.

Studies have shown that a host of barriers prevent women from realizing their full potential as entrepreneurs, where they could make significant Impact to society. Entrepreneurship by definition implies being in control of one's life and activities. It is precisely this independence that many societies have denied women (Vishwanathan, 2001).

Women's family obligations often bar them from becoming successful entrepreneurs in both developed and developing nations. As Seymour puts it "having primary responsibility for children, home and older dependent family members, and few women can devote all their time and energies to their business" (Seymour, 2001).

Traditional gender role expectations and patriarchal attitudes in many developing nations like Somalia make it even more difficult for women to relieve themselves of family responsibilities. The familial and social conditioning in many developing countries inhibits the confidence, independence and mobility of women. This translates into poor access to information, credit, technology, markets, etc., and prevents women from starting a business or women entrepreneurs from growing beyond a particular level.

Women entrepreneurs have now opportunities unlike any other time in history. But their growing success is not without significant challenges and barriers. It is of critical importance to note the factors influencing women entrepreneurs in establishing and expanding their SMEs. By today, their efforts need to be taken into consideration. Besides, their successes need to be recognized to enable them grow their businesses and to access their business opportunities effectively.

The two main objectives of this paper are to investigate the factors influencing the performance of women entrepreneurs in Banaadir Region, and to investigate if being an entrepreneur leads women to neglect their children; neglect their household chores; Authority shift, and finally divorce and family separation.

LITERATURE REVIEW

Lerner and Hisrich (1997) conducted a study on Israeli women entrepreneurs and categorized the factors that affect their performance into five perspectives, that is, motivations and goals ; social learning theory (entrepreneurial socialization) ; network affiliation (contacts and membership in organizations); human capital (level of education, business skills) ; and environmental influences (location, sectoral participation, and sociopolitical variables).

Thibault et al. (2002) suggest personal factors such as demographic variable and business factors such as amount of financing, use of technology, age of business, operating location, business structure and number of full-time employees as important factors in examining the sales performance of entrepreneurs in SMEs in Southwestern Ontario.

Machado, Cyr, and, Mione (2003) stated that variables to measure the performance of women entrepreneurs' managerial styles include: a) planning and strategic choices; b) decision style; c) formulation of objectives; d) structure of the company and share of power; and e) human resources policies were linked to and had association with their performance. The performance

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measures used in their study are turnover, number of employees, profit as well as the largest and the smallest salary paid.

Fischer et al. (1993) stated that most of the comparative studies among men and women entrepreneurs' performance are adopted with two theories, that is, liberal feminist and social feminist. Liberal feminist theory is based on premise that women are facing overt discrimination from, for example, education and/or business experience (Fischer et al., 1993; Watson, 2002). Social feminist theory is based on socialization process, such as, family setting, social values, norms, experience, educational aspirations, and expectations (Fischer et al., 1993; Learner, et al., 1997).

The above literature surveys indicate that various research efforts have been undertaken to identify the factors influencing successful performance of entrepreneurs and that the factors have been studied in isolation.

METHODOLOGY

This exploratory research tries to explore the existing condition of the variables and relationship among them in a real world application of Somalia. Quantitative research approach and procedure will be applied to explore relevant information for this study. Major steps and procedures will follow in this study be as follows:

Sample Size and Respondents Selection

A social survey will conduct through structured questionnaire among 200 women entrepreneurs of Banadir region. Since no comprehensive directory for women entrepreneurs in Somalia is available, the respondents for questionnaire survey are purposively selected for this research. At every stage of the selection of respondents, priority was given on the objectives of the study.

SAMPLING TECHNIQUE

The sampling technique that I am going to use is **Simple Random Sampling (SRS)**. This technique selects a sample without bias from the target/accessible population. Its main purpose is to select a random (representative) sample. Researcher chose it because it ensures that each member of the target population has an equal and independent chance of being included in the sample. It also produces a random sample.

Data sources

In this research data will collect from primary and secondary sources. Primary source data are collected from individuals through face to face (direct) interviews, using a structured questionnaire. The respondents for the questionnaire are selected from the women who directly own enterprises in Banadir Region. Secondary sources and information (including from published books, journals, newspapers, articles, internet and concerned organizations) will be used to develop this study further.

DISCUSSION AND FINDINGS

This research paper is about the factors influencing performance of women entrepreneurs in Somalia. The epicenter of the research was Banadir province in Somalia. The primary data was collected from women respondents by using questionnaire. The data was collected from three markets in Banadir which were Suuqa Beerta, Suuqa Bakaaraha, and around lambar Afar to Banadir Hospital. All data collected was analyzed using SPSS to transform them into useful information. The sample we took consisted of 200 respondents from Suuqa Beerta, Suuqa Bakaaraha, and around lambar Afar to Banadir Hospital. We gave large weight to Bakara

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because it is where they were concentrated most. After analyzing the data we have come to conclusion that the main factors influencing the performance of Somali Women entrepreneurs are as follows.

Financing: The main source of financing available for women entrepreneurs is personal saving, family and friends support. This only is not adequate for expanding their businesses. They don't have financial institutions to turn to as their last resort since the collapse of the former regime affected the operations, existence and accessibility of these institutions. The weak interim government is not capable of providing financial support to Women entrepreneurs though there local NGOs, particularly the humanitarian NGOs that grant some financing as in cash voucher. This also does not alleviate the financial needs.

Level of literacy: Although the rights granted to women by Islam were the rights to live and to get education as well as the right to inherit, manage and maintain property but the figures we have found from our study were quite different. 92% of the respondents stated that they have not gained any form of formal education in their early years. They have never even attended elementary school, or even informal education. This has had great effect on them to run their business operations. For example, they could not carry out common business practices such accounting and book keeping. It has also shaped the level communication skills they can employ. This, in turn, has had an impact on whether they would be involved in international trade or not.

Socio-cultural factors: Somali traditional culture is a predominately patriarchal society that blends nomadic pastoral traditions and norms with Islamic teaching. The shape of the culture is affected by the interaction three factors, Koran, Sunnah and Somali traditions. For example, the respondents have mentioned that femininity is one discriminating factor that has widely been accepted and used by Somali men and culture. There have been many proverbs and wise words, as they put it, that the Somali men have long adopted such "*a women is a child with a large feet*". Entrepreneurship requires more time and effort especially in the early start up days. However, Somali women have dual responsibility. The first one is business management and second and the most important one is looking after their children and husband. One is as important as the other. Sometimes if they stick to the business operation, they may lose the other and social problems may start such divorce and separation.

Regulations: The place of women in an Islamic society is determined by the Koran, the tradition of the Prophet Mohammed (PUB), and the interpretations of Islamic law and traditions influenced by social customs and practices as mentioned earlier. Through the revelation of the Koran and the Sunnah of the Prophet Mohammed (PUB), Islam liberated women from unacceptable conditions that prevailed in the tribal society of pre-Islamic Arabia. However, the level of libration is restricted to certain levels only beyond which they are not allowed to cross. For example, in Islam women are not allowed to travel alone without a guardian. This has hampered their success in taking advantage of other domestic markets. Islamic groups that control parts of the country have also issued regulations which restrict movements of women without guardian citing such things as women may encounter sexual harassment and this affected women entrepreneurship development.

Status: Another factor that affects the prosperity of women entrepreneurial spirit is the marital status. From the collected data, we found that large number of women entrepreneurs that filled the questionnaires were married, widowed, or divorced. This shows that there is a strong relation between being a devoted entrepreneur and the marital status. Because when a women is married, divorced, or widowed she has much responsibility than when she is a single. In the Somali clan system a woman lives with her family of origin but is expected to leave it and join the lineage of her husband upon marriage. However, as a wife, if her husband is not working, is

incapacitated or is dead, she assumes the family responsibility which necessitates entrepreneurship.

Cooperation and Coordination: Last but not the least, researcher has found that Somali people are not organized into a system. That has had the same implication on their businesses. Somali women are not organized in groups. They don't have organizations such as chamber of commerce, women business associations and co operations. 100% of those questioned stated that they are not part of any women organization. This contributes to their failure because they could have got support and assistance from such organization and could have pulled their resources together.

REFERENCES

- Al-Alak, B. (2010). Marketing and social responsibility: Entrepreneurship perspective, Amman/Jordan: Al-Yazoori Publishing House.
- Burns, p. (2005), corporate Entrepreneurship: Building an Entrepreneurial organization, Basingstoke: Palgrave Macmillan.
- Brusino, J. (2009). Women Entrepreneurs Choose a Different Path. American Society for Training and Development, 21-21
http://findarticles.com/p/articles/mim4467/is_200909/ai_n39232791/
- Bjerki, B. and Hultman, C. (2003). Entrepreneurial Marketing: The growth of small firms in the New Economic Era. Edward Elgar, Aldershot.
- CRD, Advancing the Involvement of Women in Peace-building in South-Central Somalia, 2007.
- CRD, Path to recovery Building a sustainable peace, 2004
- Heffernan, M. (2007). Men Dominate, Women Orchestrate. BusinessWeek Online, 19-19
<http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=24377618&site=ehost-live.18>
- Heffernan, M. (2006). How She Does It: How Women Entrepreneurs Are Changing the Rules of Business Success. Publishers Weekly, 253 (45), 48-48
<http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=23141574&site=ehost-live>
- Lerner, M., Brush, C., & Hisrich, R. (1997). Israeli Women Entrepreneurs: An Examination of Factors Affecting Performance. Journal of Business Venturing, 12(4), 315-339
- Mammone, R.(2009). Humility and the Successful Startup. BusinessWeek Online, 9-9
<http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=44042072&site=ehost-live>
- Ries, E. (2010). Start-ups Never easy but worth a shot. Inc., 31 (10), 22-22
<http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=46814363&site=ehost-live>
- Suleiman, A.S (2006). The Business entrepreneur; Entrepreneurial Development, small and Medium Enterprise, 2nd Edition , Entrepreneurship Academy Publishing Kaduna
- Drucker, P. F. (1970). Technology, Management and Society, Butterworth-Heinemann Ltd.
- Shukria Diini (2009), Women Building Peace: Somali Women in Punt-land and Somali-land, ACCORD, Conflict trends, issue 2, 2009.
- Seymour, Nicole, 2001. "Women entrepreneurs in the developing world", CELCEE Digest , Kansas City, Center for Entrepreneurial Leadership, Clearinghouse on Entrepreneurship Education), No. 01-04, August, <http://www.celcee.edu/>
- Schawbel, D. (2009). Pursue Your Entrepreneurial Dream. BusinessWeek Online, 15-15 19
<http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=44901970&site=ehost-live>
- Thibault, M., Wilcock, A. & Kanetkar, V. (2002). An exploratory study of factors influencing sales performance of small and medium-sized enterprises. Proceedings of the Administrative Sciences Association of Canada. Winnipeg, Manitoba.

- Turley, J. (2009). Want to Boost the Economy? Help Entrepreneurs. BusinessWeek Online, 10-10 <http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=45152937&site=ehost-live>.
- The Economist (2006), A guide to women economics, 15-21
http://nelEconomist.blogs.com/new_economist/2006/04/index.html.
- United Nations (2000), The World's Women, chapter 5: Work
http://www.unifem.org/attachments/products/157_chap5.pdf.
- Vishwanathan Renuka, 2001. Women in Business,
<http://indiatgether.org/women/business/renuka.htm>
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Online Consumer's Acceptance Of Social Networking Sites As Potential Shopping Guide

Key words: Social networking sites (SNSs), Online Shopping, Perceived ease of use (PEOU), Perceived Usefulness (PU), Trust and preserved risk.

INTRODUCTION

The emergence of social media has significantly altered the strategies that companies use to communicate with customers (Lee, Xiong, & Hu, 2011). As social media moves from “buzz word” status to strategic tool, more practitioners are developing skills related to this online communication technology (Eyrich, Padman, & Sweetser, 2008). With the development of networks, especially electronic commerce's appearance, consumers enter a new environment of trade, therefore, with the high degree of price dispersion in the online market, for example, customer information, search behaviour also changes (Guan & Cheng, 2009). In fact, with the rapid development of Web 2.0 technologies, such as Ajax and XML, a great number of social networking sites (e.g., Facebook, Renren, MySpace, Kaixin, and LinkedIn) are emerging, which makes mass users interactions easier and more convenient (Yanli, Yi, & Yuli, 2010). These social media tools allow users to search, organize, share, annotate and contribute to contents in a collaborative way. For example, Curtis et al. (2010) found that social media techniques are becoming more abundant as public relations practitioners become mindful of their effectiveness in respect of reaching target audiences, promoting a specific cause, and further developing communication strategies. More than half of America's teens and young adults send instant messages and use social networking sites, and more than one-third of all Internet users engage in these activities (Correa, Hinsley, & de Zúñiga, 2010).

Social media provide various forms of consumer-generated content (CGC), such as videos, photos, ideas, opinions, interests, and news through blogs, podcasts, social networking sites

(SNS) (W. Lee, et al., 2011). Community generated content, or social media, has become increasingly important over the past several years (Elsas & Glance, 2010). The use of social media has grown tremendously all over the world in recent years, and the impact of such growth has expanded in unexpected ways (Poblete, Garcia, Mendoza, & Jaimes, 2011). According to Kaplan and Haenlein (2010), the concept of social media is top of the agenda for many business executives today.

With the enormous amount of information potentially available, the Internet constitutes an important platform for information exchange between the consumer and industry suppliers (e.g., hotels, transportation sectors, attractions), intermediaries (e.g., travel agents), controllers (e.g., governments and administrative bodies), as well as many non-profit organizations, such as destination marketing organizations (Xiang & Gretzel, 2010). Decision makers, as well as consultants, try to identify ways in which firms can make profitable use of applications, such as Wikipedia, YouTube, Facebook, Second Life, and Twitter (Kaplan & Haenlein, 2010). Social networking reaches hundreds of millions of users and has become fertile ground for a variety of research efforts, since it offers an opportunity to study patterns of social interaction among a population larger than ever before (Ratkiewicz et al., 2011). They have become a major factor in influencing various aspects of consumer behaviour including awareness, information acquisition, opinions, attitudes, purchase behaviour, and post-purchase communication and evaluation (Mangold & Faulds, 2009). Previous studies examining personality and social media use were based on college-aged samples and did not explore the potential influencing effect of gender, nor did they control for the possible impact of life satisfaction and socio-demographic variables on the disposition of users (Correa, et al., 2010).

The emergence of Internet-based social media has made it possible for one person to communicate with hundreds or even thousands of other people about products and the companies that provide them (Mangold & Faulds, 2009). For instance, before and during vacations, tourists use the Internet to obtain information about the trip, share their experience and compare services related to the trip, and then use tools to share photos and videos, to blog and to micro blog, as well as use podcasts, customer ratings and evaluation systems, maps, etc. in order to organize trips or contribute their experiences and recommendations. This is becoming generalized in what has been named as Travel 2.0 (Parra-López, et al., 2011). With the high adoption levels of digital social media by individuals as well as organizations, and indeed the demise of the traditional press (witness the number of major national newspapers that have closed in North America alone over the past year), the value of the traditional press release has faded significantly (Pitt, Parent, Steyn, Berthon, & Money, 2010). In the new era of the Internet, user interests on products are strongly affected by everyday new information, and, consequently, exhibit complex patterns (Jin, Gallagher, Cao, Luo, & Han, 2010). Accordingly, this study is driven by explanatory and descriptive objects in the hope of exploring some of the new areas of study that have been previously suggested by scholars.

LITERATURE REVIEW

Technology Development and Social Network Sites

The use of the Internet is a quick and convenient way to get information concerning travel products (Lin, Wang & Hwang, 2010). The structure of social networks has been studied extensively because structure is strongly related to the detection of communities and to how information is propagated (Poblete, et al., 2011). Major Web technology players, such as Google, Bing and Yahoo! Search, now incorporate micro blog posts and trend analysis in their results; in addition to using social information in conjunction with existing search and retrieval models, significant efforts are dedicated to developing new applications (e.g., user and post recommendation services) for the new, real-time social realm (Pennacchiotti & Popescu, 2011). The proliferation of rich social media, online communities, and collectively produced knowledge

resources has accelerated the convergence of technological and social networks, producing environments that reflect both the architecture of the underlying information systems and the social structure on their members (Kleinberg, 2007).

Web 2.0 describes a suite of interactive web-based utilities made possible by these advances. Among the most common Web 2.0 applications are social networking sites (e.g., MySpace, Facebook), social bookmarking and tagging sites (e.g., del.icio.us), and image-hosting sites (e.g., Flickr) (Burhanna, Seeholzer, & Salem Jr, 2009). Web 2.0 facilitates collaboration and sharing among users through social media, such as online discussion forums, electronic bulletin board systems, blogs, etc. Such applications are significantly changing our life and the relationship between consumers and retailers (M. K. O. Lee, Shi, Cheung, Lim, & Sia, 2011).

Social Network Sites for Information Sharing

Social networks allow consumers to voluntarily post personal information, upload photographs, send and receive messages, join groups, and blog at their leisure (Pookulangara & Koesler, 2011). The research findings show that being networked and being engaged with multiple or particular SNSs indicate a difference in information seeking and sharing behaviour (Jansen, et al., 2011). A major trend in the current studies on social multimedia is using the social media sites as a source of huge amount of labelled data for solving large scale computer science problems in computer vision, data mining and multimedia (Jin, et al., 2010). With the Web 2.0 applications, this is seen to a higher extent; users have started to develop their own applications and services and businesses are monitoring users to learn what their next idea should bring to the users (Sorensen, 2009). The problem of using general search engines is that the original query log is not publicly available and the query trends may become noisy under the impact of news events. For example, as soon as a new product is announced by a major technology company, blogs will begin to report and speculate about the product. However, images of the product do not become widespread until the product is in the hands of the public (Jin, et al., 2010). Most social network and micro blog services already store profile information in the form of name, age, location and short summary of interests, but such information is often incomplete (e.g., a user may choose not to post bio details) or misleading (e.g., a user may choose to list an imaginary place - aka, "Wonderland", as her location) (Pennacchiotti & Popescu, 2011). Sociologists term the effect as "social influence" and point out that it will play a crucial role to assist users in reducing the uncertainty and amount of information that they must process to make a decision (Chen, 2010). It also highlights the non-monolithic nature of this youth demographic with a range of social networking services and the engagement of these services (Jansen, et al., 2011).

Social Networking Sites

One of the major aims of a social network is to enable participants to exchange ideas, experiences, and knowledge, as well as to create relationships for such purposes as entertainment, dating, blogging, or business. The rapid development of social media has challenged event managers to rethink how this trend will shape traditional marketing practices (W. Lee, et al., 2011). Social media sites such as blogs, Twitter and online discussion boards have been recognized as valuable sources of market intelligence for companies wishing to keep abreast of their customers' attitudes expressed online (Elsas & Glance, 2010).

Shopping behaviour and Social Media

Shopping has always been a social experience and social networking allows consumers to interact with individuals who are likely to be strangers (Pookulangara & Koesler, 2011). Consumers researching products for the purposes of making purchasing decisions frequently visit online shopping portal sites, such as Google Product Search, Bing Shopping or Yahoo! Shopping aggregate many types of content for the consumer: editorial and user reviews, buying guides, and price comparison tools (Elsas & Glance, 2010). Social networks have not only

transformed the research and purchase consideration phase, but also provide shoppers a platform to advocate for the products and stores they love (Pookulangara & Koesler, 2011). Shoppers doing research prior to making a purchase tap into many kinds of online information, in particular they may seek out editorials or user reviews of specific products, buying guides for categories of products or informal conversational product discussion, such as those found on message boards (Elsas & Glance, 2010).

THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

The Technology Acceptance Model (TAM) aims to be theoretically justified in predicting and explaining user behaviour across various information system contexts (Hossain & de Silva, 2009). TAM and its variants have been widely used to examine the decision of consumers to shop online (M. K. O. Lee, et al., 2011). According to Yanli, et al. (2010) the TAM model is more useful and easier to use for social networking sites and it will be perceived as more efficient. According to Yanli, et al. (2010), for future research, an integrated model that combines TAM variables, trust and perceived risk should be considered to test the impact of these variables. However, in the case of an information system that focuses on human relationship development, such as SNS, researchers have not examined whether the two perception constructs remain sufficient for explaining the intention to use or actual use (Kwon & Wen, 2010).

Perceived Usefulness (PU)

The Technology Acceptance Model originated from the Theory of Reasoned Action, and can be regarded as a special case of the Theory of Reasoned Action with only two salient beliefs: perceived ease of use and perceived usefulness. The predictive power of perceived ease of use and perceived usefulness for users' technology acceptance has been empirically confirmed by numerous studies (Yanli, et al., 2010). PU is the degree to which a person believes that using a particular system enhances job performance (M. K. O. Lee, et al., 2011). Davis (1989) defined perceived usefulness as "the degree to which a person believes that using a particular system will enhance his or her job performance".

P1: There is a significant relationship between perceived usefulness and user acceptance of purchase search info via social networking sites.

Perceived Ease of Use (PEOU)

TAM employs perceived playfulness as an anchor (general beliefs about computers and computer usage) and perceived enjoyment as an adjustment (beliefs that are shaped based on direct experiences with the target system) to argue that the role of perceived playfulness is expected to diminish over time as experience increases (W. Lee, et al., 2011). PEOU is the degree to which a person believes that using a particular system requires little effort, and, thus, affects user attitude and behaviour intent (M. K. O. Lee, et al., 2011). W. Lee, et al. (2011) defined perceived ease of use as "the degree to which a person believes that using a particular system will be free of effort." Both perceived ease of use and perceived usefulness have a strong positive influence on the acceptance of the technology.

P2: There is a significant relationship between perceived ease of use and user acceptance of purchase search info via social networking sites.

Perceived Risk

Given the perceived risk involved in online shopping, many believe that prospective online shoppers will ask the opinion of their friends or online consumer groups before they make an

online purchase decision (M. K. O. Lee, et al., 2011). Most web-based social networks are concerned with the privacy and security of their users, and through these operational features deal with trust and how the users create trusted relations (Sorensen, 2009).

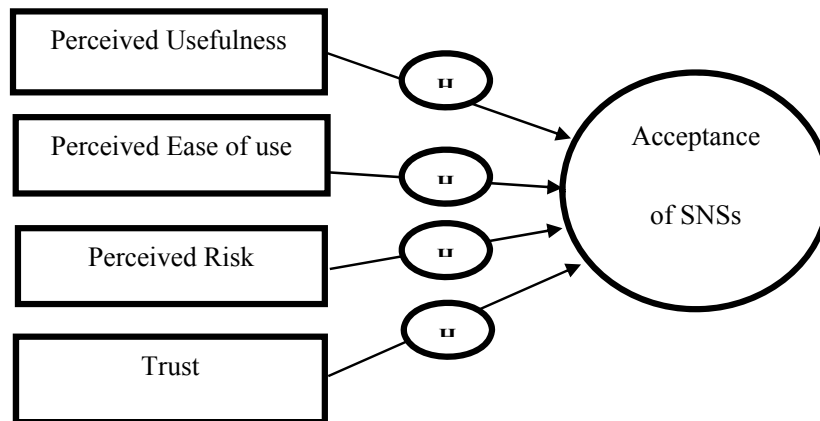
P3: There is a significant relationship between perceived risk and user acceptance of purchase search info via social networking sites.

Trust

Trust is a basic and essential element when it comes to creating relationships in any social setting, however, when it comes to the web-based social networks this ingredient is even more important (Sorensen, 2009). Trust plays an important role in a web-based social network. Given the open and dynamic nature of such an online virtual community, trust evaluation relies on transitive relationships among the direct and indirect neighbours of an evaluator (YanJun, Wen-chen, & O'Keefe, 2009). Trust is a complex concept, which has several interpretations. One operational definition of trust is resilience, which is the result of the belief in the integrity or authority of the party to be trusted (Sorensen, 2009). A social network is the highest growing web application in terms of users. Different surveys show that users are most concerned with their privacy in respect of web-based social networks (Sorensen, 2009). Accordingly, the reasons why people trust the recommendations on social shopping networks that other consumers provide merit further investigation (Marcela, Néstor, José, & Oscar, 2009). Thus, we hypothesize that:

H4: There is a significant relationship between trust and user acceptance of purchase search info via social networking sites.

Fig 1: An Integrated Model of User Acceptance of Social networking Sites (SNSs) for Purchase guide



PROPOSED METHODOLOGY

Target Population

In one study of college students, males and females were equally likely to have profiles on social networking sites and were found to spend about three hours each day on the sites (Correa, et al., 2010). Therefore, this study targets 300 students from two public universities (UPM and UTM) and one private university (MMU). Teenagers and young adults born between 1981 and 2000 are a critical demographic group economically and are one of the first demographics presented with an array of Internet social networking services just as their online habits are forming (Jansen, et al., 2011). Non-probability sampling using convenience techniques will be used in this study.

Questionnaire Development

To gain the objectives of this study the primary data were collected by email survey and online. There are three main sections in the questionnaire in which section A concerns the consumer demographics, and section B addresses the factors influencing the respondents' behaviour and attitude. A Likert Scale is an ordinal scale format that asks respondents to indicate the extent to which they agree or disagree with a series of mental belief or behavioural belief statements about a given object. This study adopted questioners from previous related studies. The table below shows the questionnaire items of study.

Table 1: Questionnaire items

	Variable Name	Item	Source
1	Perceived usefulness (PU)	PU1) Using the Social networking sites (SNSs) enables me acquire more information or meet more people PU2) Using the Social networking sites (SNSs) would improve my efficiency in sharing information and connecting with others PU3) The Social networking sites (SNSs) is a useful service for communication PU4) The Social networking sites (SNSs) is a useful service for interaction of members	(Hossain & de Silva, 2009; Kwon & Wen, 2010)
2	Perceived ease of use (PEOU)	PEOU1) Learning to use the SNSs is easy for me PEOU2) The process of using the SNSs is clear and understandable PEOU3) I find the SNSs easy to use	(Kwon & Wen, 2010)
3	Acceptance of SNSs	A1 I tend to use the SNSs frequently A2 I spend a lot of time on SNSs A3 I force myself to SNSs	(Kwon & Wen, 2010)
4	Perceived Risk	PR1 It is important to me to protect my identity information PR2 I am concerned with the consequences of sharing identity information PR3 I am likely to share my identity information online in the future PR4 I believe my identity information is well-protected online	(Fogel & Nehmad, 2009)
5	Trust	TRT1 I feel that the exchange of information on the SNW is safe TRS2 I think that the exchange of information on a SNW is truthful TRT3 I think that the information exchanged is dependable enough to help me in making a decision TRT4 If correct information is posted on a Social Network sites, I think it could be misused	(Monika, Israel, & Shailja, 2010)

CONCLUSION

Individuals communicate and form relationships through Internet social networking websites such as Facebook and MySpace. Online social networks are networks of relationships that evolve from computer mediated communication, connecting and enabling users to initiate

communication that spans time and space (Monika, et al., 2010). Owing to the rise of social shopping, online shops/auction managers are developing social shopping functions or launching social shopping networks on their websites (Marcela, et al., 2009). Social networking websites should inform potential users that risk taking and privacy concerns are potentially relevant and important concerns before individuals sign-up and create social networking websites (Fogel & Nehmad, 2009). Although marketing managers cannot control information disseminated through social media, ignoring the realities of the impact of information transmitted through these forums on consumer behaviour is tantamount to surrendering the communications process to the vagaries of the marketplace.

REFERENCES

- Burhanna, K. J., Seeholzer, J., & Salem Jr, J. (2009). No Natives Here: A Focus Group Study of Student Perceptions of Web 2.0 and the Academic Library. *The Journal of Academic Librarianship*, 35(6), 523-532.
- Chen, L. (2010). *Social influence of product popularity on consumer decisions: usability study of Flickr camera finder*. Paper presented at the Proceedings of the 15th international conference on Intelligent user interfaces.
- Correa, T., Hinsley, A. W., & de Zúñiga, H. G. (2010). Who interacts on the Web?: The intersection of users' personality and social media use. *Computers in Human Behavior*, 26(2), 247-253.
- Elsas, J. L., & Glance, N. (2010). *Shopping for top forums: discovering online discussion for product research*. Paper presented at the Proceedings of the First Workshop on Social Media Analytics.
- Eyrich, N., Padman, M. L., & Sweetser, K. D. (2008). PR practitioners' use of social media tools and communication technology. *Public Relations Review, In Press, Corrected Proof*.
- Fogel, J., & Nehmad, E. (2009). Internet social network communities: Risk taking, trust, and privacy concerns. *Computers in Human Behavior*, 25(1), 153-160.
- Guan, H.-L., & Cheng, B.-D. (2009, 23-24 May 2009). *Analysis on the Consumer's online Information Search Behavior*. Paper presented at the E-Business and Information System Security, 2009. EBISS '09. International Conference on.
- Hossain, L., & de Silva, A. (2009). Exploring user acceptance of technology using social networks. *The Journal of High Technology Management Research*, 20(1), 1-18.
- Jansen, B. J., Sobel, K., & Cook, G. (2011). *the impact of social networking on ecommerce information behavior*. Paper presented at the Proceedings of the 2011 iConference.
- Jin, X., Gallagher, A., Cao, L., Luo, J., & Han, J. (2010). *The wisdom of social multimedia: using flickr for prediction and forecast*. Paper presented at the Proceedings of the international conference on Multimedia.
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53(1), 59-68.
- Kleinberg, J. M. (2007). *Challenges in mining social network data: processes, privacy, and paradoxes*. Paper presented at the Proceedings of the 13th ACM SIGKDD international conference on Knowledge discovery and data mining.
- Kwon, O., & Wen, Y. (2010). An empirical study of the factors affecting social network service use. *Computers in Human Behavior*, 26(2), 254-263.
- Lee, M. K. O., Shi, N., Cheung, C. M. K., Lim, K. H., & Sia, C. L. (2011). Consumer's decision to shop online: The moderating role of positive informational social influence. *Information & Management*, 48(6), 185-191.
- Lee, W., Xiong, L., & Hu, C. (2011). The effect of Facebook users' arousal and valence on intention to go to the festival: Applying an extension of the technology acceptance model. *International Journal of Hospitality Management*(0).
- Lin, W.-B., Wang, M.-K., & Hwang, K. P. (2010). The combined model of influencing on-line consumer behavior. *Expert Systems with Applications*, 37(4), 3236-3247.

- Mangold, W. G., & Faulds, D. J. (2009). Social media: The new hybrid element of the promotion mix. *Business Horizons*, 52(4), 357-365.
- Marcela, M., Néstor, P., José, L. M., & Oscar, E. (2009). A review of trust modeling in ITad hocIT networks. *Internet Research*, 19(1), 88-104.
- Monika, M., Israel, D., & Shailja, A. (2010). Information exchange and information disclosure in social networking web sites: Mediating role of trust. *Learning Organization, The*, 17(6), 479-490.
- Parra-López, E., Bulchand-Gidumal, J., Gutiérrez-Taño, D., & Díaz-Armas, R. (2011). Intentions to use social media in organizing and taking vacation trips. *Computers in Human Behavior*, 27(2), 640-654.
- Pennacchiotti, M., & Popescu, A.-M. (2011). *Democrats, republicans and starbucks aficionados: user classification in twitter*. Paper presented at the Proceedings of the 17th ACM SIGKDD international conference on Knowledge discovery and data mining.
- Pitt, L., Parent, M., Steyn, P., Berthon, P., & Money, A. (2010). The Social Media Release as a Corporate Communications Tool for Bloggers. *Professional Communication, IEEE Transactions on*, PP(99), 1-1.
- Poblete, B., Garcia, R., Mendoza, M., & Jaimes, A. (2011). *Do all birds tweet the same?: characterizing twitter around the world*. Paper presented at the Proceedings of the 20th ACM international conference on Information and knowledge management.
- Pookulangara, S., & Koesler, K. (2011). Cultural influence on consumers' usage of social networks and its' impact on online purchase intentions. *Journal of Retailing and Consumer Services*, 18(4), 348-354.
- Ratkiewicz, J., Conover, M., Meiss, M., Gon, B., #231, alves, et al. (2011). *Truthy: mapping the spread of astroturf in microblog streams*. Paper presented at the Proceedings of the 20th international conference companion on World wide web.
- Sorensen, L. (2009, 17-20 May 2009). *User managed trust in social networking - Comparing Facebook, MySpace and LinkedIn*. Paper presented at the Wireless Communication, Vehicular Technology, Information Theory and Aerospace & Electronic Systems Technology, 2009. Wireless VITAE 2009. 1st International Conference on.
- Xiang, Z., & Gretzel, U. (2010). Role of social media in online travel information search. *Tourism Management*, 31(2), 179-188.
- YanJun, Z., Wen-chen, H., & O'Keefe, T. (2009, 27-29 April 2009). *Trust Computing for Social Networking*. Paper presented at the Information Technology: New Generations, 2009. ITNG '09. Sixth International Conference on.
- Yanli, J., Yi, Z., & Yuli, L. (2010, 12-14 April 2010). *Effects of System Characteristics on Users' Self-Disclosure in Social Networking Sites*. Paper presented at the Information Technology: New Generations (ITNG), 2010 Seventh International Conference on.

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Proficiency of New Product Development and Speed to Market: Exploring the Moderating Effects of Supplier Involvement

Keywords: Proficiency of New Product Development Process, Supplier Involvement, Speed to market

INTRODUCTION

NPD is a process that requires the capability to obtain, process, and interpret large amounts of market, technical, financial and other information, in order to develop product ideas and evaluate their technical boundness, manufacturability and economic feasibility (Gomes, Weerd – Nederhof, Pearson & Cunha, 2003). Research on NPD practices reveals that speed to market is the basic of competitive advantage by enabling firms to adapt quickly to market needs in the dynamic and competitive business context (Eisenhardt & Tabrizi, 1995). Structured NPD process was found to have a significant impact on speed to market (Lynn, Skov & Abel, 1999; Hartley, 2006; Swink, 2003).

According to supplier role in NPD process, past studies found positively relationship between supplier involvement and speed to market (Bonaccosi & Lipparini; Droge, Jayaram & Vickery, 2000; Johnsen, 1994; 2009; Langerak & Hultink, 2008; Peterson, Handfield & Ragatz, 2003; Primo & Amundson, 2002; Ragatz, Handfield & Scannell, 1997; Van Echtelt, Wynstra, VanWeele & Duyesters, 2008). There are also has inconsistent results with other scholars such as Eisenhardt & Tabrizi (1995) who found supplier involvement have insignificant effect on speed to market and also Hartley et al. (1997) who found the integration with supplier is significant negatively to speed to market. Furthermore, Chen, Damanpour and Reilly (2009) has suggested for future research, it should investigate the moderators of speed to market. The purpose of this study is to examine the moderating role of supplier involvement in the relationship between proficiency of NPD and speed to market.

LITERATURE REVIEW

Proficiency of NPD process

NPD has represented as a stage-gate system. An NPD system is regarded as a process of development stages interpolated by evaluation stages and in stages there is a connection to a gate where in each gate there are criterions to measure whether different tasks have been performed efficiently and effectively.

A formal NPD process describes, in detail, the activities and decisions that should carried out in every stage of bringing a new product from idea to market (Urban & Hauser, 1993). Having a formal NPD process of superior quality has been found by researchers to be important factor in bringing about new product success (Cooper and Kleinschmidt, 1995). A number of detailed NPD processes have been developed over the years. Early researchers with Booz, Allen, and Hamilton (1982) revealed a sequence of six NPD steps, new product strategy development, idea generation, screening and evaluation, business analysis, development, testing, commercialization. Urban & Hauser (1993) suggested 5 stages, opportunity identification, design phase, testing and introduction, launch. Cooper (1998) introduced Cooper stage gate model

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where more flexible gate in 13 steps; initial screening, preliminary market assessment, preliminary technical assessments (design and manufacturability), detailed market study/market research, business/financial analysis, product development (formation of prototypes and pilot run products), in-house product testing, customer product tests, test market/local sell, trial production, pre commercialization business analysis, production start-up, and market launch. For this study we define NPD process in five stages gate that adapted from Urban & Hauser (1993).

Table 1
Five Stages gate of NPD process

Stages	Activities
(1) Idea development & initial screening	Idea development, idea are solicited from a wide variety of internal and external source such as; customer problem, customer behavior & trend, competitor's analysis, technology analysis and internal company brainstorming. Initial Screening is the first decision to commit resource to the new product project. Criteria are used to helping early screen. One potential screen is the result from the concept test to used in screen is the purpose of initial screen is to identify those ideas with the best potential for success and to reduce the number of ideas that not meet the criteria as early as possible.
(2) Business and market analysis	Business analysis, the detail investigation includes activities such as (1) financial analysis as sales, cost, profit, return on investment; (2) market study in term of (a) degree of receptivity in product feature and their feasibility from potential customer, and (b)user needs and wants (3) technical appraisal with these features (4) market analysis as size, growth, trends; (5) competitive analysis as market share and strategies
(3) Development process	At this stage a product prototype is developed and subject to the lab test and product testing. This stage also includes manufacturing assessment, specification, product performance
(4) Product testing	From internal testing in physical PD stage, this stage is to test the physical product with customers and the activities are following (1) customer and sites are selected, (2) product is tested with customer, and (3) the result from product testing is analyzed.
(5) Commercialization	To launch products into full scale production and sales in the final stages with these activities, the marketing & manufacturing plans are completed, (2) individual responsibility for each program are designed (3) to launch product with marketing campaigns in the market place, (4) to study customer feedbacks from the product, (7) to specify activities & tentative plans for the product commercialization phase.

Speed to market

Although there are several terms related to speed in NPD, time-to-market, cycle time, innovation speed, NPD speed, and speed-to-market. NPD speed, it generally represents how quickly an idea moves from conception to a product in the marketplace, measuring firms' capabilities to move quickly through the NPD process (Chen et al. 2005).

Supplier involvement in NPD

Supplier involvement refers to the transfer of information and cooperation between NPD team and the suppliers (Kahn, 1996). Prior studies on regarding supplier involvement NPD, the external source of technology & technical knowledge for introduction of a new product (Parker, 2000; Hong, Doll, Nahm & Li, 2004), superior technological capabilities (Narasimhan & Das,

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1999). Suppliers provide valuable information about materials, pricing and process capability; answer questions from NPD team and thus reducing uncertainty and complexity (Koufteros, 2005). Researchers have found supplier integration in NPD can produce lower development costs, standardization of components, consistency between design and supplier capabilities, reduction in engineering changes, higher quality with fewer defects, improvement in supplier's manufacturing process, and reduction in time to market (Bonaccorsi & Lipparini, 1994; Parker, 2000; Ragatz et al., 2002). Previous studies reveal important drivers for supplier involvement in product development is to attain shorter time-to-market of new products (Bonaccosi & Lipparini; Droge et al. 2000; Johnsen, 1994; 2009; Langerak & Hultink, 2008; Peterson et al. 2003; Primo & Amundson, 2002; Ragatz et al. 1997; Van Echtelt et al. 2008).

Table 2
Constructs related to speed to market

Time to Market	Vesey 1992 Wheelwright & Clark, 1992	The elapsed time between product definition and product availability. "Such a critical dimension of performance in the outstanding project that ail of the processes, systems, and activities in development are geared to fast actions"
Cycle time	Ittner & Larcker, 1997 Griffin, 1997 Dibrell et al. 2002 Thomas, 1990 Schmenner 1988	The average development time from the portfolio of products developed by an organization. <i>Development time</i> identifies how efficiently a firm takes a product to production, give that the product's functions are already defined... <i>Concept to Customer Time</i> measures how difficult it is for a firm to figure out what functions the product should have, give a known set of customer targets... <i>Total time</i> indicates a firm's ability to segment a market, identify customers with problems to be solved, and set a strategy for the product development project." The time required to complete a (typical) repetitive organizational task. The time it takes from initiation to completion of critical organizational processes. The time takes from expression of a customer's need until that need is satisfied. The "calendar time it takes to make a product, from the time material arrive at the factory and are available to be worked on until the finished product is awaiting shipment to a customer"
Innovation speed	Gee, 1978 Keller, 1994 Clark 1989 Mansfield, 1988 McDonough & Barczak, 1991 Tabrizi & Eisenhardt, 1993	The time between the conception of an innovation (first invention or basic discovery) and its introduction into the commercial market. The degree to which a project met an assigned schedule. The time elapsed between start of the development process and market introduction (i.e., lead time)." The length of time elapsed from the beginning of applies research by the innovator on a new product or process's first commercial introduction." The degree to which a project was ahead on or behind schedule.

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	Cooper & Kleinschmid1 1994	The time from the fist meeting to consider the development of a new product to its stabilization."
	Kessler & Chakrabarti 1996	The degree to which a product stayed on schedule, and the degree to which the worked was done relative to show fast it could have been done.
	Nijssen 1995	The time elapsed between initial development, including the conception and definition of an innovation, and ultimate commercialization, which is the introduction of a new product into the marketplace. The degree of acceleration, or ratio faster or slower than previous projects.
NPD Speed	Lukas & Menon, 2003 Meyer & Utterback, 1995	The pace of activities between idea conception and product implementation "Relative to the capabilities of the company and to the characteristics the product"; "from the origin of a product time in the sample introduction".

Source Chen et al. (2005)

CONCEPTUAL MODEL AND HYPOTHESES

Conceptual Framework and hypotheses

The conceptual framework of this study indicates that the speed to market is affected by its proficiency of NPD process. Conceptual framework further proposes that proficiency of NPD process is moderated by a firm's level of supplier involvement. The following sections detail specific hypotheses concerning these relationships.

Proficiency of NPD process and speed to market

As stated above, previous studies have confirmed that proficiency of NPD process is significantly related to speed to market (Chen et al. (2009); Hartley, 2006; Lynn, et al. 1999, Swink, 2003). Therefore, the first hypothesis is proposed:

H1: Proficiency of NPD process, (a) idea development & screening, (b) business & market opportunity analysis, (c) technical development, (d) product testing and (e) product commercialization are positively related to speed to market.

Moderating role of supplier involvement

Previous studies found supplier involvement in NPD process is related to speed to market (Banaccorsi & Lipparini, 1994; Bidault et al. 1998; Cark & Fujimoto, 1991; Eisenhardt & Tabrizi, 1995; Hartley et al. 1997; Imai et al. 1995; Ragatz et al. 1997, 2002; Takeuchi & Nonaka, 1986; Womack et al. 1990).

In this study we defined NPD process into 5 stages, in the first stage idea development and screening, development partnerships with suppliers can bring a fresh perspective to the search for new ideas, aids in analyzing cost and contribute to concept testing (Spaulding & Woods, 2006). At a high level of supplier involvement, the supplier's staff can participate directly in the customer's product development team and might be entrusted with developing and screening

product ideas (Handfield et al. 1999).

In the second stage, business & market opportunity analysis, some suppliers understand market well so they are good source of market information and provide good information such as competitor's information, and also help the firm to seek new market.

In the third stage, technical development, supplier involvement in the development process brings advantages such as better and more consistent quality, timely delivery, and reduced cost (Kelvin, 1997). Ittner and Lareker (1997) stated that supplier involvement provides early availability of prototypes, increased standardization of parts, enhanced consistency between designs and suppliers' process capabilities, and reduced engineering changing. These contributions of supplier involvement may help reduce development time. Handfield et al (1999) found firms with have active suppliers integration achieved 20 percent improvement in development time, 15 percent improvement in development cost and compared to similar project with no supplier. Based on the above considerations, this study proposes that:

H2: The supplier involvement strengthens the relationship between proficiency of NPD process (a) idea development & screening, (b) business opportunity & market analysis, (c) technical development, (d) product testing and (e) product commercialization and speed to market.

RESEARCH METHODOLOGY

Research Instrument

For this study proficiency of NPD process, 33 item scales, adopted from Swink & Song (2007) and Song and Parry (1997). To refine and validate the measurement, we pretested the research instruments with R&D managers, marketing managers, and senior managers within ten companies. The informants were asked to give comment and suggestion for better represents the industry practices as well as to indicate any ambiguity or difficulties they experienced in responding to the items.

Measures

Independent variable. Proficiency of NPD process is defined as how well NPD activities or stages are performed. In this study we defined NPD process into 5 stages. The 33 item scales pertaining to proficiency of idea development and initial screening (5 items), proficiency of business & market opportunity analysis (7 items), proficiency of technical development (9 items), proficiency of product testing (5 items), and proficiency of product commercialization (7 items). The five-point Likert rating scale that range from 1 = poorly done to 5 = excellently done. *Dependent variable.* Speed to market is defined as the degree to which a product stayed on schedule, and the degree to which the worked was done relative to show fast it could have been done. The two items was adopted from Cooper & Kleinschmidt, (2000). The five-point Likert rating scale that range from 1 = very poor to 5 = very good.

Questionnaire Design

There are two sets of questionnaires. The first set is for marketing department. The questionnaire was organized into five sections. Section 1 has two parts: part 1 contains questions that asked for the company profiles of our respondents whilst part two contains question that find out the new product information. Section 2 contains questions that asked for how well they perform those activities in NPD (business and market opportunity analysis, product testing and product commercialization). Section 3 contains questions that asked for the degree of supplier involvement from key supplier in NPD process (business and market opportunity analysis, product testing and product commercialization). Section 4 contains questions that asked for how speed of bringing new product to the market. Section 5 contains questions that asked for the respondent profiles.

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The second set is for R&D department. The questionnaire was organized into three sections. Section 1 contains questions that asked for how well they perform activities in NPD (idea development and initial screening and technical development). Section 2 contains questions that asked for the degree of supplier involvement from key supplier in NPD process (idea development, initial screening and technical development). Section 3 contains questions that asked for the respondent profiles. Before data collection was conducted, the questionnaire was translated to the Thai language since English is not the official language in Thailand. The questionnaire was translated into the Thai language by academicians with bilingual capabilities. The Thai version was then translated back into English by different academicians with several years experience in academic research. We also compare the translated text with the original text in order to determine its meaning.

Data Collection Procedure

Before the survey proper was administered, however, a pilot study was first conducted with 10 companies, face to face interview of marketing managers, R&D managers, and senior management. The purpose was to refine and validate the contents of the questionnaire items in terms of clarity, wording, ambiguity, sequencing, timing, and relevance to the industry practices. Second, the 201 firms that met the survey criteria were contacted. At this time the researcher has to ask the name of the persons who in charge (R&D and Marketing) and also their cooperation to fill in questionnaire. Third, the questionnaires were then sent to the 201 firms, with each firm getting two different sets of questionnaires (set A and set B). Set A questionnaire was intended to be completed by the R&D manager. Set B were intended to be completed by the marketing manager. The questionnaires (Set A and B) were placed in individual envelopes. On each envelope, the name and position of the respondent was printed. Fourth, the follow-up telephone calls were made after the survey questionnaire forms were sent to the respondents to confirm that they have received the questionnaires

From 201 firms that questionnaire was sent, only 103 companies have returned fully completed questionnaires, while 98 companies did not respond. To assess the potential for nonresponse bias, the samples were compared on the basis of the number of employees and product category. The nonsignificant chisquare test results ($p > 0.05$) in all cases indicated that respondents were not different from the nonrespondents.

On the profile of the respondents, the data revealed that the majority of the respondents were holding positions in their firms' technical department as R&D and project managers (46%), followed by product and design engineers (41%). In terms of experience, those having experience more than 5 years constituted 61%, while those having less than 5 years experience constituted 39%. Most respondents from the technical departments had extensive knowledge and were directly involved in new product development (91%). With regards to those from the marketing departments, the majority of respondents were holding the positions as marketing/sales managers (57%), while the rest were holding posts in general management (43%). Most of them had more than five years experience (51%), highly knowledgeable, and they were directly involved in new product development (61%).

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Table 3
Profile of Companies

Profiles	Frequency	(%)
Product Category		
Electronic parts/Semiconductor, IC Software	28	27.2
Electrical products/Equipment	38	36.9
Electrical parts	23	22.3
Others	14	13.6
Years of Operation		
Less than 10 yrs	9	8.7
10-20 yrs	49	47.6
More than 20 yrs	45	43.7
Number of Employees		
SMEs	33	32
Large	70	68
Export Dependency		
0%	15	14.6
1-50%	45	43.7
51-100%	43	41.7
Ownership Structure		
Fully owned by Thailand nationals	50	48.5
Joint venture	18	17.5
Fully owned by foreigners	35	34
New Product Introduced to Market During Past 3 Years		
1-2	18	17.5
3-4	24	23.3
5 above	61	59.2
Characteristics of New Product		
New to the market	25	24.3
New to the company	78	75.7

ANALYSIS AND RESULTS

Exploratory factor analysis

Exploratory factor analysis was used for define the underlying structure among the variables in the analysis. For conducting factor analysis, this study follows 6 assumptions that recommended by Hair et al. (2006). Firstly KMO value must exceed 0.50. Secondly, Bartlett test of Sphericity is at least significant at 0.05. Thirdly, anti-image correlation of items is greater than 0.50. Fourthly, communalities of items must be greater than 0.50. Fifthly, the minimum requirement of factor loading (cutoff) 0.55 (n = 103). If items has factor loading lower than .55. These items were deleted one at the time until the rest of all other items reach the minimum acceptable of .55 and above, whereas cross factor loading exists if one item has more than one 0.55 of factor loading. Sixthly, eigenvalue is greater than 1 for the factor analysis extraction.

The factor analysis on 33 item of proficiency of NPD scales, there are eight items were deleted and 25 items remained. The last result of factor analysis have presented in the table 4 The Kaiser-Myer – Olein (KMO) measure of sampling adequacy was 0.90. Barlett's Test for Sphercity was significance. With the eigenvalues more than one, the factor has extracted four factors that explained 69.65% of the total variance. The last result of factor analysis presented in Table 5 There are eight items were deleted and 25 items remained. The value of KMO measure of sampling adequacy is 0.899 and Bartlett's test of sphercity is significant (p<.01). In 25 items of 33 items, there are five factors that eigenvalues are more than one and total variance explained 69.65%.

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Table 4
Factor analysis on Proficiency of NPD process

Items	Factor Loading				
	F1	F2	F3	F4	F5
Idea development & initial screening stage:					
I1 Initial screening of the product idea the first review of the venture	.18	.06	<u>.81</u>	-.07	.16
I2 Expanding the idea into a full product concept	.12	.10	<u>.80</u>	.09	-.02
I3 Translating the product concept into business terms such as market share, profitability and marketability	.21	.26	<u>.69</u>	.26	.08
I4 Identifying key business implications of the product concept and its development	.17	.25	<u>.73</u>	.10	.19
I5 Preparing a written proposal of the product concept	.19	.26	<u>.69</u>	.11	.32
Market analysis stage:					
A2 Determine market characteristics and trends	.27	.24	.31	.18	<u>.66</u>
A3 Conducting market study or market research (detailed study of market potential, customer preference, purchase process, etc)	.28	.09	.35	.18	<u>.59</u>
A4 Appraising competitors and their products (both existing and potential)	.27	.16	.06	.05	<u>.78</u>
Technical development stage					
D1 Conducting preliminary engineering technical & manufacturing assessment	.31	<u>.67</u>	.28	.16	.07
D2 Building of the product to designed or revised specifications	.31	<u>.68</u>	.21	.05	-.11
D3 Evaluating laboratory tests to determine basic performance against specifications	.11	<u>.65</u>	.34	.18	.07
D4 Establishing criteria for judging the product performance & market acceptance will be judged	.37	<u>.55</u>	.28	.19	.09
D5 Executing prototype or "in house" sample product testing	.07	<u>.83</u>	-.04	.07	.09
D6 Designing and testing manufacturing facilities	.15	<u>.80</u>	.07	.12	.19
D7 Approving the final product design	.13	<u>.74</u>	.15	.26	.30
D8 Specifying a detailed program to full scale manufacturing	.14	<u>.56</u>	.43	.14	.26
Market testing stage					
T3 Selecting customers for test marketing	.16	.25	.18	<u>.78</u>	.19
T4 Test marketing trial selling prior to launch	.22	.18	.13	<u>.84</u>	.09
T5 Analyzing the findings from the pretests	.43	.21	.03	<u>.67</u>	.04
Product Commercialization stage					
C2 Completing the detailed plans for marketing	<u>.68</u>	.23	.17	.04	.38
C3 Establishing the over all direction for commercialization of this product	<u>.78</u>	.15	.26	.13	.30
C4 Designate the individuals responsible for each part of the commercialization program	<u>.77</u>	.24	.19	.14	.13
C5 Launching the product in the marketplace -marketing campaigns	<u>.84</u>	.16	.13	.13	.19
C6 Studying feedback from customers regarding this product	<u>.77</u>	.21	.17	.26	.11
C7 Specifying activities and tentative plans for the product commercialization phase	<u>.79</u>	.16	.15	.25	.09
% variance explained	18.5	18.01	15.07	9.30	8.79
Eigenvalues	10.7	2.23	2.04	1.30	1.13
KMO	.899				
Bartlett's Test of Sphericity	1703.05**				

RELIABILITY ANALYSIS

Reliability analysis was used to test the internal consistency. The results are presented in table 5. All Cronbach's alphas are above 0.6 level, indicating a good internal consistency.

Descriptive analysis

Descriptive analysis was conducted in subsequent to the validation & reliability processes to ascertain the mean values and standard deviations for the constructs. The result shows that in Thai electrical and electronics firms the proficiency of technical development (3.81) is ranked highest, followed by proficiency of idea development & screening (3.60), proficiency of market analysis (3.49), proficiency of commercialization (3.43) and proficiency of market testing (3.34) respectively.

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Table 5

Reliability analysis on proficiency of NPD process and speed to market

Dimensions	No of items	α
Proficiency of NPD process:		
Proficiency of idea development & initial screening	5	0.87
Proficiency of market analysis	3	0.77
Proficiency of technical development	8	0.90
Proficiency of market testing	3	0.82
Proficiency of product commercialization	6	0.93
Speed to market	2	0.87

Table 6

Descriptive and correlation analysis

Variables	Mean	S.D	(X1)	(X2)	(X3)	(X4)	(X5)	(Y1)	(M1)
Idea development (X1)	3.60	.64	1						
Market analysis (X2)	3.49	.75	.53**	1					
Technical development (X3)	3.81	.61	.56**	.50**	1				
Market testing (X4)	3.34	.77	.39**	.43**	.52**	1			
Launch new product (X5)	3.43	.77	.50**	.60**	.56**	.55**	1		
Speed to market (Y1)	3.39	.88	.40**	.23*	.38**	.13**	.30**	1	
Supplier integration(M1)	3.31	.80	.22**	.20*	.24*	.22*	.22*	.12	1

Correlation analysis

Pearson correlation analysis was used to describe the strength, direction and strength of the bivariate relationships of all the variables. Table 6 shows all correlation coefficients are strongly significant and positive relationship between Proficiency of NPD, proficiency of idea development & screening, market analysis, technical development, market testing and launch and speed to market (0.23 – 0.40). But correlation between supplier involvement and speed to market is not significant.

Hypotheses Testing

Hierarchical regression analysis. The hierarchical regression analysis was performed to test the moderating effect of supplier integration on the relationship between proficiency of NPD process and NPD speed. A three - step of hierarchical regression was conducted, the independent variable was entered in the first step, the moderating variable was entered in the second step, and the third step the interaction between moderating variable and independent variable was entered.

Table 8 depicts the results of moderated regression analysis of supplier integration as the moderator on the relationship between proficiency of new product development dimensions and new product performance. In step 1 independent variable was entered and the finding show that proficiency of idea development & screening ($\beta = .30, P < .05$) and proficiency of technical development ($\beta = .30, P < .05$) are significant related to speed to market providing support for H1a and H1c. But for proficiency of market analysis, market testing and commercialization, there are not significant related to speed to market. Thus H1b, H1d and H1e are not supported. Therefore hypothesis 1 is partially supported. In the second step supplier integration was entered into gauge its impact as an independent variable and the finding show that there have not significant relationship between supplier integration and NPD performance. In the final step the interaction term of proficiency of NPD process and supplier integration was entered and the results indicate that proficiency of technical development ($\beta = 4.02, P < .01$) and proficiency of launch ($\beta = -3.68, P < .01$) were moderated by supplier involvement.

The line graph was further analyzed the effect of moderating variable on the relationship between DV and IV. The plotted graph (Figure 2) showed that for both low and high supplier

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involvement there is no difference in slope that means the proficiency of technical development has positively impacted the accelerate speed to the market with the same rate. So we divided the level of supplier involvement into three level (low, medium and high) and the result showed in Figure 3 that neither nor with low, medium or high supplier involvement proficiency of technical development has positively impacted the accelerate speed to the market but with medium level of supplier involvement the proficiency of technical development tend to increased accelerate speed to the market at the greater rate compare with low and high supplier involvement.

Table 7

Moderating effect of supplier involvement on relationship between proficiency of NPD process and NPD speed

DV		Beta		
		Model 1	Model2	Model3
Speed performance	IV (Proficiency of NPD)			
	Idea development & screening	.303*	.297*	1.025
	Market assessment	-.164	-.174	-.195
	Development	.303*	.295*	-1.682*
	Market testing	-.056	-.056	.002
	Commercialization	.096	.096	2.248**
	<i>Moderating</i>			
	Supplier Integration (SI)		.072	.429*
	<i>Interaction</i>			
	Idea development x SI			-1.34
	Market assessment x SI			.071
	Development x SI			4.019**
	Market testing x SI			-.102
Commercialization x SI			-3.679**	
R ²		.246	.250	.365
R ² change		.246	.005	.107
F change		5.991***	.556	2.859*

+P<.10, *P<.05, **P<.01, ***P<.001

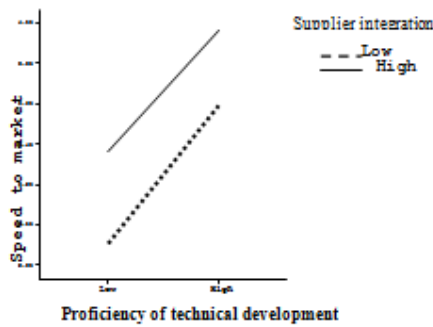
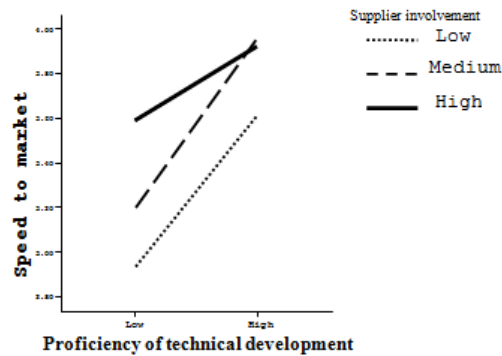


Figure 2 The moderating of supplier involvement between proficiency of technical development and speed to market

Figure 3 The moderating of supplier involvement between proficiency of technical development and speed to market



For the graph interaction between proficiency of commercialization and supplier involvement (Figure 4) showed that for high supplier involvement the direction of line different from low and medium supplier involvement that means for low and medium supplier involvement the proficiency of commercialization has positively impacted the accelerate speed to the market but with low level of supplier involvement the proficiency of launch tend to increased accelerate speed to the market at the greater rate compare with medium supplier involvement. In contrary, high supplier involvement proficiency of commercialization has negatively impacted the accelerate speed to the market that means with high supplier involvement the accelerate speed to the market drastically decreased.

DISCUSSION AND IMPLICATION

As the goal of this study, to extend literature on the relationship between proficiency of NPD in each stage and speed to market and to explore supplier involvement as a potential moderating effect of proficiency of NPD and speed to market.

For Thailand electrical and electronics companies, our finding indicated that for 5 stages in NPD process, proficiency in idea development & screening and proficiency of technical development are significant related to speed to market.

Regarding the moderating effect of supplier involvement the result suggested that for Thai electrical and electronics among low, medium and high level of supplier involvement with medium supplier involvement the proficiency of technical development can enhance accelerate speed to the market with the greatest rate.

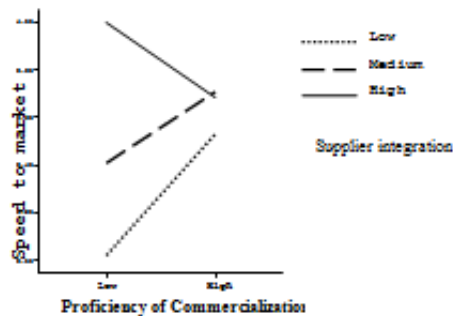
Figure 4 The moderating of supplier involvement between proficiency of commercialization and speed to market

The results also suggested that firms should balance inputs from suppliers in NPD. Based on researcher interviews, in technical development process mainly activity as the intellectual capital is product design. Most of firms are not intended supplier to influence or participate in this activity. They prefer utilization R&D capability but after they came up with product design while doing product prototype, tooling & facility, product specification and product performance suppliers are needed for searching materials that meet specification, cost, and quality.

Previous study has indicated that there is significant different in practices of involvement supplier in different regions. Birou & Fawcett (1994) found in European buyer-supplier relationships have not been extended to the design and development of new products which different from US. Suppliers are more integrated into development projects and provide a higher level of proactive support.

Another interesting result of this study is high supplier involvement in launching new product has decelerate speed to the market. The result also suggested that with low supplier involvement firms can accelerate speed to the market. The plausible explanation is the major responsibility of launching, doing market plan, marketing campaign were carried by marketing personnel. So suppliers are more limited in this stage and based on the researcher interview we found that the role of supplier for launching is to seek the market.

With respect to supplier involvement in the NPD process, this study has suggestion for the future research that needed to investigate type of suppliers, supplier capability or area of supplier expertise as the moderating effect to NPD process.



REFERENCES

*Proficiency of New Product Development and Speed to Market:
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- Birou, L.M., Fawcett, S. E. (1994). Supplier Involvement in Integrated Product Development: A Comparison of US and European Practices. *International Journal of Physical Distribution & Logistics Management*, 34(5), 4-14.
- Bonaccorsi, A., & Lipparini, A. (1994). Strategic Partnerships in New Product Development: An Italian Case Study. *Journal of Product Innovation Management*, 11, 134-145.
- Bower, J. L & Hout T. M. (1988). Fast Cycle Capability for Competitive Power. *Harvard Business Review*, 66, 110-118.
- Brown, S. L., & Eisenhardt, K. M. (1997). The Art of Continuous Change: Linking Complexity Theory and Time-Paced Evolution in Relentlessly Shifting Organization, *Administrative Science Quarterly*, 42, 1-34.
- Chen, J., Damanpour, F., Reilly, R.R. (2009). Understanding Antecedents of New Product Development Speed. A Meta – Analysis. *Journal of Operations Management*, 17 – 34.
- Cooper, R. G., & Kleinschmidt, E. J. Determinants of Timeliness in Product Development. *Journal of Product Innovation Management*, 11, 381-396.
- Davis P. S., & Dibrell C. C., & Janz B. D. The Impact of Time on the Strategy-Performance Relationship: Implications for Managers. *Industrial Marketing Management*, 31, 339-347.
- Droge, C., Jayaram, J., & Vickery, S.K. (2000). The Ability to Minimize the Timing of New Product Development and Introduction: An Examination of Antecedent Factors in the North American Auto mobile Supplier Industry. *Journal of Product Innovation Management*, 17, 24-40.
- Eisenhardt, K. M., Tabrizi, B.N. (1995). Accelerating Adaptive Processes: Product Innovation in the Global Computer Industry. *Administrative Science Quarterly*, 40, 84-110.
- Gee, S. (1978). Factors Affecting the Innovation Time-Period. *Research Management*, 21, 24-37.
- Griffin, A., (1997). Modeling and Measuring Product Development Cycle Time across Industries. *Journal of Engineering Technology Management*, 14, 1-24, 1997.
- Hartley, J.L., Zirger, B.J., Kamath, R.R. (1997). Managing the Buyer-Supplier Interface for On-Time Performance in Product Development. *Journal of Operations Management*, 5 (1), 57-70.
- Hong, P., Doll, W. J., Nahm, A. Y., & Li, X. (2004). Knowledge sharing in integrated product development. *European Journal of Innovation Management*, 7(2), 102 -112.
- Ittner C. D & Larcker D. F. (1997). Product Development Cycle Time and Organizational Performance. *Journal of Marketing Research*, 34, 13-23.
- Kessler, E. H., and Chakrabarti, A. K. (1996). Innovation Speed: A Conceptual Model of Context, Antecedents and Outcomes. *Academy Management Journal*, 21, 1143-1191.
- Kessler, E. H., & Chakrabarti, A. K. (1999). Speeding Up the Pace of New Product Development. *Journal of Product Innovation Management*, 16, 231-247.
- Lambert, D., & Sater S.F. (1999). Perspective: First, fast, and on time: The Path to Success. Or is It? *Journal of Product Innovation Management*, 16, 427-438.
- Langerak F., & Hultink, E.J. (2008). The Effect of New Product Development Acceleration Approaches on Development Speed: A Case Study. *Journal of Engineering Technology Management*, 25, 157 - 167.
- Lynn, G.S. Abel, K.D., Valentine, W.S., and Write, R.C. (1999). Key Factors in Increasing Speed to Market and Improving New Product Success Rates. *Industrial Marketing Management*, 28, 319 - 326.
- Mansfield, E. (1988). The Speed and Cost of Industrial Innovation in Japan and the United States: External versus Internal Technology. *Management Science*, 34, 1157-1169.
- Matthews C. H. & Scott S. G. (1995). Uncertainty and Planning in Small and Entrepreneurial Firms: An Empirical Assessment. *Journal of Small Business Management*, 33, 34-52.
- Menon, A., Chowdhury, J., & Lukas, B. A. (2002). Antecedents and Outcomes of New Product Development Speed: An Interdisciplinary Conceptual Framework. *Industrial Marketing Management*, 31, 317-328.

*Proficiency of New Product Development and Speed to Market:
Exploring the Moderating Effects of Supplier Involvement*

- Meyer, M. H. & Utterback, J. M. (1995). Product Development Cycle Time and Commercial Success. *IEEE Transactional Engineering Management*, 42, 297– 304.
- Nijssen E. J., Arbouw A. R., & Commandeur H. R. (1995). Accelerating New Product Development: A Preliminary Empirical Test of a Hierarchy of Implementation. *Journal of Product Innovation Management*, 12, 99–109.
- Petersen, K., Handfield, R., Ragatz, G. (2003). A Model of Supplier Integration into New Product Development. *Journal of Product Innovation Management*, 20(4), 284–299.
- Primo, A.M., & Amundson, S.D. (2002) An Exploratory Study of the Effect of Supplier Relationships on New Product Development Outcomes. *Journal of Operations Management*, 20(1), 33–52.
- Ragatz, G.L., Handfield, R.B., & Scannell, T.V. (1997). Success factors for integrating suppliers into Product Development. *Journal of Product Innovation Management* 14(3), 190–202.
- Schmenner, R. W. (1988). The merit of making things fast. *Sloan Management Review*, 30, 11–17.
- Stephan M. W., & Hoegl. M. (2006). Involving Suppliers in Product Development: Insights from R&D Directors and Project Managers. *Industrial Marketing Management*, 35, 936 – 943.
- Swink., M. (2003). Completing Projects on-time: How Project Acceleration affects New Product Development. *Journal of Engineering and Technology Management*, 20 (4), 319–344.
- Tabrizi, B. N., & Eisenhardt, K. M. (1993). Accelerating product development cycle time, presented at Annual Conference Academy Management, Atlanta, GA.
- Thomas P. R. (1990). Competitiveness Through Total Cycle Time: An Overview for CEOs. New York: McGraw-Hill.
- Van Echtelt., Wynstra, F., VanWeele, A.J., & Duyesters, G. (2008). Managing supplier involvement in NPD: a multiple case study. *Journal of Product Innovation Management*, 25, 180–201
- Vesey, J. T. (1992). Time-to-market: Put speed in product development. *Industrial Marketing Management*, 21, 151–158, 1992.
- Wheelwright, S. C. and Clark K. B. (1992). Revolutionizing Product Development: Quantum Leaps in Speed, Efficiency, Quality. New York: Free Press.

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Quality of Board of Directors, Largest Shareholder, Firm-Specific Characteristics, and Level of Voluntary Disclosure in Thailand

Key words: Positive Agency Theory, Board of Directors, Ownership Structure, Firm-Specific Characteristics, Voluntary Disclosure, Thailand.

INTRODUCTION

The disclosure orientation of companies in Thailand is also greatly influenced by the form of ownership and management structure (Limpaphayom, 2000). Thailand's listed companies are usually controlled by a family group whose staffs are in the senior positions and also function as the largest shareholder. Thai ownership is highly concentrated and most of the shares are owned by executive directors. As a result, managers and owners are of the same person (Wiwattanakantung, 2000).

The board of directors of the companies is chosen as it is an important tool to protect shareholders' assets and to control the management of the company. The board of directors is also the main policy making body, strategic planner, and acts as the authority of the company. In Thailand, the board of directors of most the listed companies on the SET are controlled by the largest shareholders. As a result of this, the interests and participation of the minority shareholders are being undermined. An important tool for the protection of the minority shareholders is the ownership structure in the companies (Limpaphayom, 2000).

The pattern of family business persisted even after the firms were listed in the SET, where neither foreign ownership nor state ownership has ever been prominent since the SET was established in 1975 (Dhnadirek & Tang, 2003). Consequently, family members were often insiders, meaning that they were major shareholders, managers and members of the board of directors, as well as the ones who nominated outside directors. The role of independent directors per se is minimal; usually only two persons are nominated to the board committee simply to fulfill the requirement of the Securities and Exchange Commission (SEC). Furthermore, as firm ownership was dominated by inside shareholders, the outside shareholders (those who did not hold management positions in the firm) would find it difficult to garner sufficient votes to influence or oust incumbent management, hence restricting the role of the market in corporate control (Limpaphayom, 2000).

The objective of this study is to examine the relationship between the board of directors' quality index (BOQI), the largest shareholder, firm-specific characteristics, and the voluntary disclosure index (VDI) of listed companies in Thailand. The findings of Thailand can be generalized to other countries or economies with similar institutional backgrounds as Emerging Capital Markets is understood to mean a stock market located in a developing country. At present, there are 47 countries whose capital markets that are considered ECMs by the International Finance Corporation (IFC, 1994; Saudagaran & Diga, 1997).

LITERATURE REVIEW

Positive Agency Theory, Board of Directors and Corporate Disclosures

Positive agency theory as theoretical explanations the relationship between corporate governance mechanisms and voluntary disclosure, under the implicit assumption of Jensen and Meckling's (1976) positive agency theory, the study hypothesized that an improved quality of the board of directors would lead to more voluntary disclosure practices, and that voluntary disclosure practices are used as a means to reduce information asymmetry and agency problems (Balachandran & Bliss, 2004).

Fama and Jensen (1983) found that a higher proportion of independent non-executive directors on the board should result in more voluntary corporate disclosure. They have suggested that once the firm's capital is widely held, the potential of conflicts between principal and agent is greater than in family-controlled firms. To reduce these conflicts some shareholders, especially institutional ones have forced managers to disclose more corporate information for the accurate evaluation of the firm's performance. As a result, information disclosure is likely to be more intensive in widely held firms. The prevalence of family-controlled firms listed on a stock exchange, which is the case in the SET, may result in less demand for corporate disclosures (Dhnadirek & Tang, 2003). Consequently, Chau and Gray (2002) found that prevalence of insiders and family-controlled firms is associated with low levels of voluntary disclosures.

Jensen (1993) argued that board composition and board leadership structure are associated with voluntary disclosure. Furthermore, Ho and Wong (2001) indicated that the independence of the audit committee has also been found to be a determinant of the level of voluntary disclosure and the percentage of family members on the board do affect the level of voluntary disclosure. In addition, Willekens, Vander Bauwhede, Gaeremynck, and Van de Gucht (2004) in their studies found that governance mechanisms introduced by companies can increase the disclosure of both the financial and non-financial information.

Agency Theory, Major Shareholder Ownership, and Monitoring

The conflict of interest between managers and shareholders (Jensen, 1986) focus on the major shareholder ownership. The study focuses on the role of the largest shareholder controlling ownership rather than that of family, or a major shareholder ownership because not all family or major shareholders are part of the executive management. This means that the family or major shareholders who are not the part of the management may have less influence on the firm's policies than the insiders. Accordingly, the strength of the relationship with financial reporting will be less (Dhnadirek & Tang, 2003).

To reduce the conflict of interest, Jensen (1993) suggested that managers should receive a significant, ownership of shares in their companies, so that they would act more as owners and not use their discretion to maximize their interest at the expense of shareholders. However, Morck, Shleifer, and Vishny (1988) argued that up to a certain level managers with substantial stakes and hence control will become entrenched (pursuing self-interest), because they found it worth while to generate privileges that are not shared, and without being under pressure of monitoring from outside shareholders.

In a different context where ownership is coupled with control (that is, ownership is concentrated in the hands of shareholders), the agency problem addresses another type of conflict of interest, that is between the controlling (major) and non-controlling (minor) shareholders. Ownership concentration can be an efficient monitoring mechanism because it is an incentive for major shareholders to bear monitoring costs since they are likely to obtain substantial benefit from active monitoring (Shleifer & Vishny, 1986). However, the problem of minority expropriation may arise when the ownership is concentrated in a specific group, particularly individual/family

(Shleifer & Vishny, 1997). Large shareholdings of the major shareholders usually enable them to hold high management positions (they become insiders), in which they can use their positions to exploit corporate assets in order to enhance their self-image and business empire through sales maximization at the expense of profits (Davis & Harveston, 1998), pay themselves excessive salaries and dividends (DeAngelo & DeAngelo, 1985), and recruit family members into management regardless of their professional expertise (Chandler, 1990).

HYPOTHESES DEVELOPMENT

Board of Directors' Quality and Voluntary Disclosure

According to Willekens, Vander Bauwhede, Gaeremynck, and Van de Gucht (2004) created a corporate governance index which measures the overall the strength of a company's corporate governance system and that they suggested that higher scores indicate stronger corporate governance systems and predict a positive coefficient on level of corporate governance. This study would like to examine the relationship between the board of directors' quality index which is associated with the quality of the board's leadership structure, composition, meetings, controlling system, committees, the audit committee and the remuneration committee and the level of voluntary disclosure and predict the direction of this relationship. Thus, this study hypothesized that:

Hypothesis 1: There is a positive relationship between the level of board of directors' quality and the level of voluntary disclosure.

Board of Directors' Quality, Ownership Structure and Voluntary Disclosure

Largest shareholder controlling ownership. On the one hand, Black (1992) has noted that the primary value of institutional investor monitoring is in improving corporate boards. Wright (1996) argued that board members with higher levels of shareholdings may be associated with greater levels of influence in the operations of the firm in order to protect their investments. Furthermore, Fan (2004) argued that institutional investors like pension funds (e.g. CULPERS), fund managers and mutual trusts. As their holding is relatively large, they have incentives to monitor and exercise influence over managers of firms they invest in. On the other hand, Berle and Means (1932), Fan and Wong (2002), and Hope (2003) found that ownership is highly concentrated, the nature of the agency problem shifts away from manager-shareholder conflicts to conflicts between the controlling (major) shareholders and non-controlling (minor) shareholders.

Consequently, it is not clear whether on average one would expect the largest shareholder controlling ownership to increase or to reduce the monitoring is in effectiveness of improving corporate boards. This study would like to examine the role of the major shareholders controlling ownership on the relationship of the board of directors' quality to the level of voluntary disclosure but do not predict the direction of this relationship. Thus, this study hypothesized that:

Hypothesis 2: The largest shareholder controlling ownership will moderate the relationship between the level of board of directors' quality and the level of voluntary disclosure.

The family member, largest shareholder. The study by Shleifer and Vishny (1997) found that the problem of minority expropriation may arise when ownership is concentrated in a specific group, particularly individuals/family. Chen and Jaggi (2000) suggested that independent non-executive directors' independence in family controlled firms may become impaired and consequently their influence on disclosure of comprehensive financial information may be weaker than in non-family controlled firms. In Thailand supported by Dhnadirek and Tang (2003) argued that the

business sector has been dominated by Chinese and most companies in Thailand are family owned and family members were often insiders, meaning that they were major shareholders, managers and members of the board of directors, as well as the ones who nominated outside directors. This study would like to examine the role of the major shareholders who are members of a family on the relationship of the board of directors' quality to the level of voluntary disclosure and predict the direction of this relationship. Thus, this study hypothesized that:

Hypothesis 3: The family member, largest shareholder will negatively moderate the relationship between the level of board of directors' quality and the level of voluntary disclosure.

RESEARCH DESIGN

Sample

This survey covers all of companies (i.e. 456 companies) listed on the Stock Exchange of Thailand (SET) as at 2005 i.e. included 391 listed companies such as Agro and Food Industry Sector 47 companies, Consumer Products Sector 43 companies, Financials Sector 66 companies, Industrials Sector 69 companies, Property and Construction Sector 87 companies, Resources Sector 24 companies, Services Sector 84 companies, Technology Sector 36 companies, and excluded 65 listed companies come from data needed for the study not available (example data such audit committee and/or board of directors, and/or ownership or control variables not available and new listed companies).

Voluntary Disclosure Checklist

The study initially combines both the checklist of Meek, Roberts, and Gray (1995), Chau and Gray (2002). Whenever an item appears in either of the study, it will be included in the study's checklist. Upon completion of this, the study ended up with a total of 115 items in its voluntary disclosure checklist. After this stage, the study then eliminated the items that were mandated by the regulatory requirements of Thailand. This resulted in a voluntary disclosure checklist comprising of 70 items. To validate that the checklist did include only voluntary disclosure items, the checklist was subjected to the evaluation of a few Certified Public Accountants in Thailand. They confirmed that the 70 item checklist can be used for the purpose of the study. Scoring and disclosure indexes of the voluntary disclosure items under the unweighted voluntary disclosure index were adopted from Cooke (1989). The relative the voluntary disclosure index (VDI_{*j*}) by each company *j* is measured by an index which is the proportion of the total score of voluntary disclosure (V_{*j*}) awarded to a company *j* to the score which that company *j* could at most be expected to disclose as the maximum score (M_{*j*}). Thus, the voluntary disclosure index score can range from zero to one ($0 \leq \text{VDI}_j \leq 1$) to be used in the statistical analyzes.

Board of Directors' Quality Index

The 11 characteristics of board and board's committees (i.e. the titles and authority of the board's chairman and head of management team are clearly separated, more than half of the directors on the board are independent non-executive directors (INDs), all directors to attend every board meetings, internal audit department is in company, audit committee (AC) and remuneration committee (RC) are established existence, the chairman of AC is an IND, at least three AC members are INDs, all AC members to attend every AC meetings, at least one AC member is a financial reporting expert as CPA, the chairman of RC is an IND, and more than half of the RC members are non-executive directors) in compliance with the SET's Code of Best Practice for Directors of Listed Companies (SET, 1999b), Best Practice Guidelines for Audit Committee (SET, 1999a), and the Principles of Good Corporate Governance (SET, 2001a) are used to measure the board of directors' quality index (BOQI). This study assigns a score of "1" if the characteristic is present and "0" if the characteristic is absent. Thus, the BOQI score can range from zero to one ($0 \leq \text{BOQI}_j \leq 1$) to be used in the statistical analyzes. The study assumes that the higher score of the BOQI, the higher quality of BOD. Furthermore, the independent

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variables selected as well as prior studies. (e.g. Evans, 2004; Haniffa & Cooke, 2002; Ho & Wong, 2001; Karamanou & Vafeas, 2005; Mangena & Pike, 2005; Vafeas, 1999; Vafeas & Theodorou, 1998; Willekens, Vander Bauwhede, Gaeremynck, & Van de Gucht, 2004) *Ownership Structure*. The two moderating variables (i.e. the largest shareholder controlling ownership and the family member, largest shareholder) selected as well as prior studies (e.g. Chen & Jaggi, 2000; Wiwattanakantung, 2000).

Control variables. The eight control variables (i.e. profit margin, return on equity ratio, liquidity ratio, debt-equity ratio, firm size of net sales and market capitalization, scope of business operations, and type of audit firm) selected as well as prior studies (e.g. Balachandran & Bliss, 2004; Chen & Jaggi, 2000; Eng & Mak, 2003; Gul & Leung, 2004; Ho & Wong, 2001; Willekens, Vander Bauwhede, Gaeremynck, & Van de Gucht, 2004). In Thailand, there has been extensive empirical work relating firm-specific characteristics to the extent of voluntary disclosure, capital structure, and firm performance namely, structure-related characteristics for example, debt-equity ratio used by Priebjriyat (1992), SET (2001b), and Wiwattanakantang (1999); firm size used by Priebjriyat (1992), SET (2001b), Wiwattanakantang (1999), Yammeesri and Lodh (2002). Performance-related characteristics for example, profit margin, earnings return, and liquidity ratio used by Wiwattanakantang (1999), Yammeesri and Lodh (2002). Market-related characteristics for example, scope of business operations used by Wiwattanakantang (1999) and audit size influence used by Priebjriyat (1992). Thus, the study used firm-specific characteristics as control variables include the theoretical framework.

Source of Information. Unit of analysis of this study is cross sectional survey research by data collection from secondary data. Secondary data for this study was compiled through annual reports (Form 56-2), report on the disclosure of additional information (Form 56-1) for the year of 2005, Fact Book of the SET (SET, 2006), and listed company information from www.setsmart.com of the Stock Exchange of Thailand (SET).

DATA ANALYSIS

A four-step hierarchical regression is used to test the hypotheses. The first step is to test the control variables, the second step 2 is to test the independent variables, the third step is to test the moderating variables and the fourth and final step is to test the interaction terms of BOQI and the moderating variable. The model can be stated as follows:

$$\begin{aligned}
 VDI_{ij} = \beta_0 & + \beta_1 BOQI_j & + \beta_2 MV_{ij} & + \beta_3 BOQI_j \cdot MV_{ij} \\
 & + \beta_4 PPM_j & + \beta_5 ROE_j & + \beta_6 CR_j \\
 & + \beta_7 DE_j & + \beta_8 LSAL_j & + \beta_9 LMKT_j \\
 & + \beta_{10} CONG_j & + \beta_{11} BIG4_j & + \epsilon_j \quad \dots\dots\dots(1)
 \end{aligned}$$

Where:

j = Firm indicator (1 – 391);

Dependent Variables

VDI_{ij} = dependent variables (i = 1, 2, 3 and 4); VDI1 = strategic information = DVIA, VDI2 = non-financial information = DVIB, VDI3 = financial information = DVIC and VDI4 = all of voluntary information = DVIT; Voluntary disclosure index, 0 ≤ VDI_{ij} ≤ 1 for company j;

Independent Variables

BOQI_j = the board of directors' quality index, 0 ≤ BOQI_j ≤ 1 for company j;

Moderating Variables

MV_{jk} = moderating variables (k = 1, 2); MV1=LCON, MV2=FCON for company j;
 LCON_j = 1 as the largest shareholder controlling ownership if more than 25 percent of their outstanding common shares were held by the largest shareholder, and 0 as the largest shareholder non-controlling

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ownership if at most 25 percent of their outstanding common shares were held by the largest shareholder for company j;
 FCON_j = 1 as the largest shareholder who is a family member, and 0 as the largest shareholder who is not family member for company j;

Interaction Terms of Independent variables and Moderator variables (MV)

BOQI_i_MV_{ij} = Interaction term of BOQI and MV_i for company j;

Control Variables

PPM_j = Income before extraordinary items over net sales for company j;
 ROE_j = IBEX over book value of equity for the beginning of the period for company j;
 CR_j = Current assets over current liabilities for company j;
 DE_j = Long-term debt over book value of common equity for company j;
 LSAL_j = Natural logarithm of net sales for company j;
 LMKT_j = Natural logarithm of market capitalization for company j;
 CONG_j = 1 if company is a conglomerate firm; = 0 if company is a non-conglomerate firm for company j;
 BIG4_j = 1 if audit firm size is Big 4; = 0 if audit firm size is non-Big 4 for company j;

Parameters

β₀ = Constant;
 β₁₋₁₁ = Coefficients of variables 1 thru 11; and
 ε_j = Error term for company j.

RESULTS

Descriptive Statistics

Table 1 provides descriptive statistics of dependent, independent, control, and moderating variables.

Table 1

Descriptive statistics of dependent, independent, control, and moderator variables (N=391)

Variable	Acronym	Mean	S.D.
Dependent Variable			
Strategic information	DVIA	0.44	.14
Non-financial information	DVIB	0.20	.10
Financial information	DVIC	0.40	.10
All of voluntary information	DVIT	0.33	.08
Independent Variable			
Board of Directors' Quality Index	BOQI	0.40	.17
Control Variable			
Income before extraordinary items over net sales	PPM	0.08	.23
IBEX over book value of equity for the beginning of the period	ROE	0.20	.73
Current assets over current liabilities	CR	2.55	3.37
Long-term debt over book value of common equity	DE	1.00	12.28
Natural logarithm of net sales	LSAL	5.51	1.49
Natural logarithm of market capitalization	LMKT	5.32	1.60
Scope of business operations	CONG		
Company is a conglomerate firm	1	58	14.8
Company is not a conglomerate firm	0	333	85.2
Audit firm size influence	BIG4		

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Variable	Acronym	Mean	S.D.
Audit firm size is Big4	1	243	62.1
Audit firm size is not Big4	0	148	37.9
Moderator Variables			
The largest shareholder's ownership	LCON		
Controlling ownership (More than 25%)	1	306	78.3
Non-Controlling ownership (At most 25%)	0	85	21.7
The largest shareholder	FCON		
Family member	1	221	56.5
Non-family member	0	170	43.5

Goodness of Measures

In this section describe the study's voluntary disclosure checklist and provide evidence supporting its reliability. The reliability of measurement in this study was tested using the Cronbach's alpha (Cronbach, 1951). The instruments, voluntary disclosure checklist items, used in the study were reliable, with coefficients ranging from .64 to .80, which exceeded the minimum acceptance level of .60. According to Liouville and Bayad (1998) used the threshold of .60 to determine strong scale reliability.

The Hierarchical Regression Results and Discussion

Effects of Control Variables. In the first step, when the eight firm characteristics as control variables were entered into the regression equation in the first step, the coefficient of determination (R^2) was found to be .16, .24, .07 and .23 indicating that 16, 24, 7 and 23 percent of the DVIA, DVIB, DVIC and DVIT is explained by the firm characteristics, respectively. It can be observed that control variables such as ROE, DE, LSAL and LMKT (Maximum of Std. Beta = .11, .10, .26 and .34, respectively) showed a significant and positive relationship with VDI at the .05, .05, .01 and .01 level, respectively. These results provided support for ROE, DE, LSAL and LMKT and not support for PPM, CR, CONG, and BIG4 of the study.

Effect of Board of Directors' quality index (BOQI). In the second step, by adding the one independent variable, R^2 increased to 18, 24, 7 and 24 percent, respectively. This R^2 change (.02, .01 and .01) is significant for DVIA, DVIB and DVIT. This implies that the additional 2, 1 and 1 percent of the variation in DVIA, DVIB and DVIT is explained by BOQI. BOQI (Std. Beta = .16, .10 and .11) was found to have a significant and positive relationship with DVIA, DVIB and DVIT at the .01, .05 and .05 level of significance, respectively. These results provided support for Hypothesis 1 of the study.

Moderating Effects of LCON and FCON. In the third step LCON and FCON were entered into the equation in order to gauge its impact as an independent predictor. The maximum R^2 increased from 18, 24, 7 and 24 percent to 19, 25, 7, and 25 percent indicating a change of 1, 1, 0, and 1 percent respectively, which is significant ($p < .05$) for FCON.

In the fourth and final step, when the interaction term was entered into the Model, it can be seen that it yielded a significant F Change of 4.20, and the additional variance explained by the interaction term is 1 percent for LCON. This indicates that only one type of ownership structure namely, the largest shareholder controlling ownership moderate the relationship of board of directors' quality index and voluntary disclosure index. The type of ownership is a Pure Moderator Variable. The results derived from the final step provided support for Hypothesis 2 of the study which predicts that the largest shareholder controlling ownership will moderate the

relationship between the level of board of directors' quality and the level of voluntary disclosure as non-financial information.

DISCUSSION

Board of Directors' Quality Index and Voluntary Disclosure Index

The study found that the higher the level of board of directors' quality is the higher the level of voluntary disclosure such as strategic information, non-financial information and all of voluntary information. The results are consistent with Willekens, Vander Bauwhede, Gaeremynck, and Van de Gucht (2004) that internal governance mechanisms as board of directors can aid in enhancing corporate voluntary disclosure, and that voluntary disclosure is used as a means to reduce information asymmetry and agency problems.

Moderating Effect of Largest Shareholder Controlling Ownership (LCON)

The study found that LCON moderate the relationship between BOQI and VDI. However, in step 4 of this study shown that BOQI not significant but interaction term between BOQI and LCON significant at .05 level. This finding that LCON can would be effect to positive and negative on BOQI. This finding is supported by Shleifer and Vishny (1986) that ownership concentration can be an efficient monitoring mechanism because it is an incentive for major shareholders to bear monitoring costs since they are likely to obtain substantial benefit from active monitoring. This means that major shareholders who are not the part of management may have less influence on the firm's policies than insiders (Jensen, 1986). This means that the problem of minority expropriation may arise when ownership is concentrated in a specific group, particularly individual/family (Shleifer & Vishny, 1997). In this study, controlling ownership is said to exist if more than 25% of their outstanding common shares were held by the largest shareholder. Thus, the largest shareholder controlling ownership has effect on the relationship of BOQI and VDI.

Moderating Effect of the family member, largest shareholder (FCON)

This study found that family members as executive directors and outside non-executive directors have a direct negative effect on the all of voluntary information. This finding is supported by Limpaphayom (2000) that family members were often insiders, meaning that they were chairman, managers and members of the board of directors, as well as the ones who nominated outside non-executive directors. The role of outside non-executive directors per se is minimal as firm ownership was dominated by family members, the outside non-executive directors (those who did not hold management positions in the firm) would find it difficult to garner sufficient votes to influence or oust incumbent management, hence restricting the role of the market in corporate control.

This finding is supported by Shleifer and Vishny (1997), and Chen and Jaggi (2000) that the ratio of independent non-executive directors on corporate boards is positively associated with the corporate disclosures, and this association appears to be weaker for family controlled firms compared to non-family controlled firms. Further, Hill (1999) argued that no one single mechanism is a governance panacea and suggests that it is desirable to have a system of overlapping checks and balances for the behaviors of controlling shareholders and at least one family member is related to an executive director. Thus, the largest shareholder who is a family member, it becomes more difficult for shareholders to control who is their family member and thus can has the negative effect on the voluntary disclosure index.

Impact of control variables on the level of voluntary disclosure

Return on equity ratio, debt-equity ratio and firm size influence as expected are positively significantly associated with disclosure levels. This higher return on equity ratio, higher debt-equity ratio and higher firm size tend to exhibit higher disclosures. This might indicate that

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increased level of voluntary disclosure is driven by increased return on equity ratio, debt-equity ratio and firm size. This finding is consistent with Chen and Jaggi (2000), Cooke (1989), Haniffa and Cooke (2002), Hossain, Perera, and Rahman (1995), Singhvi and Desai (1971).

CONCLUSIONS

This study extends the previous literature by examining voluntary disclosure in a developing country, namely Thailand. The study investigates whether board of directors, ownership structure, and firm characteristics influence the voluntary disclosure index in the annual reports of 391 public listed companies on the SET in 2005. These results supports that the major shareholders who are family members and executive directors are of the same person, ownership is highly concentrated, and the board of directors of most listed companies in Thailand are mostly controlled by the largest shareholder. When, ownership is highly concentrated, the nature of the agency problem shifts away from manager-shareholder conflicts to controlling-non-controlling shareholders conflicts and type of shareholder conflicts between the family-non-family members, largest shareholder. Finally, the control variables comprising return on equity ratio, debt-equity ratio and firm size were found to have a significant influence on the level of voluntary disclosure.

REFERENCES

- Albrecht, W.S., & Sack, R.J. (2000). *Accounting education: Charting the course through a perilous future*. Accounting education series, Volume No. 16. Sarasota, FL: American Accounting Association.
- Balachandran, J., & Bliss, M. (2004). *Board independence and voluntary disclosure: Evidence from Malaysia*. Working Paper, Department of Accountancy City University of Hong Kong.
- Berle, A.A., & Means, G.C., Jr. (1932). *The modern corporation and private property*. Macmillan, New York.
- Black, B.S. (1992). Agents watching agents: The promise of institutional investor voice. *UCLA Law Review*, 39: 811-893.
- Chandler, A.D. (1990). *Scale and scope: The dynamics of industrial capitalism* (Cambridge, MA: Harvard University Press).
- Chau, G.K., & Gray, S.J. (2002). Ownership structure and corporate voluntary disclosure in Hong Kong and Singapore. *The International Journal of Accounting*, 37: 247-265.
- Chen, C.J.P., & Jaggi, B. (2000). The association between independent non-executive directors, family control and financial disclosures. *Journal of Accounting and Public Policy*, 19(4-5): 285-310.
- Cohen, J., & Cohen, P. (1975). *Applied multiple regression/correlation analysis for the behavioral sciences*. Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Cooke, T.E. (1989). Voluntary corporate disclosure by Swedish companies. *Journal of International Financial Management and Accounting*, 1(2): 171-195.
- Cronbach, L.J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3): 297-334.
- Davis, P.S., & Harveston, P.D. (1998). The influence of the family on the family business succession process: A multi-generational perspective. *Entrepreneurship Theory and Practice*, 22: 31-53.
- DeAngelo, H., & DeAngelo, L. (1985). Managerial ownership of voting rights: A study of public Corporations with dual classes of common stock. *Journal of Financial Economics*, 14: 33-69.
- Dhnadirek, R., & Tang, J. (2003). Corporate governance problems in Thailand: Is ownership concentration the cause? *Asia Pacific Business Review*, 10(2): 121-138.
- Elliott, B., & Elliott, J. (2005). *Financial accounting and reporting*. Ninth Edition, Prentice Hall Financial Times.

Quality of Board of Directors, Largest Shareholder, Firm-Specific Characteristics, and Level of Voluntary Disclosure in Thailand

- Eng, L.L., & Mak, Y.T. (2003). Corporate governance and voluntary disclosure. *Journal of Accounting and Public Policy*, 22: 325-345.
- Evans, M. (2004). *Board characteristics, firm ownership and voluntary disclosure*. Working Paper, Fuqua School of Business, Duke University, Durham, NC. 27708, October.
- Fama, E.F., & Jensen, M.C. (1983). Separation of ownership and control. *The Journal of Law and Economics*, 26(2): 301-325.
- Fan, J.P.H., & Wong, T.J. (2002). Corporate ownership structure and the informativeness of accounting earnings in East Asia. *Journal of Accounting and Economics*, 33(3): 401-425.
- Fan, P.S. (2004). Review of literature & empirical research on corporate governance. MAS Staff Paper No. 29, The Monetary Authority of Singapore.
- Field, A. (2000) *Discovering Statistic Using SPSS for Windows*. London: Sage.
- Gul, F.A., & Leung, S. (2004). Board leadership, outside directors' expertise and Voluntary corporate disclosures. *Journal of Accounting and Public Policy*, 23: 351-379.
- Haniffa, R.M., & Cooke, T.E. (2002). Culture, corporate governance and disclosure in Malaysian corporations. *ABACUS*, 38(3): 317-349.
- Hill, J.G. (1999). Deconstructing sunbeam-contemporary issues in corporate governance. *University of Cincinnati Law Review*, 67: 1099-1127.
- Ho, S.S.M., & Wong, K.S. (2001). A study of the relationship between corporate governance structures and the extent of voluntary disclosure. *Journal of International Accounting Auditing & Taxation*, 10: 139-156.
- Hope, O.K. (2003). Analyst following and influence of disclosure components, IPOs and ownership concentration. *Asia-Pacific Journal of Accounting and Economics*, 10(2): 117-141.
- Hossain, M.A., Perera, M.H.B., & Rahman, A.R. (1995). Voluntary disclosure in the annual reports of New Zealand companies. *Journal of International Financial Management and Accounting*, 6(1): 69-87.
- IFC (International Finance Corporation). (1994). *Emerging stock markets factbook 1994*. Washington, D.C.:IFC.
- Jensen, M.C. (1986). Agency costs of free cashflow, corporate finance, and takeovers. *American Economic Review*, 76: 323-329.
- Jensen, M.C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Finance*, 48(3): 831-880.
- Jensen, M.C., & Meckling, W.H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3: 305-360.
- Karamanou, I., & Vafeas, N. (2005). The association between corporate boards, audit committees, and management earnings forecasts: An empirical analysis. *Journal of Accounting Research*, 43(3): 453-486.
- Limpaphayom, P. (2000). Corporate governance in Thailand before the crisis: Issues and implications. *Accountants' Journal*, 47(1): 10-20.
- Liouville, J., & Bayad, M. (1998). Human resource management and performances: Proposition and test of a casual model. *Human Systems Management*, 17(3): 183-193.
- Mangena, M., & Pike, R. (2005). The effect of audit committee shareholding, financial expertise and size on interim financial disclosures. *Accounting and Business Research*, 35(4): 327-349.
- Meek, G.K., Roberts, C.B., & Gray, S. (1995). Factors influencing voluntary annual report disclosures by US, UK and continental European multinational corporations. *Journal of International Business Studies*, 26(3): 555-572.
- Morck, R., Shleifer, A., & Vishny, R. (1988). Management ownership and market valuation: An empirical analysis. *Journal of Financial Economics*, 20: 293-316.
- Priebjriyat, A. (1992). *Corporate disclosure: A case of Securities Exchange of Thailand*. Unpublished Doctoral Dissertation, New York University, School of Business Administration. University Microfilms International, Order No. 9220538.

Quality of Board of Directors, Largest Shareholder, Firm-Specific Characteristics, and Level of Voluntary Disclosure in Thailand

- Saudagaran, S.M., & Diga, J.G. (1997). Financial reporting in emerging capital Markets: Characteristics and policy issues. *Accounting Horizons*, 11(2): 41-64.
- SET. (1999a). *Best practice guidelines for the audit committee*. Internet site: http://www.set.or.th/en/regulations/corporate/download/bestace_upd.doc.
- SET. (1999b). *Code of best practice for directors of listed companies*. Internet site: <http://www.set.or.th/en/regulations/corporate/download/code2e.doc>.
- SET. (2001a). *The 15 principles of good corporate governance*. Internet site: <http://www.set.or.th/en/regulations/corporate/download/CG15-ENG.pdf>.
- SET. (2001b). *The determinants of audit committee independence: Evidence from audit committee formation in Thailand*. Internet Site: <http://www.fma.org/zurich/papers/140140.pdf>.
- SET. (2006). *The stock market in Thailand: Fact book 2006*. Bangkok: JST Publishing, June.
- Sharma, S., Durand, R.M., & Gur-Arie, O. (1981). Identification and analysis of moderator variables. *Journal of Marketing Research*, XVIII: 291-300.
- Shleifer, A., & Vishny, R.W. (1986). Large shareholders and corporate control. *Journal of Political Economy*, 94: 461-488.
- Shleifer, A., & Vishny, R.W. (1997). A survey of corporate governance. *Journal of Finance*, 52: 737-783.
- Singhvi, S.S., & Desai, H.B. (1971). An empirical analysis of the quality of corporate financial disclosure. *The Accounting Review*, 46(1): 129-138.
- Vafeas, N. (1999). Board meeting frequency and firm performance. *Journal of Financial Economics*, 53(1): 113-142.
- Vafeas, N., & Theodorou, E. (1998). The relationship between board structure and firm performance in the U.K. *The British Accounting Review*, 30: 383-407.
- Willekens, M., Vander Bauwhede, H., Gaeremynck, A., & Van de Gucht, L. (2004). *The impact of internal and external governance mechanisms on the voluntary disclosure of financial and non-financial performance*. Working Paper. <http://www.business.uiuc.edu/accountancy/research/vkzcenter/conferences/willekens.pdf>.
- Wiwattanakantang, Y. (1999). An empirical study on the determinants of the capital structure of Thai firms. *Pacific-Basin Finance Journal*, 7: 371-403.
- Wiwattanakantang, Y. (2000). *The equity ownership structure of Thai firms*. Unpublished Working Paper, Institute of Economic Research, Hitotsubashi University, Japan.
- Wright, D. (1996). *Evidence on the relation between corporate governance characteristics and the quality of financial reporting*. Working Paper Series, University of Michigan. Internet site: <http://papers.ssrn.com/sol3/Delivery.cfm/99042606.pdf>.
- Yammeesri, J., & Lodh, S.C. (2002). *The effects of ownership structure on firm performance: Evidence from Thailand*. Hawaii International Conference on Business.

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Scrutiny of Corporate Social Performance effects on its Financial Performance at accepted corporate in Stock Exchange of Tehran-Iran

Key words: Corporate Social Responsibility (CSR), Financial Performance (FP), Corporate Social Investment (CSI), stock exchange

INTRODUCTION

There is currently a debate on the extent to which company directors and managers should consider social and environmental factors in commercial decision making. An approach to decision making that routinely encompasses these factors may be described as corporate social responsibility.

A view is emerging that corporate social responsibility can contribute to the financial performance of a company. This approach, which has been described as the 'enlightened shareholder approach', suggests that corporate decision-makers must consider a range of social and environmental matters if they are to maximise long-term financial returns. This paper presents some preliminary findings about the relationship between the adoption of corporate social responsibility and the financial performance of Iranian companies, and identifies opportunities for further quantitative research in this area.

THEORETICAL FRAMEWORK

Corporate social responsibility

The concept of CSR can be considered from many standpoints. For instance, Carroll (1979) links it to social performance, Solomons (1993) refers to business ethics, Freeman and Evans (1990) associate it with corporate governance, and Elkington (1998) considers the perspective of accountability. Subsequently, Carroll (1999) considers the role which business should play in society.

While there is no universally accepted definition of corporate social responsibility, it is usually described in terms of a company considering, managing and balancing the economic, social and environmental impacts of its activities (PJC 2006). The notion of corporate social responsibility as a part of the core business operations of a company, rather than a separate 'add on', distinguishes it from corporate philanthropy which may be funded out of operations that are damaging to the communities in which business is conducted.

The extent to which company directors and managers should consider social and environmental factors in making decisions, rather than focusing exclusively on maximizing short-term accounting profit, has been the subject of much discussion in recent years.

A modern concept of CSR has evolved since the 1950s, formalized in the 1960s and proliferated in the 1970s (Carroll, 1999). Based on various studies from the CSR literature, CSR can be broadly defined as the activities making companies good citizens who contribute to society's welfare beyond their own self interests. Throughout the past several decades, numerous aspects of CSR have been the subject of investigation in academic and business literature, and according to the framework of Schwartz and Carroll (2003), economic, legal and ethical domains can be epitomized as the most common components of CSR.

CSR and financial performance

One aspect of CSR interesting to many financial economists is the economic domain: financial impact of CSR for profit-seeking corporations. Regarding the relationship between companies' CSR activities and their performances (especially, financial performance), the literature presents three assertions.

The first group of researchers, based on the viewpoint of Friedman (1970), has found a negative relationship between CSR activities and financial performance as measured by, for example, stock price changes (Vance, 1975), excess return (Wright and Ferris, 1997), or analysts' earnings-per-share forecasts (Cordeiro and Sarkis, 1997). Friedman argued that managements are selected by the stockholders as agents and their sole responsibility is acting on behalf of the principals' best interests. From Friedman's perspective, the one and only social responsibility of business is to use its resources and engage in activities designed to increase profits and wealth of owners. Any other activities disturbing the optimal allocation of scarce resources to alternative uses exert an adverse influence on firm performance.

The second group argued for positive impact from companies' CSR activities on financial performance. This group's assertion, based on stakeholder theory (Freeman, 1984), suggests that firms expand the scope of consideration in their decision-making and activities beyond shareholders to several other constituencies with interests, such as customers, employees, suppliers and communities. The second group asserts that CSR activities, which encompass all legitimate stakeholders' implicit claims as stakeholder theory suggests, can improve firm value by (1) immediate cost saving, (2) enhancement of firm reputation, and (3) dissuasion of future action by regulatory bodies including governments which might impose significant costs on the firm (Bird et al., 2007).

A third group has supported no particular relationship between CSR activities and financial performance, partially arguing for the existence of too many confounding factors for researchers to uncover a particular impact from CSR on firm performance.

Seemingly contradictory themes between Friedman's (1970) viewpoint and the stakeholder theory arise from the assumption that CSR, which considers the interests of a broad spectrum of stakeholders (suggested by stakeholder theory), is in fact detrimental to value maximization activities of the firm (asserted by Friedman's viewpoint).

Preston and O'Bannon (1997) have distinguished between the direction of the CSP-FP relationship (positive, negative or neutral) and the causal sequence: does CSP influence FP, does FP influence CSP, or is there a synergistic relationship between the two? They have developed six possible causal and directional hypotheses: social impact hypothesis, slack resources hypothesis, trade-off hypothesis, managerial opportunism hypothesis, positive synergy hypothesis and negative synergy hypothesis.

The social impact hypothesis is based on the stakeholder theory which suggests that meeting the needs of various corporate stakeholders will lead to favourable FP (Freeman, 1984). According to this hypothesis, serving the implicit claims of stakeholders enhances a company's reputation in a way that has a positive impact on its FP. Conversely, disappointing these groups of stakeholders may have a negative financial impact (Preston and O'Bannon, 1997).

The slack resource hypothesis predicts that better FP potentially results in the availability of slack resources that may increase a firm's ability to invest in socially responsible domains such as community and society, employee relations or environment (Waddock and Graves, 1997). The trade-off hypothesis supposes a negative impact of CSP on FP. This hypothesis deals with the neoclassical economists' position which holds that socially responsible behaviour will net few economic benefits while its numerous costs will reduce profits and shareholder wealth (Waddock and Graves, 1997). "This hypothesis reflects the classic Friedman position and is supported by the well-known early finding of Vance (1975) that corporations displaying strong social credentials experience declining stock prices relative to the market average" (Preston and O'Bannon, 1997, p. 421).

According to the managerial opportunism hypothesis, corporate managers may pursue their own private objectives to the detriment of both shareholders and other stakeholders (Weidenbaum and Sheldon, 1987; Williamson, 1967, 1985). In fact, when FP is strong, managers may reduce social expenditures in order to maximize their own short term private gains. Conversely, when FP weakens, managers may engage in conspicuous social programs in order to offset their disappointing results (Preston and O'Bannon, 1997).

The positive synergy hypothesis supposes that higher levels of CSP lead to an improvement of FP, which offers the possibility of reinvestment in socially responsible actions (Allouche and Laroche, 2005a). Indeed, favourable CSP leads to a surplus of available funds (social impact hypothesis) which is reallocated, in part, to the different stakeholders (slack resources hypothesis). There may then be a simultaneous and interactive positive relation between CSP and FP, forming a virtuous circle (Waddock and Graves, 1997).

However, according to the negative synergy hypothesis, higher levels of CSP lead to decreased FP, which in turn limits the socially responsible investments. There may then be a simultaneous and interactive negative relation between CSP and FP, forming a vicious circle. While empirical results concerning the nature of the relationship between CSP and FP continue to be mixed, the largest number of investigations found a positive relationship. This tendency towards the positivism of the CSP-FP link is supported by subsequent meta-analysis (Allouche and Laroche, 2005b; Orlitzky et al., 2003; Wu, 2006).

Another vein of research focused on the causal relationship between CSP and FP. For instance, using traditional statistical techniques, Waddock and Graves (1997) and Hillman and Keim (2001) find a positive synergistic relationship between CSP and FP showing the existence of a virtuous circle between the two constructs.

In a more recent study, Nelling and Webb (2006) examine the causal relationship between CSP and FP by introducing a new econometric technique, the Granger causality approach. Their findings suggest that, using ordinary least square (OLS) regression models, CSP and FP are related. In disagreement with prior empirical research, they find a lower relationship between CSP and FP when employing a time series fixed effects approach. The same result is found when introducing Granger causality models. Furthermore, by focusing on individual measures of CSP, they find causality running from stock market performance to CSP ratings regarding employee's relationships.

Employee recruitment, motivation and retention

Recent surveys indicate that corporate social responsibility is increasingly an important factor in attracting and retaining a talented and diverse workforce (Globescan Inc 2005). Companies that account for the interests of their employees by offering good working conditions will achieve better performance in terms of quality and delivery, and, therefore, experience higher levels of productivity.

Learning and innovation

Learning and innovation are critical to the long-term survival of any business. Corporate social responsibility can be a vehicle for business to respond to environmental and societal risks and turn these into business opportunities.

Measuring corporate social responsibility

An initial challenge in testing the relationship between corporate social responsibility and financial performance is identifying those companies that have adopted corporate social responsibility. This is because corporate social responsibility reflects an approach to internal decision making, the presence or absence of which may not easily be determined by external observers.

The approach that was adopted for this paper was to identify those companies that issue a sustainability report, and treat those companies as having adopted corporate social responsibility. The preparation of a sustainability report provides information to external stakeholders about the conduct of a company, allowing consumers, employees, investors and others to make informed decisions when dealing with the company. Importantly, the preparation of a sustainability report also provides company management with information about social and environmental performance, facilitating improved decision making. It may be the case that it is not until information is collected for public dissemination that senior managers become aware of an issue. Generally sustainability reports provide information about a company's environmental performance, such as energy efficiency, water usage and greenhouse gas emissions, as well as their social performance, such as their staff recruiting and retention policies and engagement with stakeholders. There are a number of voluntary reporting guidelines and sets of indicators available for these companies; the most widely used is the Global Reporting Initiative. One limitation of this approach to identifying companies that have adopted corporate social responsibility is that it may give more of an indication of a company's willingness to report, rather than the extent to which company decision makers consider social and environmental factors in making decisions. While acknowledging this limitation, we would caution that one should not understate the usefulness of sustainability reporting as an indicator of corporate social responsibility for the above reasons.

RESEARCH METHODOLOGY

Sample

The sample used in this study is during the years between 1384-1389. The framework for tracking and reporting on corporate social and environmental performance includes a set of social and environmental indicators carefully developed. This framework is based largely on a stakeholder model and is similar in many ways to the framework used by the SiRi2 Network. There were 222 companies listed for the year 84 -89 companies. CSP ratings were available for 179 companies for 84-89years. Missing values are attributed mostly to income funds and trusts.

Variables

Corporate social performance. For the years 1384- 1389 we use two measures of CSP. First, we use the aggregate score of CSP. we perform our empirical tests using ratings for each of the

dimensions (community and society, corporate governance, employees, environment, customers and human rights) as separate variables.

Financial performance. Following Mahoney and Roberts (2007), return on assets (ROA) and return on equity (ROE) were used separately to measure a firm's FP. For robustness, we used stock market returns as an additional criterion. Data on ROA and ROE were derived from the Stock Guide database. Market returns were obtained from the Tehran Stock Exchange (TSX) through the tehran Financial Market Research Center (TFMRC) database.

Control variables

Some difference in CSP and FP may result from firm size, firm risk and industry and need to be operationalized as control variables (Mahoney and Roberts, 2007; Ullman, 1985; Waddock and Graves, 1997). In fact, smaller firms may not exhibit as much overt socially responsible behavior as do larger firms (Waddock and Graves, 1997). Furthermore, less risky firms have a stable return model and invest, consequently, in socially responsible activities (Roberts, 1992). In addition, earlier research has shown that clear differences in performance and R&D investment exist among different industries (Graves and Waddock, 1994; Waddock and Graves, 1997). Size and systematic risk are also well-known determinants of FP (Fama and French, 1992, 1993).

RESULTS

Initially we regressed the entire data set as a whole in order to determine whether we would find an overarching relationship for the 179 companies. Preliminary results showed that the adoption of corporate social responsibility led to an increase in sales and an increase in equity. In comparison, the adoption of corporate social responsibility led to a reduction in return on assets. All results, however, were statistically insignificant and no reliable results could be obtained from these initial regressions.

Following these results, we split the data set into specific industries in order to determine whether this would have an impact on our results.⁴ While a number of results revealed potential relationships between the adoption of corporate social responsibility and a company's financial performance, none of the results were statistically significant.

Our inconclusive results on an industry basis may have been the result of our small sample size. After splitting our data into separate industries a number of tests included very few companies that had adopted corporate social responsibility. Also, some industries included only a very small number of companies in the first place, reducing the probability that we would receive a result that would be statistically significant.

Limitations and suggested future research

The study is not free from external validity problems caused by a restricted sampling frame and small sample size. Due to the feasibility of collecting CSR and financial data, the study includes in the sample only publicly traded firms in Iran market. To enhance generalizability, future research using increased numbers of observations including international and private hospitality firms is encouraged. In addition, this study used secondary data, which might generate bias; future CSR research employing primary data and qualitative data that can represent, for example, the perspective of the firm, would complement this study.

To address the mechanism of how CSR impacts financial performance in a specific industry, examining relevant mediators would be a valid research approach. For example, one hypothesis may be that positive CSR activities enhance brand images of firms, and then, improved brand images influence firms' financial performances by attracting more customers. Or,

environmentally unsound activities of firms may bring about a negative relationship with community or government, which in turn adversely impacts financial performance due to possible boycotts or penalties. Investigating mediators can reveal specific key vehicles of CSR in each industry which may have different business structures, profit drivers and main stakeholder groups, thereby helping to establish and implement more sophisticated CSR strategy for a specific industry. This suggested future study could be conducted using structural equation modeling (SEM) that may provide a greater level of precision and depth in the analysis of the determinants and consequences of each CSR measure.

REFERENCES

- Allouche, J. and P. Laroche: 2005a, 'Responsabilite' sociale et performance financie`re des entreprises: une synthe`se de la litte`rature', Actes du colloque organise` par CREFIGE et CERIT (Nancy), 17–19 Mars.
- Allouche, J. and P. Laroche: 2005b, 'A Meta-Analytical Investigation of the Relationship Between Corporate Social and Financial Performance', *Revue de Gestion des Ressources Humaines* 57, 18–40.
- Bird, R., Hall, A.D., Momente, F., Reggiani, F., 2007. What corporate social responsibility activities are valued by the market? *Journal of Business Ethics* 76 (2), 189–206.
- Carroll, A. (1979), "A three dimensional model of corporate performance", *Academy of Management Review*, Vol. 4, pp. 497-505.
- Carroll, A. (1999), "Corporate social responsibility. Evolution of a definitional construct", *Business and Society*, Vol. 38, pp. 268-295.
- Cordeiro, J.J., Sarkis, J., 1997. Environmental proactivism and firm performance: evidence from security analyst earning forecast. *Business Strategy and the Environment* 6 (2), 104–114.
- Elkington, J. (1998), *Cannibals with forks: the triple bottom line of 21st century business*, New Society Publishers.
- Fama, E. F. and K. R. French: 1992, 'The Cross-Section of Expected Stock Returns', *The Journal of Finance* 47(2), 427–465. doi:10.2307/2329112.
- Fama, E. F. and K. R. French: 1993, 'Common Risk Factors in the Returns on Stocks and Bonds', *Journal of Financial Economics* 33, 3–56. doi:10.1016/0304-405X (93)90023-5.
- Freeman, R. E.: 1984, *Strategic Management: A Stakeholder Approach* (Pitman, Boston).
- Freeman, R.E. and Evan, W.M. (1990), "Corporate governance: a stakeholder interpretation", *Journal of Behavioural Economics*, Vol. 19 No. 4, pp. 337-359.
- Friedman, M.: 1970, 'The Social Responsibility of Business is to Increase Its Profits', *The New York Times Magazine* 13, 32–33.
- Globescan Inc 2005, Definition of corporate social responsibility survey, viewed 3 February 2007, http://www.globescan.com/rf_csr_first_01.htm.
- Graves, S. B. and S. A. Waddock: 1994, 'Institutional Owners and Corporate Social Performance', *Academy of Management Journal* 37(4), 1034–1046. doi:10.2307/256611.
- Mahoney, L. and R. W. Roberts: 2007, 'Corporate Social Performance, Financial Performance and Institutional Ownership in Canadian Firms', *Accounting Forum*. doi:10.1016/j.accfor.2007.05.001.
- Orlitzky, M., F. L. Schmidt and S. L. Rynes: 2003, 'Corporate Social and Financial Performance: A Meta- Analysis', *Organization Studies* 24(3), 403–441. doi:10.1177/0170840603024003910.
- PJC, Parliamentary Joint Committee on Corporations and Financial Services 2006, *Corporate responsibility: Managing risk and creating value*, June, Canberra.
- Preston, L. E. and D. P. O'Bannon: 1997, 'The Corporate Social-Financial Performance Relationship: A Typology and Analysis', *Business and Society* 36, 419–429. doi:10.1177/000765039703600406.

- Roberts, R. W.: 1992, 'Determinants of Corporate Social Responsibility Disclosure: An Application of Stakeholder Theory', *Accounting, Organizations and Society* 17(6), 595–612. doi:10.1016/0361-3682(92)90015-K.
- Ullman, A.: 1985, 'Data in Search of a Theory: A Critical Examination of the Relationships Among Social Performance, Social Disclosure, and Economic Performance of U.S. Firms', *Academy of Management Review* 10(3), 540–557. doi:10.2307/258135.
- Vance, S.: 1975, 'Are Socially Responsible Firms Good Investment Risks?', *Management Review* 64, 18–24.
- Waddock, S. A. and S. M. Graves: 1997, 'The Corporate Social Performance-Financial Performance Link', *Strategic Management Journal* 18(4), 303–319. doi:10.1002/(SICI)1097-0266(199704)18:4<303::AID-SMJ 869>3.0.CO;2-G.
- Weidenbaum, M. and V. Sheldon: 1987, 'Takeovers and Stockholders: Winners and Losers', *California Management Review* 29(4), 57–168.
- Williamson, O. E.: 1967, *The Economics of Discretionary Behaviour: Managerial Objectives in a Theory of the Firm* (Markham, Chicago).
- Williamson, O. E.: 1985, *The Economic Institutions of Capitalism* (Free Press, New York).
- Wright, P., Ferris, S.P., 1997. Agency conflict and corporate strategy: the effect of divestment on corporate value. *Strategic Management Journal* 18 (1), 77–83.
- Wu, M.-L.: 2006, 'Corporate Social Performance, Corporate Financial Performance, and Firm Size: A Meta-Analysis', *Journal of American Academy of Business* 8(1), 163–1

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References removed for space considerations

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The Relevancy of Brand Heritage: How do Consumers perceive Heritage Brands in the Automotive Industry

INTRODUCTION

During recent years, the study of brands with a heritage as a part of corporate brand identity has gained growing interest in both marketing research and managerial practice. Under certain situational conditions, the heritage of a brand seems to play an important role and adds value in the eyes of consumers (Urde/Greyser/Balmer, 2007).

Particularly in the present financial and economic crisis – a time characterized by high dynamics, uncertainty, and massive consumer disorientation – consumers tend to prefer brands with a heritage because they are perceived to be more credible, trustworthy, and reliable to minimize the associated risks of a purchase decision (Leigh/Peters/Shelton, 2006). Generally speaking, the heritage aspect represents longevity and sustainability as a promise to the stakeholders that the core values and performance of the brand are authentic and true (Urde, 2003). In sum, the heritage of a brand adds the association of depth, authenticity and credibility to the brand's

perceived value. In addition, as a basis for distinctiveness in positioning, the heritage is helpful in order to build up a special relationship with a consumer or a range of non-consumer stakeholders. Thus, as a competitive advantage, with reference to consumers to whom heritage is meaningful, the heritage of a brand can result into the willingness to accept higher prices and to higher consumer loyalty (e.g. Urde/Greyser/Balmer, 2007, p. 11-12).

With special focus on the automotive industry, the aim of the present study is to examine the dimensions of brand heritage, focusing on the functions or value of the brand as perceived by consumers. Our paper is structured as follows: First, we analyze existing literature on the brand heritage construct and its elements. Second, we develop a conceptual model focusing on the value-based antecedents and consequences of brand heritage. Third, to explore the various dimensions underlying the perceived values of heritage brands, we present the methodology and the results of our empirical study. Based on our factor structure, we categorize different types of drivers for the main subgroup of active user who can be distinguished along their perception of the brand heritage value aspects. Finally, the empirical results of our exploratory study are discussed with regard to future research steps and managerial implications.

THEORETICAL BACKGROUND

Definition of Brand Heritage

"To be faithful to a tradition means to be faithful to its flame and not its ashes"
Jaurès, 1859-1914

This quotation by the famous French socialist leader describes the core of the construct brand heritage. In contrast to an historical overview, which is necessarily grounded only in the past, a tradition and also brand heritage embrace not only the time frame, "the past", but also "the present", and "the future". Heritage helps to make a brand relevant to the present and prospectively to the future. A brand which is infused with a heritage stands for authenticity, credibility, and trust and can provide leverage for that brand, especially in global markets (Aaker, 1996; George, 2004; Urde/Greyser/Balmer, 2007).

Urde, Greyser, and Balmer define the brand heritage construct as a part of corporate brand identity, as „ (...) *a dimension of a brand's identity found in its track record, longevity, core values, use of symbols and particularly in an organisational belief that its history is important*“ (Urde/Greyser/Balmer, 2007, p. 4-5). Following their conceptualization, heritage brands constitute a different branding category, with its own set of defining criteria and a specific approach for effective management and leadership.

Reasoning this, it is useful to distinguish heritage brands from other kinds of branding like retro brands or iconic brands and to differentiate between the general constructs of heritage and history: While retro branding is related to just a determined epoch, often with a nostalgic character (e.g., Volkswagen's New Beetle), a brand with a heritage (e.g. Jaguar) draws from and clarifies the past and also makes it relevant for current contexts and purposes (Urde/Greyser/Balmer, 2007). Iconic brands, which are often culturally dominant and distinctive (e.g., Nike) are not necessarily heritage brands. In the process of transforming a brand into an iconic brand, one of the strongest influences is the importance of mythmaking. For heritage branding, mythmaking is relevant but not vital. It can only be a component of building a heritage brand (Urde/Greyser/Balmer, 2007). The difference between heritage and history seems minor the perspective are distinct. While history is retrospective and grounded in the past, a heritage brand embraces all timeframes including the future. History explores and explains what often is an opaque past; heritage makes the past relevant for contemporary contexts and purposes (Urde/Greyser/Balmer, 2007).

Elements of Brand Heritage

Based on the definition of the brand heritage construct and the distinction from other kinds of branding, it is useful to consider, as shown in *Figure 1*, five major elements that indicate if and to what extent heritage may be present or potentially found in a brand (Urde/Greyser/Balmer, 2007, p. 9):

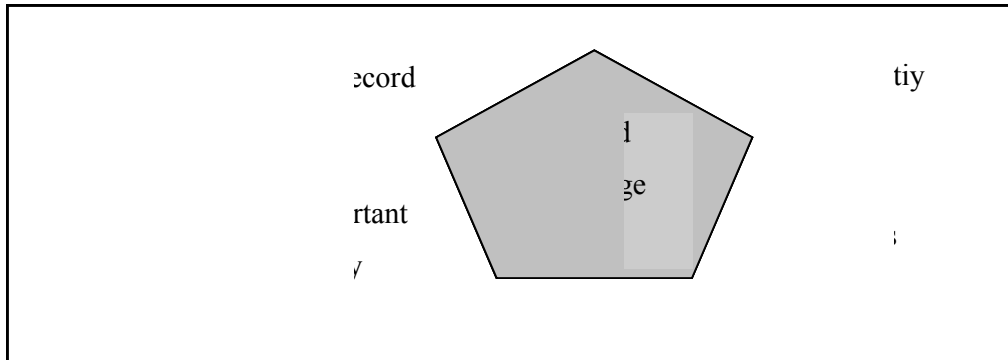


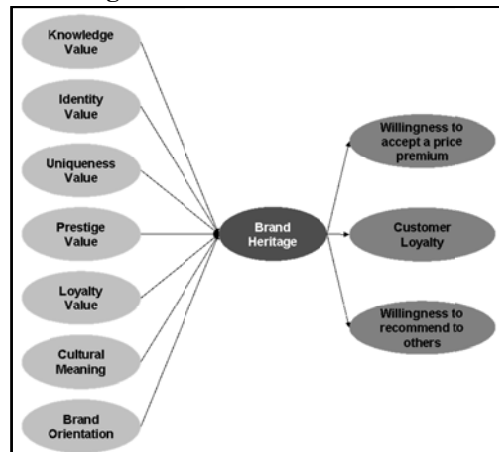
Figure 1: Key Elements of Brand Heritage

The element *track record* is related to the established performance that the brand or the company has been connected with certain values and promises over time (e.g., Volvo is continuously synonymous with safety) (Urde, 1997; Urde/Greyser/Balmer, 2007). As the second element of brand heritage, *longevity* is of special importance for large multi-generational family-owned companies like Ford or Anheuser Busch and reflects other brand heritage elements sustainable and consistent (Urde/Greyser/Balmer, 2007, p. 9). *Core values* encompass the basic values the brand is associated with. Like a promise or covenant in external communication, these values underline and help to define corporate strategy and are an integral part of the brand identity (Urde, 1994; Kapferer, 2004; Lencioni, 2002; Urde/Greyser/Balmer, 2007, p. 9). The *use of symbols* is related to logos or design and illustrates the brand’s core meaning, e.g., the Mercedes star or the leaper of Jaguar (Urde/Greyser/Balmer, 2007, p. 10). The fifth component is the element *history important to identity*. Companies have to sense their own history as crucial important for the own identity. It is absolutely essential that they know who and what they are. This should also be a key part of communication, advertising, and marketing mix (Brown/Kozinets/Sherry Jr., 2003; Urde/Greyser/Balmer, 2007).

Conceptual Model: Value-Based Drivers of Brand Heritage

Referring to an integrated understanding of the brand heritage construct and its elements, this research follows the statement of Buss (2007). The multidimensional model, as shown in *Figure 2*, (right) adds on the remarks of Urde, Greyser, and Balmer (2007), but focuses on the value-based antecedents and consequences of brand heritage.

As a context-dependent (Holbrook, 1999; Parasuraman, 1997), highly personal, and multi-dimensional concept, perceived customer value involves a trade-off between the perceived benefits and costs (Zeithaml, 1988) and can be



defined as “*an interactive relativistic consumption preference experience*” (Holbrook, 1994, p. 27). Research shows that successful brands must offer a superior cost/benefit-relation in terms of a superior value to consumers in order to differentiate the product or service from those of competitors (Fill, 2002). In order to enhance the current understanding of value perception in the context of brand heritage, the question of what really adds value in the consumer’s perception is defined in this paper through the existence of seven different attitude-relevant, perceived latent customer value dimensions encompassing the constructs of knowledge, identity, uniqueness, prestige, loyalty, cultural meaning, and, brand orientation as the basis for the identification of consumer segments that differ in their value perceptions. Closely related to consumers brand awareness and brand image (Keller, 1998), our value-based drivers of brand heritage can be seen as “perceptions about a brand as reflected by the brand associations held in consumer memory” (Keller, 1993, p. 3). A certain brand may satisfy functional and practical needs (e.g., safety, quality) as well as emotional and symbolic needs (e.g., self-expression, social identification, and status) (Bhat/Reddy, 1998; del Rio et al., 2001). Heritage as part of a brand’s past, present, and future identity incorporates various aspects of a brand that can foster consumer loyalty: The personal identification function in terms of a congruence between the consumer’s behavior, his self-image and the product image (Graeff, 1996); the perceived exclusivity and rareness of a limited product enhances the consumer’s desire or preference for a brand (Verhallen, 1982; Lynn, 1991; Pantzalis, 1995); the wish of the consumers for differentiation and exclusivity which can only be fulfilled when the consumption and use of a certain brand enhances status (Leibenstein, 1950; Vigneron/Johnson, 1999, 2004).

METHODOLOGY

The Questionnaire

To measure the underlying value dimensions of brand heritage against the background of our multidimensional model, we did both, using already existing and tested measures (e.g. Sen/Chrhan-Canli/Morwitz, 2001; Kirmani/Sood/Bridges, 1999; Dean, 1999) and generating further items resulting from exploratory interviews with marketing experts and respondents being asked what value drivers they associate with brand heritage. All items were rated on a five-point Likert scale (*1=strongly disagree, 5=strongly agree*) and, due to the fact we were able to collaborate with one of the world’s leading automobile manufacturers, the items were specified to an automotive context. Especially in the automotive industry, consumers prefer brands with a heritage that are credible and authentic to minimize their risk (e.g. Leigh/Peters/Shelton, 2006). These brands stand for longevity and sustainability as a proof that the core values and performance of the products are reliable (e.g., Urde, 2003). Brands with a heritage create and confirm expectations about future behavior to the stakeholder groups and make a promise that the company will continue to deliver on these commitments (e.g., safety, quality, environment, design) (e.g., Urde/Greyser/Balmer, 2007, p. 9). Especially with reference to the present time of economic crisis and dynamics in the automotive sector, consumers tend to prefer heritage brands because they are perceived to be trustworthy and reliable (Urde, 2003). The first version of our questionnaire was face validated twice using exploratory and expert interviews and pretested with 30 respondents to identify the most important and reduce the total number of items.

The Sample

To investigate the research model, an internet survey with a snowball sampling method was developed in Germany. It has been organized using an internet form sent to internet forums and private costumers via personalized emails with the invitation to actively contribute to the online survey. In summer 2009, a total amount of 658 valid questionnaires was received. *Table 1* (following) describes the sample characteristics.

TABLE 1: Demographic Profile of the Sample			
Variable		n	in %
Age	18 – 24 years	196	29.8
	25 – 29 years	236	35.9
	30 – 39 years	103	15.7
	40 – 49 years	72	10.9
	50 years +	51	7.8
Gender	Male	454	69.0
	Female	202	30.7
Marital status	Single	494	75.3
	Married	144	22.0
	Widowed	3	0.5
	Divorced	15	2.3
Education	Not graduated from high school	12	1.8
	Lower secondary school	57	8.7
	Intermediate secondary school	66	10.1
	A-Levels	253	38.6
	University Degree	267	40.7
	No graduation	1	0.2
Income 1	Very low income	24	3.7
	Low income	64	9.8
	Middle income	338	51.8
	High income	188	28.8
	Very high income	13	2.0
	not applicable	26	4.0
Occupation 1	Full time	237	36.1
	Part-time	28	4.3
	Pensioner / retiree	12	1.8
	Early retirement	2	0.3
	House wife / husband	2	0.3
	Job training	12	1.8
	Student	346	52.7
	Sick leave	1	0.2
	Seeking work	17	2.6
Occupation 2	Self-employed	50	7.6
	Freelancer	19	2.9
	Employee	185	28.2
	Executive employee	42	6.4
	Civil servant	26	4.0
	Worker	25	3.8
	Student	294	44.9
	Not employed	14	2.1
Income 2	> 500 Euro	60	9,2
	500 EUR – 999 EUR	124	19,0
	1.000 EUR – 1.999 EUR	121	18,5
	2.000 EUR – 2.999 EUR	110	16,8
	3.000 EUR – 3.999 EUR	72	11,0
	4.000 EUR – 4.999 EUR	36	5,5
	< als 5.000 EUR	37	5,7

TABLE 1: Demographic Profile of the Sample

Variable	n	in %
not applicable	94	14,4

Respondents mainly aged 25-39 years, those with higher education and those who are male and single were over-represented, which is indicative of the fact that many male students and employees participated as they are particularly interested in automotives. The higher percentage of young to middle-aged and male consumers in the sample may be also attributed to the greater internet usage of young to middle-aged people.

Results and Discussion

Within the data analysis, we first analysed the unidimensionality of each dimension underlying the perceived values of heritage brands by a factor analysis using the principal component method with varimax rotation. As shown in *Table 2*, the factor analysis confirmed the high reliability of our identified seven factors derived from theory for the three user subgroups in our sample: the active users (i.e., owner and driver), passive users (i.e., co-driver), and non-users of the given brand in our questionnaire.

TABLE 2: Factor Structure and Group Means

F1 Knowledge	Group = active user (n=458)	Group = passive user (n=151)	Group = no user (n=49)
<i>KMO</i>	.812	.793	.795
<i>DEV (%)</i>	68.94	65.31	71.48
<i>α</i>	.843	.813	.864
<i>Mean</i>	3,79	3,49	3,01
Items	Factor Loadings	Factor Loadings	Factor Loadings
XY is a brand you talk very often about.	0.870	0.853	0.904
The brand XY is very popular.	0.855	0.848	0.889
XY is a brand which you meet very often.	0.853	0.796	0.862
I know the brand XY much better than other brands.	0.736	0.730	0.714
F2 Identity	Group = active user (n=458)	Group = passive user (n=151)	Group = non-user (n=49)
<i>KMO</i>	.719	.649	.642
<i>DEV (%)</i>	73.79	64.09	63.51
<i>α</i>	0.819	0.715	0.713
<i>Mean</i>	3,59	3,49	2,75
Items	Factor Loadings	Factor Loadings	Factor Loadings
The brand XY has a very unique character.	0.871	0.825	0.849
The brand XY has a very distinctive identity.	0.853	0.847	0.821
I identify with the brand XY.	0.852	0.724	0.714
F3 Uniqueness	Group = active user (n=458)	Group = passive user (n=151)	Group = no user (n=49)
<i>KMO</i>	.706	.686	.655
<i>DEV (%)</i>	75.34	71.36	67.16
<i>α</i>	0.836	0.798	0.751
<i>Mean</i>	3,33	2,98	2,83
Items	Factor Loadings	Factor Loadings	Factor Loadings
The brand XY is beyond compare to other	0.896	0.884	0.873

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brands.			
The brand XY is totally different to other brands.	0.879	0.848	0.815
The brand XY is very distinctive and unique.	0.827	0.801	0.767
F4 Prestige and Status	Group = active user (n=458)	Group = passive user (n=151)	Group = no user (n=49)
<i>KMO</i>	0.816	0.784	0.790
<i>DEV (%)</i>	73.58	67.55	74.96
<i>α</i>	0.879	0.834	0.888
<i>Mean</i>	3,59	3,32	2,98
Items	Factor Loadings	Factor Loadings	Factor Loadings
The brand XY has a very high renown.	0.884	0.856	0.853
The brand XY embodies a very high status.	0.863	0.818	0.869
The brand XY has a very high esteem.	0.844	0.820	0.890
The prestige of the brand XY is very high.	0.839	0.792	0.851
F5 Loyalty	Group = active user (n=458)	Group = passive user (n=151)	Group = no user (n=49)
<i>KMO</i>	0.758	0.730	0.694
<i>DEV (%)</i>	87.77	84.25	69.57
<i>α</i>	0.930	0.905	0.779
<i>Mean</i>	3,05	2,06	1,69
Items	Factor Loadings	Factor Loadings	Factor Loadings
I am absolutely related to the brand XY.	0.945	0.943	0.858
I feel very grateful to the brand XY	0.944	0.917	0.803
I am very faithful to the brand XY.	0.921	0.893	0.841
F6 Cultural Meaning	Group = active user (n=458)	Group = passive user (n=151)	Group = no user (n=49)
<i>KMO</i>	0.753	0.747	0.757
<i>DEV (%)</i>	83.89	84.12	85.57

<i>α</i>	0.904	0.905	0.914
<i>Mean</i>	3,64	3,27	2,95
Items	Factor Loadings	Factor Loadings	Factor Loadings
The brand XY stands for a special way of life.	0.924	0.932	0.920
The brand XY embodies a certain awareness of life.	0.913	0.902	0.935
The brand XY stands for an own lifestyle.	0.911	0.918	0.920
F7 Brand Orientation	Group = active user (n=458)	Group = passive user (n=151)	Group = no user (n=49)
<i>KMO</i>	0.730	0.756	0.680
<i>DEV (%)</i>	64.68	61.54	63.16
<i>α</i>	0.817	0.786	0.805
<i>Mean</i>	3,42	3,16	2,91
Items	Factor Loadings	Factor Loadings	Factor Loadings
The brand XY sets the valuation standard for other brands.	0.858	0.809	0.806
The brand XY sets the benchmark in quality.	0.816	0.818	0.856
In comparison with other brand, the brand XY is the point of orientation.	0.794	0.776	0.756
The brand XY sets the benchmark in service.	0.746	0.732	0.757

A brief description of each factor is given below:

Factor 1 Knowledge: This factor encompasses the consumers' experience and familiarity with a brand associated with a certain image in the eyes of our respondents. In our study, the highest loading item regarding all user groups was "*XY is a brand you talk very often about*" (.853 - .870) followed by "*The brand XY is very popular*" (.848 - .889). As expected, active users show highest mean scores of all groups for the knowledge-related items.

Factor 2 Identity: Related to the perceived identity fit between consumer's self-identity and the perceived brand identity, our second factor includes a feeling of solidarity, togetherness, and a shared identity. For active users and non-users the highest loading item was "*The brand XY has a very unique character*" (.849 - .871), for passive users "*The brand XY has a very distinctive Identity*" (.847). Again, active users show highest mean scores of all groups.

Factor 3 Uniqueness: The third factor is closely related to the perceived singularity of a brand, its clear, unique positioning in the consumers' view. For all consumer subgroups in our study, the highest loading item was: "*The brand XY is beyond compare to other brands*" (.873 - .896). More than the other groups, the active users perceived the given brand to be unique and inimitable.

Factor 4 Prestige and Status: Encompassing the need for fame and exclusivity, this factor refers to the perceived status-enhancement the usage of a certain brand may provide. In this connection, it has to be stated that some automobile brands connote a heritage of engineering excellence, style, and/or prestige. In our study, for active and passive users, the highest loading item was "*The brand XY has a very high renown*" (.856 - .884) and for non-users "*The brand XY has a very high esteem*" (.890). The given brand in our study was associated with prestige and status in particular by active users.

Factor 5 Loyalty: This factor is related to the brand-customer attachment and includes a close emotional relationship leading to higher degree of customer loyalty. For all respondent groups, the highest loading item was "*I am absolutely related to the brand XY*" (.858-.945) with highest mean scores for active users.

Factor 6 Cultural Meaning: Referring to a certain lifestyle incorporated in and associated with the brand, the cultural meaning of the given brand in our study was perceived particularly by the active users. For active users and passive users, the highest loading item was "*The brand XY stands for a special way of life*" (.924 - .932), for non-users "*The brand XY embodies a certain awareness of life*" (.935).

Factor 7 Brand Orientation: This factor refers to the brand's aptitude for a role model in a certain product category. For active users, the highest loading item was "*The brand XY sets the valuation standard for other brands*" (.858), for passive users and non-users "*The brand XY sets the benchmark in quality*" (.818-.856). Comparing the mean scores of all respondent subgroups, again the active users show highest mean scores for this factor, too.

In the next step of our data analysis, the factor mean scores for each respondent of the *active users* subgroup ($n = 458$) were saved and used in stage two for clustering them into market segments. The focus of cluster analysis in this study was on the comparison of cases according to natural relationships between the hypothesized value dimensions and factors. We used both hierarchical and non-hierarchical clustering techniques. An initial hierarchical clustering procedure for a random sample (10 percent of the original sample with $n = 45$) was employed to obtain a candidate number of clusters and seed points for a k-means cluster analysis. To identify the correct number of clusters, the respondents were first partitioned by a hierarchical procedure. Because Ward's method produces tight minimum variance clusters and is regarded as one of the best of the hierarchical clustering techniques (Wishart, 1987), Ward's method of minimum variance was chosen to check cluster differences in each stage of combinations and to maximize homogeneity within clusters and heterogeneity between clusters. The results strongly suggested the presence of three clusters. This three-cluster solution was validated using non-hierarchical k-means clustering. The typical criteria for effective segments are: (1) the segments are composed

by consumers with homogeneous needs, attitudes, and responses to marketing variables (McCarthy, 1982); (2) the segments are distinct from one another (Weinstein, 1987); (3) the segments are large enough to be managerial useful (McCarthy, 1982); and (4) the segments provide operational data that are practical, usable, and readily translatable into strategy (Weinstein, 1987). The three-cluster solution as shown in *Table 3* most favorably met these criteria and produced the most interpretable and stable result.

TABLE 3: Cluster Analysis Results

Factor	Means Cluster 1 (n=210)	Means Cluster 2 (n=181)	Means Cluster 3 (n=67)	F	Sig.
F1 Knowledge	3.70	4.45	2.29	370.702	0.000
F2 Identity	3.42	4.34	2.11	443.617	0.000
F3 Uniqueness	3.08	4.10	2.04	316.308	0.000
F4 Prestige and Status	3.44	4.22	2.33	314.582	0.000
F5 Loyalty	2.51	4.17	1.73	295.158	0.000
F6 Cultural Meaning	3.40	4.32	2.53	149.541	0.000
F7 Brand Orientation	3.21	4.05	2.36	205.939	0.000

With regard to classification accuracy once the clusters were identified, we also used discriminant analysis to check the cluster groupings (Churchill, 1999; Hair et al., 1998). Using the categorical dependent variable a priori-defined three-cluster solution, the results of the discriminant analysis revealed significant differences between group characteristics (cf. *Table 4*). The classification results were used to determine how successfully the discriminant function could work. Overall, 96.9% of cases were assigned to their correct groups which validated the results of the cluster analysis and resulted in a useful classification of consumer subgroups based on their value perception of brand heritage factors.

TABLE 4: Discriminant Analysis

Discriminant Function	Eigenvalue	Canonical Correlation	Wilk's Lambda	χ^2	Significance
1	4.200	0.899	0.164	816.847	0.000
2	0.172	0.383	0.853	71.633	0.000
		Function 1		Function 2	
Centroids (group means)					
Cluster 1		-0.608		-0.432	
Cluster 2		2.139		0.272	
Cluster 3		-3.874		0.618	
Significant variable (structure matrix)					
F2 Identity		0.680		-0.202	
F1 Knowledge		0.615		-0.490	
F3 Uniqueness		0.574		0.161	
F4 Prestige and Status		0.573		-0.187	
F7 Brand Orientation		0.464		0.127	
F6 Cultural Meaning		0.394		0.159	
F5 Loyalty		0.534		0.769	

Classification matrix revealed that 96.9% of the cases were classified correctly.

For market segmentation purposes, profiling cluster solutions should lead to a classification scheme by describing the characteristics of each cluster to explain how they might differ in relevant dimensions. To develop a profile of each market segment, more detailed information comes from looking at the questionnaire variables cross-tabulated by cluster segment. Comparisons among the three clusters were conducted on a variety of descriptive variables, including demographic and socioeconomic characteristics. Based on the variables from which they were derived, the three clusters were labeled as follows:

Cluster 1: The disloyal Traditionalists (45.9% of the subsample, n=210; 76.2% male, 23.8% female; mean age of 31.0, 29.9% with income 3000 EUR >)

Compared to the users of both other cluster groups, the typical user in this cluster is younger. Members of this group have certain knowledge about the brand and can identify themselves with the brand in some way. In addition, they state that the brand is a traditional one based upon culture meaning plus prestige and status. However, they are in an unemotional relationship to the brand, indicated by a low loyalty compared to the other cluster segments. Furthermore, they don't perceive the brand to be unique or to serve a role model in representing the state of the art in this car segment. To them, this brand is replaceable. One can assume that the kind of users in this cluster perceive the cars of this brand as an ordinary or commodity good.

Cluster 2: The identity-oriented Traditionalists (39.5% of the subsample. n=181; 78.9% male. 21.1% female; mean age of 32.1, 25.6% with income 3000 EUR >)

Typical consumers in this cluster are significantly more than users of the other segments aware of the heritage aspect of the given brand. They have a higher knowledge and certain experiences with the brand and moreover, they perceive an identity fit between their self-concept and the brand. In sum, members of this group state that their lifestyle is equivalent to the brand's cultural meaning as a basis for a higher degree of brand loyalty and emotional attachment. Cars of the given brand are perceived to be unique and a role model in their product category and it can be assumed that many users in this group own or have owned such a car for private reasons.

Cluster 3: The boycotting Traditionalists (14.6% of the subsample. n=67; 83.6% male. 16.4% female; mean age of 35.1, 43.9% with income 3000 EUR >)

The smallest of all cluster segments encompasses consumers with the highest mean age and income. They absolutely deny a certain degree of heritage associated with the given brand. With reference to the statements of some cluster members, it can be assumed that – even if they have once driven or owned such a car – they refuse to accept the given brand as a heritage one. Some stated that they grew up with the brand's first series of models and boycott the present model range because it is perceived to be far away from the embosomed core values of the past.

Next Research Steps and Managerial Implications

The primary goal of this paper was to establish a multidimensional framework of value-based drivers of brand heritage, explore with special focus on the automotive industry a related factor structure, and identify market segments related to the value of the brand as perceived by different types of private drivers who can be distinguished along their perception of the brand heritage value aspects. A better understanding of the heritage of a brand and related value aspects in the eyes of consumers is valuable to both researchers and marketers: Particularly in times of high dynamics and purchase decisions that are associated with certain risks, the heritage aspect provides consumers with a feeling of security and wellbeing. Even if our results are only initial empirical hints, they should be addressed in further research and managerial practice in different ways.

First, we should emphasize the interaction between the different variables and factors in order to examine causal relations between the dimensions of perceived heritage value and their impacts on consumer attitudes, intentions, and the resulting behaviors. In addition, future studies should

compare our conceptual model of brand heritage with other complex brand constructs (e.g., brand image, brand personality) to ensure the validity of our model. Moreover, the restriction of the study to perceived value aspects associated with the given brand in our automotive study context may have limited the extent to which the conclusions can be generalized to consumer purchasing attitudes and behaviors in general. Therefore, the extension to and comparison with other product categories could enhance the conceptualization, measurement, and management of brand heritage.

For marketers, our study results may form the basis for a structured understanding of the value perception of the heritage aspect associated with their brand. Referring to our identified cluster groups, they might be able to base appropriate strategies on our empirically verified principles to improve purchase value for the different segments of consumers, who differ in their value orientations and individual heritage perceptions. To some, the heritage aspects are apparent but this does not lead to a higher loyalty to the brand. To others, the heritage of a brand is the reason to feel emotionally attached with the brand leading to a higher loyalty. A third group is heritage-conscious but prefers the products of the past and rejects a purchase in the present or the future. Due to the fact that in their opinion, the present car models do not incarnate the core values of the brand's first series of models, a lack in the brand's present communication strategy is obvious.

In sum, understanding the relevant aspects of why distinct groups of consumers with a positive attitude towards heritage show differences in brand loyalty may help to address individual needs to develop targeted marketing campaigns and improve perceived value.

For a copy of the reference list of this paper, please contact the corresponding author.
References removed for space considerations

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Social Capital and Innovation Capacity of Multinational Companies

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INTRODUCTION

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; Nahapiet & Ghoshal 1998; 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 contributing to corporate success in a number of important organizational activities like inter-unit and inter-firm resource exchange, the creation of

intellectual capital, inter-firm learning, supplier relationships, product innovation and entrepreneurship.

In global markets, the development and more effective, efficient and realistic management of social capital have gained special attention. To access adequate resources (e.g., information, technology, knowledge, access to distribution networks, etc.) and compete effectively in a globalized environment, companies are embedded in networks of business and social relationships that operate across national borders. With an increasing expansion and density of these local and global economic and social relations, the dynamic interplay of international and global aspects of social capital becomes critical on a global level.

Embedded in a networked world characterized by compression of time and space where survival is particularly connected with a company's capacity to sustainably out-learn and out-innovate its competitors (McElroy 2001), the production and integration of new knowledge as well as the recognition and improvement of the rate and quality of innovation capacity and innovation output is of particular importance. Apart from financial and human resources, knowledge and skills, a company's natural ability to self-organize around innovation on an overall enterprise level – the social capacity to innovate in a company – should also be seen as a significant source of competitive advantage.

To date, only little research has addressed the topic of developing an integrated view of a company's innovation capacity, especially incorporating the concept of social capital. To advance existing knowledge in the field of social capital, it might be an appropriate approach to start with the development of a theory based framework which contains basic hypotheses concerning the impact of relevant factors of social capital as well as human and financial capital on establishing high innovation capacity. 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 and 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 as well as human capital, and to identify relevant impacts of these dimensions on the innovation capacity of (multinational) companies. This paper is structured into three main sections. First, considering all different aspects of corporate capital to the company's success, this paper aims at developing a multi-dimensional conceptualization of corporate value which encompasses corporate financial, human and social capital. Our conceptual model leads us to believe that human and social capital are the major determinants of innovation capacity. Second, two sets of propositions are developed: the first deriving from the perspective that knowledge and skills of individuals within the company impact innovation capacity (human capital), and the second deriving from the perspective that innovation capacity is tied to the characteristics of the social network in which the company is embedded (social capital). Third, the model and propositions are discussed with reference to their managerial and research implications.

CONSTRUCT DEFINITION AND LITERATURE REVIEW: COMPONENTS OF CORPORATE VALUE

A comprehensive understanding of corporate value integrates all relevant actual and potential value sources and effects to the company's success into one single model. In our socially constituted world it is worthwhile to go beyond the traditional economic view of the relationship between capital and firm performance. For the purposes of this paper, regarding all prospective and directly attributable in- and outpayments, corporate value can be – according to Bourdieu's (1986) capital theory proposing economic, cultural and social capital – segmented into three

highly interrelated forms of capital: financial, human and social. Each form is, at some point, convertible into money.

Corporate Financial Capital. Corporate Financial Capital is immediately and directly convertible into money. It addresses direct monetary aspects and man-made aids to production owned by the company such as turnover, revenue, machines, land and equipment.

Corporate Human Capital. Including indirect-monetary contributions from individuals within the company, the Corporate Human Capital focuses on the value of personality, knowledge, skills, experiences and abilities possessed by the company through its individual members.

Corporate Social Capital. Social Capital – an umbrella concept used in a variety of disciplines to describe resources embedded within social networks (Adler & Kwon 2002) – 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 1985, p. 248), (b) “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” (Nahapiet & Ghoshal 1998, p. 243), (c) “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), or (d) “the existence of a certain set of informal values or norms shared among members of a group that permit cooperation among them” (Fukuyama 1997). 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).

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, corporate social capital is strongly associated to network structure and the value inherent in long-term relationships between individual employees, teams, departments and companies. Regarding multinational firms, corporate social capital is vitally important since they have to effectively integrate internal business units across geographic (e.g., country) boundaries, as well as manage relationships within a large external network of firms (Bartlett & Ghoshal 1998).

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 as well as the sum of actual and potential resources that might be available through and derive from that network.

CONCEPTUALIZATION AND PROPOSITIONS: CORPORATE HUMAN AND SOCIAL CAPITAL AS DETERMINANTS OF INNOVATION CAPACITY

Economic survival in a globally networked world increasingly depends upon the company's “widespread innovative capacity” (Bellandi 1989) and a continuous stream of new innovations, new patents, new ideas, new insights, and new bases of competitive advantage (McElroy 2001).

A company's capacity to innovate – its ability to perceive opportunities and use internal and external information to develop or adopt innovative products or production processes – is undoubtedly based on a company's financial (e.g., money, equipment, materials) and human resources (e.g., employees' knowledge, education level, attitudes and values, innovativeness and creativity). However, as innovations often require a new set of resources not employed in the current production, the capacity to innovate also depends on the nature of the social environment in which a company is embedded. In our knowledge-based economy, innovations are no longer conceived as a specific result of individual actions, but more as an interactive social process of learning and exchange involving relationships between firms with different actors (Kline & Rosenberg 1986). Since interdependence between actors generates an innovative system or an innovation cluster (e.g., Edquist 1997; Landry & Amara 1988; Acs 2000; Porter 1999; Porter 2000), the local and global context of a company exerts a significant influence on the nature and extent of innovative activities (Gertler et al. 1998, 2000).

In view of the fact that diverse forms of social capital influence the innovation capacity of a company, corporate social capital can be – beyond corporate financial and human capital dimensions – considered as a necessary precondition (or antecedent) to a company's collective capacity to collaborate around the production of new knowledge and all forms of innovation. Following a more interactionist instead of a conventional individualistic perspective (Schneider 1983) acknowledging the importance of social relationships and the social capital therein, “the combination of high-quality human capital and high-quality social capital is key to competitive advantage in the knowledge economy” (Lengnick-Hall & Lengnick-Hall 2003, p. 62).

Considering this background, it is important to identify, manage and control the influence of corporate human capital dimensions (i.e., employees' capacity to acquire and apply effectively new knowledge, capabilities and skills) as well as social capital dimensions (i.e., the quality of social relationships – enabling employees to communicate useful knowledge) on a company's innovation capacity. The research question is: Do human and social capital determine innovation in multinational companies, and if so, to what extent?

Figure 1 (above) shows the proposed conceptual model to investigate how far the capacity to innovate in a company is – apart from financial conditions – more closely tied to human or social capital dimensions.

Human Capital Dimensions

Focused on knowledge and innovation management, much research has concentrated on human resources, personal characteristics and development (e.g., Eagly & Chaiken 1993; Allen et al. 1992; Mayo & Marks 1990; Bearden et al. 1986; Hirschman 1980), proposing that contemporary firm's core competencies lie more in its intellectual base than its hard assets (Quinn 1992). The intellectual base of a company “represents a valuable resource and a capability for action based on knowledge and knowing” (Nahapiet & Ghoshal 1998, p. 245)

Aside from the dimensions we will concentrate on here, aspects like education level, attitudes, values, creativity, professional experiences and objectives, knowledge sharing potential willingness, cross-functional team working skills and collaborative spirit (Robertson & O'Malley Hammersley 2000; Swart & Kinnie 2003) are important to mention.

Expertise and Knowledge. Expertise and knowledge in the forms of employees' know-what and know-how (Quinn 1992), are important presuppositions of a company's capacity to innovate and the most valuable assets of a 21st century company. Forming the basis for individual and organizational competence (Hayek 1945; Penrose 1959), knowledge includes various elements: (a) facts, truths or principles, (b) ideas validated by various tests, (c) findings of research, as well as (d) understandings derived from experience (Merton 1973; Souder & Moenaert 1992).

In this context it is important to mention, that innovation may arise from internal or external sources of knowledge (Dogson 1991) and a company's own knowledge is a function of the knowledge that it has access to (Orr 1990). While employees can be viewed as "the ultimate knowledge creators and bearers" (Oltra 2003, p. 2), knowledge is a dynamic and complex system that changes as it interacts with the environment and can be defined as "a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knowers" (Davenport & Prusak 1998, p.5). Since failures often occur when individual actors may lack knowledge, or a project team does not include people with the required expertise in problem solving (Weick & Roberts 1993), innovation can only result from an effective knowledge management processes (Rosemberg 1982). A company should realize the range as well as the boundaries of its internal knowledge, recognize what is not known within its own field and to whom it can turn for the certain expertise that is needed (Pinkus et al. 1997).

This leads us to our first proposition,

P1a: Expertise and knowledge in terms of internal and external know-what and know-how are important preconditions of a company's capacity to innovate.

Motivation and Involvement. The confidence to create ideas that are novel and useful, the willingness to adopt the sense of the need to change in the workplace and the ability to implement those ideas to develop new products, services or processes as well as an innovative organizational culture that is supportive of these efforts are core contributors to creative outputs. Employee commitment, job satisfaction and the level of involvement within a particular issue area may increase the motivation to innovate or to disseminate information about a "product," as well as reduce the cognitive costs associated with processing new information, allowing for a greater accumulation of knowledge over time (Bloch & Richins 1983). In fact, even employees with exceptional talent and know-how will not be able to develop potential without the adequate motivation (Twining 1991).

Consequently,

P1b: The employee's individual motivation to innovate and the level of involvement within the innovation process determine the innovation capacity of a company.

Innovativeness. Employees with a certain personal characteristic known as "innovativeness", the predisposition to engage in creativity and experimentation through the introduction of new products, services as well as new processes, are among the first to support innovative efforts and new products. When they feel safe to innovate and perceive that their innovativeness contributes to the growth and profit of the company, employees are more likely to act innovatively and to experiment with new combinations of resources (Trice & Beyer 1993). Providing a forum that fosters employee innovativeness as the ability to create new solutions and not just relying on existing practices and models creates a basis for differentiation and competitive advantage (Zahra 1991). To enhance the innovativeness of employees, organizations should provide opportunities for development and training that facilitate creative decision-making, promote creativity and thus innovation (Sherman 1984; Cornwall & Perlman 1990).

Therefore, our next proposition follows:

P1c: Employee innovativeness and the willingness to support innovative efforts and new products contribute to a company's capacity to innovate.

Social Capital Dimensions

While the first set of propositions addresses attributes of corporate human capital that contribute to innovation capacity, the second set demonstrates that corporate social capital plays a key role in determining the capacity to innovate in a company.

In the interest of moving towards measuring corporate social capital, it is useful to distinguish the sources of social capital along three dimensions: structural (e.g., network links), relational (e.g., trust) and cognitive (e.g., shared goals, shared paradigms) (Nahapiet & Ghoshal 1998; Tsai & Ghoshal 1998; Bourdieu 1986). Each having two common characteristics (Coleman 1990), as they constitute some aspect of the social structure, and facilitate the actions of individuals or organizations within the structure, the three dimensions are highly interrelated: Through social interaction (structural), individuals or groups develop trusting relationships (relational) and common goals and values (cognitive) (Tsai & Ghoshal 1998).

The Structural Dimension of Social Capital. 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), structural capital considers the existence of connections between 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.

The structural properties of social relationships such as centrality and betweenness are crucial in generating ideas and in coordinating expert knowledge in social networks and play an important role on how different actors can access resources from within the network. The position of a network actor or rather a business unit in a network significantly influences the capacity to innovate in this organization (Tsai 2001), companies with a central position in col-laboration networks have a higher output of patents than less central firms (Powell et al. 1999). The availability of more potential exchange partners generate benefits deriving from the access to useful knowledge and to valuable and early information (Nahapiet & Ghoshal 1998). The number of network relations – so called network ties – influences and is proportional to the ability to acquire relevant information (Tsai & Ghoshal 1998).

Thus, the structure of social networks and the access to potential exchange partners can be regarded as important sources of new, external knowledge (Inkpen & Dinur 1998) and valuable channels for information benefits and knowledge diffusion and transformation, since knowledge is more easily transferred among networks partners than through market mechanisms (Shenkar & Li 1999).

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 individuals in terms of density, connectivity or hierarchy (Burt 1992, 1997; Coleman 1988; Granovetter 1973; Hansen 1999). Structurally categorized as strong or weak, the strength of a tie (Granovetter 1973) is characterized by a combination of the duration, emotional intensity, intimacy, and reciprocity of interactions. Networks of largely strong ties – established through intense and repeated interaction – enable effective and efficient communication and are important for sharing and transferring more complex information and knowledge that is sticky by nature, i.e. highly context dependent, confidential or complex (Hansen 1999; Larson 1992; Levin et al. 2002). However, due to their clique-like structure, strong tie networks may suffer from redundant contacts and may decrease innovativeness because of rigidity caused by excessive amounts of

normative cohesiveness. In contrast, weak ties, bridging structural holes (Burt 1992) between disparate social units, enable accessing a diverse range of other actors in terms of actor characteristics, available information, and perceptual scope (Burt 1997). From the novel and non-redundant information and opportunities that weak ties make available, value can be derived (BarNir & Smith 2002).

The existence of strong and weak ties impacts the potential innovation capacity of a company. Rather than being at the centre of a network, opinion brokers (Burt 1999) are located at the edge of several heterogeneous networks and play a key role in the flow of information because of existing social capital. Since they have relationships to members outside of the group that other group members lack, they span "structural holes" and possess unique access to potentially valuable information. They can act as a bridge between different networks, which gives them their 'Social Capital' and status as a local missionary or maybe a role model within the group. Looking for ideas outside their immediate community (Rogers 1995), opinion brokers activate their bridging weak ties to well-connected actors who are perceived to have some expertise (Bansal & Voyer 2000; Gatignon & Robertson 1986), receive potentially valuable, new information and then influence other strong tie-related actors (Weimann 1982). Consequently, having such a central brokering position enables the access to second-order resources, i.e. the resources that are not one's own but that are embedded in and mobilizable through social networks, like the knowledge of one's friends (Bourdieu 1980; Lin 1999), and the combination of these resources into new entrepreneurial activities (Burt 1992).

This leads us to our next proposition,

P2a: The structural properties of social capital – the availability of potential exchange partners and the access to external expert knowledge – represent the opportunity to share information and knowledge and are important preconditions of a company's capacity to innovate.

The Relational Dimension of Social Capital. Whereas the structural dimension of social capital refers to the presence or absence of relations between actors, yet, cannot fully describe the ability of an individual or organization to be able to access social resources, the relational source dimension of social capital focuses on the quality and content, rather than the structure, of social relationships. Apart from the access to potential exchange partners and resources, innovations require relational aspects such as openness, willingness to take risks, and trust, which is built up over years of informal in-teractions between company members (Axelrod 1984; Krackhardt 1992; Oliver 1997; von Hippel 1988).

Relational social capital, as prerequisite for the formation of effective and stable relationships, encompasses the emotional aspects of relationships (Naude & Buttle 2000) – 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).

The relational dimension of social capital, as measured by trust, trustworthiness and commitment, 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 relational 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 interorganizational 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). Research has examined the effects of the strength of ties on knowledge transfer and innovation (e.g., Hansen 1999; Uzzi 1996, 1997, 1999). 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) – an important aspect in the process of innovation (Kline & Rosenberg 1986; Rothwell 1992).

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), and play a crucial role in the diffusion of innovations (Rogers 1995).

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 and reveal rich exchanges of information and proprietary "know-how". 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.

Therefore, we propose that:

P2b: The relational properties of social capital – the level of trust and the strength of preference for a particular exchange partner – represent the willingness and motivation to share information and knowledge and determine a company's innovation capacity.

The Cognitive Dimension of Social Capital. The cognitive dimension of social capital – one of the least discussed dimensions when referring to social capital (Nahapiet & Ghoshal 1998) – addresses the need for a common understanding or "vocabulary" to build social capital. Related to the relational dimension, it will increase the strength of preference for a potential exchange partner, since similarity (i.e., shared norms and values) tends to influence relationships (Cialdini 1993).

Through its shared meanings, language, symbols and codes, the cognitive dimension facilitates the sharing of information and knowledge (Weber & Camerer 2003), which is necessarily important since innovation process involves the exchange of codified and tacit knowledge (e.g.,

Patel & Pavitt 1994; Winter 1987). The existence of shared language and codes is vital for efficient knowledge transfer and integration among individuals or groups and act as vehicles for integrating individual understandings and experiences. Thus, only if they share a common language, knowledge can be transferred and different companies can interact and gain access to people and their information about the other company.

While the cognitive dimension of social capital does not have any affect on the overall resource exchange and combination of resources (Tsai & Ghoshal 1998), “organization members who share a vision will be more likely to become partners sharing or exchanging their resources” (Tsai & Ghoshal 1998, p. 467). The cognitive dimension allows network actors to determine common patterns of behavior, develop expectations on what future patterns of behavior will occur and understand when new knowledge or information is brought into the network, to learn from new information and develop new knowledge which can then be transmitted through the network. Cognitive social capital is vitally important to multinational companies to integrate business units operating in multiple and diverse country markets and cultures – by shared values, goals, a mutual understanding and global vision, they can be bound together, solve possible bottlenecks, and fine-tune their decision-making.

Overall, the cognitive dimension of social capital describes the ability of network actors to create understandings of network behavior and facilitates the flow of valuable information and knowledge.

Consequently, the following proposition emerges:

P2c: The cognitive properties of social capital – a common understanding and the level of shared norms, values and beliefs – represent the ability to share information and knowledge and affect the innovation capacity of a company.

Even though we have just made a very first step to conceptualize innovation capacity in view of identifying corporate value as an overall measure to focus managerial planning, our integrative framework sketched in figure 1 seems to be worth focusing in further research as well as in managerial practice.

MANAGERIAL AND RESEARCH IMPLICATIONS

Limitations and Research Implications

Focusing on the link between individual attributes and social resources, this paper has examined the role of social context in determining a company’s capacity to innovate. We suggest that innovation capacity is rooted in the presence of a certain set of individual characteristics and in the social environment in which a (multinational) company is embedded.

Of course, our model is only a first step and should be further developed in different ways. First, the different propositions sketched above will have to be elaborated more into depth. 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 human and social capital and their impact on a company’s capacity to innovate. In this context we will also have to add the conceptualization of different forms of innovation capacity und their explanation in view of human and social capital impacts. 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 human and social capital to portray high corporate 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 dimensions of human 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 innovative local and global 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 (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 innovation capacity integrating the concept of social capital. The social capital dimensions could be used as a basis to develop a more robust measurement instrument to measure and manage a company’s capacity to innovate.

Managerial Implications:

Having more robust measures of innovation capacity is of course as well a key for managerial practice. In view of our propositions concerning the impact of social capital on the company’s innovation capacity, managers might discover the existence and relevancy of internal and external information, knowledge and other resources in their local and global business network which are either already available or easily accessible. Overall, taking the interplay between human and social capital into account our framework already might lead to the opportunity of a better understanding of the conditions and drivers of a company’s capacity to innovate and to come to a broadened view of corporate value. This will of course enlarge the efficiency of identifying and selecting different employee groups and of encouraging appropriate key employees or business units to leverage and use their innovation potentials.

REFERENCES

- Acs, Z. (2000): *Regional Innovation, Knowledge and Global Change*, New York, Printer.
- Adler, P. S./Kwon, S.-W. (2002): *Social Capital: Prospects for a New Concept*, in: *Academy of Management Review*, 27, 17-40.
- Allen, C.T./Machleit, K.A./Kleine, S.S. (1992): *A comparison of attitudes and emotions as predictors of behavior at diverse levels of behavioral experience*, in: *Journal of Consumer Research*, Vol. 18 pp.493-504.
- Axelrod, R. M. (1984): *The evolution of cooperation*. New York, NY: Basic Books.
- Bansal, H. S./Voyer, P. A. (2000): *Word-of-Mouth Processes Within a Services Purchase Decision Context*, in: *Journal of Service Research*, 3 (2), 166-177.
- BarNir, A./Smith, K. (2002): *Interfirm Alliances in the Small Business: The Role of Social Networks*, in: *Journal of Small Business Management*, 40 (3), 219-232.
- Bartlett, C./Ghoshal, S. (1998): *Managing Across Borders: The Transnational Solution*. Harvard Business School Press.
- Bearden, W.O./Calcich, S.E./Netemeyer, R.G./Teel, J.E. (1986): *An exploratory investigation of consumer innovativeness and interpersonal influences*, in: Lutz, R.J (Eds), *Advances in Consumer Research*, Association for Consumer Research, Provo, UT, Vol. 13.
- Bellandi, M. (1989): *Capacita` innovativa diffusa e sistemi locali di imprese*. In: Becattini, G. (Ed.), *Modelli Locali di Sviluppo*. Il Mulino, Bologna.

- Bloch, Peter H./Richins, M. L. (1983): A Theoretical Model for the Study of Product Importance Perceptions, in: *Journal of Marketing* 47 (Summer): 69–81.
- Brown, J. J./Reingen P. H. (1987): Social Ties and Word-of-Mouth Referral Behavior, in: *Journal of Consumer Research*, 14 (3), 350-362.
- Bourdieu, P. (1980): Le capital social: Notes provisoires. *Actes de la Recherche en Sciences Sociales* 31, 2-3.
- Bourdieu, P. (1985): Sozialer Raum und ‚Klassen‘. Zwei Vorlesungen. Frankfurt a. M..
- Bourdieu, P. (1986): The forms of capital, in: Richardson, J. G. (Ed.) *Handbook for Theory and Research for the Sociology of Education*, 241-258.
- Burt, R. S. (1992): *Structural holes: The social structure of competition*, Cambridge, Mass.: Harvard University Press.
- Burt, R. S. (1997): The Contingent Value of Social Capital, in: *Administrative Science Quarterly*, 42, 339-365.
- Burt, R. S. (1999): The Social Capital of Opinion Leaders, *Annals* 566, 37-54.

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References edited for space considerations.

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Is It Gas Worthy? Exploring the Effects of Monetary and Non-Monetary Discounts on Purchase Decisions

Keywords: Pricing, Discount Framing, Monetary Discounts, Non-Monetary Discounts

INTRODUCTION

While the search for effective and efficient marketing strategies continues, there is wide evidence that companies are now switching from advertising to sales promotion to market their products. Sales promotions are utilized by manufacturers to encourage purchases by consumers. Among their advantages is the ability to time specific sales strategies and to directly measure promotional effectiveness. While there are many different forms of promotion, they have the common theme of directly offering potential direct benefit to the customer related to their product or service purchase, e.g., discounts. This paper explores a less direct approach to promotional strategy.

Price discounts are by far the most common form of sales promotion employed by marketers, and their use has steadily increased in recent years. Blattberg & Neslin (1991) confirmed that the number of price reductions offered by different department stores increased from six to nineteen percent of total sales between 1963 and 1986; moreover, coupons distributed by manufacturers have more than quadrupled in the past two decades and discounts have deepened by an average of 8 % annually (Montaldo, 2007). In addition, research on consumer's response to different pricing and sales promotion tactics has been plentiful in the past three decades, and marketers are

still looking for new ways to make products and services more attractive and affordable to target consumers.

The research of price promotions typically falls into one of two categories. The first involves the consideration of antecedent consumer-background variables, e.g., that “deal prone consumers were highly sensitive to the value of a promotion compared to other available alternatives in a condition of high absolute dollar savings” (DelVecchio, 2005). The second stream of research focuses on how various means of price promotions will affect the behavior of different consumers. Chen, Monroe and Lou (1998) proposed that, for higher priced items, consumers saw promotions framed in dollars (as opposed to percentage terms) to be of greater value. The opposite was true for lower priced items.

In this research we will focus on the discount form; specifically, we will compare the effects of a percentage of price discount, a dollar discount, and a monetary discount framed in non-monetary terms (e.g., framing a dollar discount as gallons of gas) on consumers’ perceptions, offer attractiveness and purchase intention.

CONCEPTUAL MODEL

Kahneman and Tversky (1979) found that positive framing of problems emphasizes benefits, while negative framing emphasizes risks. Consequently, different presentations of the same choice will not yield the same preferences. Tversky and Kahneman (1986) later generalized this to a set of principles that establish limits on the presumed invariance that underlies rational choice; rules of invariance are obeyed only when they are transparent. Framing has an effect of reducing transparency. Extending on Kahneman and Tversky’s Prospect Theory (1979), Thaler (1985) proposed that consumers respond to certain local temporal budget constraints where expenditures are grouped into categories and expenditures are considered within their respective categories. Thus, while considering any choice prospect, consumers will map that prospect into similar purchase categories and when a match occurs, the purchase will be evaluated taking into consideration the time and category specific budget constraints.

Thaler (1985) added that consumers segregate purchases from rebates through mental accounting; since rebates arrive in the form of a physically separate check sometime after the original purchase is made, customers frame them as gains as opposed to discounts. Thaler (1985) also found that consumers perform mental accounting on the transactional gains and losses based on the differential responses to such outcomes. Prospect theory (Kahneman and Tversky, 1979) holds that an individual’s value function is concave (risk-averse) over gains and convex (risk-seeking) over losses; it can be shown that people psychologically segregate multiple gains but integrate losses. Since most promotions are representative of a small gain relative to a larger loss (i.e. price paid), individuals will either segregate the gain or integrate it with the price and consider is a reduced loss.

Diamond and Campbell (1989) established that if the promotion is monetary (and are the same metric as the item price) a consumer will integrate it and encode is as a reduced loss. If the promotion is nonmonetary (additional units of the product, which would be framed in different metrics as the item price) the consumer will consider it a gain. Diamond & Campbell (1989) believed that if promotions incorporating premiums (or extra amounts of product) are likely to be framed as a gain, these promotions are less likely to be considered in conjunction with other pricing information. Hence, regardless of the fundamental definition of reference price, monetary promotions are expected to affect the reference price of the product more than “value added” (nonmonetary) promotions (Diamond 1989). The results showed that a discount will often yield a lower reference price than other forms of promotion.

Diamonds (1992) explained that the promotion frame strongly affected whether a simple or complex decision rule would be used when determining its value. The study established that monetary promotions were likely to be analyzed using a “value assessment” rule whereas nonmonetary promotions were analyzed with a “rapid acceptance/rapid rejection” decision rule. Further support showed that heavy coupon user’s utilized complex decision rules (value assessment) more so than light coupon users (which most often used rapid rejection/rapid acceptance).

Sinha and Smith (2000) extended Diamond and Campbell’s work to find that consumer perceptions of transaction value will vary across economically equivalent price promotions, extra-product promotions and mixed promotions. In particular, perceived transaction value will be highest for price promotions, followed by extra-product promotions and then mixed promotions.

Another factor to consider when studying non-monetary discounts is whether a product is a stock up product or a non-stock up product, a factor Li, Sun and Wang (2007) found to be very important. Items that cannot be stocked up (i.e. milk, cheese, beef) are apt to have different discounts than items that can be stocked up (i.e. pasta, canned goods, animal food). Consumers are more likely to derive higher value from extra-product promotions in the stock up category as opposed to the non-stock up category (which is more apt to offer a “Buy one, Get one” frame). While a consumer can stock up two (or more) cans of soup from an extra product promotion, they may not benefit from an extra gallon of milk.

Guided by such thinking, we designed the following experiment to examine in further detail whether we could frame a monetary discount as non-monetary to influence consumer preferences and intentions. Specifically, we will compare the framing effects of dollar and percentage of price discount to those of gallons-of-gas worth discount on consumer purchase intentions and perception of discount attractiveness.

METHODOLOGY

Sample

To explore our effects an online survey was conducted. One hundred and sixty-eight subjects, mainly undergraduate students, took the study for extra-credit.

Stimuli and Design

After the study instructions, respondents were presented with one of the six offers that are manipulated in a 2 x 3 between subjects design. The first factor is the price level where the laptop and the Blu-ray disc player represent the high and medium price levels respectively; i.e. the dollar amount of the offer seen: \$115 for the medium price level and \$ 924 for the high price level. The dollar values were chosen based on the results of a 10 person focus group. The second factor is the discount frame percentage (23%), dollar (\$ 35 for Blu-ray, \$ 275 for laptop), and gas worth (10 gallons worth of gas, 78 gallons worth of gas). It was made clear to the respondents, in the instructions, that discount was in the form of “instant savings” on price, not a rebate, gift card, or gas card, thus savings framed as gallons of gas will still be given as dollars off the price. After seeing one of the offers, respondents were asked, “How attractive (or an attractive) was the offer?” and responded on a 9-point scale with “Very Unattractive” at one and “Very Attractive” at nine as anchors. A three-item scale was also utilized to measure the respondents purchase likelihood/ purchase intentions.

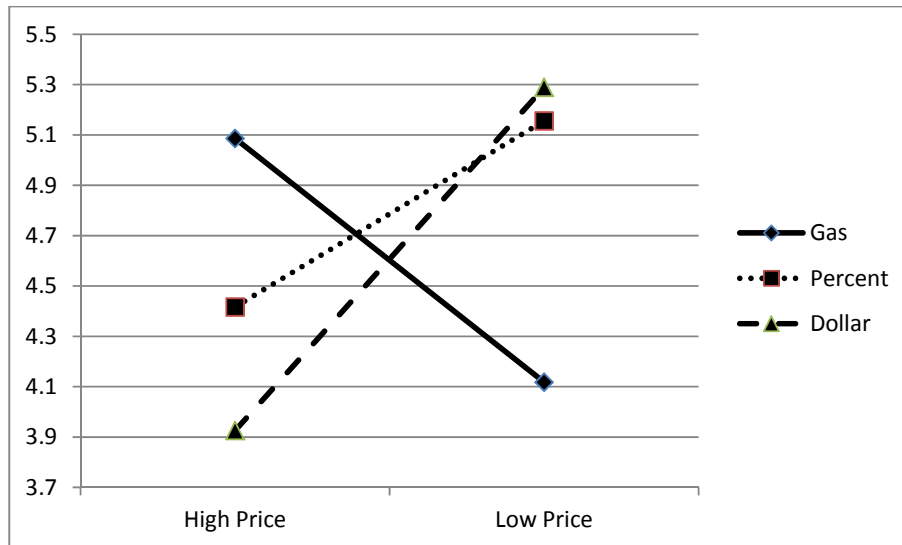
RESULTS

The authors conducted a 3 x 2 MANOVA (Frame: percentage, dollar, gas) x (Price: medium, high) with participation intentions and offer attractiveness as dependent variables. The results of

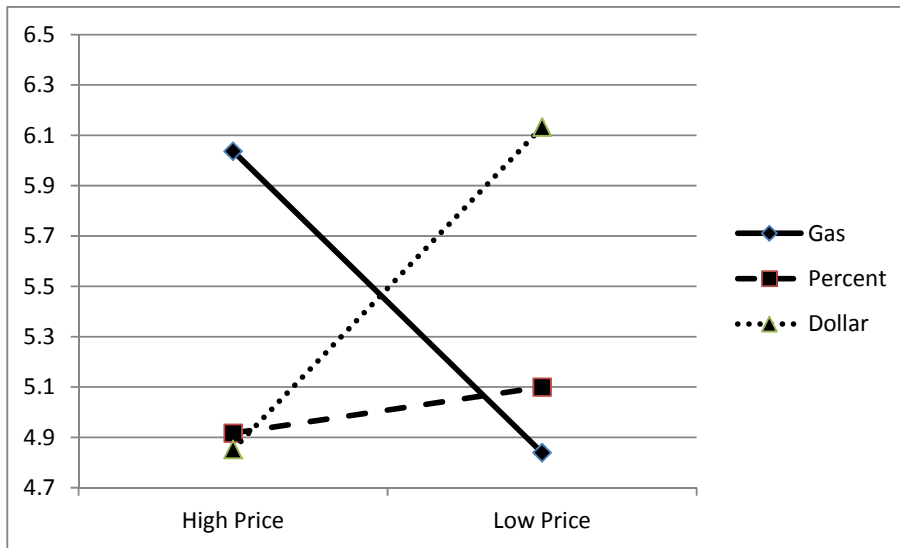
the repeated measures MANOVA showed a significant two-way interaction between price and frame on both purchase intention and offer attractiveness ($F(2, 168) = 7.292, p < 0.001$; and $F(2, 168) = 6.439, p < 0.002$ respectively). The two-way interaction of price and frame are provided in Figures 1 and 2.

A planned comparison of the two way interaction was run and it showed that at medium price level: the mean participation intention for gas-worth frame was significantly lower than that of percent frame ($M_{\text{Gas}} = 4.118$ vs. $M_{\text{Percent}} = 5.156, p < .021$) and that of dollar frame ($M_{\text{Gas}} = 4.118$ vs. $M_{\text{Dollar}} = 5.289, p < .010$). At high price level, on the other hand, the mean participation intention for gas-worth frame was significantly higher than that of dollar frame ($M_{\text{Gas}} = 5.167$ vs. $M_{\text{Dollar}} = 3.926, p < .010$) but only marginally higher than that of percent frame ($M_{\text{Gas}} = 5.167$ vs. $M_{\text{Percent}} = 4.917, p < .100$).

The planned comparison also showed that at medium price level: the mean offer attractiveness for gas-worth frame was significantly lower than that of dollar frame ($M_{\text{Gas}} = 4.839$ vs. $M_{\text{Dollar}} = 6.133, p < .005$) but not that of percent frame ($M_{\text{Gas}} = 4.839$ vs. $M_{\text{Percent}} = 5.100, p < .569$). At high price level, on the other hand, the mean offer attractiveness for gas-worth frame was significantly higher than that of dollar frame ($M_{\text{Gas}} = 5.962$ vs. $M_{\text{Dollar}} = 4.852, p < .025$) and that of percent frame ($M_{\text{Gas}} = 5.962$ vs. $M_{\text{Percent}} = 4.917, p < .040$).



Purchase Intentions Means



Attractiveness Means

DISCUSSION

Exploring promotional effectiveness appears to be more important in light of recent economic turbulence and the necessity of retailers and managers to attract consumer dollars in an increasingly turbulent environment (Gammell and Clout, 2008). Pauwels et al., 2004 illustrates how price promotions can be linked to financial performance in the automobile industry and highlights the importance of understanding the effects of price promotions. The results of the present study indicate that respondents do perceive the gallons-of-gas worth frame as more attractive than a dollar or percentage of price savings at high prices, but not at low prices. Added to that finding is that the “gas-worth frame” also increased the respondents purchase intentions significantly. This line of research is still at its early stages of development. The authors still have more factors to explore that might impact the effectiveness of gas-worth framing (e.g., consumer inclination to use coupons/ discounts, consumer knowledge and consumer knowledge asymmetry, etc.).

There may also be significant cross-cultural implications for this work. While there few direct national comparative studies of discount strategies, there are related studies that suggest that cultural differences uniquely shape the decision framing process differently in each national context. Chen et al (2005) for example found that there were significant cultural differences in consumer impatience that appeared strongly related to measures of national cultural differences. Impatient cultures framed decisions to favor immediate over potentially superior choices. Similarly, Mann (1998) noted significant national-cultural differences in self-reported decision-making style and confidence. When forced to deal with conflict, the research found different framing mechanisms across cultures. In a recent study, Arkes et al. (2010) found significant cultural differences in the framing of reference points. In their research, participants adjusted their reference points more after a gain than after a loss. They also found that with real money incentives, Asians made larger adaptations than their American counterparts. Given these and other studies, the authors feel there is need to extend this research to include cross-cultural contexts.

REFERENCES

Arkes, H.R., Hirshleifer, Jiang, D. and S.S. Lim, 2010. A cross-cultural study of reference point adaptation: Evidence from China, Korea, and the US.

- Blattberg, Robert and Scott Neslin 1990. Sales Promotion: Concepts, Methods and Strategies. Englewood Cliffs, NJ: Prentice Hall.
- Campbell, Leland and William Diamond 1990. Framing and Sales Promotions: The Characteristics of a Good Deal. *Journal of Consumer Marketing*, 7, 4 (Fall).
- Chen, H., Ng, S. and Rao, A.K., 2005. Cultural differences in consumer impatience, *Journal of Marketing Research*, 42(3), 291-301.
- Chen, Shih-Fen, Kent Monroe and Yung-Chien Lou 1998. The Effects of Framing Price Promotion Messages on consumers' Perceptions and Purchase Intentions: research Perspectives on Retail Pricing. *Journal of Retailing*, 74 (September).
- DelVecchio, Devon, H. Shanker Krishnan, and Daniel Smith 2007. Cents or Percent? The Effects of Promotion Framing on Price Expectations and Choice. *Journal of Marketing*, Vol. 71 (July).
- Diamond, William and Leland Campbell 1989. The Framing of Sales Promotions: Effects on reference Price Change. *Advances in Consumer Research* Vol. 16, pp. 241-247.
- Diamond, William and Leland Campbell 1992. Just What is a Dollar's Worth? Consumer Reactions to Price Discounts vs. Extra Product Promotions. *Journal of Retailing*, 68, 3 (Fall).
- Kahneman, D. and Tversky, A. 1979. Prospect Theory: An Analysis of Decision Under Risk. *Econometrica*, 47 (March), 363-391.
- Li, Shu, Yan Sun and Yong Wang 2007. 50% Off of Buy One Get One Free? Frame Preference as a Function of Consumable Nature in Dairy Products. *The Journal of Social Psychology*, 147(4).
- Mann, L. 1998. Cross cultural differences in self-reported decision making style and confidence, *International Journal of Psychology*, 33(5), 325-335.
- Montaldo, Donna 2007. Marketers Offer Additional \$37 Billion in Coupon Savings in 2005. www.coupons.about.com
- Sinha, Indrajit and Michael Smith 2000. Consumers' Perceptions of Promotional Framing of Price. *Psychology and Marketing*, Vol. 17 (March), 3.
- Thaler, Richard 1985. Mental Accounting and Consumer Choice. *Marketing Science*, 4 (Summer), 199-214.
- Tversky, A. and Kahneman, D. 1986. Rational choice and the framing of decisions. *Journal of Business*, 59(4, part 2), S251-S278.
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Market Segmentation in the Luxury Industry based on Materialism and Consumer Vanity

INTRODUCTION

Although there is lot of research dedicated to luxury brands and the management of luxury brands, little is yet known about how best to market and monitor them (Vigneron & Johnson, 1999, 2004; Wiedmann et al. 2009). Against a background of dynamic growth in the global luxury market, it is critical for luxury researchers and marketers to understand the reasons why consumers buy luxury, what they believe luxury is, and how their perception of luxury value affects their buying behavior. Regarded as a common denominator that can be used to define

consumption across cultures (Bourdieu, 1984; Dubois & Paternault, 1997), luxury is a key factor in differentiating a brand in a product category, (All  r  s, 1991; Kapferer, 1997) as well as a central driver of consumer preference and usage (Dubois & Duquesne, 1993).

Past research efforts in the luxury product market have analyzed the consumption behaviors of affluent consumers (e.g., Veblen 1899; Stanley, 1988; Hirschman, 1988), studies on luxury brand types (e.g., Dubois & Duquesne, 1993; Andrus et al., 1986), the determinants of the acquisition of luxury products (e.g., Mason, 1992; Dubois & Laurent, 1993; Dubois & Duquesne, 1993), 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; Wang & Waller, 2006). However, there is currently little agreement about the dimensions of luxury product value as perceived by customers. With regard to consumer buying motives, the notion of "to impress others" still more or less serves as a 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 their purchase behavior outcomes (Eagly & Chaiken, 1993; Mandrik, 1996; Sallot, 2002). However, from a broader perspective in exploring customer perceptions of and motives for purchasing luxury, it is not sufficient to explain the whole picture of luxury market consumption with socially oriented 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, Price, & Feick, 2003). A personally oriented type of consumption should also be considered in the marketing management of luxury brands.

In the line of studies dedicated to analyze links between consumers' personality traits and their marketplace behaviors, much of the work has focused on consumer characteristics like involvement and materialism and related effects on individual's purchase and consumption of specific types of products (Belk 1985; Richins & Dawson 1992, Mittal 1988, 1989; Laurent & Kapferer 1985; Zaichkowsky 1985, 1986; O Cass 2000a). With regard to the consumption of products that possess a high social and image dimension, e.g., fashion clothing and luxury items in general, many consumers appear to utilize material possessions to portray images that display success and status. Given that materialistic values represent an important influence on consumer behavior, it is important for both marketing researchers and practitioners to explore individual difference variables that characterize consumption and direct possession related behavior (Belk 1984, 1985; Richins 1987; Richins & Dawson 1992). An important personality construct that affects materialistic orientation and usage of products to portray image is gaining prominence in the psychology and consumer behavior literature: consumer vanity. It describes a person's definition of one's self-identity in terms of the perception of social achievements and physical appearances (Durvasula et al. 2001).

In this paper, we establish a multidimensional framework of vanity-related consumer attitudes and explore the relationships between the vanity scales and the materialism construct as a general basis for market segmentation purposes in luxury brand management.

REVIEW OF KEY CONSTRUCTS

The Consumer Vanity Literature

The phrase "vanity" has been used in many different contexts in the literature (Netemeyer et al. 1995). To develop a broad definition of consumer vanity in the context of luxury brands, it is necessary to examine the relevant literature ranging from marketing aspects (e.g., consumer behavior) to sociology, psychology and even philosophy (e.g., Cash & Brown 1987; Solomon

1985, 1992; Lasch 1978; Lyman 1978). Even though a specific formal definition cannot be found, two aspects of vanity emerge: (a) physical appearance aspects, and (b) achievement aspects, both referring to a concern for and a positive perception of the physical appearance and the personal achievements (Netemeyer et al. 1995). The concern-related components of consumer vanity (the concern for physical appearance and for social achievements) are considered as *personal values* in present research supportive of Richins and Dawson's (1992) approach towards the construct of materialism (Wang & Waller 2006). In contrast to this, the perception-related components of consumer vanity (the positive view and perception of physical appearance and social achievements) are contemplated as *self-concept* (Wang & Waller 2006).

The Materialism Literature

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, possessions as a "symbol of success" and their acquisition play a central role in the definitions of materialism (Daun 1983; Bredemeier & Campbell 1960; Wackman et al. 1972; Heilbroner 1956; Rassuli & Hollander 1986; Du Bois 1955). More specifically, materialism can be described as the degree to which individuals principally find possessions to play a central role in one's life. A growing body of research suggests that people engage in consumption behaviors that indicate to others that they are successful (e.g., Belk 1985; Mason 1981; Richins & Dawson 1992). Therefore, materialistic oriented consumers rely heavily on external cues, favoring those possessions that are worn or consumed in public places (Richins & Dawson 1992; O'Cass & Muller 1999). This can be associated with the understanding of (materialistic) individuals that possessions serve as a signal or source of communication to others for portraying and managing impressions of who they are and what their status or position is (Douglas & Isherwood 1979; Belk 1985). Recently, the body itself has been viewed as an object of materialism where it takes on the quality of possession or ownership (Belk 1988; Richins 1991).

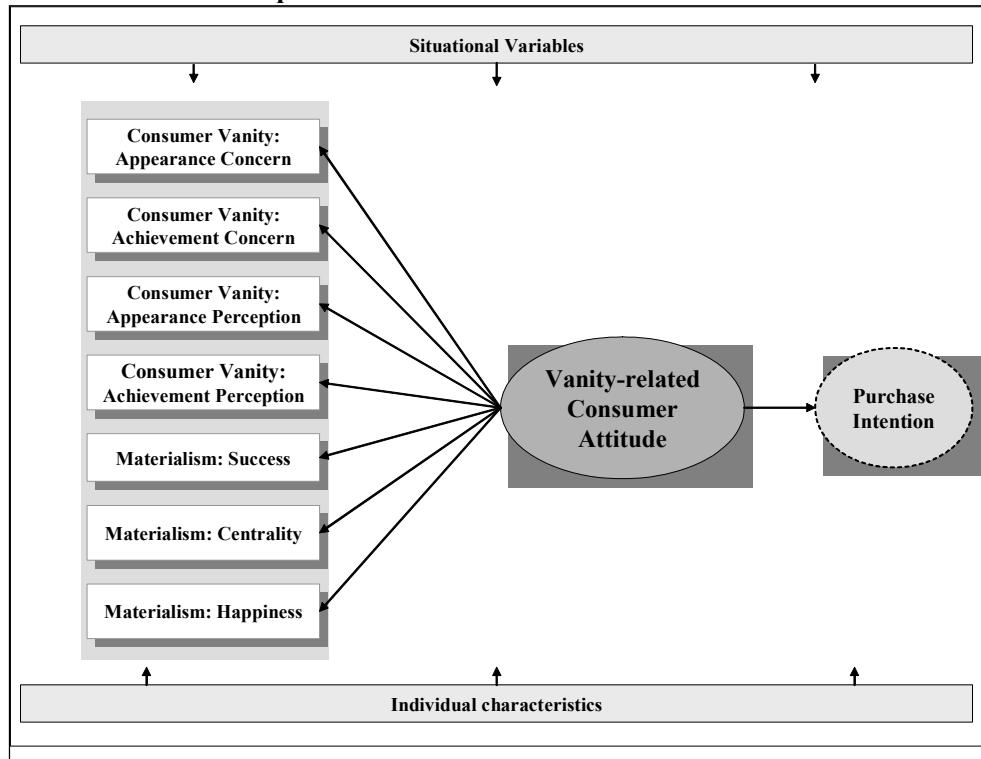
CONCEPTUAL MODEL: DETERMINANTS OF VANITY-RELATED CONSUMER ATTITUDES

The primary goal of this paper is to establish a multidimensional framework of vanity-related consumer attitudes and the relationships between the vanity scales and the materialism concept. *Figure 1* (following) shows the proposed conceptual model to investigate the strongly correlated but not identical factors and origins of vanity-related consumer attitudes. Although these factors operate independently, they interact with each other and have different influences on the vanity-rooted consumer attitude and behavior. It may serve as the basis for further identification and segmentation of different types of vanity consumers across different cultures and national boundaries.

Appearance concern as vanity-related consumer attitude – Vanity basically contains an appearance aspect, which incorporates a positive and maybe inflated view of one's physical appearance (Netemeyer et al. 1995). This leads to the fact, that a person's concern for their appearance is one of the major influence dimensions which affects the construct of consumer vanity.

Achievement concern as vanity-related consumer attitude – Furthermore, vanity also encompasses a specific achievement aspect, which regards a specific concern for one's personal achievements (Netemeyer et al. 1995). In line with the above mentioned component of appearance concern, this dimension of achievement concern regards these two components as personal values (Wang & Waller 2006).

FIGURE 1: The Conceptual Model



Appearance perception as vanity-related consumer attitude – Consumer vanity additionally consists of a third component known as appearance concern, which comprehends again the described physical appearances of a person in conjunction with a perception aspect as a multidimensional construct in line with a person’s self-concept (Bracken 1996).

Achievement perception as vanity-related consumer attitude – Further, vanity encompasses another dimension, the achievement perception, regarding a specific perception of the personal achievements (Wang & Waller 2006). In context with the above mentioned component of appearance perception, this last dimension of achievement perception regards these two components as a person’s self concept (Wang & Waller 2006).

Materialism as vanity-related consumer attitude – Referring to an individual’s belief that possessions symbolize one’s identity and to the importance attached to possessions as objects (Richins & Dawson 1992), materialistic consumers use possessions that are worn or consumed in public places for portraying and managing impressions. Related to vanity-oriented behavior, materialism is used here to refer to individuals giving possessions a central place in life and believing them to be a sign of success and satisfaction (Fournier & Richins 1991; Richins & Dawson 1992) and as a source of happiness. Materialists use possessions to convey status, success and prestige (Douglas & Isherwood 1979) what seems to be associated with the understanding of vanity-related consumer attitudes and behavior. This reasoning leads us to our research hypothesis:

H: Higher levels of consumer vanity will be positively related to a personal value system that is more materialistic.

METHODOLOGY

The Questionnaire, Sample and Data Collection

To measure the underlying dimensions of vanity-related consumer attitudes, we did both, using already existing and tested measures and generating further items resulting from exploratory interviews. As a result, the questionnaire included the items of appearance concern, appearance perception, achievement concern and achievement perception of a vanity scale developed by Netemeyer et al. (1995), which have been validated by Wang and Waller (2006) for US and Chinese customers. A German version of the 21-item consumer vanity scale was created using back translation in order to achieve an equivalence of meaning (Malhotra et al. 1996). Items were rated on five-point Likert scales (1 = strongly disagree to 5 = strongly agree) because they are more commonly used in Germany than the seven-point scales used by Wang and Waller (2006). With regard to materialism, we relied on a German version of Richins and Dawson's (1992) materialism scale, which consists of 18 items that were rated on a five-point Likert scale, too. The questionnaire was face validated twice using exploratory interviews (Malhotra et al. 1996) and pre-tested with 50 respondents. A total of 768 usable questionnaires were obtained in summer 2007. *Table 1* provides a description of the sample characteristics.

RESULTS AND DISCUSSION

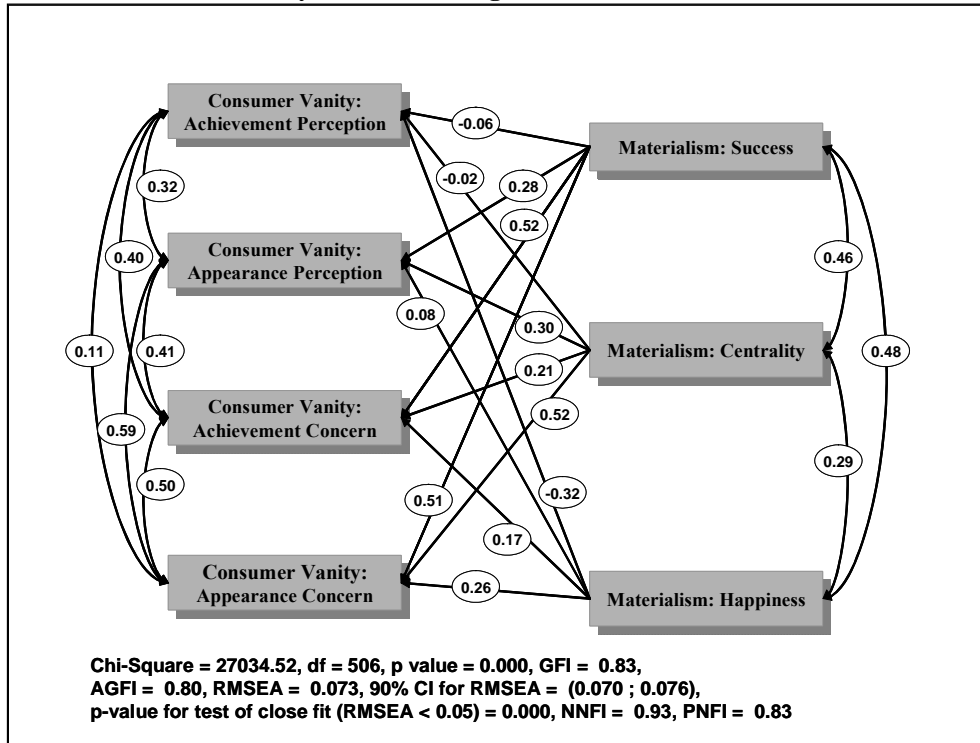
Data were analyzed in three stages: First, the various dimensions underlying vanity-related consumer attitudes were uncovered by a factor analysis using the principal component method with varimax rotation. The factor analysis produced a seven factor structure with a Kaiser-Meyer-Olkin measure of .887 that summarized 34 items with medium (>0.5) up to high factor loadings (>0.8); the factors' Cronbach's alpha were .701 up to .929. *Table A2* shows our proposed factor structure that is identical to those that appear in the literature: appearance concern, achievement concern, appearance perception, and achievement perception related to consumer vanity (see Netemeyer et al. 1995), and acquisition centrality, possession defining success, and the acquisition as the pursuit of happiness related to materialism (see Richins & Dawson 1992). A brief factor description is given in *Table 1* (following). To examine the hypothesized relationship between consumer vanity and materialism, after EFA and reliability analysis, a confirmatory factor analysis (CFA) using the LISREL 8 software was conducted.

As shown in *Figure 2*, the hypothesized seven-factor measurement model representing the four correlated components of the vanity construct and the three materialism components appears to fit the data reasonably well. The results suggest that the hypothesized measurement model had a reasonable fit with the German data and supports significant relations between consumer vanity traits and materialism.

TABLE 1: Factor Description

<i>Factor 1: Consumer Vanity - Achievement Perception</i>	This factor measures the individual's perception of the personal achievements. Individuals scoring highly on this factor consider themselves as a successful person in a professional sense. The item that best describes this factor is " <i>I am a good example of professional success.</i> " (.822).
<i>Factor 2: Consumer Vanity - Appearance Perception</i>	This characteristic represents the individual's perception of his/her physical appearance; high scorers on this factor feel and state that they are very attractive. It is best described by the items, " <i>My body is sexually appealing.</i> " (.853), " <i>I have the type of body that people want to look at.</i> " (.844), and " <i>I am a very good-looking individual.</i> " (.840).
<i>Factor 3: Consumer Vanity - Achievement Concern</i>	High scorers on this factor show a specific concern for their personal achievements. For male and female consumers, the highest loading item was, " <i>Achieving greater success than my peers is important to me.</i> " (.815).
<i>Factor 4: Consumer Vanity - Appearance Concern</i>	This factor represents an individual's concern for his/her appearance. High scorers on this trait perceive that " <i>I am very concerned about my appearance.</i> " (.776), " <i>It is important that I always look good.</i> " (.772), and " <i>Looking my best is worth the effort.</i> " (.771).
<i>Factor 5: Materialism - Success</i>	High scorers on this factor tend to perceive material possessions as a sign of success. The highest loading item was – with a negative loading: " <i>I don't place much emphasis on the amount of material objects people own as a sign of success.</i> " (-.776).
<i>Factor 6: Materialism - Centrality</i>	This factor measures the extent to which an individual perceives material things to play a central role in his/her life. This factor is best described by the items, " <i>I usually buy only the things I need.</i> " (-.856) and " <i>I enjoy spending money on things that aren't practical.</i> " (.779).
<i>Factor 7: Materialism - Happiness</i>	Measuring the extent to which material possessions add to individual's happiness, this factor is best described by one item, " <i>My life would be better if I owned certain things I don't have.</i> " (.830).

FIGURE 2: Confirmatory Factor Loadings and Structural Relations



In the next step, the seven factor structure scores for each respondent were saved and consequently used in stage two for clustering them into market segments. We used both hierarchical and non-hierarchical clustering techniques: An initial hierarchical clustering procedure was employed to obtain a candidate number of clusters and seed points for a k-means cluster analysis. To identify the right number of clusters, the respondents were partitioned by the hierarchical procedure first. Because it produces tight minimum variance clusters and is regarded as one of the best of the hierarchical clustering techniques (Wishart 1987), Ward’s method of minimum variance was chosen to check the cluster differences in each stage of combinations and to maximize homogeneity within and heterogeneity between clusters. The results strongly suggested the presence of five clusters. This five-cluster solution was validated using non-hierarchical k-means clustering. Overall, following the typical criteria for effective segments that consist of consumers with homogeneous needs, attitudes, and responses to marketing variables (McCarthy 1982), are distinctive from one another (Weinstein 1987), are large enough to be managerial useful (McCarthy 1982), and provide operational data that are practical, usable, and readily translatable into strategy (Weinstein 1987) the five-cluster solution as shown in *Table A3* most favorably met the above criteria and produced the most interpretable and stable result.

With regard to classification accuracy once the clusters are identified, we also used discriminant analysis to check the cluster groupings (Churchill 1999; Hair et al. 1998). Using the categorical dependent variable a priori-defined five-cluster solution, the result of discriminant analysis (*Table A4*) revealed significant differences between the group characteristics. The classification results were used to determine how successfully the discriminant function could work. Overall, 97.7% of the cases were assigned to their correct groups, validating the results of cluster analysis for useful classification of segments based on their consumer-related attitudes.

Comparisons among the five clusters were conducted on a variety of descriptive variables including demographic and socio-economic characteristics. *Table A1* provides a thumbnail sketch of the characteristics that differentiate each cluster, based on tests of statistical significance. Based on the variables from which they derived, the five clusters were labeled as follows:

TABLE 2: Cluster Profiles

Cluster	Characteristic
Cluster 1: The extroverted Hedonists (22.7% of the sample, n=174)	48.3% male, 51.7% female, mean age: 34.5 Comparing the five clusters, typical consumers in this cluster show highest mean scores for <i>Materialism – Centrality</i> , <i>ConsVan – Achievement Perception</i> , and <i>ConsVan – Appearance Concern</i> ; ratings for <i>Materialism – Happiness</i> are lowest for this group. More precisely, typical consumers in this cluster had the most positive attitude towards “ <i>Buying things gives me a lot of pleasure</i> ”, “ <i>I am an accomplished person</i> ”, and “ <i>I enjoy spending money on things that aren’t practical</i> ”; whereas “ <i>I have all the things I really need to enjoy life</i> ” and “ <i>My life would be better if I owned certain things I don’t have</i> ” show lowest mean scores.
Cluster 2: The unpretentious Satisfied (17.5% of the sample, n=134)	44.8% male, 55.2% female, mean age: 42.0 Taken as a whole, means for all factors were lower than mean scores recorded by other groups. Comparing the mean scores within this cluster, this segment shows highest mean ratings for <i>ConsVan – Achievement Perception</i> followed by <i>Materialism – Centrality</i> , and <i>ConsVan – Appearance Concern</i> ; ratings for <i>ConsVan – Achievement Concern</i> are lowest for this group. Members of this group agree to “ <i>I wouldn’t be any happier if I owned nicer things</i> ” and are less likely than others to perceive “ <i>Professional achievements are an obsession with me</i> ” and “ <i>I’d be happier if I could afford to buy more things</i> ”.
Cluster 3: The Admiration Seekers (17.5% of the sample, n=134)	74.6% male, 25.4% female, mean age: 30.8 Members of this segment are more likely than other groups to agree to <i>ConsVan – Achievement Concern</i> and <i>Materialism – Happiness</i> . In particular, they had the most positive perception of “ <i>I want my achievements to be recognized by others</i> ” of all groups. Lowest mean scores in this group are reported for <i>ConsVan – Appearance Concern</i> and <i>Materialism – Centrality</i> .
Cluster 4: The self-confident Successful (16.2% of the sample, n=124)	40.3% male, 59.7% female, mean age: 37.6 This cluster shows highest mean scores of all groups for <i>ConsVan – Achievement Perception</i> as members in this segment strongly perceive “ <i>I am an accomplished person</i> ” and “ <i>In a professional sense, I am a very successful person</i> ”. Besides, they state to be concerned about their appearance and perceive the <i>Happiness</i> aspect of <i>Materialism</i> to be most important (“ <i>Buying things gives me a lot of pleasure</i> ”). Due to their perception of being more successful than others, members in this group are not concerned about this aspect: <i>ConsVan – Achievement Concern</i> shows the lowest mean scores.
Cluster 5: The glamorous Materialists (16.9% of the sample, n=130)	35.4% male, 64.6% female, mean age: 32.4 Typical consumers in this cluster perceive the factor <i>Materialism – Centrality</i> to be most important, followed by <i>ConsVan – Appearance Concern</i> and <i>Materialism – Happiness</i> , while <i>ConsVan – Achievement Concern</i> shows the lowest mean scores for this group. Comparing all groups, members in this cluster are more likely than others to state “ <i>Buying things gives me a lot of pleasure</i> ”, “ <i>It sometimes bothers me quite a bit that I can’t afford to buy all the things I’d like</i> ”, and “ <i>I enjoy spending money on things that aren’t practical</i> ”.

Even though we have just made a very first step in view of identifying market segments along the dimensions of the consumer vanity construct, our integrative framework and the empirical results seem to be worth focusing in further research as well as in managerial practice.

CONCLUSIONS

As stated above, research shows that individuals who are more materialistic and have vanity-related tendencies use possessions and luxury brands as a sign of success, derive happiness from them and are placing possessions and status in a central place in life. High materialist and vain

consumers are strongly concerned for their achievements and appearance and put a strong emphasis on the messages their possessions send to others about them as the owner. Our results support the predicted relationships suggesting that the model provides a reasonable framework to understand individual's brand purchase and consumption behavior that is linked to consumer vanity and materialism.

Of course, our results should be further developed in different ways. For instance, future research should employ nationally representative samples in more countries to enhance the generalizability of the research findings with regard to cross-cultural group segments in different product categories. Especially an extension of the research might examine how consumer vanity develops in less-developed countries (LDCs) and its influence on consumer behavior. To the extent that consumers in LDCs are truly embracing Western consumer culture, they may try to emulate Western consumption values, resulting in a similar or even a more pronounced level of vanity. In the case of China, which is arguably the largest consumer market in the world, there is some evidence to suggest that as the country grows more prosperous, Chinese consumers become more vanity oriented (e.g., Sin & Yau 2004). Clearly, more research in other LDCs is needed to generate more knowledge on this issue. As more and more firms expand their business worldwide, particularly entering LDCs that are developing consumer cultures, such research should be interesting and useful to both consumer researchers and marketing managers.

Despite the limitations and necessary steps in future research, the primary contribution of our research lies in exploring the relationship between consumer vanity and materialistic tendencies as a general basis for the identification of different segments of consumers. Referring to appearance concern, appearance perception, achievement concern, achievement perception, and the materialistic dimensions, marketers might be able to base marketing strategies and advertising campaigns on our conceptualization and empirically verified model to improve purchase value for different consumer segments. From a managerial perspective, our results synthesize cognitive and emotional components and already might lead to the opportunity of a better understanding of the conditions and drivers of luxury brand consumption. 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 communication efforts for products and brands, which should consider and address simultaneously or separately the individual needs of vanity-based purchase behavior.

REFERENCES

- Akaah, I. P., Yaprak, A. (1993): Assessing the Influence of Country of Origin on Product Evaluations: an Application of Conjoint Methodology, *Journal of International Consumer Marketing*, 1993, Vol. 5, pp. 39-53.
- Alder, N. J. (1983): Cross-National Management Research: The Ostrich and the Trend, *Academy of Management Review*, 1983, Vol. 8, pp. 226-232.
- Allen, M. W. (2001): A Practical Method for Uncovering the Direct and Indirect Relationships between Human Values and Consumer Purchase, *Journal of Consumer Marketing*, 2001, Vol. 18, pp. 102-120.
- Allèrès, D. (1991). Spécificités et stratégies marketing des différents univers du luxe. *Revue Française du Marketing*, 133(2/3), 71-97.
- Ammerman, R. T. (1988): Fear of negative evaluation, in: M. Hersen & A. S. Bellack (Eds.), *Dictionary of behavioral assessment techniques*, pp. 214-215, New York.
- 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.
- Belk, R. W. (1985): Materialism: traits aspects of living in the material world, *Journal of Consumer Research* 12 (3): pp. 265-280.

- Belk, R. W. (1988): Possessions and the Extended Self, *Journal of Consumer Research*, 15, 2, pp. 139-168.
- Berry, C. J. (1994). *The idea of luxury: A conceptual and historical investigation*. Cambridge: Cambridge University Press.
- Bhat, S., Reddy, S. K. (1998): Symbolic and Functional Positioning of Brands, *Journal of Consumer Marketing*, 1998, Vol. 15, pp. 32-43.
- Bourdieu, P. (1984). *Distinction: A social judgment of taste*. Nice, R. (trans). Cambridge, MA: Harvard University Press.
- Bracken, B. A. (1996): *Handbook of self-concept: Developmental, social, and clinical considerations*, New York: Wiley.
- Bredemeier, H. C./Campbell, D. T. (1960): *Social problems in America: Costs and casualties in an acquisitive society*, Wiley, New York, NY.
- Campbell, C. (1987): *The romantic ethic and the spirit of modern consumerism*, Oxford, Basil Blackwell.
- Cash, T.F. and Brown, T.A. (1987): Body Image in Anorexia Nervosa and Bulimia Nervosa: A Review of the Literature, *Behavior Modification*, 11 (October), pp. 487-521.
- Chao, P. (1993): Partitioning Country of Origin Effects: Consumer Evaluations of a Hybrid Product, *Journal of International Business Studies*, 1993, Vol. 24, pp. 291-306.
- 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 lifestyle: Some socio-psychological aspects, in: *Consumer behavior and environmental quality*, Uusitalo, L. (ed.), St Martins, New York, NY, pp. 6-16.
- Davis, H. L., Douglas, S. P., Silk, A. J. (1981): Measure Unreliability: A Hidden Threat to Cross-National Marketing Research?, *Journal of Marketing*, 1981, Vol. 45, pp. 98-108.
- Dawar, N., Parker, P., Price, L.J. (1996), `A cross-cultural study of interpersonal information exchange, *Journal of International Business Studies*, Vol. 27, No. 3, pp. 497-516.
- De Mooij, M. (2001): *Convergence and Divergence in Consumer Behavior*, World Advertising Research Center, 2001 October, pp. 30-33.
- Dibley, A., Baker, S. (2001): Uncovering the Links between Brand Choice and Personal Values among Young British and Spanish Girls, *Journal of Consumer Behavior*, 2001, Vol. 1, pp. 77-93.
- Dittmar, H. (1994). Material possessions as stereotypes: Material images of different socio-economic groups. *Journal of Economic Psychology*, 15(4), 561-585.
- Djursaa M., Kragh S.U. (1998): Central and Peripheral Consumption Contexts: the Uneven Globalisation of Consumer Behavior, *International Business Review*, 1998, Vol. 7, pp. 23-38.
- Douglas, M., Isherwood, B. (1979): *The World of Goods*, Basic, New York, NY.
- Douglas, S. P., Craig, C. S. (1992): *Advances in International Marketing*, *International Journal of Research in Marketing*, 1992, Vol. 9, pp. 291-318.
- Du Bois, C. (1955): The dominant value profile of American culture, *American Anthropologist*, 57, 6, pp. 1232-1239.
- Dubois, B., & Duquesne, P. (1993). The market for luxury goods: Income versus culture. *European Journal of Marketing*, 27(1), 35-44.
- Dubois, B., & Paternault, C. (1997). Does luxury have a home country? An investigation of country images in Europe. *Marketing & Research Today*, 25 (May), 79-85.
- Durvasula, S., Lysonskil, S., Watson, J. (2001): Does Vanity Describe Other Cultures? A Cross-Cultural Examination of the Vanity Scale, *The Journal of Consumer Affairs*, Vol. 35, No. 1, 2001, pp. 180-199.

- Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. New York: Harcourt Brace Jovanovich.
- Ekwulugo, F. (2003): Branding in Cross-Cultural Marketing, In: Rugimbana R., Nwankwo, S. (Eds.) *Cross-Cultural Marketing*. Italy: Torquay, Devon: Thomson Learning, 2003, pp. 92-107.
- Ferrandi, J-M., Valette-Florence, P., Prime, N., Usunier, J-C. (2000): Linking Personal Values and Time Orientations: The Case of the Attitude towards Cellular Phone in France and Germany, *Convegno 'Le Tendenze del Marketing in Europa'*, Università Ca Foscari Venezia, 2000, November, pp. 1-18.
- Friend, R. M., & Gilbert, J. (1973): Threat and fear of negative evaluation as determinants of locus of social comparison, *Journal of Personality*, 41, pp. 328-340.
- 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.
- Grunert K.G., Grunert S.C., Sørensen E. (1995): Means-end Chains and Laddering: an Inventory of Problems and Agenda for Research, MAPP, Working Paper 34, 1995, pp. 1-23.
- Hansen, F. (1998). From lifestyle to value systems to simplicity. In Alba, J., & Hutchinson, J. (Eds.), *Advances in consumer research* (Vol. 25, pp. 181-195). Provo, UT: Association for Consumer Research.
- Harter, S. (1990): Self and identity development, in: S. S. Feldman & G. R. Elliott (Eds.), *At the threshold: The developing adolescent*, 352-387, Cambridge: Harvard University Press.
- Heilbroner, R. L. (1956): *The quest for wealth: A study of acquisitive man*, Simon and Schuster, New York, NY.
- Hirschman, E. C. (1988). Upper class WASPs as consumers: A humanistic inquiry. In Hirschman, E. (Ed.), *Research in Consumer Behavior* (Vol. 3, pp. 115-148). Greenwich, CT: JAI Press.
- Hofstede F.T., Steenkamp E.M., Wedel M. (1999): International Market Segmentation Based on Consumer-Product Relations, *Journal of Marketing Research*, 1999, Vol. 36, pp. 1-17.
- Hofstede, G. (1980): *Culture's consequences: International differences in work related values*. Beverly Hills: Sage.
- Hofstede, G. (1997): *Cultures and organizations: Software of the mind*, New York: McGraw Hill.
- Hulland, J. S. (1999): The Effects of Country-of-Brand and Brand Name on Product Evaluation and Consideration: A Cross-Country Comparison, *Journal of International Consumer Marketing*, 1999, Vol. 11, pp. 23-40.
- Jackson, L.A. (1992): *Physical appearance and gender: Sociobiological and sociocultural perspectives*, Albany: State University of New York Press.
- Kahle, Lynn R. (1983): *Social Values and Social Change: Adaptation to Life in America*, New York, NY: Praeger.
- Kapferer, J.-N. (1997): Managing luxury brands, *Journal of Brand Management*, 4, 4, 251–260.
- Knight, G. A., Spreng, R. A., Yaprak, A. (2003): Cross-National Development and Validation of an International Business Measurement Scale: the COISCALE, *International Business Review*, 2003, Vol. 12, pp. 581-599.
- Kropp, F., Jones, M., Rose, G., Shoham, A., Florenthal, B., Cho, B. (1999): Group Identities: A Cross-Cultural Comparison of Values and Groups Influences, *Journal of Euromarketing*, 1999, Vol. 8, pp. 117-131.
- Lasch, Christopher (1978): *The Culture of Narcissism*, New York: Norton.
- Lee, J. A., Kacen, J. J. (1999): The Relationship between Independent and Interdependent Self-Concepts and Reasons for Purchase, *Journal of Euromarketing*, 1999, Vol. 8, pp. 83-99.
- Levitt, T. (1983): The globalization of markets, *Harvard Business Review*, 61, pp. 92-102.
- Liefeld, J. P., Wall, M., Heslop, L. A. (1999): Cross-Cultural Comparison of Consumer Information Processing Styles, *Journal of Euromarketing*, 1999, Vol. 8, pp. 29-43.

- Lindridge A., Dibb S. (2003): Is "Culture" a Justifiable Variable for Market Segmentation? A Cross-Cultural Example, *Journal of Consumer Behavior*, 2003, Vol. 2, pp. 269-286.
- Lyman, Stanford M. (1978): *The Seven Deadly Sins: Society and Evil*, New York: St. Martin's.
- Malhotra, Naresh K.; Agarwal, James; Peterson, Mark (1996), Methodological issues in cross-cultural marketing research: A state-of-the-art review, *International Marketing Review*, Vol. 13, No. 5, 1996, pp. 7-43.
- Mandrik, Carter 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.
- McCort D.J., Malhotra N., *Culture and Consumer Behavior* (1993): Toward an Understanding of Cross-Cultural Consumer Behavior in International Marketing, *Journal of International Consumer Marketing*, 1993, Vol. 6, pp. 91-128.
- 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, pp. 71-84.
- Metwally, M. M. (1993): An Analysis of Australian Exports to Middle Eastern Countries, *Middle East Business and Economic Review*, 1993, Vol. 5, pp. 19-37.

For a complete copy of this paper with full references and appendix, please contact the corresponding author. These items omitted for space considerations.

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Early Internationalization of Emerging MNEs: Case Of Top Glove Malaysia

Keywords: Entrepreneurship, Internationalization, Emerging MNEs, Case Study

INTRODUCTION

In a dynamic globalised environment, firms need to remain competitive to survive in the market and expanding internally has been a common strategy in achieving such needs. International expansion provides several benefits to the firm by promoting organizational and technological learning (Barkema & Vermeulen, 1998; Ghoshal, 1987), and facilitating the development of skills and competencies for firm to achieve its competitive advantage (Dodgson, 1993). International expansion involves a process of internationalization where firms engage in cross border operations. Beamish (1990) defines internationalization as the process where firms increase their awareness of the direct and indirect influences of international transactions by establishing and conducting transactions with other countries. Various approaches have been used in explaining internationalization of the firms which are often classified broadly into four main groups. They are the process or stages-models of internationalization (e.g. Johanson & Wiedersheim-Paul, 1975), the network approach (Johanson & Mattsson, 1988), the foreign direct investment theory (FDI) and internalization or transaction cost theories (Buckley & Casson, 1976). These theories

and models have analyzed internationalization of the firms with different explaining factors. Other empirical evidence demonstrates that not all firms internationalize through the traditional internationalization models, such as the Uppsala model, the innovation model or network approach. As opposed to these traditional models of internationalization, more recent theories describe the phenomenon of 'Born Globals', or 'international new ventures'. These are firms that adopt an international approach immediately after start-up or shortly thereafter (Oviatt and McDougall, 1994).

The early internationalization phenomenon has been taking place by the new ventures from both advanced and emerging countries that are aggressive in globalizing their business operations in accordance to their philosophies. Although there have been a great deal of research on internationalization in the literature studies, these studies have been primarily conducted over large companies, specifically MNCs, in which it has been found that they have a better ability to enter foreign markets due to their resources, capabilities, and market knowledge. A number of studies also have been conducted on the early internationalization of new ventures from advanced countries such as US and Europe. Nevertheless, the evidence is rather limited from the emerging countries despite the booming growth of firms from East Asian countries such as Malaysia, Thailand, Indonesia and Vietnam. Many firms in Malaysia did quite well in a global stage but somehow did not attract as much attention from scholars as it should be. Thus, an interesting closer look on one of the most successful firms in Malaysia will provide some understanding about their behaviour when it comes to the topic of their internationalization. Hence, this study attempts to shed some light on the early internationalization of a new venture specifically from Malaysia as one of the emerging countries in East Asia. The study represents an attempt to identify successful evidence of internationalization of a firm within the environmental perspective, providing a considerable insight to policy makers, managers, and researchers by addressing a number of key issues that affect Malaysian firm's future international development and competitiveness in the global market. The major objectives of this study are firstly, to examine the early internationalization phenomenon of Malaysian new venture, Top Glove, secondly to evaluate various kinds of competitive advantages that enables Top Glove to internationalize their businesses activities and finally, to analyse the internationalization pattern or trends of the Top Glove.

TOP GLOVE AND MALAYSIA RUBBER INDUSTRY

The rubber industry in Malaysia has since evolved through the years and has transformed itself into a more integrated industry where the rapid developments of the mid and downstream industries have made the industry a multi-billion dollars. This was vastly aided by the tremendous progress made in the R&D of rubber cultivation and harvesting as well as rubber processing. The invention of technically specified rubber (the SMR) in 1965 and the three Industrial Master Plans (IMP) (1986-2020) has enhanced the growth of the rubber processing and manufacturing sectors. The global demand for rubber gloves has increased due to recent regulations on occupational safety and is expected to grow by 10% yearly. The demand for rubber gloves is increasing from India, China and Vietnam due to increase in health and hygiene awareness. Currently, Malaysia exports rubber gloves to the US, European Union, Latin America, China and India.

The awareness of healthcare and hygiene is driving the demand for rubber gloves in the developed countries. Since the World Health Organization (WHO) declared influenza A (H1N1) a pandemic few years ago, an increased orders from the US and Latin American countries had resulted where global demand outweigh supply. Malaysia glove manufacturers started small but have now be a force to be reckoned with in the global market. Regulations also have played a key role in the growing rubber gloves demand, by making it mandatory in all types of industries. For Malaysia which currently controls 60% of the global rubber gloves market, this is the season

of opportunities and challenges. Although there are some misconceptions of the glove industry as a small industry by global standards, this is the only product for which Malaysia is the dominant player globally.

INTERNATIONAL NEW VENTURES AND BORN GLOBAL

Several studies, especially in the 90s, have identified an increasing number of firms which, instead of following the traditional stages pattern by opting for domestic expansion before initiating foreign activities in geographically-close countries firstly, choose to be extensively present abroad right from their birth or very shortly afterwards. However, these types of firms becoming international or even global from inception, have been labelled very differently from one study to another. While the term “Born Globals” has likely been the most popular (Rennie, 1993; Knight and Cavusgil, 1996; Madsen and Servais, 1997; Bell and McNaughton, 2000; Madsen et al., 2000; Rasmussen et al., 2001; Larimo, 2001; Aspelund and Moen, 2001; Moen, 2002), other names such as Global Start-ups (Oviatt and McDougall, 1995), High Technology Start-ups (Burgel and Murray, 2000), Global High-Tech Firms (Roberts and Senturia, 1996), Instant Internationals (Fillis, 2001), and International New Ventures (INVs) (Oviatt and McDougall, 1994; McDougall et al., 1994; Oviatt and McDougall, 1997; Servais and Rasmussen, 2000) have also been used for designing these firms. Depending on the school of thought and characteristics of the investigated companies, scholars have used the following criteria when defining INV or born global: (1) vision and strategy to become global or international (e.g. Knight & Cavusgil, 1996; Oviatt & McDougall, 1994), (2) small technology-oriented companies (e.g. Bell, 1995; Knight & Cavusgil, 1996), (3) time to become global or international, varying from immediate to three years (e.g. Knight et al., 2001; Knight & Cavusgil, 1996), (4) geographical expansion in terms of a minimum of 25% of foreign sales (e.g. Knight & Cavusgil, 1996) or a minimum number of countries served outside the home country (e.g. Oviatt & McDougall, 1994), (5) geographical expansion outside the home continent with a minimum of 50% external sales (Luostarinen & Gabrielsson, 2004).

Oviatt and McDougall (1994) defined INV as “from inception, seeks to derive significant competitive advantage from the use of resources and the sales of outputs in multiple countries”. This referring to INVs from their inception pursue a vision of becoming global and often globalize rapidly without any preceding long term domestic or internationalization period. The born globals should have either unique technology and superior design or innovative product or service, or know-how, systems or other highly specialized competence. The born global usually would lack the managerial and financial resources required for globalization and global marketing (Luostarinen & Gabrielsson, 2004). Such latter resources are difficult to gain from conventional sources because the born global has yet to prove its credibility as a profitable entity. The risk of gaining profitability is even higher and the challenge even bigger when the new entrepreneurial firm is going global. Research building on Oviatt and McDougall's (1994) framework has been carried out in the world's six major continents, in advanced and developing economies alike, under four labels: INVs, born globals, accelerated internationalization, and International Expansion. According to McDougall, Oviatt, & Shrader (2003), the study of international new ventures is becoming an important part of the growing international entrepreneurship literature (Acs, Dana, & Jones, 2003; Christensen, 2003; McDougall & Oviatt, 2000; Young, Dimitratos, & Dana, 2003).

Accordingly, the growing significance of early internationalizing firms challenges traditional internationalization perspectives. Thus, in order to obtain further knowledge about the business internationalization process, more specifically oriented and highly systematic research concerning early internationalizing firms is needed (Coviello & McAuley, 1999; Fillis, 2001; Jones & Dimitratos, 2003; Zou & Stan, 1998). Building upon existing internationalization theories, Oviatt and McDougall (1994, 1999) have established a conceptual framework and a

theoretical classification of INVs. Madsen and Servais (1997) develop a research model of the propensity and further development of early internationalizing firms in which the characteristics of the environment, of the organization itself, and of the founder/s are seen to be critical. Also, the possible links existing between the recent born-global literature and the traditional internationalization process model (the Uppsala-Model), along with the network and evolutionary approaches are substantially explored by these authors. From a more managerial perspective, Bell and McNaughton (2000) and also Bell et al. (2003) outline an eclectic, normative, and integrative model of small firm internationalization that seeks to accommodate the diverse 'pathways' that smaller firms (traditional, born-globals, and born-again globals) may take during their internationalization process. Finally, a general theoretical model on international entrepreneurship, as a major and interdisciplinary research field, has been more recently developed by Zahra and George (2002). Their model basically connects the international entrepreneurship antecedents with several types of activities and outcomes, together with other strategic and environmental issues.

RESEARCH METHODS

Case studies are complex because they generally involve multiple sources of data, may include multiple cases within a study, and produce large amounts of data for analysis. According to Bryman (1989), case studies should be evaluated in terms of the adequacy of the theoretical inferences that can be generated. The aim is not to infer findings from a sample to a population, but to engender patterns and linkages of theoretical importance. Researchers from many disciplines use the case study method to build upon theory, to produce new theory, to dispute or challenge theory, to explain a situation, to provide a basis to apply solutions to situations, to explore, or to describe an object or phenomenon. (Soy, 1997). Case studies can be single or multiple-case designs, where a multiple design must follow a replication rather than sampling logic. A single-case designs is chosen when no other cases are available for replication, or limited (Yin, 1994). He also pointed out that generalization of results, from either single or multiple designs, is made to theory and not to populations. Multiple cases strengthen the results by replicating the pattern-matching, thus increasing confidence in the robustness of the theory.

Multiple sources of data for this study is needed and collection of document examination, the gathering and study of organizational documents such as administrative reports, agendas, letters, minutes, and interviews/news clippings for the company or other organization involved are gathered. The population that is to be studied in this research is limited to Top Glove Corporation Bhd. This Malaysian company is chosen to be a case study for the research method to illustrate the INV phenomenon. Data was analyzed to identify, examine, compare and interpret themes and patterns. The analysis can be started after the collection of all the necessary data. The analysis was based on an extensive reading of the available data in order to identify the most relevant information, reliable and compare them with whatever other information are gathered from other sources because data was collect from different sources.

FINDINGS

Today, Top Glove is the world's biggest manufacturer of rubber gloves, with a share of 22% of the global market. Founded by a local entrepreneur, Lim Wee Chai, Top Glove was established in 1991, starting from a single factory in 1991 with three production lines and has since then transformed from merely a local player to one of the world largest rubber glove manufacturer with 19 factories located in Malaysia, China and Thailand. In year 2001, Top Glove has been listed in the Kuala Lumpur Stock Exchange and in a short span of slightly more than a year, Top Glove's listing has been successfully promoted from the Second Board to the Main Market of the Kuala Lumpur Stock Exchange on May 16, 2002. Currently, Top Glove has a shareholder fund

of RM846 million (USD247 million) with an annual turnover of about RM1.53 billion (USD447) million as at 31 August 2009. Top Glove principal activities are manufacturing and trading rubber gloves, synthetic gloves and surgical gloves. Other activities include property investment, trading of machinery, producing and selling latex concentrate, the provision of management services and investment holding.

Table 1: Company's facts

Company's information	Existing (as at October 2009)
1. Number of factories	19
2. Number of Production Lines	355
3. Total pieces of Gloves Produced (Per Year)	31.5 billion
4. Countries of Export	180
5. Number of Employees	9100
6. Number of Customers	850

Source: Top Glove website (2010)

Table 2: Awards And Recognition

Year	Award/ Recognition
2009	Growth Excellence Awards 2009 by Frost & Sullivan
2008	Best Brands Manufacturing - Rubber Gloves 2007 – 2008 Asia Pacific Entrepreneurship Awards (APEA) 2008 Entrepreneur of the Year 2008 to Tan Sri Dato' Lim Wei Chai
2007	Anugerah Kecemerlangan Industri 2007 SME Platinum Award 2007 Enterprise 50 Award Programme 2007
2006	KPMG Shareholder Value Award 2004 Rubber Industry Award 2005 The 4th Asia Pacific / Malaysia e-Entrepreneur Excellence Award 2005 Asia's Best Companies 2005 Award
2004	Ernst & Young World Entrepreneur of The Year Malaysia 2004
2003	KLSE Corporate Merit Awards 2003
2002	NPC Productivity Award 2002 Industry Excellence Award 2002
2001	Enterprise 50 Award Programme 2001

Source: Top Glove website (2010)

Top Glove Corporation Ltd was launched with the vision of exporting Made-in-Malaysia gloves to every corner of the world. With the economy booming in the late 1980s and early 1990, Lim saw the potential for the rubber glove industry as "Good demand, high profit margins". There was a rush to start glove-making businesses when it became known could produce a pay-back period of just one year. As many as 400 businesses were registered at that time, however the price slump in the mid 90s which drove many players out of the industry and it was a significant hurdle which Top Glove overcame with perseverance and shrewd management. Lim's drive and ambitions built Top Glove's track record of rapid and consistent growth in its earnings. Top Glove's net profit grew every year from RM2.8 million in 1996 to RM11.6 million by 2000 (Top Glove, 2009). It was clearly a small and medium enterprise (SME), which now became the world No 1. That trend continued after its listing in 2001 when its earnings were RM15.9 million,

rising steadily to RM58.1 million by 2005. It was an inspiration to the rest of the industry which then realised the global market could absorb a rapidly increasing output. That realisation emboldened the other local players to also aggressively ramp up production capacity. A structural change that was soon observed was that multinational corporations (MNCs) were outsourcing some of their manufacturing to the local glove manufacturers. Top Glove was the first to capitalise on it.

Learning Strategies

During its commencement, the big glove manufacturers in Malaysia were the foreign MNCs. Lim had the vision that it was possible to compete with the MNCs by producing good quality gloves at an efficiently low cost. This vision has since become Top Glove corporate mission: *“To be a world class glove manufacturer providing top quality products with excellent services through continuous improvement and innovation”*. There was also a lack of technical know-how in its early years. Top Glove inspired a mindset of continuous improvement and seeking new knowledge through extensive R&D by capitalising the MNCs’ technical knowledge and created its competitive advantage since then. The MNCs in the manufacturing sectors helped the local industry to develop through the standards of best manufacturing practices. The MNCs that produced rubber gloves in Malaysia led to the development of supporting industries and the training of local technical workers. Later on, these MNC moved their glove-making operations to Thailand. After these MNCs left, local industry took over. As a local player, Top Glove have the competitive advantages of local knowledge, local culture and working environment to compete with the MNCs which were manufacturing from Malaysia but at a higher operating cost. Once the MNCs started to notice the quality gloves and low cost from local players like Top Glove, the outsourcing process began. Lim sees the global market as opportunities for growth; where at that time, the US took up almost 60% of the world’s glove supply, and there are potential demand catching up from other regions like Europe, Latin America and Asia. Top Glove’s ambitions were restrained by inadequate capital, being a small company in its early years. Its listing in 2001, of course, facilitated as it raised RM20 million for the company. At the same time, its steady profits provided additional funds. Even so, getting all the required funding was not easy as its track record was relatively short. Its ambitions were also curtailed by a shortage of employees of high calibre. These days, it has an adequate pool of trained and experienced personnel so that further expansion now is easier.

Expansion Strategies

Top Glove focused its expansion to capture an increase in the global demand. Currently with 22% global market share, Top Glove is targeting for 30% by 2012. The company are pressured to venture internationally due to several reasons such as the small-to-medium size (SMEs) nature of the Malaysian economy, the small size of its domestic market, stagnant growth, export experience, the need to secure critical raw materials to serve regional export markets, and the structural limits of the overall growth process. For Top Glove, the rising cost of productions in the country and highly growing demand of its rubber glove products motivates Top Glove to open a new production sites internationally. Furthermore, the strategies to constantly seek growth through entry into new markets are among reason for investing abroad. Top Glove builds its high-tech glove-manufacturing complex in Hadyaai, Thailand and China. The main rationale behind this strategy is that, apart from some similarity in business culture and society, ownership advantages such as knowledge and experience in the international market, and technological competence are only applicable in developing countries whose economic conditions are lower than or closely similar to those of the home market. Top Glove started to operates its overseas factories in Thailand and China in 2003. This rapid process of expansion was not incremental in nature but driven by industry- and firm-specific factors. A closer look at its strategy shows that, they are ready to undertake some assertive and risky approaches such as management control with majority ownership and acquisitions in their investment. Although the pattern of international expansion made by the Malaysia-based corporations followed the sequential model

in their geographical spread (beginning closer to home), however in terms of international commitment and pattern of expansion, it can hardly be described as a sequential process, but is rather diverse and more complex.

Growth Strategies

A clear trend was noted towards attaining majority ownership control or acquisition as entry strategy in some foreign investments. The approach adopted by Top Glove on their entry strategy proved not to be consistent with the incremental entry mode strategy claimed in the developing country MNCs literature. Such literature describes the entry mode of emerging country MNCs as incremental in nature; in high risk countries, emerging-country firms are more likely to enter through the use of some form of export entry strategy than through the use of investment modes. The literature suggests that firms will only assertively expand their operations abroad once they have accumulated ownership advantages. Given the handicap of emerging-country MNCs in ownership advantages, this may limit their choices to low-risk forms of commitment in their international ventures, rather than being aggressively engaged in high resource commitment such as has been demonstrated in the Malaysian case companies. Top Glove completed the acquisition of Singapore-listed medical and speciality glove maker Medi-Flex Ltd as to expand its operation in the area of manufacture of medical and clean room gloves. Medi-Flex has 27 production lines, with the combined capacity of 1.6 billion gloves per annum, at its two plants in Klang and Banting, Selangor.

Vertical growth. (a) Moving upstream by setting up latex concentrate plant. Top Glove had set-up its first latex concentration plant in Hadyai (2006), for the purpose of producing its own latex concentrate for the manufacturing of disposable natural latex glove. Combined with the existing Factory 17, these two latex concentrate plants will supply approximately 70% to 80% of the group's latex requirement. The rationale behind setting-up latex concentrate plant is to enable the company to be less reliant on its latex supplier in view of escalating latex prices trend over the years and generate up to 3% savings in latex cost. This also allows the company to enhance control over supply, timing of delivery as well as quality latex supply to the group's existing factory in Malaysia and Thailand. *(b) Moving downstream to get closer to their customers via setting up more overseas marketing offices.* It has been and will always be the company's objective and commitment to keep its customers satisfied with its quality, reliability and price competitiveness in the market. Besides good management, Top Glove has the reputation of being close to its market. Exporting to more than 118 countries, it has marketing offices in Germany and the United States.

Horizontal growth (a) Product range expansion (vinyl, PE, latex and nitrile glove, clean room gloves, surgical gloves) to capture bigger market share. Top Glove prides itself as "One-stop Complete Glove Sourcing Centre", offering 13 types of glove products (i.e. latex examination, nitrile, vinyl and surgical gloves). This extra edge over other manufacturers is made possible due to its "Continuously strive for improvement and innovation" concept which has become a daily practice in the company. *(b) Presence in China will enable Top Glove to tap for opportunities that synergize their distribution channel.* Top Glove announced there will be setting up of more factories to sustain growth (1-2 factories yearly).

Top Glove's rapid growth can be identified in several industry drivers and environments:

(i) Emergence of health threats and wars - Unforeseen events like A(H1N1), SARS, bird flu, bio-terrorism threats, Anthrax has pushed up demand further. The A (H1N1) pandemic has increased perhaps to 10% this year. With the on-going Gulf War II in the Middle East, gloves are vital for both military and humanitarian purposes. Top Glove hopes to grow its annual revenue by 20% to 30% for 2008 and 2009, which should be achievable given rising health care awareness and enforcement by authorities in developing nations such as Latin America, Eastern Europe, Asia and Africa. *(ii) Industry consolidation* - The local industry currently caters to 60%

to 65% of the world's NR glove market and also supplies about half of the world's nitrile glove market. An opportunities for efficient players to expand in a fragmented market as the highly competitive industry was reflected by the consolidation from about 200 domestic players back in the early 1990s to about 40 domestic players currently. (iii) *Necessity in healthcare industry* - For Top Glove, exports make up 95% of the company's total sales annually. The company was largely insulated from downturns due to the nature of its product offering rubber gloves are mainly used in the medical industry. As such Top Glove does not foresee their business being affected by a recession in the US as their products are a necessity and as well as recession-proof market for the healthcare industry. (iv) *Increasing outsourcing opportunities* - Firstly, the MNCs are not expanding. This is because currently, the five domestic big players – Top Glove, Supermax, Kossan, Hartalega, and Latexx; produce almost half the world's supply. With the volumes that they now produce and their low unit costs, it will be difficult for others to challenge them. As the MNCs are no longer expanding their capacities, the global markets share of Malaysia's top five glove makers could increase to 60% to 80% eventually. Secondly, brand name producers are also increasingly seeking to outsource. Interestingly, 60% of Top Glove's products are on a contract-manufacturing basis bearing customer's trademarks with only 40 per cent manufactured under its own brand name, Top Glove (Bnet, 2003).

DISCUSSION AND CONCLUSIONS

The findings of this study indicate an early internationalization of Top Glove to the global market despite of its deficiency in terms of global experience, lack of technology and smaller size. Among the most common factors triggering an early internationalization by Top Glove are due to several entrepreneurial characteristics that are found and seen in Top Glove company which include (1) a managerial global vision from inception; (2) high degree of previous international experience on behalf of managers; (3) management commitment; (4) strong use of personal and business networks (networking); (5) market knowledge and market commitment; (6) unique intangible assets based on knowledge management; (7) high value creation through product differentiation, leading-edge technology products, technological innovativeness associated with a greater use of IT and quality leadership; (8) a niche-focused, proactive international strategy in geographically spread lead markets around the world from the very beginning; (9) narrowly defined customer groups with strong customer orientation and close customer relationships; (10) flexibility to adapt to rapidly changing external conditions and circumstances.

This list of factors or 'triggers' to early internationalization have been quite consistently identified by other authors in this field (McDougall et al., 2003), and resemble to a large extent the conditions for and distinctive features of born-global firms or INVs as established previously by Knight (1997). It can be expected that such trends will be even stronger in the years to come, in various industries, thus the phenomenon of early internationalization will undoubtedly increase in the future. Therefore, more and more industries and businesses are likely to be affected by these factors and should be expected to internationalize more rapidly than before. Most of these driving forces have enabled small and medium enterprises to compete globally. Governments must focus on creating an enabling environment for the sustained international growth and development of local firms by proactively seeking international business opportunities that fit them, strengthening legal institutional, administrative and financial set-ups and formulating appropriate policies at both the micro and macro levels. The internationalization of business requires a process of profound change that includes taking advantage of the usage of ICT and e-commerce, taking risks, opening up the firm's culture and a flexibility as well as capacity for learning, which in turn requires planning and strong leadership.

By nature of a literature review, there are limitations of this paper resulting from the individual studies. Foremost, INVs were differently defined by the various authors. As especially difficult

can the differing delays between inception and the start of international business can be regarded. These discrepancies may result in differences in the research findings. Undisclosed company's information such in the early stage makes the analysis difficult. In Top Glove case, their company's performance information before the company was listed in Stock Exchange are not available in their website. While there is a considerable amount of research in the field of new venture internationalization available today, there are still some areas in doubt. International vision and especially the roles of networks and market differentiation strategies in relation to INVs are disputed by some authors. Further research in these areas is necessary particularly that applies to future technological and economic trends as well. Shown to be the primary enablers of the rise of SMEs in general and INVs in particular, they continue to influence the competitive landscape.

REFERENCES

- Autio, E., & Sapienza, H.J. (2000). Comparing process and born global perspectives in the international growth of technology-based new firms. *Frontiers of Entrepreneurship Research*, Center for Entrepreneurial Studies, Babson College, 413-424.
- Autio, E., Sapienza, H.J., & Almeida, J.G. (2000). Effects of age at entry, knowledge intensity, and imitability on international growth. *Academy of Management Journal*, 43/5, 909-924
- Barkema, H.G and Vermeulen, F. (1998) International Expansion through Start up or Acquisition: A Learning Perspective, *The Academy of Management Journal*, 41(1), pp. 7-26.
- Beamish, P. W. (1990). The Internationalisation process for smaller Ontario firms: a research agenda. In *Research in global strategic management -international business research for the twenty-first century: Canada's new research agenda*, (ed. A. M. Rugman), pp. 77-92, JAI Press Inc, Greenwich.
- Bell, J., 1995. The internationalisation of small computer software firms. *European Journal of Marketing*, 29(8), 60-75.
- Bell, J., McNaughton, R., & Young, S., 2001. 'Born-again global' firms: An extension to the 'born global' phenomenon. *Journal of International Management*, 7(3), 173-189
- Bell, J., McNaughton, R., Young, S., & Crick, D., 2003. Towards an integrative model of small firm internationalisation. *Journal of International Entrepreneurship*, 1(4), 339-362
- Buckley, P.J. & Casson, M. 1979. A theory of international operations. In P.J. Buckley & P.N. Ghauri (eds.) *The Internationalisation of the Firm: A Reader*. London: Academic Press.
- Coviello, N.E. & McAuley, A. (1999). Internationalisation and the smaller firm: a review of contemporary empirical research. *Management International Review*, 39/3, 223-256.
- Fillis, Ian (2001). Small Firm Internationalization: An Investigative Survey and Future Research Directions. *Management Decision*, 39, (9), 767-783.
- Ghoshal, S. (1987), Global Strategy: An organizing Framework, *Strategic Management Journal*, Vol. 8, pp. 425-440
- Johanson, J. & Mattsson, L-G. 1988. Internationalization in industrial systems - a network approach. In N. Hood & J-E. Vahlne (eds). *Strategies in Global Competition*. New York: Croom Helm, pp303-321.
- Johanson, J. & Wiedersheim-Paul, F., 1975, "The Internationalisation of the Firm-Four Swedish Cases", *Journal of Management Studies*, Vol. 12, No. 3, pp. 305-322
- Johanson, J. & Vahlne, J.-E. 1990. The mechanism of internationalisation. *International Marketing Review*. 7 (4): 111-124.
- Johanson, Jan and Vahlne, Jan-Erik (1977), "The Internationalization Process of the Firm: a Model of Knowledge Development and Increasing Foreign Market Commitments," *Journal of International Business Studies*, 8 (1), 23-32.
- Madsen, Tage K., Erik S. Rasmussen & Per Servais (2000). Differences and similarities between Born Globals and other types of exporters. *Advances in International Marketing*, 10, 247-265

- McDougall, P.P. (1989). International versus domestic entrepreneurship: new venture strategic behaviour and industry structure. *Journal of Business Venturing*.
- McDougall, P.P. & Oviatt, B.M. (1996). New venture internationalization, strategic change, and performance: a follow-up study. *Journal of Business Venturing*, 11/1, 23-40.
- McDougall, P.P. & Oviatt, B.M. (2000). International entrepreneurship: the intersection of two research paths. *Academy of Management Journal*, 43/5, 902-906.
- McDougall, P. P., Oviatt, B. M., & Shrader, R. C., 2003. A comparison of international and domestic new ventures. *Journal of International Entrepreneurship*, 1(1), 59-82.
- Oviatt, B. and McDougall, P. (1994) 'Toward a theory of international new ventures', *Journal of International Business Studies*
- Oviatt, B.M. & McDougall, P.P. (1995). Global start-ups: entrepreneurs on a worldwide stage. *Academy of Management Executive*.
- Oviatt, B.M. & McDougall, P.P. (1997). Challenges for internationalization process theory: the case of international new ventures. *Management International Review*, 37/2, 85-99.
- Oviatt, B.M. & McDougall, P.P. (1999) A framework for understanding accelerated international entrepreneurship. In A.M. Rugman, & R.W. Wright, (eds.) *Research in global strategic management: international entrepreneurship* (pp. 23-40). Stamford, CT: JAI Press Inc.
- Rasmussen, E. S., & Madsen, T. K., 2002. The born global concept. *Proceedings of the EIBA 2002 Conference*. Athens, Greece
- Shrader, R.C., Oviatt, B.M. and McDougall, P.P. (2000) 'How new ventures exploit trade-offs among international risk factors: lessons for the accelerated internationalization of the 21st century', *Academy of Management Journal* 43(6): 1127-1248.
- Yin, R. (1994). *Case study research: Design and methods (2nd ed.)*. Beverly Hills, CA: Sage Publishing.
- Yin, R.K. (2003). *Case Study Research: Design & Methods. 3rd ed.* Thousand Oaks. Sage Publications Inc.
- Zahra, S.A., Ireland, R.D., & Hitt, M.A. (2000). International expansion by new venture firms: international diversity, mode of market entry, technological learning, and performance. *Academy of Management Journal*.
- Zahra, S.A. & George, G. (2002) International entrepreneurship: the current status of the field and future research agenda. In M. Hitt, R. Ireland, M. Camp, & D. Sexton, (eds.) *Strategic leadership: creating a new mindset*. London, UK: Blackwell.
- Zou, S. & Stan, S. (1998). The determinants of export performance: a review of the empirical literature between 1987 and 1997. *International Marketing Review*, 15/5, 333-356.

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Information and Communication Technology (ICT), Globalization and Economy of the Urban Environment

Keywords: Globalization, ICT, Urban Economy, CO2 emissions, Panel data Method.

JEL Classification: F15, O33, R10, Q56, C23.

INTRODUCTION

Globalization, now, is a concept by which many political, economic, cultural and national security transformation issues are explained and analyzed. Impact of economic globalization, is not limited to major cities, many smaller towns and villages are also part of this process. Development of ICT transformed urban economy and created extraordinary capacity to remove time and place barriers (Kayvani, 2009). Thus, ICT and its role in urban economy is an important issue. ICT formation, promotion or lack of facilities and technologies eclipse urban population. Furthermore, ICT plays an important role in air pollution reduction and environmental protection. Followings are environmental quality advantages of using ICT: (Lashkarizadeh and Gharavi, 2010).

- 1) Reduction in shuttles and use of cars and thus decrease in air pollutants emissions, especially CO2 gas.
- 2) Use ICT to increase energy efficiency and save energy, in brief, improve energy management in all sectors; buildings, transportation, power industry and ...
- 3) Use ICT to enhance public awareness of pollutants' harms.
- 4) Use ICT to change people's living manner.

At this paper's lead author's request, editorial correction of written English was restricted. Remaining errors are the authors'.

This study examined the effect of ICT application in reducing air pollution of cities in developed and developing countries, and was organized as follows: Second section covered theoretical and empirical studies, third section was devoted to the empirical model and its estimation, and final section analyzed conclusions, and suggestion.

THEORETICAL AND EMPIRICAL STUDIES

ICT, today, is a technology that focuses on saving energy and reducing pollution. Kstlz, by examining information flow, turned to the impact of information on urban class structure, and its influential consequences for urban life guidance. He believed that through time, number of informational cities increased, and eclipsed human resources and urban class structure, and formed businesses which were increasingly information dependent, this process led to an increase in the number of experts and informational managers who provided flow of information for economic activities, information that turned to an inevitable sector in any system. Therefore, developing a global network helps people to bring in not only urban but also, international competition and to create great opportunities for them to make more profits. Urban sustainability

emphasizes that, qualitative patterns of environment are attained by using internet to reduce unnecessary shuttles ultimately different types of pollution is decreased (Motlagh and Behrooznia, 2009).

In recent years, air pollution and gases which cause global climate change attracted international attention. CO₂ is initial greenhouse gas caused to global warming and its control is an important issue for governments. During last three decades, risks and environmental damage have been more visualized. This damage aroused by combination of factors such as population growth, economic growth, energy consumption and industrial activities. However, several empirical studies, depending on the research methodology employed and the geographical configuration considered, had mixed results. Sujodi et al (2010) investigated the impact of ICT on the environment in developing countries. Findings indicated that the number of fixed telephone lines and mobile cellular subscriptions had a significant and positive impact on environment, while the number of internet users and personal computers in developing countries had not significant effect on the environment. Also comparison of the effects of ICT on the environment in developing countries and OECD countries represented less ICT utilization in developing countries to protect environment. Lashkarizadeh and Gharavi (2010) using panel data, investigated the effects of ICT and other variables that influenced environment; such as income and preferences on the amount of CO₂ emissions in 20 developing countries during 1998-2007 time period. The results indicated that despite the positive effect of income on the amount of CO₂ emissions, promoting ICT and public awareness had a significant role in reducing these emissions.

Halicioglu (2009), in his study, attempts to empirically examine the dynamic causal relationships among carbon emissions, energy consumption, income, and foreign trade in case of Turkey using time-series data for period 1960–2005. The empirical results suggested that income was the most significant variable in explaining the carbon emissions followed by energy consumption and foreign trade in Turkey. Zhang and Cheng (2009) investigated the existence and direction of Granger causality relation among economic growth, energy consumption, and carbon emissions in China, applying a multivariate model of economic growth, energy use, carbon emissions, capital and urban population. Empirical results for China through 1960–2007, suggested a unidirectional Granger causality running from Gross Domestic Product (GDP) to energy consumption, and a unidirectional Granger causality running from energy consumption to carbon emissions in long run. Barghi Oskouie (2008) in his study, evaluated the impact of trade liberalization on CO₂ emissions, and also investigated the environmental Kuznets curve relationship by the pollution shelter hypothesis, Kuznets curve, based on combined data, and using panel data, was estimated for four different groups countries, during 1992-2002. The estimation results indicated that trade liberalization increase in countries with high income and upper middle income, led to reduction of CO₂ emissions, and in countries with low income and lower middle income, led to increase of CO₂ emissions.

Alam et al (2007), in his study aimed to analyze the impact of population growth, economic growth, energy intensity (EI) growth and urbanization growth on environmental degradation in Pakistan. The results indicated that in Pakistan, process of economic development depended on the level of energy use and the resultant of this energy used, CO₂ emissions caused to significant and positive economic growth. Moreover to the rapid urbanization and increased population growth affected positively environmental degradation while negatively and significantly the economic development in the long run. Pazhuyan and moradhasel (2007) studied the effect of economic growth on air pollution in the framework of the Kuzentes curve hypothesis for 67 countries with different income groups. The results, establishing the environmental Kuznets curve confirmed in the countries studied using panel data. Lantz and Feng (2006) investigated the macroeconomic forces underlying CO₂ emissions out of fossil fuel use in Canada. In keeping

with the relevant literature on environmental degradation, three forces were expected to influence CO2 emissions: per capita gross domestic product (GDP/capita), population and technological change. Findings indicated that GDP/capita was unrelated to CO2, and an inverted U-shaped relationship exists with population, and a U-shaped relationship existed with technology. Thus, technological and population changes were supported over the commonly hypothesized environmental Kuznets curve (an inverted U-shaped relationship between GDP/capita and environmental degradation) because fossil fuel use in Canada caused CO2 emissions. Hoffmann et al (2005) investigated Granger causality relationship between FDI and pollution for 112 countries. The results indicated that a two-way causality relationship was between variables under study for a group of countries that are at a level of development. Sadeghi and saadat (2004) in a study investigated the causal relationship among population growth, economic growth and environmental impacts in Iran during 1346-1380. Findings indicated that there were an been established unidirectional causality relationship between population growth and environmental degradation and a two-way causality relationship between environmental degradation and economic growth in Iran.

MODEL SPECIFICATION, THE DATA AND THE ESTIMATION METHOD

The Empirical Form and The Data

This study, in order to evaluate the impact of ICT on the urban economy and environment used the following model:

$$\text{LCO2}_{it} = \alpha_0 + \alpha_1 \text{LINTU}_{it} + \alpha_2 \text{LCAR}_{it} + \alpha_3 \text{LOPEN}_{it} + \alpha_4 \text{LPOPU}_{it} + \alpha_5 \text{LFDI}_{it} + U_{it} \quad (1)$$

where: LCO2_{it} is logarithm of the variable related to pollution (CO2 emissions), α_0 is a constant coefficient; LINTU_{it} is logarithm of the number of internet users per 100 people as an indicator of ICT; LCAR_{it} is logarithm of the number of cars, buses, and freight vehicles but do not include two-wheelers per 1000 people; LOPEN_{it} is logarithm of the degree of openness of the economy, that is sum of exports and imports to GDP; LPOPU_{it} is logarithm of the urban population, in countries with more than one million population; LFDI_{it} is logarithm of foreign direct investment attraction; U_{it} is the model's random error component; i represents the cross section (country) and t represents time. To estimate the model, data were extracted from World Bank (2010).

Countries in the sample include Albania, Australia, Botswana, Chile, China, Germany, Dominican, Ecuador, Finland, United Kingdom, Ghana, Greece, United Arab Emirates, Iran, Jordan, Mexico, Poland, Singapore, Syrian Arab Republics, United States, South Africa, Austria, Belgium, Switzerland, Cyprus, Denmark, Estonia, France, Moldova, Mauritius, Norway, Nicaragua, New Zealand, Slovak Republic, Slovenia, Sweden, Turkey, Ukraine.

The Estimation Method and Results

To estimate the model in 48 selected countries (see box) of the world during 2002-2007, the panel data method was used. The following is the panel data estimation equation used in this paper:

$$Y_{it} = \delta_i + \Gamma_t + (X_{it})\Phi + \psi_{it} \quad (2)$$

Where Y_{it} is CO2 emissions, the variable related to pollution in country i at year t , and X_{it} is a vector of the explanatory variables (the number of internet users, the number of cars, buses, and freight vehicles but do not include two-wheelers, sum of exports and imports to GDP, the urban population, foreign direct investment) for country $i = 1, 2, \dots, m$ and at time $t = 1, 2, \dots, T$, Φ a scalar vector of parameters of $\alpha_1, \dots, \alpha_5$; ψ_{it} is a classical stochastic disturbance term with $E[\psi_{it}] = 0$ and $\text{var}[\psi_{it}] = \sigma_e^2$, δ_i and Γ_t are country and time specific effects, respectively. In the case where country specific effects are constant across countries and time effects are zero [i.e. $\delta_i = \lambda$ and $\Gamma_t = 0$], we can estimate with Ordinary Least Squares (OLS). Since the amount of calculation

of F statistics indicate that based on testing the null hypothesis, using (OLS) is rejected. Therefore, should be considered Fixed- Effect (FE) or Random- Effect (RE). Hausman Test used to discriminate between FE and RE. Since Chi-square (χ^2) statistic calculated was greater than χ^2 table, so the null hypothesis of Hausman (using RE) was rejected and the FE confirmed for estimating of model. Our findings based on the fixed-effects model are summarized in Table 1. Since the models estimated were in logarithmic forms, all estimated coefficients represent elasticity.

Table 1: Estimation results of the effect of ICT on the urban economy and environment using panel data

Variables	Coefficients	Std. Error
C	0.763**	0.584
LINTU	-0.043*	0.013
LCAR	0.151*	0.032
LOPEN	-0.033**	0.031
LPOPU	0.534*	0.194
LFDI	0.003**	0.003
F test statistics	492.20	[0.000]
Hausman test statistics	21.43	[0.000]
Durbin-Watson stat	1.53	
R-Squared	0.99	

** p<0.05, * p<0.1

As the table shows all variables have signs that are consistent with theory predictions, increasing the number of internet users lead to reduction air pollution in selected countries. Virtualization of many products, digitization of information, transfers to non-physical has been of positive results the expansion of ICT in recent years. Positive coefficient the number

of motor vehicles indicate that per increasing number of them, air pollution was increased. Coefficient of the openness was negative and indicated that in these countries with an increase in trade exchanges, reduce environmental pollution. On the other hand, this variable can express positive effect of globalization on reduce pollution levels. Coefficient obtained for the population variable was positive this means that the development of urban life lead to increases pollution. In other words, the environmental damage caused by the combination of factors such as population growth, energy consumption and industrial activity in recent decades. Coefficient obtained for FDI is positive, So that the majority of countries attracted foreign investment to promote economic growth were encouraged, However, it should not be ignored environmental issues, which is hidden behind this situation.

SUMMARY AND CONCLUSIONS

In recent years, implication of globalization as convergence and integration of global markets and applying ICT in the past two decades, affected the economies of different countries. Also, the globalization of economy and the use of ICT, urban communities have been affected, Further, use of ICT for raising awareness of the different communities, reduce traffic in cities and reduce motor vehicles use and change the way people lives, plays an important role in reducing environmental pollution. The purpose of this paper, reviews the use of ICT and globalization of the urban economy and environment. In this regard, 48 countries of the world's in the period 2002-2007 were studied and the results of estimating the model using panel data indicated that the use of ICT and openness will lead to improved environmental quality. While increasing the number of motor vehicles and the urban population is causing environmental degradation.

Suggestions:

1. Since the ICT infrastructure such as, the internet penetration rate had a significant influence on increasing quality of the environment, policies that could accelerate growth of ICT sector, would improve environmental quality.

2. Since the increasing number of motor vehicles and urban population caused by environmental degradation, it is suggested that reduce car traffic by training individual in using ICT. Also, with electronic service delivery through improved ICT infrastructure can reduce the concentration of population in certain areas.
3. It is suggested that leaders and planners which have business interaction with other countries, in attracting foreign investment, should regard environmental issues and use industries which cause less environmental pollution.

REFERENCES

- Alam, Sh. Fatima A. & Butt, M. (2007), "Sustainable development in Pakistan in the context energy consumption demand and environmental degradation" *Journal of Asian Economics*, Vol 18, pp 825- 837.
- Barghi Oskouie, M. (2008), "The effect of trade liberalization on CO2 emissions in the environmental Kuznets curve", *Journal of Economic Research*, No 82, pp 1-21.
- Birdsall, N., Wheeler, D., (1993). "Trade policy and industrial pollution in Latin America: Where are the pollution havens?" *Journal of Environment and Development* 2 (1), 137–149.
- Cole, M.A., Rayner, A.J., Bates, J.M., (1997). "The environmental Kuznets curve an empirical analysis". *Environment and Development Economics* 2 (4), 401–416.
- Grossman, G.M., Krueger, A.B., (1991). "Environmental impacts of a North American free trade agreement". National Bureau of Economic Research Working Paper, vol. 3914. NBER, Cambridge, MA.
- Halicioglu, F. (2009), " An econometric study of CO2 emissions, energy consumption, income and foreign trade in Turkey", *Journal of Energy Policy*, Vol 37(3), pp 1156-1164.
- Hoffmann, R., Lee, C. & Yeung, M. (2005), " FDI and pollution: a Granger causality test using panel data", *Journal of International Development*, Vol17(3), pp 311-317.
- Keyvani, R. (2009), " Globalization and city competitiveness, challenges and opportunities facing the municipal authorities in developing countries", *Journal of Urban Economics*, No 1.
- Lashkarizadeh, M., Gharavi, F. (2010), " The effect of information and communication technology (ICT) on the environmental quality of the 20 selected developing countries", *Journal of Transportation and Development*, No. 49.
- Lantz, V., Feng, Q. (2006), " Assessing income, population, and technology impacts on CO2 emissions in Canada: where' s the EKC?", *Journal of Ecological Economics*, Vol 57(2), pp 229-238.
- Mani, M., Wheeler, D., (1998). " In search of pollution havens? Dirty industry in the world economy, 1960–1995," *Journal of Environment and Development* 7 (3), pp 215- 224.
- Motlag, M., Behrooznia, P. (2009), " The effect of information and communication technologies on urban development", *Journal of Social Science Research*, No 2.
- Pazhuyan, J., Moradhasel, N. (2007), " The effect of economic growth on air pollution", *Iranian Economic Researches Quarterly*, V(4), pp 141-160.
- Sadeghi, H., Saadat, R. (2004), " Population growth, economic growth and environmental impact in Iran." *Journal of Economic Research*, No. 64, pp. 164-180.
- Sujodi, S., Aslaninia, N. & Mohseni, F. (2010), " The effect of information and communication technology (ICT) on the environment in developing countries", *Fourth Conference on Environmental Engineering*, 1389.
- Suri, V., Chapman, D., (1998). "Economic growth, trade and energy implications for the environmental Kuznets curve" *Ecological Economics* 25 (2), 195– 208.
- World Development Indicator (WDI, 2010).
- Yang- Yen, (2001). "Trade liberation and pollution: a general equilibrium analysis of carbon dioxide emission in Taiwan". *Economic Modeling* 18, 435-454.

Zhang, X.P. & Cheng, X.M. (2009), " Energy consumption, carbon emissions, and economic growth in China", *Journal of Ecological Economics*, Vol 68, pp 2706- 2712.

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Study the Effect of Targeted Energy Subsidies on Environment Pollution in Iran

INTRODUCTION

Present trend of energy consumption of the world, has encountered the world with two great crisis; environment pollution and acceleration in purging energy resources. Environment pollution, climate change and nonrenewable resources are the original challenges of using up fossil energy resources for incorrect consumption pattern, population increase, which have been continued more severely (Energy Balance Sheet, 2007) Energy provision is also the most fundamental prerequisite for economical and social development of countries today. Demographic change and urban growth along with efficiency weakness of production, transfer, distribution, consuming flows and necessary independence to secure and safe energy resources have caused rise in energy demand and in rapid consumption of its resources.

The manner of production and the use of energy carriers in different consumption sectors are effective factors in creating environment pollution at local, regional and global scale. Thus, considering the amount of contaminants and greenhouse gas emissions and surveying their variations in different time periods, provide appropriate tools for incumbent plan and policy to decrease negative effects and consequences of energy consumption. Consumption of electricity, natural gas, gas oil and gasoline in their various applications is one of the most important factors in producing and diffusing pollutants in environment. The major of these pollutants enters into the breathing air and is an essential threat for human health.

It is obvious that because of increasing energy consumption, water and soil resources are subject to pollution threat in recent years. The use of water resources to produce consumed electricity, the evacuation of energy carriers into water resources, and soil contamination by oil pollutants are among the sensible samples for energy consumption and environment quality relationship.

The use of energy carriers in all its forms and stages of production, distribution and consumption, entails in producing and diffusing environment pollutants into water, weather or

soil. Estimation and calculation the amount of pollutant proceeded by the use of energy carriers may result in more attention to alleviate the amount of these utilization. This reduction does not necessarily mean decline in production or decrease in the efficiency or operation of different sectors. For, decreasing consumption should take place through expenditure optimization and energy loss reduction and improvement in consuming efficiency (Salgi Aazam et al, 2009).

Theoretical framework about the effect of targeted energy subsidies on the environment pollution was then offered in this paper, afterward the model was introduced and estimated and finally, the acquired results and suggestions were presented by considering former part of the paper.

Keywords: targeted energy subsidies, environment pollution, Iran

THEORETICAL FRAMEWORK OF THE ENVIRONMENTAL EFFECTS OF SUBSIDIES

Economics is the science of optimum use of resources. Understanding and using this science enables mankind to optimally use scarce natural resources. But it should be mentioned that individual interest is not necessarily consistence with society's interest. Thus, optimal use of natural resources should regard social interest considering interests of future generation and minimize environment destruction and pollution. In general, there is mutual response between economy and environment. Firms produce commodities using economical resources, such as materials and energy, and in this process they return some of the inputs used in production as wastes and residuals into environment. These wastes are mainly in forms of carbon monoxide, carbon dioxide, sulfur dioxide and solid waste and sewage, cause contaminations or impose external costs on society. Therefore it is considered that making a choice in an economy is confronted with an opportunity cost (Abbasspour, 2007).

Environmental effects of energy subsidies are very complicated. Depending on the type and the nature of subsidy and also energy sources, the effects of subsidies may be positive or negative. The subsidies which encourage consumers to use more fossil fuels have inevitably unpleasant environment effects and consequences. Subsidies granted to consumers by decreasing fuel price or its cost of using causes to more consumption, ultimately results in the atmospheric rise spread of toxic and greenhouse gases. Production of more fossil fuel may also indirectly harm environment by polluting water resources and destroying natural landscapes. Subsidies assigned to biofuels by some OECD member countries, for example, have been generally resulted in the rise of using chemical fertilizers and pesticides. This has caused in the damage of regional ecosystem and contaminated the region's water and soil.

Some studies show that different kinds of subsidies devoted to fossil fuels have harmful effects. Researches that were recently done by Organization of Economic Cooperation and Development (OECD) show that the omission of all subsidies allocated to fossil fuels in industry and electricity sectors all over the world, will decrease carbon dioxide (CO₂) diffusion more than 6% till 2010 and will increase real income by 0.1%. International Energy Agency surveys in 1999, showed that elimination of consumption subsidies in eight great non-OECD countries caused primarily in 13% decline in energy consumption and 16% decrease in carbon dioxide and also an increase in GDP of these countries for about 1%. Since coal is the most polluting fuel, elimination of subsidies to this type of fuel, best serves the environment.

About the relationship of energy consumption and environment destruction Myer and Kent (2003) argued that since industrial revolution, specifically in recent years, although using more energy has increased average productivity of factors of production, but use of energy has destroyed environment by its pollutant effect. Because major part of the greenhouse gases

diffused in the world is carbon dioxide due to fossil fuels. So energy sector has the most contribution in the environment change, thus there is a close relation between energy and environmental policies (Shim 2006).

However, the general effect of subsidies devoted to fossil fuels and other energies has not always been negative. Abatement in more consumption of oil products may result in less demolition of forests in developing countries, because in these countries, low income families for their own use will consume fuel products instead of woods. This is the main reason not to eliminate subsidies on liquid gas and kerosene in many occasions. It should be considered that if subsidies accrued to internal production of fossil fuels it would incur decline in fuel imports to the country, then there will be no increase in fuel consumption. Moreover, subsidies assigned to electricity and oil products in poor countries may alleviate pollution indoors. Because they encourage households to use cleaner fuels instead of using traditional forms of energy such as wood, straw, agricultural and animal wastes (Javan and Nassimi, 2006).

Figure 1 shows how subsidies allocated to the fuel production and consumption may harm environment. So that presentation of subsidy on each unit of fuel production transfers supply curve to S_{ps} . This causes in price fall to P_{ps} and rise in quantity of fuel sold to Q_{ps} and increase in environment damage from E to E_{ps} .

Subsidies devoted to each unit of energy consumed, shift demand curve from D to D_{cs} . That may result in fall of net price paid by consumer to P_{cs} , and causes rise in fuel consumed to Q_{cs} . This, also will rise damage in environment and settles it on E_{cs} .

The exact amount of effects and consequences of subsidies devoted to each one unit of energy consumption or production depends on supply and demand and environmental loss curves. Less the price elasticity of demand and supply, less effect has subsidies on environment. Total effect of subsidies devoted to a special fuel is determined by replacement of one fuel with the other one. For these subsidies usually affect the amount of other fuels which are not qualified for subsidies (ibid).

RESEARCH BACKGROUND

Diets & Rosa (1997) have investigated the effect of population and energy consumption on environment. The results showed that elasticity of carbon dioxide diffusion and energy consumption was close to one. Rise in population will also increase spread of carbon dioxide. Tol et al. (2006) studied long run relation between energy consumption and carbon dioxide diffusion in U.S.A. during 1850-2002. It led to this conclusion that increase in fossil fuel will lead to rise in carbon dioxide gas diffusion and population, economic and electricity consumption growth are also among the factors effective on dioxide carbon gas emission. Alam, et al. (2007) surveyed the effect of determinants of environment pollution in Pakistan during 1971-2005. Their findings revealed that increase in GDP and intensive use of energy will raise environment pollution (carbon dioxide gas spread).

Ang (2007) in his study examined dynamic causality relation among carbon dioxide gas spread, energy use and production in France during 1960-2000. Therewith, economic growth has been the long run cause of energy utilization and environment pollution and there have been a one way causal relationship of energy consumption toward production growth in short run. The study result also showed that rise in energy using increases carbon dioxide gas spread.

Energy sector's position in Iran

Tables 1 and 2 show the amount of the emission of pollutant and greenhouse gases and their contribution in each consuming energy sector in 2007. According to these tables it is recognized that transportation sector by producing total emission of 61.26% NO_x, 28.12% SO₂, 98.52% CO, 75.55% CH₄ and 77.72% suspended ingredients, among energy consuming sectors of the country has the maximum contribution in variety of gas emission. It should be noted that power and transportation sectors had the most SO₂ emission and household, trade, public and power sectors had the biggest amount of CO₂ emission in that year. Transportation, power and industry sectors had significant contribution in production of sulfur dioxide and nitrogen oxides, so that, from total gas emission approximately 85.05 and 85.73 percent respectively, belongs to these sectors in Iran (energy balance sheet, 2007)

Figure1. Effect of energy subsidy on environment pollution

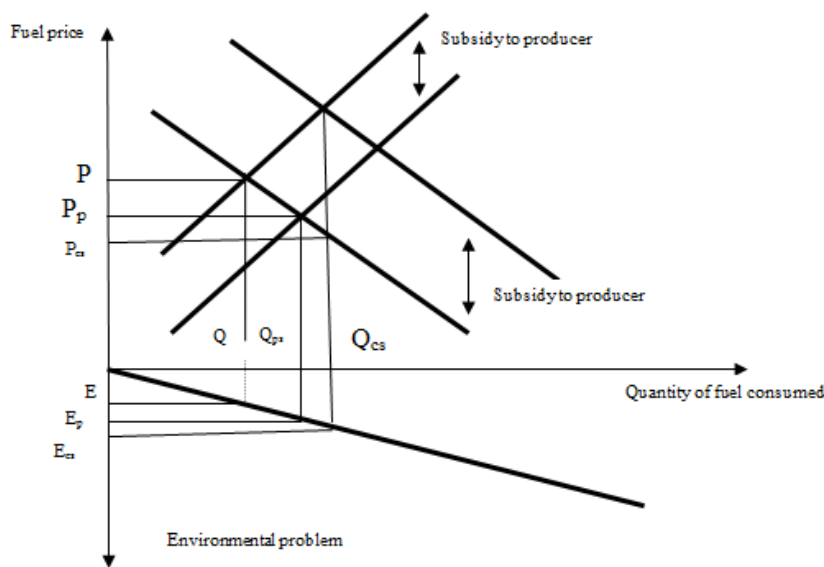


Table1: The amount of pollutant and greenhouse gas emission in energy sector in Iran 2007 (in tons)

Sector/gas	NO _x	SO ₂	SO ₃	CO	SPM	CO ₂	CH ₄	N ₂ O
House, trade, public	130227	144998	1820	79796	13506	142335125	4246	594
Industry	156066	343218	5112	2267	17432	79398458	2071	324
Transportation	844749	400724	4495	8331409	285428	115502438	32487	5583
Agriculture	66599	68065	414	22296	29026	12210019	726	4508
Refinery	na	na	na	na	na	2263486	470	58
Power	181317	467968	3110	234	21848	120179431	3001	457
Total	1378957	1424973	14951	8456502	367239	492264957	43001	11525

Source: energy balance sheet 2007 (na = figures unavailable)

Table 2: contribution of each energy consuming sector in pollutant and greenhouse gas emission (%)

Sector/gas	NO _x	SO ₂	SO ₃	CO	SPM	CO ₂	CH ₄	N ₂ O
House, trade, public	9.44	10.18	12.17	0.94	3.68	28.91	9.87	5.16
Industry	11.32	24.09	34.19	0.27	4.75	16.13	4.82	2.82

*Study the Effect of Targeted Energy
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Sector/gas	NO _x	SO ₂	SO ₃	CO	SPM	CO ₂	CH ₄	N ₂ O
Transportation	61.26	28.12	30.07	98.52	77.72	23.46	75.55	48.44
Agriculture	4.83	4.78	2.77	0.26	7.9	2.48	1.69	39.12
Refinery	na	na	na	na	na	4.6	1.09	0.5
Power	13.15	32.84	20.8	*	5.95	24.41	6.98	3.97
Total	100	100	100	100	100	100	100	100

Source: energy balance sheet 2007 (na = figures unavailable; * = trivial figure)

Model specification

Basically, the amount of environmental pollution and in a sense the severity of air pollution and/or environment demolition in the form of carbon dioxide emission in space can be derived from several factors. According to the research topic, in this paper studied function is as follows:

$$LCO_2 = F(LGDPP, LPE, LMV, LU)$$

Where,

LCO₂: logarithm of carbon dioxide gas emission in metric ton.

LGDPP: logarithm of per capita gross domestic product (constant price 2007)

LPE: logarithm of real price of energy carriers

LMV: logarithm of the value added of industries & mines sector (constant price 2007)

LU: logarithm of urban population

To estimate the model, data about per capita GDP, value added in industries and mines sector, urban population is used from the last information and time series data on national account of central bank of Islamic Republic of Iran, data on carbon dioxide emission is extracted from World Development Indicators' CD (World Development Indicators (2008)), and also data on real prices of energy careers, energy balance sheet in 2007 is used.

Unit root test

In cointegration analysis, statistical characteristics of variables have high importance. In real, cointegration method usually tests statistical consistency of system of equation with the theory. Economic variables are generally non-stationary. But cointegration is an exception to this rule and has close relation with economic theory. In this review, to study stationarity of variables, EVIEWS7 and two tests; augmented Dickey Fuller (ADF) and Phillips-Prone (PP) are used. According to these two tests' results all variables will be stationary by first difference (Table 3).

Optimum lag interval specification

Before estimating the model, lag intervals used in the model should be specified in order to ensure that error terms contain classical characteristics, in another word there is no sequential correlation between them, but the error terms are normally distributed with zero mean and δ^2 variance, and are independently distributed. So in vector autoregressive regression, one lag is selected by Schwarz-Bayesian lag criterion (SBC).

Table 3- variables' stationarity studied in the model

Variable	ADF		PP	
	Level	First difference	Level	First difference
LCO ₂	-1.79	-6.12	-1.69	-7.17
LGDPP	-1.78	-3.85	-0.27	-3.69
LPE	-2.44	-4.79	-2.07	-4.84
LMV	-1.85	-5.65	-1.23	-7.18
LU	-2.55	-3.40	-1.12	-3.25

Source: research findings, critical value of ADF and PP statistic at levels 1, 5, 10 percent are -4.26, -3.55 and -3.21 respectively.

Johansen Cointegration test and long run results

In this method, at first, the presence of cointegration and long run relation or relations among variables of the model is determined by maximum Eigenvalue and Trace tests. Considering maximum Eigenvalue test, one cointegration vector (Table 4), and by trace test (Table 5) one long run cointegration vector were obtained.

Table 4- Determination of number of cointegration vectors on the basis of maximum Eigenvalue test

H ₀	H ₁	Test statistic (λ_{max})	Critical amount at 95% level
r = 0	r = 1	32.59	30.44
r ≤ 1	r = 2	16.08	24.16

Source: research findings

Table 5- Determination of number of cointegration vectors on the basis of trace test

H ₀	H ₁	Test statistic λ_{trace}	Critical value at 95% level
r = 0	r ≥ 1	67.02	60.06
r ≤ 1	r ≥ 2	34.43	40.17

Source: research findings

Since, in this paper, the effects of per capita GDP, energy carriers prices, value added in industries & mines sector and burgess population were examined on the amount of carbon dioxide gas emission, therefore, the process of normalizing cointegration vector was done on the basis of the amount of carbon dioxide emission. Normalized vector might be written as follows:

$$LCO_2 = 0.42 LGDPP - 0.05 LPE + 0.56 LMV + 0.57 LU$$

(0.21) (0.02) (0.21) (0.19)

Numbers within parenthesis introduce standard deviation of variables. Per capita gross domestic product shows economic growth. In the long run, there may be direct, reverse or mixed relation between economic growth and quality of environment. Given fixed technology, tact and investment in environment, broad increase in economic activities would certainly result in environment elimination. Rise in per capita income would increase demand for developing quality level of environment and also, investment in environment.

According to the results obtained, per capita gross domestic product had positive and significant effect on carbon dioxide gas emission. Per capita GDP coefficient was 0.42 which indicated that 1% increase in GDP raised carbon dioxide gas emission and environment pollution by 0.42%. In other words, economic growth was accompanied by creation and intensification of pollution. For using less pollutant new technologies in production of commodities and also because of less continuous extension of some energy intensive and pollutant industries, this coefficient was positive.

The effect of energy carriers' real prices on carbon dioxide gas emission was negative and significant and indicated that 1% increase in energy price would decrease carbon dioxide gas emission by 5%.i.e. deletion of subsidies granted to consumers would raise fuel price and its usage cost, decrease fuel consumption and ultimately, alleviate atmospheric toxic and greenhouse gas emission.

The effect of value added in industries & mines sector on carbon dioxide gas emission was negative and significant, which indicated that 1% increase in value added in industries & mines sector would raise environment pollution by 0.56%.i.e. change in economic structure and development of industry section worsen environment quality by more pollutant emission.

There are two broad approaches on the relation between urban population and environment pollution. First it points that urban population has positive effect on environment pollution because, as urbanization increases in infrastructures, transportation and energy usage and also transformation from agriculture into industry causes in rising environment pollution. But, second approach emphasizes in that urban culture results in optimization of energy consumption in cities relative to villages and reduction in pollution. Therefore, the relation between urban population growth and environment pollution may be either positive or negative. In this paper, the effect of urban population on carbon dioxide gas emission was positive and significant which indicated that 1% increase in urban population raised environment pollution by 0.57%. Urbanism extension intensified fossil fuel consumption and concluded pollution. This is considerable in present situation of Iran economy. Since, relative fall in rural life (in the form of immigration to cities), and rise in urban life means decline in employees in traditional agriculture sector and their entering to generally industrial urban life which causes pollution in both production and consumption areas.

Vector Auto Regression Error Correction Model (VECM)

VECM method may determine causality among variables and also, separate short run and long run causality. Wald test shows causality of considered explained variables relative to dependent variable. Furthermore, since VECM contains long run data, through significant coefficient of error correction by t test, long run causality relation of explained variables relative to dependant variable will be realized. To study short run causality, Wald test on coefficients was used and results were presented in Table 6.

Table 6- results of short run causality of Wald test

Dependant	Independent	Wald test statistics	P- Value	Results
LCO ₂	LGDP	12.93	0.0003	No causal relationship
	LPE	0.04	0.85	No causal relationship
	LMV	4.04	0.04	No causal relationship
	LU	0.28	0.59	No causal relationship

Source: research findings

Table 7- Vector Error Correction Model's equation for ΔLCO_2

Variable	Coefficient	T statistics
$\Delta LCO_2 (-1)$	-0.03	-0.20
$\Delta LGDP (-1)$	1.01	3.60
$\Delta LPE (-1)$	0.01	0.19
$\Delta LMV (-1)$	- 0.31	-2.01
$\Delta LU (-1)$	- 0.50	-.053
VECM(-1)	- 0.38	-2.54
R ² = 0.61		

Source: research findings

According to the obtained results in Table 7, there is causal relationship from per capita GDP, value added in industries& mines sector toward carbon dioxide gas emission, but no causal relationship from energy price and urban population toward carbon dioxide gas emission.

On the basis of short run model conclusions revealed in Table 7, VECM (-1) coefficient in the equation was -0.38, which stated that by moving from time t to t+1, 38% of carbon dioxide gas

emission deviation from its long run trend was adjusted by model variables and moved toward its long run equilibrium trend that lasted about 2 years and 7 months.

CONCLUSION AND POLICY PROPOSALS

Production and consumption of energy, specifically various kinds of fossil fuels, have great effect on environment. Fossil fuel consumption entails in the greatest amount of greenhouse gas emission resulted from human activities. These greenhouse gases, created by human beings, become condensed atmospheric pollution and intensify natural phenomenon “greenhouse effect”.

In this paper, the effect of targeted energy subsidies and some other factors such as economic growth, economic structure and urban population on environment pollution (logarithm of carbon dioxide gas emission amount), was studied using two modern time series approaches in econometrics, cointegration method and VECM, in Iran during 1976- 2007.

Previous to estimating the model, stationary state of variables was examined by augmented Dickey-Fuller and Phillips-Prone tests and according to the results all variables became stationary by their first difference. As mentioned above, variables all were augmented by taking the first difference.

Conclusions obtained from the long run relations, considered that targeted energy subsidies, economic growth and structure, and also urban population were among effective factors on environment pollution during studied period. Thus, a positive and significant relation between economic growth and environment index existed. Positive coefficient of logarithm of per capita GDP showed that pollution level rises as one unit increase in per capita production occurs. It implied that economic growth accompanied by pollution creation and intensification.

Real price effect of energy carriers on carbon dioxide gas emission was negative and significant, it implies that deletion of subsidies granted to consumers or a rise in fuel price or cost of using it, might entail in less fuel consumption and ultimately decline in atmospheric toxic and greenhouse gases. Results also stated the existence of positive and significant effect of value added in industry on the carbon dioxide gas emission in Iran. In other words, change in economic structure and extension of industrial sector, because of more pollutants' emission, might worsen environment quality.

The effect of urban population on carbon dioxide gas emission was positive and significant which indicated that expansion of urbanism would intensify rise in fossil fuel consumption and pollutions resulted.

By short run analysis, a causal relation of the model's variables was jointly perceived from short run toward long run. And according to Wald test results, there was causal relation among economic growth, economic structure and carbon dioxide gas emission, but there was no causal relation among real price of energy, urban population and carbon dioxide gas emission.

Therefore, due to the positive and significant effect of industry sector and urban population on pollutants amount and also considering this point that Iran, in recent years, has been transferring from agriculture into industry sector, it is offered that government, by enacting regulations and standards about environment such as tax imposed on pollution, should enforce industrial producers to use technologies which create less pollution or decrease pollution created. It is also proposed that government by execution of targeted subsidies should move energy price to its real price and adjust energy consumption pattern in the country.

REFERENCES

- Abbasspour, Majid, 2007, "Energy, Environment and Sustainable Development", Tehran, scientific publication of Shariff industrial university, volumes 1 and 2, first edition.
- Abbasspour Majid, 2007, "Energy, Environment and Sustainable Development", Tehran: Scientific publication of Shariff Industrial University, VOL 1,2 first edition
- Afshin Javan, Nassimi Homayoon (2006), "Optimal Methods of Revision and Amendment of Energy Subsidies", Journal of Economy of Energy Studies, 2nd year, NO.6.
- Alam, S., F. Ambreen & B. Muhammad, 2007, "Sustainable Development in Pakistan in the Context of Energy Consumption Demand and Environmental Degradation", Journal of Asian Economics, 18:825-837.
- Ang, J.B., 2007, "CO₂ Emission, Energy Consumption, and output in France", Energy Policy, 35:4772-4778.
- Central Bank of Iran, time series data, different years.
- Dietz, T & E.A. Rosa, 1997, "Effects of Population and Affluence on CO₂ Emission", proceeding of the National Academy of Sciences, 94:175-179.
- Energy Balance Sheet of Iran, 2007, Tehran: power ministry- energy affaires' assistant.
- Salgi Aazam, Ali, Nabizadeh Ramin and Goodini Kazem, (2009), "Survey the Relation between Energy Consumption in Central Paradise of Tehran University and its Environmental Gas Emission", Journal of Health And Environment, Quarterly Journal Of Scientific Association Of Hygiene Of The Environment of Iran. Vol.2.
- Shim, J.H., 2006, "The Reform of Energy Subsidies for the Enhancement of Marine Sustainability, Case Study of South Korea, University of Delaware.
- World Bank, 2010, World Development Indicators 2010
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An Assessment of The Contributions of Microfinance on the Growth of Small and Medium Enterprises (SMEs) in Nigeria

INTRODUCTION

The Small and Medium Scale Industries subsector of the Nigerian economy over the years has been facing problems of slow or stagnating development. This problem has continued to serve as a cog in the wheel of progress of the overall economic development in the country. This stampede of the growth of Small and Medium Enterprises (SMEs) in Nigeria is nowadays threatening to deprive the nation of the much needed benefits of poverty reduction, employment generation and wealth creation, which by implication should have set the country's ball rolling for sustainable and growth and development.

One major problem, which is indisputable in all quarters, is the lack of sufficient fund to set up and run small businesses. Lack of funds and access to credit facilities are significant obstacles to the development and sustainability of micro-enterprises that discourage those with entrepreneur skills. Small firms seeking bank loans face considerable credit constraints in that they receive credit much less frequently than larger ones. It is also known that many entrepreneurs would like to start up their businesses, but refrain from doing so due to the lack of credit to finance their

initial or subsequent operations. For any business to grow, credit is essential; lack of credit is a barrier to the development and growth of the incomes of households and SMEs. Access to credit enhances the adoption of new and more advanced technologies that will enable the rural household to expand their agricultural and non-agricultural enterprises, which in turn improve their income levels, and hence help in reducing their incidence of poverty (Abubakar, 2011).

Despite the fact that credit has been recognized as an essential tool for promoting small and micro enterprises, savings also plays an important role next to credit (Olaitan, 2006). Generally, the savings culture in Nigeria, particularly among rural dwellers, is low, as such mobilising start up capital and operational capital by SMEs always is becoming a difficult task. The significance of savings on the advancement of SMEs is very profound. With more financial savings, SMEs stand a good chance to accumulate a huge capital, and therefore greater capability for self-investment is enhanced, the need to borrow at high interest rates from private money lenders is reduced and the ability to purchase more productive assets improved. The recent shift in terms from micro-credit to micro-finance reflect that saving services and not just loans may help to improve the well being of the poor in general and women in particular, and that borrowing is riskier than savings (Vonderlack, 2001 cited in Juana, 2005). It is in view of this that the expanding micro-enterprise services like micro-finance are currently receiving perhaps the highest attention ever as tools of achieving many development goals in poor countries. Micro-finance institutions (MFIs) help to build the ability of the poor and the vulnerable to have access to formal financial services. With micro-finance institutions, the latent entrepreneurial capacity of the poor people can now be harnessed and facilitated.

Majority of the Nigerian population dwells in the rural areas where peasant farming and informal activities play leading roles obviously this group is much impacted on the incidence of poverty and squalor. According to the World Bank Report (2009 cited in Maksudova 2009), around 1.4 billion people globally live on less than one dollar per day, facing poverty and social and financial exclusion, while recent economic crisis has thrown millions into extreme poverty. In emerging economies like that of Nigeria, government embarks on a series of policy and institutional reforms aimed at enhancing the flow of financing from the Banking system to Small and Medium Scale industries, as well as those involved in the petty business (micro) activities at the informal level. In particular, the important objective of boosting the performance of the petty business activities has not materialized. This is because commercial banks perceive micro-activities as bad risks (Akinboyo, 2007). The main thrust of this write up is to examine the contribution of micro-finance on the growth of Small and Medium Enterprises (SMEs) in Nigeria by evaluating how micro-credit and saving stipulate the performance and expansion of SMEs in the country.

AN OVERVIEW OF THE CONCEPT OF MICRO-FINANCE

Literally, micro-finance means providing very poor people with very small loans to help them engage in productive activities or grow their small businesses. However, technically, micro-finance is a type of banking service that is provided to unemployed or low income individuals or groups who otherwise have no other means of gaining financial services (Kavitha and Ramachandram, 2007). Therefore, microfinance refers to loans, savings, insurance, transfer services and other financial products targeted at low income clients. Thus, micro-finance involves both micro-credits and micro-savings. Micro-credits refer to a small amount of money loaned to an individual or through group lending (Shastri, 2009). Also, Bliss (2005) opined that micro-credit is the name given to small loans made to poor people who are regarded as bad financial risks by conventional banks, as they have insufficient savings or assets to obtain a loan. Despite the diversity of the definitions, the word "micro-finance" generally means small size loans with shorter repayment periods; its clients are small entrepreneurs and low income

households; and the loans are used to generate income, develop enterprises and utilities by the community for social services, such as health and education.

Micro-finance is not limited to giving out loans. The concept of micro saving in which people in the low-income and poverty level-bracket can invest their money into a special kind of savings account that pays higher than the average returns is also an important section of micro-finance. It is a branch of micro-finance that is being explored by existing micro-finance institutions and some of the bigger banks that see potential in this growing market. It is an often neglected component of microfinance. The Grameen Bank of Bangladesh funded by Prof. Muhammad Yunus, considered as the founder of micro-financing, felt that expanding access to saving is an over-riding priority and that, even for the very poorest, those who may not be appropriate recipients of micro-finance services, savings may be a key to enable access to financial services and to alleviate poverty (Counts and Meriwether, 2008 cited in Hayes and Wauwe, 2009). According to Shastri (2009), micro savings are deposit services that allow people to store small amounts of money for future use, often without minimum balance requirements. A saving account allows households to save small amounts of money to meet unexpected expenses and plan for future investments on such things as education and old age.

The interest in micro-finance as an important tool in poverty reduction has burgeoned during the last two decades. This interest triggered by a few success stories in micro-finance is gathering further momentum with the continued search for innovations to address risk and transaction cost issues typically associated with the provision of microfinance services. In the meantime, the landscape of microfinance is changing as a result of increasing understanding of how people use money and their diverse demand, for financial services can be met efficiently and effectively in a user-friendly manner (Amerasinghe, 2000). Good examples of growth of microfinance banks could be seen in the Grameen Bank of Rakyat of Indonesia. From December, 1999 to December, 2005, the number of people who received credits from Microfinance Institutions (MFIs) worldwide rose from 13.5 million to 113.3 million (84 percent of them being women). The number of microfinance institutions increased from 618 to 3,133 during the same period (Daley Harris, 2006 cited in Lensink and Pham, 2008).

THE DEFINITION AND IMPORTANCE OF SMALL AND MEDIUM SCALE ENTERPRISES IN NIGERIA

There is no universally accepted definition of Small and Medium Scale Enterprises (SMEs). Even in a single country, different institutions may adopt different definitions depending on their focus. The criteria usually used in the definitions include capital investment, annual gross turnover, output and employment (Kurfi, 2006). For instance, in the United States of America, a Small Scale Enterprise is one that is independently owned and operated with a capital base of not more than \$5 million. In the Far East (mainly China, Hong Kong, Taiwan and South Korea) and even Europe, the average turnover of a Small Scale Enterprise must not exceed \$3 million (Olayiwola and Adeleye, 2003). In Nigeria, a Small Scale Medium Enterprise is defined as any enterprise with a maximum asset base of N500 million (excluding land and working capital) with no lower or upper limit of staff (SMEEIS, 2005).

The SME's importance to any economy hinges on their ability to stimulate indigenous entrepreneurship, to provide employment to a vast number of people; to mobilize and use domestic savings; to provide intermediate raw materials or semi-processed products to Large Scale enterprises and to curtail rural-urban migration. Hence, the SMEs provide the cornerstones on which any country's economic growth and stability rest (Ozigbo and Ezeaku, 2009). Sanni (2009) posited that Small Scale Medium Enterprises have shown their importance in West Africa; they are recognized by policy makers as an important reservoir for growth. The African

Development Bank (ADB) regards them as representing over 90% of businesses providing employment in Africa. The promotion of the growth of the subsector has been a major concern of the Nigerian administration in the past four decades, as evidenced by the various Monetary, Fiscal and Industrial Policy Interventions introduced by successive governments since 1970s (Abubakar, 2011).

Well managed and healthy SMEs are a source of employment opportunities and wealth creation. They can contribute to social stability and generate tax revenues. According to the International Finance Corporation (IFC), there is a positive relationship between a country's overall level of income and the number of SME per 1000 people. The World Bank Report (2000) indicates that a healthy SMEs sector corresponds with a reduced level of informal or black-market activities. For large corporations, SMEs can constitute an important source of local supply and service provision to the larger corporations. They usually have an extensive local knowledge of resources, a supply pattern and purchasing trend. Developing countries also represent a huge, largely untapped market for large corporations. By working closely with SMEs, large corporations can develop a new customer base that may not be accessible to the traditional distribution networks of these corporations.

SMEs also represent an important source of innovation. They tend to occupy specialized market niches and follow competitive strategies that set them apart from other companies. For local communities, SMEs often have a vested interest in community development. Being local, they draw upon the community for their workforce and rely on it to do the business. SMEs also provide goods and services tailored to local needs at a cost affordable to local people.

THE PROBLEMS AND PROSPECTS OF SMES IN NIGERIA

Since the attainment of independence in Nigeria from British Colonial rule in October, 1960, every known regime has recognized the importance of promoting SMEs as the basis of economic growth. As a result, several micro-lending institutions were established to enhance the development of SMEs. Such micro lending institutions include the Nigerian Bank for Commerce and Industry (NBCI), the National Economic Reconstruction Fund (NERFUND), the Peoples Bank of Nigeria (PBN), Community Banks (CB) and the Nigerian Export Import Bank (NEXIM). But unfortunately, records indicate that the performance of SMEs in Nigeria has not justified the establishment of this plethora of micro-credit institutions (Ogujuuiba et al, 2004). One major problem of SMEs in Nigeria that still persist and defies logic is funding. Muktar (2009) opined that small and medium enterprises in rural areas lack the necessary financial services, especially credit from the commercial Banks. This is because they are not considered credit worthy.

Micro-finance institutions empower micro, small and medium enterprises through loans and saving products, thus helping to lift poor people out of poverty and increasing their contribution to the Gross Domestic Product (GDP) of the nation. In Nigeria, government at various levels and stakeholders take cognizance of these potentials and are working out different modalities to curtail the problem of funding SMEs. One recent bold step taken by the World Bank and the federal government of Nigeria is the establishment of Micro-Small and Medium Enterprises (MSME) projects. It is a joint project between the World Bank and the Government aimed at increasing employment and production in selected non-oil sectors of the Nigerian economy with a focus on the pilot states of Abia, Kaduna and Lagos. The project has five components: Access to Finance (ATF), Business Development Service (BDS); Investment Climate; Public Private Partnership (PPP); and Project Management. The Access to Finance (ATF) Component is aimed at developing a new commercial Micro-finance Investment in Nigeria. The project has already given performance grants to six (6) new Micro-finance Banks. The ATF grant constitutes a

considerable portion of the Commercial Microfinance sector in Nigeria in terms of clients and volume of activity (Timberg, 2008).

MICRO-FINANCE INSTITUTIONS IN NIGERIA

Micro-finance institutions are established to provide credits to the poor who have no access to Commercial Banks. Generally, these institutions receive financial support from Western Donors, Non-Governmental Organisations and/or Commercial Banks, who lend to micro-finance often below market interest rates. The micro-finance institution in turn lends this money to indigenous small companies and poor business people. The size of the loan varies but it is often small (Hermes and Lensink, 2007). Nowadays, with renewed interest of various stakeholders in microfinance, the number of micro-finance institutions is increasing around the globe. In Nigeria, as at May 31, 2008 at the conclusion of recapitalization programme for Community Banks, a total of 607 erstwhile Community Banks that met the minimum requirement of N20 million Shares holders Funds, unimpaired by losses, converted to Micro-finance Banks (MBFs). The total number of MBFs as at that date became 768. The rise of micro-finance in Nigeria represents a remarkable accomplishment that demonstrates that it is possible to provide cost-effective financial services to the poor. There are now over 900 Microfinance Banks in existence, with at least 30 operating in Abuja, the nation's capital. Average loan sizes range from as little as N5,000 to amounts higher for organizations and groups. Over N50 billion has been given out already to target audiences like micro-small and medium enterprises (Kalu, 2010). Just like in other centers all over the globe, micro-finance institutions in Nigeria have unique features that distinguish them from conventional banks as follows:

Table I Comparison between MBFs and Conventional Banks

S/N	Microfinance banks (MBFs)	Conventional Banks
I	They offer limited products with no collateral	They offer a variety of products backed by collateral
II	They offer low value credit facilities with high turnover and transaction costs, leading to high interest rates.	They have competitive transaction cost interests
III	They have short loan repayment cycles with weekly payment that ranges from 6 months to 1 year.	They offer loan facilities with diverse tenure and repayment
IV	They have little or no technology deployment	They have sophisticated communication, information and technology
V	They are less formalized and their regulation intensity differs from economy to economy	They are keenly monitored by a formal regulatory body
VI	They have little or no sophisticated credit scoring system	They have a highly sophisticated credit scoring system

Source: Attah, J.A (2007): Microfinance Newsletter, Vol6 No2 P.g 20.

Despite the numerous benefits credited to micro-financing, a lot of challenges exist for microfinance in Nigeria. Some of the key challenges confronting the growth of microfinance in the country include low capacity, lack of technical skills and limited outreach to the poor (Abubakar, 2011). Moreover, according to Ana (2007), the challenges of microfinance banking in Nigeria can be categorized into the following: lack of awareness of the existence of microfinance institutions, lack of trust by the people themselves who believe that Microfinance

Banks are just like the unregulated financial houses; the low literacy level of micro entrepreneurs; preference for gifts by the poor people rather than economic empowerment; inability of the microfinance banks to attract investors; insufficient support from government and related stakeholders; competition rather than cooperation from the deposit money Banks and lack of sufficient manpower.

CONCLUSIONS AND RECOMMENDATIONS

From the foregoing discussion, it is clear that the diverse microfinance services are tools to be utilized for the growth of small and medium businesses. Various opportunities are provided by microfinance banks and/or institutions that enable SMEs to function optionally and effectively towards the development of the economy. For instance, services like micro-credits and micro-savings are essential tools or effective vehicles for SMEs growth. Given the high proportion of poor people and growth prospects of SMEs in Nigeria, a collaborative effort is required among governments (at all levels), government agencies, microfinance institutions and the general public to remove all the challenges that are facing or militating against SMEs growth, as this may have a strong positive repercussion on the entire economy, as well as the national development at large. Therefore, the following recommendations are hereby proffered;

- (I) To improve the chance of the success of existing and potential governmental policies targeted on SMEs, the Nigerian government at various levels should engage in aggressive public enlightenment campaigns on the benefits of such policies and programmes. This can be carried out by employing the use of both electric and print media.
- (II) The Microfinance Institutions (MFIs) should give adequate attention to small and medium scale operators. This would enable the operators to consider MFIs not only as financing sources, but also as counsellors in matters relating to basic financial planning and access inputs, innovation and other procedures.
- (III) The regulatory authorities made up of the Central Bank of Nigeria (CBN) and the Nigeria Deposit Insurance Corporation (NDIC) should closely monitor and pursue the implementation of microfinance policy and regulatory and supervisory framework with vigour to ensure the set targets are achieved.
- (IV) There is the need for the formation of more or additional Microfinance Institutions (MFIs) to cater for the needs of the numerous poor people and Small and Medium Scale Enterprises (SMEs). By so doing, the SMEs would benefit from credits at affordable interest rates, which by implication would improve the economic well being of the Nigerian populace.
- (V) Capacity development for the management staff of SMEs is essential. It is vital because it would help in promoting the manpower quality to manage the SMEs and sustain the business. Also, there should be a strict adherence to the minimum professional qualifications and banking experience specified for the managers of Microfinance Banks (MFBs) by the Central Bank of Nigeria (CBN). Thus, the capacity building of the staff of NBFs should be regularly built to keep pace with the emerging challenges in the sub-sector.

REFERENCES

- Abubakar, A (2011) *An Assessment of the Impact of Micro Financing on the Growth of Small and Medium Scale Enterprises (SMEs) in Bauchi North, Nigeria: An Unpublished M.Sc Management Dissertation Submitted to the Department of Business Administration, Bayero University, Kano, Nigeria.*
- Akinboyo, O.L (2007) *Microfinance Banks: Unlocking the Potentials of Micro-business Activities in the Nigerian Rural Economy*, Bullion of the Central Bank of Nigeria Vol. 31 No 1 page 39-51.

An Assessment of The Contributions of Microfinance on the Growth of Small and Medium Enterprises (SMEs) in Nigeria

- Amerasinghe, N (2000) *Finance for the Poor*, Focal Point of Microfinance, Vol. 11No. 1 page 1-2.
- Ana, C.I (2007) *The Thrills, Challenges and the Way Forward*, The Nigerian Microfinance Newsletter, Vol. 5 No.2 page 6.
- Attah, J.A (2008) *Microfinance Banking: The Need for Proper Orientation*, the Nigerian Microfinance Newsletter, Vol. 6, No. 2, pp20.
- Bliss, S. (2005) *Micro-credit: Small Loans, Big Dreams*; A paper Presented at the Economic Business Educators Conference of the United Nations in Sydney.
- Hayes, K and Wauwe, V.V (2009) *An Opportunity for Rural Development: A Paper Presented at the 9th Annual Communities and Small Scale Mining (ASM) Maputo, Mozambique.*
- Hermes, N and Lensink, R (2007) *The Impact of Microfinance: A Critical Survey*, Economic and Political Weekly, February 10.
- Juanah, M (2005) *The Role of Micro-Financing in Rural Poverty Reduction in Developing Countries*, Being a Research paper Submitted to Spring Centre, University of Dortmund, Germany.
- Kalu, I (2010) *The Hidden Merit of Microfinance*, An Article in Daily Trust, A Nigerian Newspaper Vol. 24, No. 1, Page 13 (April 5th).
- Kavitha, N and Ramachandran, A (2007) *Overview of Microfinance for Women in India*. Retrieved from www.indianMBA.com on 20th May, 2010.
- Kurfi, A.K. (2006) *Factors Militating Against the Development of Small Scale Industries in Nigeria: The Kano Metropolis Experience*, Journal of Social and Management Sciences, Bayero University, Kano Nigeria, Vol. 11 No1 pp. 102-109.
- Lensink, Rhand Pham, T.T (2008) *Is Microfinance An Important Instrument for Poverty Alleviation?* Retrieved from www.developmentgateway.org on 20th May, 2010.
- Maksudova, A.H (2009) *The Contribution of Microfinance to Growth: Transmission Channel and Ways to Test it*, Prentice-Hall Inc, New Jersey.
- Mukhtar, M (2009) *The Role of Microfinance Banks in the Promotion and Development of Entrepreneurship in Semi-Urban and Rural Areas in Nigeria*. Retrieved from www.focusNigeria.com On 20th May, 2010.
- Ogujiuba, K.K et al (2004) *Credit Availability to Small and Medium Enterprises in Nigeria: The Importance of New Capital Base for Banks Background and Issues*. A working Paper.
- Olaitan, M. A (2006) *Finance for Small and Medium Enterprises*, Journal for International Farm Management Vol. 3 No 2 Pp 1-9.
- Olayiwola, L.M and Adeleye, O A (2005) *Rural Development and Agro- Industrial Promotion in Nigeria: Concepts, Strategies and Challenges*, Journal of Social Science, Vol. 11 No. 4 Pp 57-61.
- Ozigbo, N.C and Ezeaku, P (2009) *The Adoption of Information and Communication Technologies to the Development of Small and Medium Scale Enterprises (SMEs) in Africa*, Journal of Business Administration Studies Vol. 1 No 1 Pp 1-20.
- Sanni, O.O (2009) *Small Scale Industry: The Problem of Establishing Small Business Enterprises in Nigeria*, An Unpublished H.N.D. Business Administration Project Submitted to the Vaasa Polytechnic, Nigeria.
- Shastri, R.K. (2009) *Microfinance and Poverty Reduction in India: A Comparative Study with other Asian Countries*, African Journal of Business management Vol. 3 No 4 Pp 136-140.
- SMEEIS (2005) *Revised Guidelines for the Operation in Nigeria*.
- World Bank Report (2000) *World Bank Estimates*, Washington DC.

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Customer-Based Brand Equity in Telecommunication Companies in Sudan

Keywords: Brand Equity, Customer Satisfaction, and Customer Trust

INTRODUCTION

Sudan began its telecom sector reform in 1993 but real developments happened only after the discovery of oil in 1997 which has helped spur growth and generate much needed foreign exchange. With a Compound Annual Growth Rate (CAGR) of more than 40% over the past five years, Sudan represents by far the fastest growing fixed telephony market not only in Africa but worldwide.

A brand is strong if brand equity is high (Boyett & Boyett, 2003). However, brand equity is important due to the competitive advantages conferred by strong and successful brands. For service firms, brand equity can contribute largely to visualizing intangible service products (Chang H., Hsu C. & Chung S., 2008). However, not much research has been done to apply brand equity dimensions and its consequences in telecommunication companies in Sudan. Thus, the objectives of this study are to investigate the influence of the brand equity components (brand awareness (BA), quality practices guarantees (QPG), brand image (BI) & brand ethics (BE)) on customer satisfaction (CS) & customer trust (CT), whereas, customer satisfaction running as mediator variable. This study concentrated on two companies (Zain Company & Sudani Company).

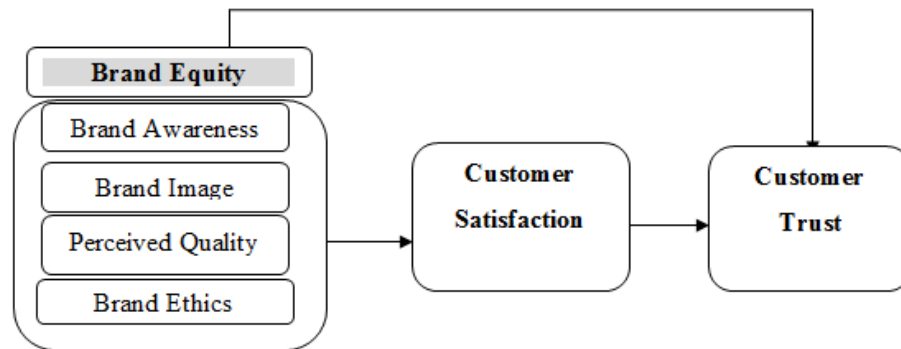
LITERATURE REVIEW

The Marketing Science Institute (MSI) states that brand equity can be viewed by customer “as both financial and as a set of favorable associations and behaviors” (MSI 1989). Since its appearance in the 1980s, brand equity has been one of the main priorities in marketing research (Marketing Science Institute, 2002). Its importance stems from the firms’ interest to create strong brands in order to obtain sustainable competitive advantages and to differentiate their products (Aaker, 1991; Keller, 2003). Brand equity is defined in the literature in a variety of forms, such as favorable impressions, behavioral predilections, and attitudinal dispositions. Brand equity can be brand loyalty, brand awareness, perceived quality, brand associations, and other proprietary brand assets (Aaker, 1992), brand knowledge (Keller, 1993). Some researchers observe that a brand includes only intangible aspects whereas others believe brands comprise both tangible and intangible aspects of the product or service (Leventhal, 1996). Thus, the definitions of brand equity are numerous. They demonstrate the lack of convergent opinions because brand equity is defined either as a blend of tangible and intangible aspects of the offering, or only as intangible, emotional aspects of the offering.

This study embraces the following definition, one that suggests the emotionality attached to the brand: “Brand Equity is the incremental, the [emotional] added value by the brand to the core product as perceived by a [business customer]” (Park & Srinivasan, 1994). There are many

classifications and dimensions proposed in the analysis of brand equity. However, Keller (2003) considers brand knowledge, formed by the dimensions of awareness and brand image, as an indicator of brand equity. Shocker and Weitz (1988) establish brand equity in function of brand image and brand loyalty. Agarwal and Rao (1996) consider overall quality and choice intention as the main dimensions of brand equity; Va'zquez et al. (2002) indicate the importance of stored associations expressing both functional and symbolic utilities, etc. One of the most common classifications in brand equity is the one proposed by Aaker (1991), who distinguishes five dimensions: awareness, associations, perceived quality, brand loyalty and other brand-related assets. In practice, only the first four dimensions are analyzed in consumer-based brand equity research. Finally, Rust et al. (2000) establish brand equity in function of customer brand awareness, customer attitude toward the brand and customer perception of brand ethics. This study is using four measures to analyze brand equity these four measures are brand awareness, brand image, perceived quality and brand ethics. Rust et al. (2000) state that brand equity is hopefully to influence customer willingness staying, considering repurchases, or to recommend the brand. Based on the literature review, the abovementioned insights, the conceptual framework of customer-based brand equity demonstrated in Figure (1).

Figure (1): Conceptual Framework of Customer-Based Brand Equity



RESEARCH DESIGN

The aim of this study is to examine the effects of brand equity dimensions (brand awareness, brand image, perceived quality and brand ethics) on customer satisfaction and customer trust. Brand awareness refers to the strength of a brand's presence in consumers' minds. Brand awareness is an important component of brand equity (Aaker, 1991; Keller, 1993). Brand awareness refers to "the ability for a buyer to recognize or recall a brand is a member of a certain product category" (Aaker, 1991, p. 61). Mostly brand awareness is represented either as brand recognition or brand recall (Keller, 1993).

Perceived quality is another important dimension of brand equity (Aaker, 1991). Perceived quality is considered a "core/primary" facet across customer-based brand equity frameworks (Aaker, 1996; Dyson et al., 1996; Keller, 1993). It is not the real or actual quality of the product but the customer's perception of the overall quality or superiority of the product (or service) with respect to its intended purpose, relative to alternatives (Zeithaml, 1988). Marketers across all product and service categories have increasingly recognized the importance of perceived quality in brand decisions (Morton, 1994). Kotler (1991) notes the intimate connection among product and service quality, customer satisfaction, and company profitability.

Brand Image is defined as “perceptions about a brand as reflected by the brand associations (attributes, benefits and overall brand attitudes) held in consumer memory” (Keller, 1993). It is believed to contain the meaning of the brand for consumers. Brand association can be seen in all forms and reflects features of the product or aspects independent of the product itself (Chen, 2001). A set of associations, usually organized in some meaningful way, forms a brand image. Customer-based brand equity occurs when consumers have a high level of awareness and hold some strong, favorable, and unique brand associations in their memories (Tong and Hawley, 2009).

Brand Ethics is defined as “The extent to which the customer’s believes the brand in question operates in an ethically correct manner” (Rust et al., 2000). So does ethical branding matter? The literature seems to be divided on the responses of consumers. One survey in the USA finds that ethical behavior is an important consideration during the purchase decision and consumers are willing to pay higher prices for that firm’s product (Cryer and Ross, 1997). A UK study concludes that although consumers are more sophisticated today, this does not necessarily translate into behavior that favors ethical companies over unethical ones (Carrigan and Attalla, 2001).

Satisfaction is a response that occurs when consumers experience a pleasurable level of consumption-related fulfillment when evaluating a product or service (Oliver, 1997, p. 13). Satisfaction ratings are the means to strategic ends, such as customer retention, and directly affect profits (Jones and Sasser, 1995; Reichheld, 1996). Mittal and Kamakura (2001) argue that repurchase behavior should be linked to satisfaction because the cost of retaining and maintaining an existing customer is less than the cost of acquiring a new one. Customer satisfaction is an important element in service delivery because understanding and satisfying customers’ needs and wants can generate increased market share from repeat custom and referrals (Barsky, 1992). It therefore has a significant effect on future purchase intentions (Cronin and Taylor, 1992; McAlexander et al., 1994) and on the formation of customer trust.

In this study, customer trust is conceptualized as “the confident expectations of a brand’s reliability and intentions in situations entailing risk to the consumer” (Delgado-Ballester, Munuera-Alemán and Yagüe-Guillén, 2003, p. 37). Therefore, the first dimension of customer trust (reliability) has a technical or competence-based nature, involving the ability and willingness to keep promises and satisfy consumers’ needs. The second dimension (intentions) comprises the attribution of good intentions to the brand in relation to the consumers’ interests and welfare, for example when unexpected problems with the product arise. Consequently, a trustworthy brand is one that consistently keeps its promise of value to consumers through the way the product is developed, produced, sold, serviced and advertised. Even in bad times when some kind of brand crisis arises (Delgado-Ballester, E., Munuera-Alemán, J.L., 2005). Based on above discussions the following sub-hypotheses are developed:

H1.1 There is a positive relationship between brand awareness and customer satisfaction.

H1.2 There is a positive relationship between perceived quality and customer satisfaction.

H1.3 There is a positive relationship between brand image and customer satisfaction.

H1.4 There is a positive relationship between brand ethics and customer satisfaction.

H2.1 There is a positive relationship between brand awareness and customer trust.

H2.2 There is a positive relationship between perceived quality and customer trust.

H2.3 There is a positive relationship between brand image and customer trust.

H2.4 There is a positive relationship between brand ethics and customer trust.

H3 There is a positive relationship between customer satisfaction and customer trust.

H4.1 Customer satisfaction mediates the relationship between brand awareness and customer trust.

H4.2 Customer satisfaction mediates the relationship between perceived quality and customer trust.

H4.3 Customer satisfaction mediates the relationship between brand image and customer trust.

H4.4 Customer satisfaction mediates the relationship between brand ethics and customer trust.

METHODOLOGY

The questionnaire survey method is the most appropriate way to collect the data from the telecommunication companies' customers. For the purpose of this study simple sampling technique was used because it has least bias and offers the most generalizability. The researcher distributed (300) questionnaires to the customers in Zain company sales point and Sudani company sales point, 275 questionnaires were collected of 266 questionnaires were completed. However, the overall response rate of this study was 88.7%, and this high response rate. Brand Awareness measurement was modified from (Keller; 2008, Aaker; 1992; 1996, Hoeffler and Keller (2002) and Yoo et al. (2000)). Even though Carman (1990) observes that there is no consensus about conceptualizing and measuring (perceived) service quality, it has been suggested by Zeithaml (1988) that service quality is "the consumer's judgment about the overall excellence or superiority of a service". Hence, for the measurement of perceived quality in Telecomm companies, SERVQUAL scale with twenty one items developed by Parasuraman et al., 1988 were employed. Brand personality (uniqueness and favorableness) and organizational associations were used as measures for brand image, five items for which were developed based on Aaker (1996), Keller (1993), and Pappu et al. (2005). The measurement of brand ethics adopted from (Rust et al., 2000). Also, four satisfaction questions, adapted from (Oliver & Swan, 1989 & Caruana et al., 2000) assessed the respondents' overall satisfaction. Finally, the measurement of customer trust adapted from (Delgado, 2004; Delgado et al., 2003; 2005 & Morgan and Hunt; 1994). All constructs were evaluated by using a five-point Likert-type scale ranging from "strongly agree" to "strongly disagree". The next step is to test convergent and discriminate validity of items by conducted an exploratory factor analysis (principal component). Table 1 shows the result of factor analysis for brand equity components, the initial model consisting of four variables (namely: brand awareness, perceived quality, brand image and brand ethics).

Using varimax rotation of the four variables and deleting cross-loading, the results reveal four factors. Consequently, the questions that load highly on factor one, all seem related to brand ethics; therefore we might label this factor brand ethics. The questions that load highly on factor two contain some items of perceived quality and brand ethics; therefore we might label this factor quality practices guarantees. While, the questions that load highly on factor three, all seem related to brand image; therefore we might label this factor brand image. Finally, the four questions that load highly on factor four, all seem related to brand awareness; therefore we might label this factor brand awareness. From Table 1 these four factors cumulatively captured about 59.7% of the variance in the data. Before rotation, factor one accounted for considerably more variance than the remaining three (35.007, compared to 11.063, 7.139 and 6.448 respectively),

however after extraction it accounts for only 16.169 of variance (compared to 15.517, 14.875 and 13.097 respectively). The corresponding reliability (Cronbach alpha) for four factors was 81.6%, 79%, 83.3% and 72.6% respectively.

Table 1 Factor and Reliability Analysis on Brand Equity Variables

Variables & Questions Items	Factor Loading			
	F1	F2	F3	F4
Social Responsibility	.775			
Privacy/Security policy	.774			
Community Events	.713			
Environmental record	.700			
Responsiveness		.729		
Hiring practices		.698		
Empathy		.635		
Assurance		.624		
Guarantees		.564		
Reliability		.514		
Favorability of associations			.830	
Strength of associations			.818	
Uniqueness of associations			.676	
Types of association			.575	
Brand Recognition				.788
Brand Recall 2				.784
Brand Familiarity				.752
Brand Recall 1				.575
Percentage Variance Explained Before Rotation	35.007	11.063	7.139	6.448
Eigenvalues Before Rotation	6.301	1.991	1.285	1.161
Percentage Variance Explained After Extraction	16.169	15.517	14.875	13.097
Eigenvalues After Extraction	2.910	2.793	2.677	2.358
Alpha Cronbach %	81.6%	79%	83.3%	72.6%

RESULTS OF THE STUDY

Hierarchical regression equation expected with customer satisfaction as dependent variable. Consequently, the equation tests the impact of independent variables (brand awareness, quality practices guarantees, brand image and brand ethics) on customer satisfaction. From Table 2 (next), brand equity dimensions cumulatively contributed ($R^2 = 56\%$) of the variance in customer satisfaction. The three drivers of brand equity (brand awareness, quality practices guarantees, brand image and brand ethics) are positively correlated with customer satisfaction (74.8%). The adjusted R^2 in the model is (55.3%) which is the coefficient of multiple determinations adjusted for the number of independent variables and the sample size to account for diminishing returns where after the first few variables, the additional independent variables do not make much contribution. Also the value of F ratio of 83.041 ($P = 0.000$) indicated that there is significant relationship between brand equity dimensions and customer satisfaction (namely; **H1.2** (quality practices guarantees with satisfaction), **H1.3** (brand image with satisfaction), and **H1.4** (brand ethics with satisfaction)). Brand awareness was rejected because beta coefficient is of the unexpected sign with not significant level with customer satisfaction. Moreover, the regression coefficient in Table (2) indicated that among these independent variables, quality practices

guarantees was the most important in explaining the variance in customer satisfaction ($\beta=.44$), followed by brand image ($\beta=.24$) and finally brand ethics ($\beta=.22$).

Table 2 Multiple Regressions: Brand Equity Dimensions and Customer Satisfaction (Beta Coefficient)

Independent Variables	Dependent Variable (Customer Satisfaction)
Brand Awareness	-.056
Quality Practices Guarantees	.44***
Brand Image	.24***
Brand Ethics	.22***
R	74.8%
R ²	56%
Adjusted R ²	55.3%
F change	83.041***

Results of linear multiple regression in the below Table 3 showed that all of the four components of the brand equity (brand awareness, quality practices guarantees, brand image and brand ethics) are positively correlated with customer trust ($r = 77.6\%$). However, the four components cumulatively contributed with ($R^2= 60.2\%$) of the variance in customer trust. The adjusted R^2 in the model accounted for 59.6%. Also the value of F ratio of 98.660 ($P= 0.000$) indicated that there is significant relationship between brand equity dimensions and customer trust (namely; **H2.2** (quality practices guarantees with trust), **H2.3** (brand image with trust), and **H2.4** (brand ethics with trust). Brand awareness was rejected because beta coefficient is of the unexpected sign with not significant level with customer trust. Moreover, the regression coefficient in Table (3) indicated that among these independent variables, quality practices guarantees was the most important in explaining the variance in customer trust ($\beta=.44$), followed by brand image ($\beta=.26$) and finally brand ethics ($\beta=.22$).

Table 3 Multiple Regressions: Brand Equity Dimensions and Customer Trust (Beta Coefficient)

Independent Variables	Dependent Variable (Customer Trust)
Brand Awareness	-.010
Quality Practices Guarantees	.44***
Brand Image	.26***
Brand Ethics	.22***
R	77.6%
R ²	60.2%
Adjusted R ²	59.6%
F change	98.660***

Results of linear multiple regression in Table 4 (next) showed that customer satisfaction is positively correlated with customer trust ($r = 80.5\%$). However, customer satisfaction contributed with ($R^2= 64.8\%$) of the variance in customer trust. The adjusted R^2 in the model accounted for 64.7%. Also the value of F ratio of 486.656 ($P= 0.000$) indicated that there is significant relationship between customer satisfaction and customer trust. However, customer satisfaction is strongly explaining the variance in customer trust ($\beta=.81$). Thus, **Hypothesis 3 (H3)** which states that there is a positive relation between customer satisfaction and customer trust) is strongly supported.

Table 4 Multiple Regressions: Customer Satisfaction and Customer Trust (Beta Coefficient)

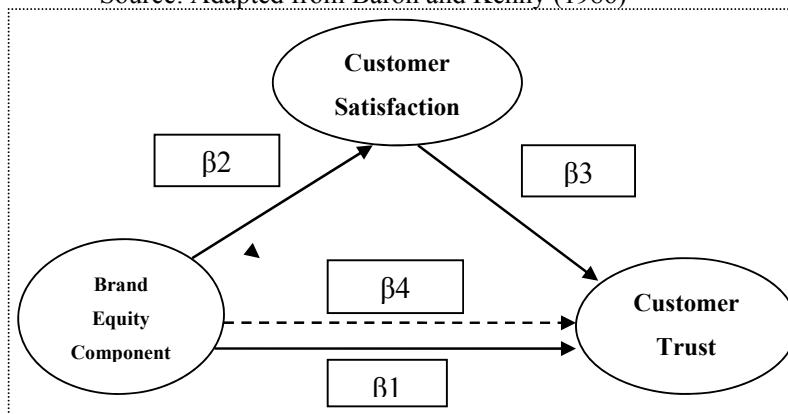
Independent Variable	Dependent Variable (Customer Trust)
Customer Satisfaction	.81***
R	80.5%
R ²	64.8%
Adjusted R ²	64.7%
F change	486.656***

Concerning the mediation effect of customer satisfaction on the relationship between brand equity dimensions and customer trust, Baron and Kenny, (1986) supposed that to demonstrate mediation, one must establish strong relations between (a) the predictor and the mediating variable and (b) the mediating variable and some distal endogenous or criterion variable. Baron and Kenny (1986) recommended the establishment of the following three regression equations to test the linkages of the media tonal model (the mediation effect), and consequently separate coefficients for each equation should be estimated and tested: **1-** The independent variables (namely; brand awareness, quality practices guarantees, brand image and brand ethics) must affect the dependent variable (customer trust), β_1 must be significant. **2-** The independent variables (namely; brand awareness, quality practices guarantees, brand image and brand ethics) should affect the mediating variable (customer satisfaction), β_2 must be significant. **3-**The mediator (customer satisfaction) must influence the dependent variable (customer trust), β_3 must be significant.

To establish that the mediator (customer satisfaction) is fully mediates the relationship between the initial variable (brand equity components) and outcome variable (customer trust), the impact of brand equity components on customer trust controlling for customer satisfaction should be zero or β_4 is not significant, whereas, partially mediator exists when β_4 is significant. In other word, partially mediator exists when the direct effect of brand equity components on customer trust is reduced when customer satisfaction is in the model (<http://davidakenny.net/cm/mediate.htm>).

Figure 2: The Mediation Structure of Customer Satisfaction

Source: Adapted from Baron and Kenny (1986)



The results of regression analysis given in Table 3 illustrated that brand equity dimensions (quality practices guarantees, brand image and brand ethics) significantly influenced customer trust. Similarly, Table (2) showed that brand equity dimensions

(quality practices guarantees, brand image and brand ethics) significantly influenced customer satisfaction. Similarly, Table (4) showed that customer satisfaction significantly influenced customer trust. Consequently, the conditions for testing the mediation effect of customer satisfaction on the relationship between brand equity dimensions and customer trust were fulfilled. While, brand awareness as on driver of the brand equity was not fulfilled the condition

for testing the mediation affect on customer satisfaction and also on the customer trust. Thus, the mediation effect of customer satisfaction will be considered with the relationship between brand equity dimensions (quality practices guarantees, brand image and brand ethics) and customer trust. Table (5) showed the results of the hierarchical regression testing the mediation effect of the customer satisfaction on the relationship between brand equity dimensions (quality practices guarantees, brand image and brand ethics) and customer trust. In model 1, the results showed that the strength of association measured by the coefficient of multiple determinations (R^2) explained 60.2% of the total variation in the dependent variable accounted for by the independent variables, and the adjusted R^2 is 59.7% with F value 132.000 at ($p=0.000$) level of significance. In model 2, the results showed that the strength of association measured by the coefficient of multiple determinations (R^2) explained 71.7% of the total variation in the dependent variable accounted for by the independent variables and mediator variable, and the adjusted R^2 is 71.3% with F value 106.778 at ($p=0.000$) level of significance. From Table 5 below, in model 1, the results showed that quality practices guarantees, brand image and brand ethics significantly influence customer trust with beta coefficient for quality practices guarantees ($\beta=.54$) and for brand image and brand ethics ($\beta=.27$) & ($\beta=.28$) respectively. In model 2, the extent of customer satisfaction significantly changed the variance explained by quality practices guarantees, brand image and brand ethics, as the beta value coefficient for quality practices guarantees, brand image and brand ethics were decreased ($\beta=.26$, $\beta=.15$ & $\beta=.14$ respectively). Concerning the type of mediation of customer satisfaction on the relationship between quality practices guarantees, brand image, brand ethics and customer trust, the results showed that the value of quality practices guarantees, brand image and brand ethics were significantly reduced (in model 2) this indicated that, customer satisfaction partially mediated the relationship between quality practices guarantees, brand image, brand ethics and customer trust (i.e. if we take out customer satisfaction we still get an effect of quality practices guarantees, brand image, brand ethics on customer trust). Consequently, **H4.2**, **H4.3** & **H4.4** were accepted.

Table 5 Multiple Regressions: Mediation Effect of Customer Satisfaction on the Relationship between Quality Practices Guarantees, Brand Image, Brand Ethics and Customer Trust (Beta Coefficient)

Variables	Continued Interaction	
	Model 1	Model 2
Quality Practices Guarantees	.54***	.26***
Brand Image	.27***	.15**
Brand Ethics	.28***	.14*
Customer Satisfaction	-	.49***
R	77.6%	84.7%
R^2	60.2%	71.7%
Adjusted R^2	59.7%	71.3%
F change	132.000***	106.778***

DISCUSSION OF RESULTS

This study aims to evaluate the impact of brand equity dimensions (namely; brand awareness (BA), brand image (BI), perceived quality (PQ), and brand ethics (BE)) on customer satisfaction (CS) and customer trust (CT). The results have revealed that the brand equity dimensions (quality practices guarantees, brand image and brand ethics) are significantly related to customer satisfaction and customer trust, but brand awareness do not have significant influence on customer satisfaction and customer trust. Also, customer satisfaction significantly influenced customer trust. Moreover, customer satisfaction significantly mediated the relationship between

brand equity dimensions (quality practices guarantees, brand image and brand ethics) and customer trust. While, customer satisfaction did not mediate the relationship between brand awareness and customer trust.

The results of this study revealed that high emphasis on quality practices guarantees and brand image lead to higher customer satisfaction. This finding is consistent with the previous researchers results e.g. Huu Tran, 2011; Gocek Ikilem et al., 2007; Peyrot, M.F., Cooper, P.D. & Schnapf, D.J., 1993; Woodside, A.G., Frey, L.L. & Daly, R.T., 1989; Shu Xin, 2010 and Muzahid Mohammad & Parvez Noorjahan, 2009 which reported that service quality is positively correlated with customer satisfaction. Parasuraman et al. (1985) also confirmed the significance of staff satisfaction and service quality as drivers of customer satisfaction in developing their SERVQUAL measurement tool. Heskett et al. (1994) proposed a positive linear relationship between staff satisfaction, service quality and customer satisfaction leading, ultimately, to profitability.

Also, this finding is consistent with the results of previous researchers (Laison Stephen, 2009; Aaker, 1992; Hoeffler & Keller, 2002; Cobb-Walgren et al., 1995 and Fung Wu Tain & Ulzii Batmunkh Munkh, 2010) which reported that brand image positively correlated with customer satisfaction. According to Gocek Ikilem et al., 2007, textile firms in Turkey should never ignore the brand image in their marketing and sales strategies as the brand image influences the customer satisfaction directly due to the Turkish customers. Thus, to increase the number of the customers, firms should consider this important factor. In other words, textile firms should base their strategies on brand image. The results of this study also show that high emphasis on customer perception of brand ethics lead to higher customer satisfaction. Ethics frameworks applied to marketing are differentiated primarily by the distribution of what could be termed the burden of satisfaction (Story John & Hess Jeff (2010). The lack of ethics is the opposite of a marketing ideal: reaching consumer's overall satisfaction (Holbrook & Hirschmann 1982). However, we can conclude that there is a lack in empirical studies that have examined the relationship between brand ethics and customer satisfaction. Thus, there is a difficulty in comparing the results of this study with previous findings.

This research has found that the relationship between brand awareness and customer satisfaction is not significant. Consequently, it differs from previous research e.g. Ahmad Zamri & Hashim Rahmat, 2011; Huu Tran 2011; Aaker, 1992; Keller, 1993; Hoeffler & Keller, 2002; Cobb-Walgren et al., 1995 and Fung Wu Tain & Ulzii Batmunkh Munkh, 2010 that state brand awareness has key role in determining the behavior of a buyer and it has the final decision. In other words, brand awareness is a gauge of marketing effectiveness measured by the ability of a customer to recognize and/or recall a name, image or other mark associated with a particular brand. Hence, most of the authors emphasize that brand awareness has a great range of influence on customer's satisfaction for making buying behavior. Consequently, brand awareness needs more enhancement and consideration by the telecommunication companies in Sudan by increasing the communication mix (e.g. advertising, sales promotion, publicity). Also, by increasing communication with customer through various media like face book, YouTube or mass media such as television, print, radio or direct media such as direct mail, e-mail or telecomarketing.

In context of the relationship between brand equity components (brand awareness, quality practices guarantees, brand image and brand ethics) and customer trust, the results of this study show that quality practices guarantees is related significantly to customer trust. This finding is consistent with the previous researchers (e.g. Ouyang Yenhui, 2010; Chenet Pierre, S. Tracey & O'Sullivan Don, 2010 and Moorman et al., 1992). When the customer believes a firm to be reliable, responsive, assurance and empathetic they are likely to view the provider as having a

high degree of integrity from which trust is likely to develop (Moorman et al., 1992; Morgan and Hunt, 1994). Also, the results of this study show that high emphasis on brand image, brand ethics lead to higher customer trust. Brand image includes perception of consumers from brand in the form of coincidences or associations in the minds of consumers. Based on the definition, these associations can be shaped via direct experience of goods or services, connections between the company and other commercial sources, conversations, inferences, with respect to previous associations, etc. These associations make a mind picture with tangible, intangible, inherent or acquired facets (Keller, 1993). Hence, this study finds that good image or positive association lead customers to establish positive trust. Also, this study finds that customer perception of brand ethics (e.g. community events, environmental record, social responsibility and privacy policy) lead to customer trust. However, we can conclude that there is a lack in empirical studies that have examined the relationship between brand image, brand ethics and customer trust. Thus, there is a difficulty in comparing the results of this study with previous findings.

With respect to the significant relationship between customer satisfaction and customer trust, this result concurred with earlier research by (e.g. Costabile et al, 2006; Morgan & Hunt, 1994; Egan, 2001; Geyskens, Steenkamp & Kumar, 1996 and Helfert & Gemuenden, 1998). Customer has more confidence in the company's future performance when he evaluates the past performance level as satisfactory (Crosby et al. 1990). Satisfaction is an attitude based on past experience with an actor. Although trust is usually understood as a future-oriented attitude, i.e. as a state of mind that goes beyond past experience, one can hardly deny that a certain amount of positive experience with a person or organization will at least support the development of trust towards this person or organization (Walter Achim, Mueller Thilo & Helfert Gabriele, 2000).

Consequently, the results support the mediating effect of customer satisfaction on the relationship between quality practices guarantees, brand image, brand ethics and customer trust. Thus, we can conclude that there is a lack in empirical studies that have examined the mediation influence of customer satisfaction on the relationship between brand equity dimensions (quality practices guarantees, brand image and brand ethics) and customer trust. Thus, there is a difficulty in comparing the results of this study with previous findings.

REFERENCES

- Aaker, D.A (1991), "Managing Brand Equity: Capitalizing on the value of Brand Name" (New York: the Free Press)
- Aaker, D.A. (1992). Managing the most important asset: Brand equity. *Planning Review*, 20(5), 56.
- Aaker, D. (1996), *Building Strong Brands*, The Free Press, New York, NY.
- Agarwal, M.K. and Rao, V. (1996), "An empirical comparison of consumer based measures of brand equity", *Marketing Letters*, Vol. 7 No. 3, pp. 237-47.
- Ahmad Zamri and Hashim Rahmat (2011), "Customer's Brand Equity and Customer Loyalty: A Study on Hotel's Conference Market" *World Applied Sciences Journal* 12 (Special Issue of Tourism & Hospitality): 44-49, 2011 ISSN 1818-4952.
- 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*, Vol. 51, No. 6, 1173-1182.
- Barsky, J. (1992), "Customer satisfaction in the hotel industry: measurement and meaning", *Cornell Hotel & Restaurant Administration Quarterly*, Vol. 7, pp. 20-41.

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Reliability of Quarterly Financial Accounts: Evidence from Earnings Deviation between Cumulative Quarterly Accounts and Audited Annual Accounts

Keywords: Financial Reporting, Quarterly Accounts, Audit, Earnings Deviation.

INTRODUCTION

The production of quarterly accounts is mandatory for various stock exchanges. For example, in the United States of America, the production of quarterly accounts is mandatorily required since 1970 whilst in Malaysia, listed companies are required to produce quarterly accounts since 1999 (Ku Ismail & Abdullah, 2009). The purpose of the requirement is to enable the market's participants to receive more timely information and thus, allows for more regular monitoring. Timely information helps to reduce uncertainties and enhances confidence over the company's state of affair and thus, improves users' decisions (Ku Ismail & Abdullah, 2009). The traditional annual financial accounts become less relevant to the users since the information provided by these accounts are less timely.

However, reliability of quarterly accounts can be questionable since these accounts generally are not being required to be audited. Unaudited quarterly accounts expose the accounts to the risk of accounting errors and manipulations by the managers. For example, prior studies by Kinney & Trezevant (1997), Ku Ismail & Abdullah (2009) and Ku Ismail & Chandler (2005) have reported the tendency of company to defer the reporting of extraordinary (special) items to the fourth quarter accounts. Furthermore, higher percentage of extraordinary items reported in the fourth quarter accounts is more likely to decrease the reported earnings (Ku Ismail & Abdullah, 2009; Ku Ismail & Chandler, 2005). They later concluded that fourth quarter accounts is used in 'settling up' the misstatements in the earlier three quarters accounts.

The objective of this study is to examine the reliability of quarterly financial accounts by comparing the earnings reported in the quarterly accounts with the audited annual accounts. This study proposes that the difference between unaudited cumulative quarterly Profit After Tax and Minority Interest (PATMI) and audited annual PATMI (termed as earnings deviation) is evidence of lack of reliability of quarterly accounts. The occurrence of the deviation between these two accounts may suggest that the quarterly accounts produced are inaccurate and the users who rely on these accounts may make wrong judgements and decisions.

LITERATURE REVIEW

Financial reporting

Financial reporting plays an important roles in the corporate structure by relieving the fundamental asymmetry information on the corporation's performance and position between the managers, who have access to management information and the shareholders, who are external

to the company (Whittington, 1993). This is because shareholders usually have minimal involvement in the management of the corporation and therefore, have limited information on corporate activities. Therefore, the importance of financial reporting is usually related to the agency theory where the information provided in the financial reporting enables the shareholders to monitor the company and at the same time to monitor the managers (Penno, 1985). This is because financial performance and position represent outcome of management's actions and decisions during a period of time. Good company's performance represent that the managers have successfully manage the company's resources.

Besides as a monitoring device, Penno (1985) also postulated that the information generated by the financial reporting process is essential in motivating management to make decisions consistent with shareholders' interests. The quantitative numbers provided by financial accounts allow for objective measurement of goals to be achieved. In addition to this, financial reporting is also important in making economic decisions where besides being used as one of the criteria in compensating the management, financial reporting has also been shown as an important tool in investment and loan decision-making (see for example Lev & Ohlson, 1982; Naceur & Goaid, 2004).

Even though, the publication of financial reporting is primarily addressed to the shareholders of the corporation, it is however reaching wide groups of users such as lenders, employees, customers, suppliers, competitors, government and community representatives.

The recognition of the importance of financial reporting can be seen from the mandatory requirement for a corporation to produce financial accounts by most countries (if not all). However, despite the recognition, many are sceptical on the quality of financial reporting. Arguably, the preparation of financial reports is geared more to conform to the management's needs rather than users' needs (see for example Bradbury, Mak & Tan, 2006; Ibrahim, Raman & Saidin, 2009).

Financial Reporting Quality

Quality financial reporting seems to be a complex issue. This is due the fact that accounting involves estimation such as in the depreciation and accrual and alternative method application such as in the inventory treatments. This flexibility itself can result in lower quality financial reporting and at the same time can be manipulated by the management in reporting their desired accounting numbers.

It is argued that company manipulates earnings to report the desired numbers which are smooth, regular and upward path. Managers are argued to increase the reported earnings when actual earnings are relatively low and to decrease the reported earnings when actual earnings are relatively high (Bao & Bao, 2004). The motivation of manipulation is due to the fact that the managers' compensation and the threat of displacement are closely linked to firm performance. Under performance may result in management's compensation to be low and displacement threat to be high. In addition, fluctuated earnings' company may be viewed as a higher risk compared to the stable income company (Garizi, Homayoun & Firouzi, 2011). Having small and steady increase in earnings for many years is better than having large increase in current year and subsequently lower or decrease earnings in the next year. Furthermore, under-recognition of current year earnings' number can create 'reserved' for the future and at the same time reduces the earnings' benchmark for the next year (Kinney & Trezevant, 1997). Therefore, it is argued that company manages smoothing accounts (such as depreciation, amortization, inventory method) to achieve the desired earnings number whether by understatement or overstatement.

To ensure the quality of financial reporting, internal and external mechanisms (mandatorily or voluntarily) have been adopted by corporations. One widely used mechanism is by requiring the annual financial accounts to be audited by an external independent auditor. The requirement for the financial accounts to be audited by an external auditor is to increase the reliability of financial information contained in the reports. While the financial reporting is prepared by the management, adding the audit function can enhance the credibility of the report whereby the users have reasonable assurance that the financial statements do not contain material misstatements or omissions (Chow, 1982). In general, an auditor is required to examine the correspondence between information provided in the financial accounts and their standards and give the reports on the correspondence. In discharging these responsibilities, auditor needs to accumulate and evaluate the evidence and at the final stage issues an audit opinion. Therefore, it can be assumed that audited annual accounts are at a high quality which are free from any errors and misstatements.

Quarterly Accounts

Listed companies on Bursa Malaysia (previously known as Kuala Lumpur Stock Exchange) is mandatorily required in March 1999 to produce quarterly accounts for quarters ending on or after 31st July 1999. This requirement was imposed as a response to the Asian Financial Crisis in 1997/1998 in replace of half-yearly reporting and the contents are much more comprehensive than half-yearly reporting (Ku Ismail & Chandler, 2005). Currently, the requirement is regulated under Chapter 9.22 of the Listing Requirements of Bursa Malaysia, where listed companies are mandated to produce their quarterly accounts not later than two months after the end of each quarter. Part A of Appendix 9B further elaborates the information that needs to be disclosed in the accounts.

Financial Reporting Standards 134 Interim Financial Reporting (previously known as *MASB 26*) issued by the Malaysian Accounting Standard Board required companies to use discrete method (treats each quarterly accounts as independent from annual cycle) than integral method (treats quarterly accounts as one of the reporting cycles in the full financial year reporting cycle) as the main view in dealing with most of the transaction (Ku Ismail & Chandler, 2005). Under this method, the reported accounts should only reflect the economic activity of that particular quarter, independent from the other quarters (Mendenhall & Nichols, 1988). Thus, suggesting that the cost that benefits more than one interim period is not to be anticipated or deferred and therefore, the expense is fully recognized in the period in which it incurred (Ku Ismail & Abdullah, 2009). The application of discrete method rather than integral method is believed to be able to provide more reliable quarterly accounts (Ku Ismail & Abdullah, 2009).

While quarterly accounts are shown to be as important as the audited annual accounts in monitoring and economic decision-making process (see for example Lee & Park, 2000; Mendenhall & Nichols, 1988) hence, the need for quality quarterly accounts is also as important as the need for quality audited annual accounts. Furthermore, fraudulent audited annual accounts often begins with misstatements in the quarterly accounts (Yang & Krishnan, 2005) and thus, by enhancing quality quarterly accounts can ensure the quality of audited annual accounts.

HYPOTHESIS

While quarterly accounts are prepared for a period of three months, conceptually the cumulative quarterly accounts (the summation of all quarterly accounts) should be the same as the audited annual accounts (Ibrahim, et al., 2009; Ku Ismail & Abdullah, 2009). This is because the accounting policies and estimation methods applied in quarterly accounts are required to be consistent with those adopted by the annual accounts.

*Reliability of Qtrly Financial Accounts: Evidence from Earnings Deviation between
Cumulative Qtrly Accounts and Audited Annual Accounts*

Meanwhile, it has been widely accepted that external auditing enhances the quality of financial accounts. Competent and independent auditor should be able to detect (if any) and report (if not corrected) any material misstatements in the audited financial accounts (DeAngelo, 1981). Hence, audited financial accounts can be assumed to be free from any material misstatements or omissions. On the other hand, quarterly accounts are usually unaudited and therefore, may be subject to manipulation by the management and may contain errors (Ku Ismail & Abdullah, 2009). Thus, the quality of the quarterly accounts is fully dependent upon the management. Unaudited quarterly accounts give flexibility for the management in preparing the quarterly accounts and the flexibility provides an opportunity for managers to manipulate the reported numbers in these accounts.

However, when the financial accounts are audited by external auditors, they may detect the misstatements and request the companies to make changes in the financial accounts. Hence, this shall result in the deviation between cumulative quarterly accounts and audited annual accounts. Therefore, the occurrence of deviation between unaudited cumulative quarterly accounts and audited annual accounts suggests a low reliability quarterly accounts whereby the quarterly accounts may contain misstatements (Ibrahim, et al., 2009). Thus, the accuracy of quarterly accounts can be examined by the difference between the numbers reported in quarterly accounts and in audited accounts. Significant difference of the deviation suggests that the quarterly accounts are less reliable and may contain manipulations and omissions.

SAMPLE

Listed companies on Bursa Malaysia in 2008 are used as sample in this study. This is due to the mandatory requirement for listed companies in Malaysia to produce quarterly accounts since 1999. Furthermore, unlike some other countries (such as the USA and Pakistan), production of quarterly accounts in Malaysia is not required for external auditor involvement.

As shown in Table 1, as at 31st December 2007, 821 non-financial companies are listed on the Main Market of Bursa Malaysia. 62 companies are without information on quarterly or audited accounts and 1 company which reported its financial account in a non-Ringgit Malaysia currency is excluded from the sample. In addition, another 21 companies are also excluded since their quarterly accounts are audited. Therefore, only 737 companies are used as the final sample. Data on quarterly and annual audited accounts are collected from the Bursa Malaysia's website.

Table 1:
Sample Companies Selection

Description	Number of Companies
Non-financial companies listed on Bursa Malaysia Main Market as at 31 December 2007	821
Companies without Quarterly or Audited Accounts	62
Companies reported financial accounts in a non-Ringgit Malaysia currency	1
Companies with audited fourth quarter accounts	21
Final sample companies	737

The t statistical test is used in testing the hypothesis. The test examines whether the average cumulative quarterly earnings significantly differs from the average audited annual earnings. It takes into consideration the means and standard deviations of the two groups and examines if the

numerical difference of the means is significantly different from 0. Significant difference provides support that quarterly accounts may contain misstatements.

RESULTS

Cumulative Quarterly PATMI versus Audited PATMI

For all 737 companies, the audited Profit After Tax and Minority Interest (PATMI) ranges from loss of RM950,000,000 to profit of RM3,510,000,000. Twenty six percent (191 companies) reported losses with an average amount of RM37,200,000. Meanwhile, another 74 percent reported an average profit of RM80,300,000.

Table 2 shows the result of the t-test conducted. On average, the cumulative quarterly PATMI is RM1,035,488 higher than audited PATMI, whereby the average cumulative quarterly PATMI is RM50,500,000, whilst the average audited PATMI is RM49,400,000. This implies that on average cumulative quarterly earnings is overstated by RM1,035,488. The t-test shows the difference is statistically significant at a 1 percent significant level. The result provides support that PATMI reported in cumulative quarterly accounts is significantly different than PATMI reported in audited annual accounts. This suggests that the quarterly accounts produced by companies are less reliable and may contain overstatements.

Table 2:
Results of T-test

PATMI	Minimum (RM)	Maximum (RM)	Mean (RM)	Std Deviation	t-test
Unaudited	-950,000,000	3,510,000,000	50,500,000	243,000,000	2.7855*
Audited	-950,000,000	3,510,000,000	49,400,000	243,000,000	

*significant at 1 percent significant level (two-tailed)

Earnings Deviation

Table 3 classifies the sampled companies into 3 groups; non-deviation companies (PATMI in cumulative quarterly accounts and audited account is equal), negative deviation companies (PATMI in cumulative quarterly accounts is less favourable than in audited account) and positive deviation companies (PATMI in cumulative quarterly accounts is more favourable than in audited account).

The table shows that a majority (64 percent) of sampled companies have deviation between cumulative quarterly accounts and audited accounts. Based on types of deviation, 27 percent (198 companies) reported less favourable cumulative quarterly PATMI than audited PATMI and another 37 percent (276 companies) reported more favourable cumulative quarterly PATMI than audited PATMI. The tabulation is consistent with the t-statistic conducted earlier that company tends to overstate quarterly earnings. In addition, the average deviation is 32 percent (not reported in the table). This implies that on average a company reports 32 percent higher PATMI in cumulative quarterly accounts as compared to audited account.

Table 3:
Classification of Sample Companies Based on Types of Deviation.

Company	Non-Deviation	Negative Deviation	Positive Deviation	Total
Number	263	197	277	737
Percentage	36	27	37	100

CONCLUSION

While the purpose of requiring a company to produce quarterly accounts is to disseminate regular company's performance, the reliability of these accounts should also be of concern. This is because quarterly accounts are not usually being audited and hence, may be subjected to manipulation by management.

This study provides initial evidence of the reliability of quarterly accounts based on the difference between PATMI reported in quarterly accounts and audited accounts. Using a sample of 737 listed companies on Bursa Malaysia in 2008, this study has found that quarterly accounts are less reliable, whereby companies tend to overstate their quarterly PATMI. By using t-statistics, the result shows that PATMI reported in quarterly accounts are significantly different from PATMI reported in audited accounts. Furthermore, it is found that cumulative PATMI reported in quarterly accounts is 32 percent higher than audited PATMI. 64 percent of companies have earnings deviation between cumulative quarterly accounts and audited annual accounts and 37 percent of companies have overstated their quarterly accounts. Therefore, users who are interested in using quarterly accounts in their economic decision-making process should discount the PATMI reported in the quarterly accounts. The finding is consistent with earlier conclusion by Kinney & Trezevant (1997), Ku Ismail & Chandler (2005) and Ku Ismail & Abdullah (2009) whom also concluded that quarterly accounts are less reliable.

For companies without deviation, it does not necessarily mean that they have accurate quarterly accounts. The possible lack of auditor quality in detecting the misstatements (and requesting the companies to make adjustment to their audited PATMI) may also lead to the non-deviation. In addition, this study does not take into account any possible event after balance sheet date that could affect the PATMI in the audited accounts. The gap of two months (between the release of fourth quarterly accounts and audited annual accounts) could also affect the occurrence of deviation. For future research, it may be beneficial to conduct a study to examine the nature of deviation which then could benefit auditors and companies in identifying the misstatement items in the financial accounts.

REFERENCES

- Bao, B.H. & Bao, D.H. (2004). Income smoothing, Earnings Quality and Firm Valuation. *Journal of Business Finance & Accounting*, 31(9&10): 1525-1557.
- Bradbury, M.E., Mak, Y.T. & Tan, S.M. (2006). Board Characteristics, audit committee characteristics and abnormal accruals. *Pacific Accounting Review*, 18(2): 47-68.
- Chow C.W. (1982), The demand for external auditing: Size, debt and ownership influences, *The Accounting Review*, 57(2): 272-291.
- DeAngelo, L.E. (1981). Auditor size and audit quality. *Journal of Accounting & Economics*, 3(3): 183-199.
- Garizi, A.Z., Homayoun, A. & Rirouzi, B.B. (2011). The impact of income smoothing on companies abnormal return. *Australian Journal of Basic & Applied Sciences*, 5(9): 245-251.
- Ibrahim, D.N., Raman, K. & Saidin, S.F. (2009). Audit committee characteristics and quality of unaudited financial accounts. *Singapore Management Review*, 31(2): 19-33.
- Kinney, M. & Trezevant, R. (1997). The use of special items to manage earnings and perceptions. *The Journal of Financial Statement Analysis*, 3(1): 45-53.
- Ku Ismail, K.N.I. & Abdullah, S.N. (2009). The reliability of corporate quarterly financial reports in Malaysia: Post-MASB 26 evidence. *Asian Journal of Finance & Accounting*, 1(2): 53-74.

- Ku Ismail, K.N. & Chandler, R. (2005). The reporting of exceptional items in the quarterly financial reports of companies in Malaysia. *IJUM Journal of Economics and Management*, 13(2): 167-188.
- Lee, J. & Park, C.W. (2000). Intraday stock price reactions to interim-quarter versus fourth-quarter earnings announcements. *Journal of Business Finance & Accounting*, 27(7&8):1027-1046.
- Lev, B. & Ohlson, J.A. (1982). Market-based empirical research in accounting: A review, interpretation, and extension. *Journal of Accounting Research*, 20: 249-322.
- Mendenhall, R.R & Nichols, W.D. (1988). Bad news and differential market reactions to announcements of earlier-quarters versus fourth-quarter earnings. *Journal of Accounting Research*, 26: 63-86.
- Naceur, S.B. & Goaid, M. (2004). The value relevance of accounting and financial information: panel data evidence. *Applied Financial Economics*, 14(17): 1219-1224.
- Penno, M. (1985). Informational issues in the financial reporting process. *Journal of Accounting Research*, 23(1): 240-255.
- Whittington, G. (1993). Corporate governance and the regulation of financial reporting. *Accounting and Business Research*, 23(91A): 311-319.
- Yang, J.S. & Krishnan, J. (2005). Audit committees and quarterly earnings management. *International Journal of Auditing*, 9(3): 201-219.
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Corporate Social Responsibility Reporting: A Survey of Listed Sri Lankan Companies

INTRODUCTION

This is a survey study of the Corporate Social Responsibility (CSR) reporting practices by Sri Lankan companies listed on the Colombo Stock Exchange (CSE). Financial reporting has surpassed its traditional role of providing only financial information (Gray et al., 1983) and consequently, many organizations around the world show high interest in and do the CSR reporting (Douglas et al., 2004).

The term CSR generally emphasizes the need for contributing to the society and environment by organizations while conducting their operations in a sustainable manner. Despite the fact that business organizations interact with the society and environment by providing goods and services, they also consume public goods freely, dump waste and damage environment through, say, carbon emission. Negative consequences of these activities cause environmental degradation, depletion of resources, exploitation of workers, manufacturing of unsafe products and use of inappropriate materials (Bebbington et al., 1994). Hence, CSR can be viewed as a tool of dealing with such consequences and building relationships with stakeholders to minimise the negative impacts and to create sustainable value for all. The CSR reporting measures and

discloses organizational performance with respect to organizational accountability towards the sustainable development. The attention on the CSR engagement and reporting has been increasing worldwide and it is undertaken to show the depth of and focus on the CSR engagement. Hence, the CSR reporting assists stakeholders to understand the extent of the CSR engagement of companies and their contribution to the society and environment.

Sri Lanka is an emerging economy in the South Asian region. The CSR reporting is not mandatory in Sri Lanka as in the case of many other countries (Douglas et al., 2004). Hence, it is likely that voluntary CSR reporting by the Sri Lankan firms may show structural diversity and contain disclosures varying from low to standard levels in line with GRI G3 sustainability reporting guidelines which are considered to be a global benchmark for sustainability reporting. Some firms may carry out CSR activities without realizing that they are doing so and they do not even report them. On the other hand, some firms may try to boast the company image through the CSR reporting without effectively engaging in those activities. There is hardly any research evidence on the structure and content of the CSR reporting in Sri Lanka. Hence, this study was carried out with a view to provide a basis of general understanding on current status of the CSR reporting and the management perception on CSR.

RESEARCH PROBLEM AND OBJECTIVES

Strong theoretical support for CSR has been built on the arguments that business organizations are bound with social contracts to carry out business operations in a legitimate manner while contributing towards the social development (Campbell et al., 2003). The evidence shows that there is an increasing tendency of promoting the CSR reporting around the world (Adams and McNicholas, 2007) despite such reporting is not mandatory.

CSR is believed to have potential of winning the support of stakeholders to run the business operations (Freeman, 1984). On the other hand, it is argued that the CSR reporting is used as an advocacy advertising through which firms try to build and improve the company image as a responsible citizen (Milne, 2002). However, it is not well known what the firms are really doing in the name of CSR (Blum-Kusterer and Hussain, 2001). Questions such as ‘what would be the consequences of the CSR reporting’, ‘does CSR allow a firm to increase future earnings or to build the company image’, and ‘does a firm report CSR just for social reasons or without having any reason’ are yet to be answered. Hence, a need arises to examine various aspects of the CSR engagement and reporting in order to meaningfully deal with the phenomenon of CSR. As an initial attempt, this survey examined current status of the CSR reporting practices of listed companies on the CSE to provide a basis of understanding the extent, content and level of the CSR reporting by achieving the following objectives:

To assess the nature and the extent of the CSR reporting in Sri Lanka

To distinguish the characteristics of the adopters and non-adopters of the CSR reporting

To assess the perceptions of the corporate managers towards the CSR engagement and reporting

LITERATURE SURVEY

Financial reporting took a new direction with the introduction of triple bottom line accounting which usually encourages firms to disclose not only the financial performances but also the environmental and social performance. Non-financial reporting of firms, including the CSR disclosures, has been continuously and tremendously increasing around the world in the recent past (Harte and Owen, 1991). As a result, it has increased about six-fold within a period of less than a decade (Bebbington et al., 2009). Further, the nature, purpose, content, structure and the

readership of reporting have also been changing (White, 2005). However, there are some organizations who still show a reluctance to contribute for CSR (Ofori and Hinson, 2007) and disclose them mainly due to prevailing contextual reasons such as the nature, complexities and expectations of the society which are likely to influence the CSR engagement (Carnegie, 1900, c.f. Dunne, 2009). Both external and internal variables and diverse expectations of stakeholders have potential of influencing the need, practice and disclosures of CSR (Carroll, 1979) and as a result, the CSR reporting has become a highly subjective practice (Churchill, 1974).

The definition of CSR given by Gray, Owen, and Maunders (1987) considers this broader view and emphasizes the importance of the CSR engagement as a process of communicating the social and environmental outcome of organizations' economic activities and operations to interested parties and to the society at large. Therefore, it is argued that the CSR engagement is well connected with organizational values and behaviours and the expectations and needs of stakeholders including the society as a whole (Network, 2008) in order to achieve a sustainable development. Context specific evidence showed that firms in Germany and Sweden reported more environmental information whereas firms in France disclosed more employee related information (Roberts, 1991). Malaysian companies with significant shareholdings of directors were found to have disclosed less CSR information, whereas government controlled companies did the opposite of it by disclosing more CSR information (Ghazali, 2007). Large companies were found to have given prominence for the CSR disclosures when compared with other companies (Owen and Swift, 2001).

Hence, it is likely that CSR reporting practices can vary from country to country and from time to time even within the same country depending on many internal and external factors. The relevance and applicability of the CSR reporting has to be judged from the contextual perspective. For example, the scope of CSR may range from basic philanthropies to sustainable development programs interwoven with corporate strategies.

Adopters of the CSR reporting have the flexibility of using any reporting structure ranging from their own format to generally accepted guidelines and principles such as GRI G3 sustainability reporting guidelines. Such reporting guidelines and principles include AA1000 series of principle-based standards covering Accountability, Assurance and Stakeholder Engagement, Social Accountability International's SA8000 standards to improve workplaces and communities, ISO 14000 environmental management standards, the United Nations Global Compact (UNGC), Millennium Development Goals (MDGs) and Global Reporting Initiative's (GRI) Sustainability Reporting Guidelines. GRI G3 has incorporated the substance of most of the guidelines referred above and is generally regarded as a global base for sustainability reporting (Morris and Chapman, 2010).

Adopters of the CSR reporting may have different motives to do so. It is commonly argued that the CSR engagement will have a positive impact on financial performance of the organization in the long run. McWilliams & Siegel (2000) found mixed results with respect to the relationship between the CSR reporting and the company performance measured in accounting profits. Aupperle, Carroll and Hatfield (1985) and Walter and Mosen (1979) found that there were no relationship between the CSR reporting and profitability of the firm. On the other hand, it has been found that CSR had the potential to increase the profitability of the firm and the value of equity in the long run through sales growth (Zairi and Peters, 2002). Further, it was found that the profitability of older firms positively correlated with the CSR reporting (Cochran and Wood, 1984); thus, revealing the fact that adopters of the CSR reporting could be old firms.

Professional organizations conduct various types of competitions among companies with a view to motivate the CSR reporting. The Association of Certified Chartered Accountants (ACCA) is

pioneering in this exercise in Sri Lanka and has been actively involved with sustainability reporting since 1990. ACCA has established awarding systems in Asia, Europe, North America, and Australasia to reward innovative attempts of firms to communicate their CSR performance. Accordingly, John Keels Holdings Plc, Aitken Spence Hotel Holdings Plc, Diesel and Engineering Motors Plc, and HDFC Bank were the recent winners of ACCA sustainability awards in Sri Lanka (ACCA, 2011). However, mere winning of awards does not warrant that the sustainability reporting in Sri Lanka is at a satisfactory level. We do not have clear idea on how sustainability reporting takes place in Sri Lanka. Therefore, this study attempts to survey on the current status of the nature and extent of the CSR reporting and the perception of managers on the CSR engagement and reporting.

Legitimacy theory argues that any business organization has implicit or explicit social contracts which hold the organization responsible for conducting its operations in a transparent manner while contributing for the social development (Campbell et al., 2003). Management of a firm has to play an important role in order to establish the legitimacy. Adams and McNicholas (2007) found that the senior managers were of the view that the primary motive for sustainability reporting was to enhance corporate legitimacy.

Stakeholder theory argues that the CSR engagement would provide a leverage for the managers to run the business operations with the support of stakeholders through series of connections that the firm has with stakeholders (Freeman, 1984). Further, the evidence has been found that CSR was directly used as a mode of communication to build the company image and therefore, the CSR reporting indirectly served as advocacy advertising (Milne, 2001). Political economy theory suggests that firms tend to carry out CSR campaigns in the media to avoid political costs that may arise in a political economy (Deegan and Carroll, 1993). CSR can also be viewed from the institutional theory perspective and it argues that the nature of CSR depends on the practices of the context and therefore, it becomes an accepted institution (Dacin et al., 2002) so that firms work accordingly. Hence, the perception of managers in relation to the CSR practices would certainly help improve the quality of understanding the current status of the CSR reporting. These theoretical underpinnings provided a basis for managers to deal with CSR and therefore, the perceptions of managers will certainly have a big impact on the CSR engagement (Barkemeyer, 2011) since they have the authority for decision making and are separate from ownership of the firm (Berle and Means, 1932).

Significant differences in the perceptions of managers on understanding and knowledge of CSR concept were seen in the UK, other European countries and China (Hind, 2004). This study found that the UK managers had shown a broad knowledge and understanding followed by other European countries whereas Chinese managers had relatively little knowledge and understanding on CSR. The same study found that Chinese managers were of the view that CSR should be voluntary while others were on the side for the need of more regulations and codes for the CSR practices.

The review of literature revealed that there is a growing concern for and tendency of the CSR reporting around the world. Similarly, guidelines and principles have also been continuously developed to streamline the CSR reporting around the world. Managers who really drive the business operations to achieve firms' goals have shown high interest on CSR and its impact on the sustainability and long term corporate strategies. However, being an emerging economy, Sri Lanka does not have updated knowledge on various dimensions of the CSR engagement and reporting practices. This situation has created a research gap in relation to the CSR reporting practice in Sri Lanka and hopefully, the study will help bridge that gap by providing a basis on which the CSR reporting in Sri Lanka could be properly understood.

METHODOLOGY

This study was carried out as a survey of listed companies on the CSE. Listed companies are supposed to actively interact with and have significant influence on the economy, society and environment. Market capitalization of the CSE as at 31st March 2010 was Rs. 1210.8 billion (US\$ 11 billion) (CSE, 2010) and this accounted for 25% of the Gross Domestic Production (GDP) of the country for the year 2010.

Both quantitative and qualitative data on the CSR reporting was collected from annual reports and from other reports namely CSR reports, corporate responsibility reports and sustainability reports. Cross sectional data was used to analyse the current status of the CSR reporting in relation to nature, scope and content of the CSR engagement and reporting.

Firms were grouped into two categories as “adopters” and “non-adopter of the CSR reporting for data analysis purposes. Adopters are the firms that have reported CSR either in the annual reports or in the separate sustainability reports whereas firms that have not disclosed CSR separately in any report were regarded as non-adopters. The variables namely firm size, return on total assets (ROA), return on equity (ROE), earnings per share (EPS), total assets, revenue, profit for the year and the business sector, were analysed between adopters and non-adopters. “Adopters” were further grouped as adopters based on GRI G3 sustainability reporting guidelines (GRI G3) and as others. The CSR reporting of adopters of GRI G3 were reconciled with GRI G3 while that of other adopters was analysed by grouping them into economic, social and environmental categories. With respect to adopters, a content analysis, focusing on number of words used, number of pages allocated, number of projects carried out, number of images shown, and number of tables used, CSR categories, number of projects carried out and awards received, was carried out.

Firm size was determined based on market capitalization (MCAP). The highest market capitalization of a firm was Rs. 188,294 million (US\$ 1712 million) (8.59%) whereas the lowest amounted to Rs. 3.5 million (US\$ 32,000) (0.02%). A firm with a market capitalization of Rs. 10 billion or above was treated as ‘large’ and a firm with a capitalization of less than Rs. 1 billion was labelled as ‘small’. The rest of the firms were grouped as ‘medium’ size. This basis is judgemental and decided by looking at the range of distribution of market capitalization of each firm. Accordingly, 65 small firms, 125 medium firms and 42 large firms are in the sample of 232 firms which represent 20 business sectors as per the classifications given by the CSE for trading purposes.

Managers’ perceptions were gathered through a questionnaire sent to all (78) CEOs of adopters. The questionnaire comprised of 40 questions covering the areas of general aspects of CSR, CSR focus, arguments against CSR, reasons for engaging in CSR and CSR policy related aspects. It was possible to collect 47 responses from adopters and this turned out to be 60% of adopters. Managers’ perceptions were obtained on a five-point scale preference ranging from ‘strongly agreed’ to ‘strongly disagreed’ positions. These perceptions were analysed with descriptive statistics and explanations and interpretations were given accordingly. A score which is greater than 3 was regarded as a positive perception to the given statement and a score less than 3 was regarded as not as a favourable response. The score of 3 reflected a neutral perception.

ANALYSIS

Overview

It was revealed that only 78 (34%) firms out of 232 had adopted the CSR reporting. These adopters accounted for about 72% of market capitalization. There were significant differences in

the number of firms that adopted the CSR reporting in different business sectors. As indicated in table 1, all firms operating in sectors namely “Constructions and Engineering”, “Information Technology”, “Oil Palms”, “Services” and “Stores and Supplies” and more than 75% of firms in “Hotels”, “Investment Trusts”, “Land and Property”, and “Trading” sectors were non-adopters of the CSR reporting. “Telecommunication” sector comprised of only two companies and both had reported CSR. These two companies accounted for 8.36% of market capitalization. Around one-third of companies operating in “Food, Beverages and Tobacco”, “Chemicals and Pharmaceutical Items”, “Footwear and Textiles”, “Healthcare”, “Manufacturing” and “Motors” sectors and more than 50% of firms in the rest of the sectors were adopters of the CSR reporting.

Space Allocation for the CSR Disclosures

Majority of firms had allocated less space for the CSR reporting despite the fact that there is a growing interest in CSR. The smallest space allocated for the CSR reporting by a firm was one (1) page whereas the highest number of pages used was 58. Accordingly, eight firms had allocated only one page and 15 firms had used just two pages for the CSR reporting. Fifty firms (64%) of adopters had used five or less pages for the CSR reporting whereas only sixteen (21%) firms had assigned 10 or more pages. The average number of pages for CSR reporting was nine. This implies that the majority of the firms did not have much to disclose in the name of CSR but wanted to claim that they are reporting CSR and build a good corporate image. Hence, it cannot be regarded as good practice of the CSR reporting.

Adopters that used GRI G3 guidelines for the CSR reporting were large firms and had allocated more space than other adopters. The average number of pages assigned by an adopter with GRI G3 reporting was 36 whereas the lowest was 12 pages. Hence, the space allocated for the CSR reporting significantly changed when adopters that used GRI G3 were excluded from the analysis. Accordingly, the highest number and the average number of pages reduced to 16 and four respectively when GRI G3 adopters were excluded. This indicates that firm size has a significant bearing on the space allocated for CSR. A comparison of pages used by adopters with GRI G3 and other adopters is given in Table 2.

It was further revealed that the total number of words used for the CSR reporting by a firm ranged from as low as 145 to as high as 22,453 with an average of 3,052 words when all the adopters were considered. The highest and the average numbers of words used without adopters based on GRI G3 guidelines, changed to 4,776 and 1,174 respectively. Due to changes in reporting structure and content, the number of words per page varied from 109 to 767. This implies that large firms use more space and other means of presentations in the CSR reporting in addition to the use of words when compared with other firms.

It was further revealed that there was a tendency of using images such as photographs and pictures, to make the CSR reporting attractive. All the adopters except seven had used various types of images in the CSR reporting. The highest number of images included in a CSR report by a firm was 40 whereas the average number was nine. Six firms had used more than 20 images in a report. Frequent number of images (mode) was six which was seen in seven firms. Thirty (38%) adopters had used only five or less images.

There were instances of presenting photographs with political figureheads who took part in some company related occasions. However, the most of the images were presented in the CSR reporting without or with a suitable caption by referring to the corresponding event or CSR activity carried out. Therefore, the usefulness and relevance of such images as sources of CSR information were limited despite the fact that it improves the appearance of the report. It was revealed that those photographs have captured scenes of social activities such as sports competitions, religious ceremonies, environmental programs such as tree planting, distribution of

stationeries and books to school children. The use of irrelevant images had to some extent increased the space allocated for CSR; thus covering up low engagement of CSR. Table 3 gives an analysis of number of images shown in the CSR disclosures.

In addition to the images, tables, graphs, figures and charts were used in the CSR reporting. However, 44 firms did not use a single table to present data. The highest number of tables used by a firm was 27 and the lowest was two. Firms which adopted GRI G3 guidelines had relatively used higher number of tables when compared with others.

CSR Projects Carried Out

In addition to general and specific disclosures, information about different CSR activities with set objectives was disclosed. Such a disclosed activity is referred as a CSR project in this study. The size of each project was disregarded and only the number of projects was considered in the analysis. Accordingly, the average number of CSR projects carried out by a firm for the year was 12. The lowest number was one whereas the highest was 112. Most of the projects were linked to environmental and community related activities. The frequency analysis revealed that the highest number of firms has conducted eight projects a year and 49 firms (63%) had conducted ten or less number of projects. Only six firms (5%) were found to have conducted 30 or more projects during the year. Most of the projects were started and completed during the same year while few projects are being carried out on continuous basis.

Money Spent on CSR

None of the firms has disclosed the total amount of money spent on CSR except some ad hoc disclosures on money spent as donations and for other charitable purposes. A few firms had disclosed the amount of money spent on selected projects but not all. None of the firms has provided adequate information which will enable readers to figure out the total amount of money spent on the CSR engagement by a firm. The descriptive explanations given on CSR projects implied that a considerable amount of money might have been spent on CSR but readers have no clue as to how the magnitude of such expenses is assessed. Non-provision of such information block the users of CSR information to assess the outcome of the CSR engagement against the actual cost incurred.

Disclosure Categorization

It was noted that the judgement of and subjectivity associated with the reporting entity had a significant bearings on how CSR activities have been grouped into different categories. The common categories of the CSR reporting were “Social”, “Environment”, “Community”, and “Economy”. The lowest number of CSR categories used by a firm was two namely “Environmental” and “Community” while the highest was ten. These ten categories were identified within main categories of economic (“Food Safety” and “Alternate Energy”), environmental (“Environment”, Environmentally-friendly Land Management” and “Protection of Bio-diversity”.), and social (“Ethical Business Conduct”, “Training and Skill Development”, “Health and Nutrition”, “Community Capacity Building” and “Empowerment of Youth”). In relation to employee related activities, categories of “Community Development”, “Employee Benefits”, “Employee Welfare” and “Empowering Employees” were found. Information on one such employee empowering program has been extensively disclosed. Accordingly, the firm has provided employees with farming equipment free of charge to grow vegetables at their home gardens and given necessary training and chicks for poultry farming and training for manufacturing of joss sticks (incense) as suggested by the company. This program had become very popular among employees but no information was found as to whether the firm has carried out an assessment on how these extra activities had affected the work performance of employees.

Some of the other grouping labels were “Recognition of Quality Assurance Efforts” (Economic/Social), “Responsible Manufacturing”(Economic), “Responsible Sourcing”(Economic), “Responsible Product Innovation”(Economic/Social), “Responsible Marketing”(Economic), “Youth Development”(Social), “Natural Resource Utilization (Environmental) and Waste Management (Environmental)”, “Training and Development” (Social), “Responsible Employer” (Social), “Health” (Economic) and “Safety at Work” (Economic).

Firm Size and the CSR Disclosures

All large firms listed on the CSE, except one that is in the oil palm sector under the umbrella of Carsons Group, reported CSR. Total market capitalization of all the large firms was about 50%. There were 12 such adopters in the category of large firms and six of them had reported CSR based on GRI G3 sustainability reporting guidelines. There were 25 medium size firms that accounted for about 26% of total market capitalization. However, only 14 medium size firms (56%) had reported CSR. Of them, four had followed GRI G3 guidelines. It was noted that only 27% of small firms had reported CSR. Only two small firms were found to have followed GRI G3 sustainability reporting guidelines.

In addition to adopting CSR reporting, it was found that there was a significant positive correlation between the firm size and the space allocated in terms of number of pages, words count and projects carried out with correlation coefficients of 0.347, 0.319, and 0.276 respectively. Further, there was a significant positive correlation between the firm size and adoption of GRI G3 sustainable reporting guidelines with a Pearson correlation coefficient of 0.374.

Large firms tend to go for extensive CSR disclosures by adopting GRI G3 guidelines when compared with small and medium size firms. Perhaps, the large firms are intending to build the corporate image through the CSR reporting and such attempts are in conformity with the political economy theory which suggests that large firms face a high proportion of political cost and therefore, they try to avoid such political cost by engaging in CSR with a view to enhance the corporate image (Deegan and Carroll, 1993). Table 4 gives a summary of firm size and the CSR reporting information.

GRI G3 Guidelines Based Reporting

Out of 78 adopters, only 12 (5.2%) companies, comprising six large firms, four medium firms and two small firms had reported CSR based on GRI G3 sustainability reporting guidelines which are considered as the global benchmark for the sustainability reporting. These 12 companies had high market capitalization (32%) while the other 64 adopters accounted for about 39%.

“Banking, Finance and Insurance” sector was leading in the CSR reporting on GRI G3 as it comprised five out of 12 firms (42%) followed by “Diversified Holding” with three firms and the other sectors of “Hotels”, “Telecommunication”, “Beverage, Food & Tobacco” and “Motors” accounted one firm from each sector. Market capitalization of these 12 firms amounted to 32.23%.

Two firms had not clearly disclosed as to how and what level of GRI G3 guidelines was applied instead it was mentioned that GRI (Not GRI G3) was followed in the CSR reporting. Accordingly, GRI G3 application level was not disclosed and disclosures were made on their own formats and structures. Another firm had specifically mentioned that it followed GRI G3 guidelines but did not declare the level of application as required by the guidelines. However, this firm had been awarded the best Sustainability Reporting by the Association of the Certified

Chartered Accountants (ACCA) in 2008 and by the Institute of Chartered Accountants of Sri Lanka (ICASL) in the years 2003 and 2004.

Only a single firm had declared the application level of “A+” which is the highest level and another firm had declared application level of “A”. Application level “B” had been declared by two firms while “B+” level was also declared by a single firm. Four firms had declared the level of application within the range of “C” and “C+”. Application level C is for the beginners of sustainability reporting. Table 5 gives a summary of GRI G3 application levels declared by the firms.

Adopters Vs Non-Adopters of the CSR Reporting

Multivariate Hotelling's analysis showed that there were significant difference between adopters and non-adopters of the CSR reporting in relation to ROA, ROE, revenue, and MCAP and company size. With respect to ROA and ROE, the p-values of 0.004 and 0.000 suggest that ROA and ROE of adopters are different from that of non-adopters. Accordingly, it was found that ROA and ROE of adopters were higher than that of non-adopters of the CSR reporting.

Similarly, independent t-test also indicated that significant differences were seen between adopters and non-adopters under both assumptions of equal variances and not equal variances. It produced p-values of 0.004 and 0.002 for ROA and 0.000 and 0.000 for ROE, thus indicating a significant difference. The significant values generated by multivariate analysis with respect to revenue, MCAP and company size were almost zero, thus indicating a significant difference between adopters and non-adopters. However, no significant differences were found between adopters and non-adopters with respect to total assets, profit for the year and EPS.

PERCEPTIONS OF CEOS

CEOs had positively perceived general aspects of CSR by giving an average score of 3.98. 64% (30) of the CEOs were of the view that firms have a responsibility and should contribute to the society and environment. The support from top management was viewed as an important factor for the success of CSR by giving an average score of 4.47. 96% (43) CEOs was of the view that the CSR reporting should be mandatory with an average score of 4.45. Only 11% (5) of CEOs mentioned that a firm should have generated adequate profits to contribute for the society and did not admit the idea that it should contribute towards CSR when there is no profits earned. Further, CEOs admitted that CSR could help organization to comply with various rules and regulations applicable.

With respect to the areas of CSR, 98% (46) of CEOs perceived contribution for education, health and other basic needs as important aspects in CSR with an average score of 4.51. Programmes to run along with national development and poverty alleviation were also highly scored as important CSR areas. Role of intervening for social activities such as awareness programmes for prevention from HIV/AIDS and health care obtained a perception score of 3.36. Offering donations and environmental protection were perceived as modes of the CSR engagement with an equal average score of 3.55. Safer working conditions and welfare for employees were positively perceived by 53% (25) of CEOs as critical CSR areas. However, safeguarding labour rights, and human rights, assuring gender equalities, non-use of child labour at work place did not carry high preference scores.

Arguments against CSR on the ground that it is trivial and disturbs the core objectives of a firm were not accepted by CEOs and it produced an average score of less than 3. The idea of government mediation through an effective tax system in lieu of CSR was also rejected by majority of CEOs. Therefore, CEOs have perceived CSR as an important task which should not be neglected. However, a score of 3.47 was given on the point which says that the overall cost of

conducting CSR was likely to be greater than the perceived benefits of CSR. This perception poses a question on the usefulness and relevance of the CSR engagement.

Perception on why firms should engage in CSR carried an average score of 3.71. Among such reasons, the ability to increase profits in the long run and building relations with stakeholders captured high preferences over the ability of increasing corporate image, avoiding additional regulations and maintaining corporate legitimacy.

With respect to the aspects on CSR policies more than 60% (29) of respondents perceived CSR as a long process through which management can pass benefits to the society and environment in a systematic way by engaging with significant stakeholders. The main idea of CSR was identified as empowering stakeholders by identifying their potential of building networks with the operations of the firm in a sustainable manner. Accordingly, 68% (32) of respondents viewed CSR as a sustainable program through which management can incorporate CSR into corporate mission, vision and strategies to gain the benefits of CSR for all the stakeholders. Further, the importance of being ethical in conducting business operations instead of simply complying with rules and regulations was highlighted in the CEO's perceptions.

SUMMARY AND CONCLUSIONS

The majority of the Sri Lankan firms listed on the CSE do not report CSR despite the fact that CSR is being talked about within the corporate sector. 78 firms were identified as adopters of the CSR reporting and of them only 12 firms had followed globally accepted GRI G3 sustainability reporting guidelines. The number of CSR adopters varied among different business sectors. Accordingly, not a single firm in four business sectors had disclosed CSR while all the firms in telecommunication made CSR disclosures. CSR adopters had won many awards for their social responsibilities and other economic achievements as well. These recognitions in turn might have encouraged firms to engage in CSR.

Disclosure of CSR content significantly varied among firms. Only a very few firms had allocated adequate space for the CSR reporting while the majority had just used only one page for the CSR reporting by claiming that they are socially responsible and taken measures to contribute for the society and environment through the CSR engagement. Some CSR reports were found to have been prepared in an attractive manner by including colourful pictures and photographs with political figureheads just ignoring the substance of information content. Disclosures included a wide range of CSR categories among them economic, social and environmental were the common ones. However, no attention was paid to disclose adequate information on the total money spent for CSR programs and administration.

Firm size was found to be a major determinant of the CSR reporting. Accordingly, large firms had shown a tendency of going for the CSR reporting. Therefore, the market capitalization of adopter amounted to 72% even though the proportion of the adopters was 34% (78 firms). Comparison between adopters and non-adopters of the CSR reporting showed that there were significant differences in relation to ROA, ROE, MCAP and revenue. On the other hand, total assets, profit for the year and EPS were not significantly different between adopters and non-adopters.

The majority of the CEOs of CSR adopters have high positive perception on the CSR engagement and reporting. They perceived the CSR engagement as a process that should be incorporated in corporate vision, mission and objectives; thus enabling the management to create value for all the stakeholders. Only few CEOs perceived philanthropic aspects and popular social

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issues should be considered in determining the scope of CSR. CEOs further mentioned that the support of top management is crucial for the success of CSR Engagement.

The outcome of this study will pave the way for corporate managers and business community to have a general idea on how CSR is taking shape in Sri Lanka and to create a forum for discussion on their presence in CSR and contribution to the society and the environment.

All in all, it was revealed that the level of the CSR reporting in Sri Lanka is not very encouraging. Hence, the current status of low level of the CSR reporting raises a question as to why firms are reluctant to engage in CSR in Sri Lanka despite a conducive environment. Such efforts will certainly improve the body of knowledge in the CSR reporting and find new avenues for future research on the CSR engagement and reporting. Further, the knowledge on what is really happening in the CSR reporting can be incorporated into teaching-learning processes at various levels to improve the quality of learning. Professional accounting bodies and other interested parties can make use of the results of this study to develop new CSR principles and guidelines or to improve the existing ones to fit the local context whereby enhancing the quality of the CSR reporting in Sri Lanka. General public at large can be aware of how firms interacted with the environment and the society and the significance of such involvement to their lives. By referring to this outcome, stakeholders can suggest the ways and means in which they could actively engage in sustainability programs of firms to create value to the society as a whole.

Tables and references from this fine paper were omitted due to space considerations. For a copy of the paper with tables and reference list please contact the author(s).
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What Competencies Are Important From a Buyer's Versus Supplier's Perspective in Project Transactions?

Key words: projects, competences, risk

INTRODUCTION

Firms build and leverage their competences in order to develop long-term relationships, achieve a better market performance, and thus, a sustainable competitive advantage. While the economics, supply chain management literature have long been investigating the factors influencing supplier selection, besides a heavy focus on pricing, it is not clear why certain companies in the project industry succeed (Cova and Holstius, 1993) and are better at closing a deal with a project buyer, than others. We argue the answer can be found in the perceived competence of actors.

Business-to-business projects can have tangible (eg. hardware, buildings) and intangible (eg. software, engineering, consulting, production know-how) components. This research aims to investigate the competences the supplier should invest in, in order to influence the buyer's risk

and value perception. In particular, this study investigates the following research question: What competences are important from a buyer's versus supplier's perspective?

LITERATURE REVIEW

The following literature review reveals the research that has been undertaken in this area by discussing the domain of competences on the buyer's risk and value perception in a project environment.

Competencies in Projects

In the areas of management and marketing, the resource-based view of the firm has been used to explain how firms create a sustainable competitive advantage (eg. Barney, 1991) by leveraging their tangible (e.g. hardware, buildings) or intangible (e.g. technology, reputation, alliance, know-how, relationship) assets (e.g. Bharadway, Varadarajan and Fahy, 1993; Srivastava, Shervani and Fahey, 1998). Some of these competencies draw on the company's past, such as previous project successes of the supplier, references, buyer-supplier relationship, and reputation (epistemic competencies), whereas others represent a promise for a reliable and successful outcome (heuristic competencies) (c.f. Cova and Salle, 2007; Grant, 1995; Möller, 2006). These competences are also context-dependent; for instance, a construction company's most important competence lies in the execution of complex tasks, whereas a consulting company's main competence revolves around its employees and their relationships with their clients (Sveiby, 1997). Beyond the possession of these competences, Golfetto and Gibbert (2006) emphasize the utilization, promotion and "selling" of these competences in business-to-business contexts (Gibbert, Golfetto and Zerbini, 2006). Therefore, this study aims to explore the relevant competences influencing the buyer's risk and value perception.

Perceived Competences and their Impact on Risk and Value Perception

Overall, the success of a project transaction is uncertain until it is completed. Risk is referred to as the subjective assessment of uncertainty and is associated with situations with potential negative consequences (Dhalakia, 2001) in comparison to alternatives (Aqueveque, 2006), and thus, risk serves as an inhibitor to purchase intention (Pavlou, Liang and Xue, 2007). As project buyer lacks the required knowledge to complete the project, the buyer's major risk is related to the supplier's expected performance, which is driven by the presumed weaknesses of the supplier (Veres, 2009). Information on a particular supplier's competence profile reduces the buyers' market uncertainty (in the pre-transaction phase) (Golfetto and Gibbert, 2006), and its transaction uncertainty (in the implementation phase) (Ford, 2002). Therefore, at the outset of the project a large emphasis is placed on the perceived competences and promises of the expected benefits (Page and Siemplenski, 1983; Veres and Sajtos, 2012).

Suppliers might not feel confident – at the start and during the project – in their ability to successfully deliver on what they have promised to the project buyer. However, as the project progresses this risk component reduces and it might be replaced by the risk of the buyer not paying or not accepting the project as delivered. Similarly, the buyer's risk might remain constant due to the uncertainty in the supplier's ability to successfully deliver the outcome of the project. These risks can be managed through targeted acts and communication – especially under the condition of bounded rationality (Singh and Sirdeshmukh, 2000) – that can help the buyer distinguish between 'high' and 'low' quality providers (separating equilibrium) (e.g. Spence, 1974).

METHODOLOGY

Qualitative data was collected in two phases. In the first phase we used on-site, expert mini focus group interviews in various contexts, such as market-research, construction, IT consulting and web design, advertising, etc. The objective of these interviews was to explore general views of project buyers and suppliers on project characteristics and stages and their expectations and risk perception throughout the project. A total of 90 buyer- and 90 supplier interviews were undertaken by using a standard interview guide and each focus group consisted of two-three people of decision makers, such as project experts and business marketers.

In the second phase 129 (49 hard-type and 80 soft-type projects) structured in-depth interviews with project managers were undertaken. Construction, manufacturing and property development were categorised as hard-type, whereas IT or other types of consulting, advertising, media and market research were considered as soft-type projects. We asked middle managers of companies who participated in both, the preparatory and implementation phase of the project. The objective of this phase was to identify factors that make projects successful where respondents had to categorise competences according to their importance in terms of their effect impacting risk perception. The interview guideline can be seen in the Appendix.

FINDINGS FROM THE QUALITATIVE PHASE

According to a project supplier: *“we do not sell physical things, but rather a future promise... therefore, we have to provide some evidence to the client that we are able to implement the project, and hence, the client becomes more efficient or will save some money”*. This represents a view that suppliers need to demonstrate that they possess the capability to successfully cooperate and finish the project. In order to do that they need to provide manifestations (diagnostic cues) to influence (but not bias) the buyer's decision, and thus manage his future expectations. Diagnostic cues can be the presence of a quality control system (for instance, ISO), references, company size, and in particular, activities that buyers are aware of about the supplier. While in certain contexts (eg. event management) if the stakes are high, the history of the relationship outweighs any other factors; this research aims to focus on projects where client and supplier had no prior history, and hence buyers/suppliers have to rely on information received through various channels. The idea of selling future promises is also closely related to information asymmetry, where the client's subject knowledge usually outweighs that of the supplier; however, suppliers draw on their wide range of experience and system thinking competences. Furthermore, interviews revealed that (perceived) information asymmetry varies across contexts; it is likely to be high in finance and low in the training industry and business tourism.

We found differences in the type of information that buyers and suppliers look for about the other party before they meet the potential buyer or supplier. Suppliers usually look for “official” financial information (profit and loss statement, balance sheet, stock prices, etc.) about buyers, whereas buyers usually consider past project-related information, such as references, recommendation, evidence of expertise or samples of current work. After the initial information search, the first meeting provides an opportunity to have a first impression about the other party. In particular, the supplier aims to uncover the capability of the buyer (commitment), whereas the buyer explores the supplier's expertise and his personality.

Managing the buyer's risk perception is vital throughout the entire project and beyond. High risk perception of projects is also attributed to the interdependency between buyers and sellers, which means *“if a project is abandoned then its outcome is destroyed”*. Most respondents agreed that *“the client's risk is larger than the cost of the project as the client's business is at stake”*. At the start of the project *“...it seems like a public relations exercise that we inform the clients about*

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certain risk factors... in the name of self-defence.”, which also reassures clients not to follow unrealistic objectives. The interviews revealed that solely communicating the risk factors will increase the level of perceived risk; thus, risks always have to be presented with the solution in order to decrease the buyer’s risk perception. According to a project supplier “...*buyers do not want standardized answers... but they expect us to find a solution for them...therefore, suppliers, instead of developing highly standardized offers, they need to have the ability to divide complex problems into smaller (modular) tasks in order to reduce the buyer’s risk perception*”. Suppliers, who provide a range of solutions rather than a standardized one, and further, who (communicate that they) understand the challenges of coordinating across various departments (within the company) are more likely to develop positive attitudes (i.e. trust) in the project buyer. During the project, companies consciously aim at reducing risk through standard procedures, such as, continuous project monitoring, milestone meetings (regular visits) and plan updates. Buyers revealed that the frequency of visits and the introduction of support contracts are very effective tools in reassuring the buyer about the supplier’s intention; hence they are assumed to reduce risk and increase his trust. However, at the same time these processes make the buyers more knowledgeable and involved in the project, which on the other hand, increases his/her risk perception.

With regard to the role of competences (second phase of qualitative research), both, buyers and sellers collectively agreed on communication skills, expertise, and credibility to be the most important competences, whereas the very same competences were not mentioned in the ‘least important’ category (see Table 1). Besides similarities, the main difference is that while suppliers are concerned about buyer’s financial stability, their ability to explicitly articulate their needs and their problem-solving skill, buyers emphasized suppliers’ expertise, licences, professional staff and amount of experience. Our qualitative interviews further revealed that suppliers, who show leadership and proactive behaviour, are valued by project buyers. The factors listed previously should be clearly distinguished from other tangible evidences (eg. ISO, references), as the former ones are more likely to increase perceived trust and or image, whereas the latter ones are more likely to reduce risk in the project buyer, but not necessarily influence customer value. Finally, risks always have to be communicated with a solution to project buyers in order to decrease their risk perception.

**Table 1. Categorisation of Perceived Competences from Most to Least Important
An Overview**

	Perceived by Buyers			Perceived by suppliers		
	Most important	Neither	Least important	Most important	Neither	Least important
Credibility	74*	21	0	57	34	5
Expertise	74	21	0	64	25	7
Quality of staff	67	21	7	55	30	11
Communication skills	65	30	0	66	27	4
Project management skills	60	26	7	54	36	5
Ethical behaviour	54	35	7	50	43	4
Innovation capability	53	19	19	34	34	27
Licences	47	28	12	52	21	14
Conflict management skills	46	42	7	46	41	7
Financial stability/reliability	44	32	16	79	13	5
Financial assets	39	33	19	57	30	2
Corporate reputation	32	46	18	18	38	36
Relationship management	30	42	21	36	50	11
Type of materials used	26	35	26	23	23	48

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	Perceived by Buyers			Perceived by suppliers		
	Most important	Neither	Least important	Most important	Neither	Least important
Recognising own constraints	23	49	19	36	46	13
Foreign language skills	18	28	46	14	36	43
Responsibility delegation	16	44	33	20	43	29
Type of instruments used	14	42	30	20	25	50
The supplier's network	9	40	42	13	23	55

*numbers represent percentages based on a sample size of n=57 (buyers) n=56 (suppliers)

Quantitative analyses

We start our analysis by presenting descriptive findings on the evaluations of the capabilities of an imaginary project partner. The respondents were asked to put cards with a capability into one of three piles. They could put a card (a capability) into the pile of outstanding important factors, of average importance factors, or into that of least important factors.

Three different types of capabilities can be identified according to the answers of the respondents (as seen in Table 2). The first group of capability includes the *most important factors*, namely “expertise (know-how)”, “communication” and “trustworthiness”. At least two-thirds of the respondents valued these capabilities as factors of outstanding importance, while only 2 to 5 percent of them considered that these were factors of smaller significance. In the opposite group there are the *least important factors*, namely the own network, the instruments, devices used and the (foreign) language communication. Less than 20 percent of the respondents classified these capabilities as factors of outstanding importance, while more than 40 percent of them chose these cards to the group C, i.e. to the factors of smaller significance.

We identified another type of capabilities as well. These factors’ common characteristic is that almost as many respondents found them very important as less significant. There are only two capabilities in this group: the corporate reputation and the delegation of responsibility and competence. We called these capabilities *divisive*. The other factors are not in our focus point in this section.

Table 2: Classification of capabilities by the distributions of respondents’ evaluations

Groups of factors	Capabilities
the most important factors	- expertise (know-how) - communication - trustworthiness
the least important factors	- own network - instruments, devices used - (foreign) language communication
the divisive factors	- corporate reputation - delegation of responsibility and competence

After we had identified these groups of factors, we studied first the bivariate relationships between the evaluations of the factors and the position in the partner relation by analyzing contingency tables. We signed the statistically significant differences with the grey colour of the cells. We used adjusted standardized residuals to test the significance of the relationships by cells. The results are shown in Table 3. The following conclusion can be drawn from the data: the buyers think more important the trustworthiness, the expertise and the instruments, devices used than the suppliers. We can see another interesting result: there are only significant

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differences between the opinions of suppliers and buyers in the evaluations of most important and the least important factors.

CONCLUSIONS AND FURTHER RESEARCH

The results of our qualitative research and first quantitative analyses revealed the areas that both buyers and suppliers pay attention to, which not only means that these are the relevant areas, but also that these are considered as risk factors by managers. Therefore, as a next step of our study we aim to test the impact of the presence or absence of the most important competences – mentioned by buyers and sellers - on risk and value perception. The benefit of this is – besides confirming the differential (positive) effect of the presence of various competences, – to demonstrate the negative, damaging impact of the absence of a particular competence on how a buyer sees a potential supplier.

In order to test the above propositions we will adopt a technique developed by Skowronski and Carlston (1989) in social psychology. Their research viewed people as a set of positive and negative behaviours alongside two personality traits (honesty and morality), which, we argue, can be applied to companies as well. Therefore, the quantitative research will focus on how informative (diagnostic) certain behaviours are and their differential effect on value and risk perception of project buyers. This means that buyers, making decisions on suppliers, can learn more from certain behaviours of the potential supplier, than from others. Furthermore, we are particularly interested in positivity and negativity biases caused by extreme positive and negative activities of companies, related to the various competence dimensions, such as capability and morality. After collating a set of activities that represent individual companies, we randomly combine extreme-to-moderate and positive-negative as well as ability-morality aspects, and respondents (project buyers) will evaluate these sets based on risk and value perception as well as the likelihood to cooperate.

Table 3: The relationship of the position in the partner-relation (buyer or supplier) to the evaluation of the capabilities of project-partners (in % - results affirmed by Kruskal-Wallis tests)

factors (capabilities)	position in the partner-relation	A - factor of outstanding importance	B - a factor of average importance	C - a factor of smaller significance	not classified	Total
the most important factors						
trustworthiness	supplier	57%	33%	6%	3%	100%
	buyer	74%	21%	0%	5%	100%
communication	supplier	70%	24%	3%	3%	100%
	buyer	67%	29%	0%	5%	100%
expertise (know-how)	supplier	60%	25%	10%	5%	100%
	buyer	77%	18%	0%	5%	100%
the least important factors						
own network	supplier	11%	27%	52%	10%	100%
	buyer	9%	38%	42%	11%	100%
(foreign)language communication	supplier	16%	33%	44%	6%	100%
	buyer	18%	26%	47%	9%	100%
instruments, devices used	supplier	19%	24%	51%	6%	100%
	buyer	14%	39%	33%	14%	100%
the divisive factors						
corporate reputation	supplier	19%	38%	35%	8%	100%
	buyer	27%	45%	21%	6%	100%
delegation of responsibility and competence	supplier	24%	40%	29%	8%	100%
	buyer	18%	44%	29%	9%	100%

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In summary, findings from the qualitative interviews helped us understand the pattern of competences and activities that most likely to have an impact on risk and/or value perception of the buyer. This research aims to learn about how suppliers are perceived through their positive and negative activities by their potential buyers and how these activities impact buyer's risk and value perception before selecting a potential project partner. Similarly, suppliers will also be able to understand the impact of certain negative and positive information about the company, and further, how negative information can be counteracted or overcome. Finally, the proposed quantitative research can also uncover the activities of which impact is resistant to contradiction. This is not only relevant from a managerial perspective (Veres, 2009), but it also represents a very fruitful domain for cross-disciplinary research.

REFERENCES

- Aqueveque, C. 2006. Extrinsic cues and perceived risk: The influence of consumption situation. *Journal of Consumer Marketing*, 23(5), 237-247.
- Barney, J. B. 1991. Firm resources and sustained competitive advantage. *Journal of Management*, 7(1), 99-120.
- Bharadway, S. G., Varadarajan, P. R. & Fahy, J. 1993. Sustainable competitive advantage in service industries. *Journal of Marketing*, 57(4), 83-99.
- Cova, B. & Holstius, K. 1993. How to create competitive advantage in project business. *Journal of Marketing Management*, 9(2), 105-121.
- Cova, B. & Salle, R. 2007. Introduction to the IMM special issue on Project marketing and the marketing of solutions: A comprehensive approach to project marketing and the marketing of solutions. *Industrial Marketing Management*, 36(2), 138-146.
- Dhalakia, U. M. 2001. A Motivational process model of product involvement and consumer risk perception. *European Journal of Marketing*, 35(11/12), 1340-1362.
- Ford, D., 2002. *The Business Marketing Course – Managing in Complex Networks*. Chichester: Wiley.
- Gibbert, M., Golfetto, F. & Zerbin, F. 2006. What do we mean by marketing competencies? A reply to Hooley et al. *Journal of Business Research*, 59(1), 148-151.
- Golfetto, F. & Gibbert, M. 2006. Marketing competencies and the sources of customer value in business markets. *Industrial Marketing Management*, 35(8), 904-912.
- Grant, R. M. 1995. *Contemporary strategy analysis: Concepts, techniques, applications* (Vol. 2). Malden: Blackwell.
- Möller, K. 2006. Role of competences in creating customer value: A value-creation logic approach. *Industrial Marketing Management*, 35(8), 913-924.
- Page, A. L. & Siemplenski, M. 1983. Product systems marketing. *Industrial Marketing Management*, 12(2), 89-99.
- Pavlou, P. A., Liang, H. & Xue, Y. 2007. Understanding and mitigating uncertainty in online exchange relationships: A principal-agent perspective. *MIS Quarterly*, 31(1), 105-136.
- Singh, J. & Sirdeshmukh, D. 2000. Agency and trust mechanisms in consumer satisfaction and loyalty judgements. *Journal of the Academy of Marketing Science*, 28(1), 150-167.
- Skowronski J. J. & Carlston, D. E. 1989. Negativity and extremity biases in impression-formation - A review of explanations. *Psychological Bulletin*, 105(1), 131-142.
- Srivastava, R. K., Shervani, T. A. & Fahey, L. 1998. Market-based assets and shareholder value: A framework for analysis. *Journal of Marketing*, 62(1), 2-18.
- Sveiby, K. E. 1997. *The New Organizational Wealth*. San Francisco: Berrett-Koehler.
- Veres, Z. 2009. Competence-based risk perception in the project business. *Journal of Business and Industrial Marketing*, 24(3/4), 237-244.
- Veres, Z. & Sajtos, L. 2012. Competencias y Gestión de Riesgos de los Actores de Proyectos. *Revista Internacional Administración & Finanzas*, The IBFR, 5(4), 51-62.

APPENDIX

Expert interview guideline

Research aim:

To explore the organizational capabilities of the actors in project transactions

Operationalization:

Project transaction = to realize a unique task as a business service

Research target groups:

Specialists of companies / institutions, who are making decisions in the preparation and the execution of project transactions,

(Make an effort to ask suppliers and buyers collaborating in the same project.)

The business areas, involved in the research:

a/ (hard) projects, realized with a considerable physical content – construction industry, infrastructure development etc.

b/ (soft) projects, realized with a limited or negligible physical content – ad hoc market research, consulting projects, (ad) campaign organization, the setup of IT software systems etc.

Respondents' profile:

Identical number of sellers and buyers in a position of (possibly) middle managers, with a higher qualification.

It is necessary to record the following data without the firm's name: respondent's gender; estimated age group and professional profile; firm's scope of activity; and its estimated size (for example: employees' number).

Interview:

First part (20 minutes):

- What are your expectations in connection with the prospective partner at the time of preparation of a project transaction? From among these, which ones insure the successful outcome of the project?
- From what can you judge, that the partner will meet these requirements? What kind of information do you check on? What is that, in which you rely on the partner?
- In what way do you manage to get information from the partner's real capabilities?
- If you should make a choice, in judging the partner's suitability on only three factors, then which three would you select?
- Which three features would you be cautious with? From what can you judge them?

Instruction: When moderating the interviews, make an effort to achieve that the respondents support their statements with particular project episodes.

Second part (20 minutes):

1. Tell me, please, the procession of the latest important project, in which you took part personally.

Instruction: The interviewer has to observe what kind of episodes the respondent mentions. Ask the respondents to characterize the pre-story of the partnership (its length in time, the frequency of transactions...) briefly!

2. Tell me, please, a case that remained so in your memory, that it had confirmed you on the later success of the project.

3. Tell me, please, a case that remained so in your memory, that had made you uncertain regarding the later successfulness of the project.

Third part (20 minutes):

(Hand over the cards to the respondent!)

Please, classify these capabilities (on the cards) of an imaginary project partner into the following three groups:

A/ factors of outstanding importance

B/ factors of average importance

C/ factors of smaller significance

Instruction: We solve the classification by making piles. Respondent may assign at most 10 into a group! Before making groups, ask him to interpret the factors in a few words. To the „other:” card, he may write a factor about which he thinks it was missing from the list. The factors mentioned in a spontaneous manner in the first part can be a basis to this.

CARDS: communication; innovational capability; relationship management; project management skills; trustworthiness; HR profile; conflict solving capability; competence to act (for example: permission); material inputs used; financial resources; (foreign)language communication; expertise (know-how); financial reliability; delegation of responsibility and competence; recognition of the limits of own competence; own network; extension of own competence; ethical behavior; corporate reputation; instruments, devices used; other

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The Impact of Product Features on Global Brand Switching

INTRODUCTION

This paper provides evidence that the long-term success of capital-intensive technology products requires continuous integration of innovations in the form of new features and capabilities that meet broad preferences. Magnetic Resonance Imaging (MRI) research centers, which represent lead users in this industry, are used as a case study. An online survey was developed to identify and rank the main factors behind brand switching; then secondary sources are used to confirm

research results. The results show that product innovations in the form of specific features are the main motive for switching to a new technology, consistent with the expectation that lead users seek technologies that maintain leading-edge positions. In practice, managers should find a reliable strategy to assess factors underpinning brand switching that is unique to their industry. Determining the main factors behind switching is a critical matter when defining the appropriate strategy to keep their market share from eroding.

LITERATURE REVIEW

There is considerable research that investigates brand switching, but the majority is focused on competitive products in consumer markets (Ranganathan *et al.*, 2006; Low and Johnston, 2006; Heide and Weiss, 1995). There is a paucity of research in the context of capital-intensive high technology products in business-to-business marketing. Such products are information intensive, and the product evaluation process is intense and complex (Glazer, 1991), which can make users reluctant to switch (Weiss and Jan, 1993). The dominant logic is that incumbent firms have a strong advantage in the case of repurchasing capital-intensive technologies, because of search costs, along with high switching costs and their related consequences (Heide and Weiss, 1995).

The concept of dynamic capabilities (Teece *et al.*, 1997) offers one explanation for this. This theory associates rapid changes in the external environment with distinctive processes inside the organization that help users to redirect internal resources. Eisenhardt and Marten (2000) describe dynamic capabilities as strategic procedures, such as strategic decision making, by which users alter their resources to generate competitive advantage in response to market changes. Therefore, management needs constantly to evaluate and redirect its resources and capabilities in order to maintain a strong position relative to competitors (Itami and Roehl, 1987).

RESEARCH METHOD

This research uses both secondary source and primary data to investigate the influence of product innovations on brand switching between MRI technologies. Two secondary sources – International Society for Magnetic Resonance in Medicine (ISMRM) conference proceedings (ISMRM, 2009) and MagNET technical evaluation reports (MagNet, 2009) – are used to document switching and product features of MRI equipment. Personal interviews and an online survey of representatives of MRI research centers document the important factors considered during the evaluation process leading up to a decision to switch. (This research is a part of a larger study of the MRI industry, so only a portion of the data gathered by the survey is presented.)

ISMRM Conference Database

We use proceedings from the annual ISMRM conference to document switching between MRI technologies by research centers. MRI research centers are active participants in the ISMRM annual meeting, presenting their research and clinical findings. The abstracts published in the proceedings frequently identify the MRI technology used by the center. Conference proceedings were collected for the period 1995 to 2008; each annual proceeding contains approximately 3000 abstracts. We identified 658 research centers, and the MRI technology used in the research reported by researchers from each centre in each year. The number of centers is less than the population of MRI centers (about 1217 centers), as the vendor of the MRI equipment was not always identified in the abstract, and we did not include vendors other than the major three. We categorized the data as indicating a *complete switch* when a technology from a different firm replaced the existing MRI technology, or a *partial switch* when a centre added a different technology alongside an existing one.

Technical Evaluation Reports

Technical reports provide an independent assessment of product innovation, including the number of associated features and ranking of overall performance. We used technical evaluation reports collected by an independent agency allied with the Centre for Evidence-based Purchasing in UK (MagNET, 2009). This agency has developed more than twenty years of experience in evaluating and comparing MRI technologies (Wilde *et al.*, 2002). The UK National Health Service and similar agencies in other European countries use these reports when making decisions about the purchase of MRI technology. MagNet reports use well-established protocols (Och *et al.*, 1992), and report on both hardware and software features.

Online Survey

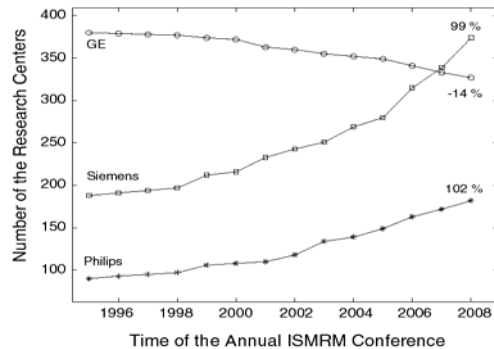
To validate and generalize the findings from the interviews, we contacted MRI centers worldwide to complete an online questionnaire. The online questionnaire included questions on demographic information and a list of factors generated from the interviews that could influence the decision to repurchase from the same vendor or switch. Respondents were asked to rank these factors based on their importance in selecting an MRI technology, then to rank different MRI technologies based on the attractiveness of available clinical applications.

RESEARCH FINDINGS

Switching and Changes in Market Share

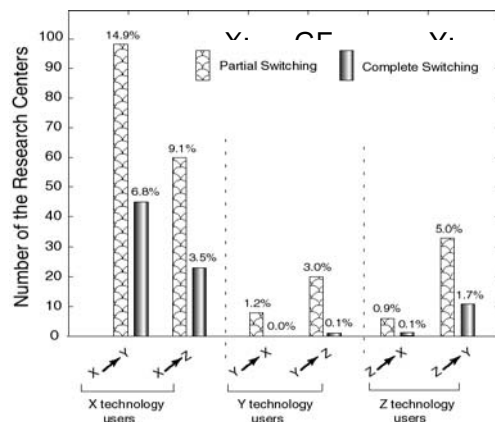
Figure 1 shows the market share of each MRI vendor from 1995 to 2008 using the data collected from the ISMRM conference proceedings. In 1995, 380 research centers operated GE-MRI technology compared with 188 and 90 centers that operated Siemens and Philips technologies, respectively. Over time, research centers expanded their research and clinical operations by buying additional equipment. The number of centers using Siemens-MRI technology increased steadily, reaching 374 in 2008 (a 99% increase over 1995). In addition, the number of centers using Philips-MRI technology increased to 182, a 102% increase over 1995. The number of centers using GE-MRI technology declined, ending at 327 centers (a 14% decrease since 1995). This shift in market share illustrates the significant impact of brand switching on the dynamics of this industry. Figure 2 shows the same data, but distinguishes research centers that partially switched from those that completely switched. Figure 2 is divided into three components based on the technology a center used in 1995 (on the horizontal axis). This figure represents the accumulative brand switching over fourteen years.

Figure 1 MRI brand switching over 14 years.



The Percentage at the end of each curve represents the change in value reported at 1995.

Figure 2 Partial and complete switching over 14 years.



The percent value above each bar represents a portion of the total number of research centers (658). Arrows below horizontal axis represent the direction of brand switching; for example, X → Y represents brand switching from GE technology to Siemens technology.

Factors behind Switching

To understand what researchers look for when evaluating MRI technology for purchase, we elicited key criteria during the interview. Later, we asked those who responded to the online survey to rank the importance of the same set of criteria in their decision to switch MRI technologies. Table 1

shows how respondents to the online survey ranked the importance of the same factors (where “1” represents the most important factor and “5” is the least important factor). In the online survey, product features emerged as the most influential factor in the decision to switch to a new technology. In the survey, 85.3% of switchers ranked this factor first. Product features represent new capabilities and applications to advance a wide range of research activities and provide accurate diagnoses.

Table 1 Ranking the important factors behind brand switching

Ranking	Switchers		Non-switchers	
	Percent ^a	Variable	Percent ^a	Variable
1	85.3%	Product Features	52.4%	Product Features
2	58.3%	Research Collaboration	45.1%	Price
3	54.2%	Product Service	46.5%	Product Service
4	42.5%	Price	55.3%	Research Collaboration
5	83.3%	Bundling	76.7%	Bundling

^a Percent column is the percent of participants in each group identifying the factor as the first, second, etc. rank.

Features of MRI Equipment

Respondents to the survey ranked their perception of the capabilities of each MRI technology. Table 2 lists important clinical applications and the technology achieving the highest average rank for each feature. Respondents on average identified Siemens as the best provider of clinical applications, followed by Philips and then GE. Table 3 summarizes the MagNet assessment of hardware performance, and availability of software applications. The rankings of both agree with the perceptual ranking by the survey respondents. In the case of hardware, it is possible to accumulate the performance of different hardware components, as all of them work simultaneously to generate the final image. With software, however, each package represents a unique feature that provides special capabilities. Users have the choice of selecting any combination of these features to meet their needs.

Table 2 Ranking of MRI technologies by survey respondents based on clinical application

Clinical Application	First Rank	Second Rank	Third Rank
Angiography and Cardiac Imaging	Siemens	Philips	GE
Brain and Functional Imaging	Siemens	Philips	GE
Others	Siemens	GE	Philips

Table 3 Hardware performance of the three MRI technologies

Hardware Performance	GE	Siemens	Philips
Image resolution:			
1- Two dimensional image	2	1	2
2- Three dimensional image	2	1	1
Radio frequency coils with parallel imaging capabilities	3	1	2
Image quality	3	1	2
Overall performance	3	1	2

DISCUSSION

This paper begins with the argument that product features are important to increase the market share of firms, by encouraging users to switch to products that are more attractive. To confirm this argument we collected data from secondary sources, and conducted interviews and a survey of those involved in purchasing MRI equipment for research centres. We use MRI equipment as an example of a capital intensive technology and research centres as representative of lead users.

The data clearly illustrate the importance of product features in the decision to switch between competing technologies. Among the three leading vendors of MRI equipment, perceptual and third-party assessments show that Siemens's technology has greater hardware performance and more software applications than wither Philips or GE. Over the past 14 years, the market share of the traditional leader, GE, has eroded, while that of Siemens and Philips have grown. Survey findings demonstrate that product features represent the most influential factor behind brand switching for capital-intensive technologies. We argue that this is one of the primary drivers of the brand switching that has occurred, as users seek to renew their internal resources and maintain a competitive market position. These findings are consistent with previous research about the importance of product features to achieve high market performance (Su *et al.*, 2006; Thompson *et al.*, 2005; Thölke *et al.*, 2001; Bayus, 1994; Cooper, 1979).

Since the new technology contains many advanced features, switchers (as lead users) are concerned about building a strong research collaboration with the vendor of the new technology (Lee, 2000), to overcome any research-related challenges and using the technology for new clinical applications. This becomes an important issue for implementing various research projects to generate reputable research, and applying best clinical practices to achieve competitive advantages. Research collaboration includes networking opportunities with other users who operate the same technology, in order to exchange experiences and best practices. Such networking is offered by firms through a special online community network that connects the same technology users and enables them to exchange ideas and post feedbacks. In addition, firms can sponsor user group meetings for collaboration. In general, research collaboration

facilitates a smooth conversion to the new technology and the efficient use of its features (Athaide *et al.*, 1996).

Product service is also a vital factor to ensure that MRI technology runs constantly without interruption. If there is an interruption, it must be resolved efficiently; otherwise the downtime and shifting clinical schedules will be extremely expensive. Since MRI technology contains multiple advanced features, it is considered a very sensitive technology, requiring a specialized engineer to fix it and calibrate the system after each service. MRI users expressed concern about delays in getting an engineer from the firm's main office and the time needed to fix a sudden break; most prefer to use a nearby service center that can provide quick on-site service support (Athaide *et al.*, 1996).

In addition to product features, research collaboration and product service represent a part of the internal capabilities that an MRI research center obtains when switching to a new firm (Mathieu, 2001). Research collaboration and product service are essential factors for exploring and using the new technology in an effective manner to generate a competitive advantage. Without research collaboration, the full range of technology capabilities may not be used, and poor product service can paralyze functioning at a competing level. Therefore, both factors received high ranking in the evaluation process to switch to a new technology, which enhances the internal capabilities and sustain a competitive advantage.

Technology cost (or price) has limited influence on technology switchers, because most MRI research centers receive funding from research funding agencies, a condition that reduces the financial impact on the hospital budget. Also, product bundling has a small effect on the switching decision, because technology users are mainly focused on having a specialized technology that provides specific features (capabilities) to achieve certain objectives (Hogan and Armstrong, 2001). Any added features (as bundles) that are not related directly to the core capabilities of the product have a minor influence on users' decision. However, the literature shows that bundling has a significant influence over the decision to switch in competitive industries (Wathne *et al.*, 2001).

Non-switchers also ranked product features first in their decision to buy a replacement technology from the same supplier. This implies the current technology is not significantly limiting their capabilities, so there is less need to switch to a new technology. Second, for organization specific reasons, technology total cost may be more important, thus constraining the ability to switch. Finally, the lower ranking of research collaboration may be due to less difficulty in using the same technology from the same supplier, as they already have experience. Bundling was ranked last by both groups (switchers and non-switchers). Figure 1 shows the changes in market share among research centers for the three major MRI vendors over 14 years. The shift in market share is primarily the result of brand switching. The pattern of switching shown by the secondary data is similar to that revealed by the online survey. Figure 2 shows that most switchers migrated from GE-MRI technology toward Siemens-MRI technology as the first choice, and to Philips-MRI technology as the second choice. No research center completely switched from Siemens technology to GE-MRI technology. This suggests that GE-MRI technology has less attractive product features, and explains why GE-MRI technology was ranked the lowest in meeting requirements of MRI research centers (based on the survey findings). In contrast, the tendency to switch toward Siemens and Philips indicates that both provide product features that are highly demanded by users. Such features are critical to achieve users' objectives and sustain their competitive advantage. These suppositions are supported by both perceptual and objective rankings of hardware performance and number of software applications.

REFERENCES

- Appleby, C. (1995), "MRI's second chance", *Hospitals and Health Networks*, Vol. 69 No. 8, pp. 40-42.
- Anderson, E. and Sullivan, M.W. (1993), "The antecedents and consequences of customer satisfaction for firms", *Marketing Science*, Vol. 12 No. 2, pp. 125-143.
- Anderson, P. and Tushman, M.L. (1990), "Technological discontinuities and dominant designs: A cyclical model of technological change", *Administrative Science Quarterly*, Vol. 35 No. 4, pp. 604-633.
- Armstrong, J.S. and Overton, T.S. (1977), "Estimating nonresponse bias in mail surveys," *Journal of Marketing Research*, Vol. 14 No. 3, pp. 396-402.
- Athaide, G.A. Meyers, P.W. and Wilemon, D.L. (1996), "Seller-buyer interaction during the commercialization of technological process innovations", *Journal of Product Innovation Management*, Vol. 13 No. 5, pp. 406-421.
- Atuahene-Gima, K. (1995), "An exploratory analysis of the impact of market orientation on new product performance: A contingency approach", *Journal of Product Innovation Management*, Vol. 12 No. 4, pp. 275-294.
- Bacon, G. Beckman, S. Mowery, D. and Wilson, E. (1994), "Managing product definition in high-technology industries: A pilot study", *California Management Review*, Vol. 36 No. 3, pp. 32-56.
- Banbury, C.M. and Mitchell, W. (1996), "The effect of introducing important incremental innovations on market share and business survival", *The Journal of Product Innovation Management*, Vol. 13 No. 2, pp. 267-268.
- Barbiroli, G. and Focacci, A. (2005), "Product diversification in the computer industry: A structural analysis", *Technovation*, Vol. 25 No. 9, pp. 947-970.
- Bayus, B.L. (1994), "Are product life cycles really getting shorter?", *Journal of Product Innovation Management*, Vol. 11 No. 4, pp. 300-308.
- Bhattacharya, S. Krishnan, V. and Mahajan, V. (1998), "Managing new product definition in highly dynamic environments", *Management Science*, Vol. 44 No. 11, pp. 50-64.
- Calantone, R.J. Chan, K. and Cui, A.S. (2006), "Decomposing product innovativeness and its effects on new product success", *The Journal of Product Innovation Management*, Vol. 23 No. 5, pp. 408-421.
- Canadian Coordinating Office for Health Technology Assessment (1995). "A Comparison of Fixed and Mobile CT and MRI Scanners".
- Cooper, R.G. (1979), "The dimensions of industrial new product success and failure," *Journal of Marketing*, Vol. 43 No. 3, pp. 93-103.
- Cooper, R.G. and Kleinschmidt, E.J. (1995), "Benchmarking the firms critical success factors in new product development", *Journal of Product Innovation Management*, Vol. 12 No. 5, pp. 374-391.
- Daniels, E. (2002), "The dynamics of product innovation and firm competences", *Strategic Management Journal*, Vol. 23, No. 12, pp. 1095-1121.
- Eisenhardt, K.M. and Martin J.A. (2000), "Dynamic capabilities: What are they?" *Strategic Management Journal*, Vol. 21 No. 10-11, pp. 1105-1121.
- Franke, N. Von Hippel, E. and Schreier, M. (2006), "Finding commercially attractive user innovations: A test of lead-user theory", *Journal of Product Innovation Management*, Vol. 23 No. 4, pp. 301-315.
- Glazer, R. (1991), "Marketing in an information-intensive environment: Strategic implications of knowledge as an asset", *Journal of Marketing*, Vol. 55 No. 4, pp. 1-19.
- Heide, B.J. and Weiss, A.M. (1995), "Vendor consideration and switching behavior for buyers in high-technology markets", *Journal of Marketing* Vol. 59 No. 6, pp. 30-43.
- Helfat, C.E. and Peteraf, M.A. (2003), "The dynamic resource-based view: Capability Lifecycles", *Strategic Management Journal*, Vol. 24 No. 10, pp. 997-1010.

- Henard, H.D. and Szymanski M.D. (2001), "Why some new products are more successful than Others," *Journal of Marketing Research*, Vol. 38 No. 3, pp. 362-375.
- Hogan, E.J. and Armstrong, G. (2001), "Toward a resource based theory of business exchange relationships: The role of relational asset value", *Journal of Business to Business Marketing*, Vol. 8 No. 4, pp. 3-28.
- ISMIRM (2009), "International Society for Magnetic Resonance in Medicine", available at: <http://www.ismrm.org> (accessed 8 February 2007).
- Itami, H. and Roehl, W.T. (1987), *Mobilizing Invisible Assets*. Massachusetts, Harvard University Press.
- Krieg, R. (2004), "Impact of structured product definition on market success", *International Journal of Quality and Reliability Management*, Vol. 21 No. 9, pp. 991-1002.
- Lee, Y.S. (2000), "The sustainability of university-industry research collaboration: An empirical assessment", *Journal of Technology Transfer*, Vol. 25 No. 2, pp. 111-133.
- Liu, H.A. Leach, P.M. and Bernhardt, L.K. (2005), "Examining customer value perceptions of organizational buyers when sourcing from multiple vendors", *Journal of Business Research*, Vol. 58 No. 5, pp. 559-568.
- Lilien, G.L. Morrison, P.D. Searls, K. Sonnack, M. and Von Hippel, E. (2002), "Performance assessment of the lead user idea-generation process for new product development," *Management Science*, Vol. 48 No. 8, pp. 1042-1059.
- Low, B. and Johnston, J.W. (2006), "Relationship equity and switching behavior in the adoption of new telecommunication services", *Industrial Marketing Management*, Vol. 35 No. 6, pp. 676-689.
- MagNET (2009), "Purchasing and Supply Agency: The Centre for Evidence-based Purchasing," available at: <http://www.pasa.nhs.uk/cep> (accessed 8 February 2007).
- Mathieu, V. (2001), "Product services: From a service supporting the product to a service supporting the client", *Journal of Business and Industrial Marketing*, Vol. 16 No 1, pp. 39-61.
- Meyer, M.H. (2008), "Perspective: How Honda innovates", *The Journal of Product Innovation Management*, Vol. 25 No. 3, pp. 261-271.
- Moriarty, R.T. and Kosnik, T.J. (1989), "High-Tech marketing: Concepts, continuity, and change", *Sloan Management Review*, Vol. 30 No. 4, pp. 7-17.
- Morrison, D.P. Roberts, H.J. and Midgley, F.D. (2004), "The nature of lead users and measurement of leading edge status", *Research Policy*, Vol. 33 No. 2, pp. 351-362.
- Nielson, Charles (1996), "An Empirical Examination of Switching Cost Investments in Business-to-business Marketing Relationships", *Journal of Business and Industrial Marketing*, Vol. 11 No. 6, pp. 38-60.
- Och, J.G. Clarke, G.D. Sobol, W.T. Rosen, C.W. and Mun, S.K. (1992), "Acceptance testing of magnetic resonance imaging systems", *Medical Physics*, Vol. 19 No. 1, pp. 217-229.
- Oh, E.H. Imanaka, Y. and Evans, E. (2005), "Determinants of the diffusion of computed tomography and magnetic resonance imaging", *International Journal of Technology Assessment in Health Care*, Vol. 21 No. 1, pp. 73-80.
- Olson, E.L. and Bakke G. (2001), "Implementing the lead user method in a high technology firm: A longitudinal study of intentions versus actions", *Journal of Product Innovation Management*, Vol. 18 No. 6, pp. 388-395.
- Pae, J.H. and Hyun, J.S. (2006), "Technology advancement strategy on patronage decisions: The role of switching costs in high-technology markets", *The International Journal of Management Sciences*, Vol. 34 No. 1, pp. 19-27.
- Pae, J.H. and Hyun, J.S. (2002), "The impact of technology advancement strategy on consumers' patronage decisions", *The Journal of Product Innovation Management*, Vol. 34 No. 1, pp. 19-27.

- Paladino A. (2007), "Investigating the drivers of innovation and new product success: A comparison of strategic orientations", *The Journal of Product Innovation Management*, Vol. 24 No. 6, pp. 534-553.
- Ranganathan, C. Seo, D.B. and Babad, Y. (2006), "Switching behavior of mobile users: Do user's relational investments and demographics matter?", *European Journal of Information Systems*, Vol. 15 No. 3, pp. 269-276.
- Stump, R.L. Athaide, A.G. and Joshi, A.W. (2002), "Managing seller-buyer new product development relationships for customized products", *The journal of product innovation management*, Vol. 19 No. 6, pp. 439-454.
- Su, C.T. Chen Y.H. and Sha D.Y. (2006), "Linking innovative product development with customer knowledge: A data-mining approach", *Technovation*, Vol. 26 No. 7, pp. 784-795.
- Teplensky, D.J. Kimberly, J.R. Hillman, A.L. and Schwartz, S. (1993), "Scope, timing and strategic adjustment in emerging markets: Manufacturer strategies and the case of MRI", *Strategic Management Journal*, Vol. 14 No. 7, pp. 505-527.
- Thompson, B.V. Hamilton R.W. and Rust, R.T. (2005), "Feature fatigue: When product capabilities become too much of a good thing", *Journal of Marketing Research*, Vol. 42 No. 4, pp. 431-442.
- Thölke, J.M. Hultink, E.K. and Robben, H.S. (2001), "Launching new product features: A multiple case examination", *Journal of Product Innovation Management*, Vol. 18 No. 1, pp. 3-14.
- Teece, D.J. Pisano, G. and Shuen, A. (1997), "Dynamic capabilities and strategic management," *Strategic Management Journal*, Vol. 18 No. 7, pp. 509-533.
- Terziovski, M. Amrik S. and Andrea H. (2002), "Best practice in product innovation at Varian Australia", *Technovation*, Vol. 22 No. 9, pp. 561-569.
- Von Hippel, E. (1986), "Lead users: A source of novel product concepts", *Management Science*, Vol. 32 No. 7, pp. 791-805.
- Von Hippel, E. (1989), "New product ideas from lead users", *Research Technology Management*, Vol. 32 No. 3, pp. 24-27.
- Wathne, K.H. Biong, H. and Heide, B.J. (2001), "Choice of supplier embedded markets relationship and marketing program effects", *Journal of Marketing*, Vol. 65 No. 2, pp. 54-66.
- Weiss, M.A. and Jan, H.B. (1993), "The nature of organizational search in high technology markets", *Journal of Marketing Research*, Vol. 30 No. 2, pp. 220-233.
- Wilde, D.J. Price, D. Curran, J. Williams, J. and Kitney, R. (2002), "Standardization of performance evaluation in MRI: 13 years' experience of intersystem comparison", *Concepts in Magnetic Resonance*, Vol. 15 No. 1, pp. 111-116.
- Wilson, A.L. Ramamurthy, K. and Nystrom, P.C. (1999), "A multi-attribute measure for innovation adoption: The context of imaging technology", *IEEE Transaction on Engineering Management*, Vol. 46 No. 3, pp. 311- 321.

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Performance Measurement of Small and Medium Enterprises (SMEs) in Pakistan

INTRODUCTION

The paper examines the performance of small and medium enterprises in Pakistan through primary data collection from 199 business concerns. The study shows that most of the people maintain record of their revenues to measure performance of their organizations. There are many approaches used for performance evaluation but in Pakistan these approaches are not very much popular for performance measurement

Companies of all sizes need to implement a streamlined accounting system in order to accurately record and report business transactions, keep track of invoices and reduce problems with tax authorities and the International Reporting Standards (IRS). Accounting procedures are typically coordinated by a CPA or financial manager who is responsible for recording all incoming and outgoing transactions, maintaining consistent records and creating financial statements at the end of each financial period.

Performance management is the processes whereby an organization's programs, investments and acquisitions reached to the desired results by using some parameters which are established by the organization. By using following approaches small organizations can evaluate or measure their performance:

- **Goal Approach** - Goal approach measures the degree to which an organization accomplishes its goals. This approach focuses on vision, mission, aims and objectives which an organization set before it.
- **System Approach** - Under this approach, an organization's performance is measured by appraising its capability to attain resources or input.
- **Balance Scorecard Approach** - In this approach, an organization can evaluate its performance on the grounds of four aspects in which financial measures, internal process, quality and learning are incorporated.
- **Hybrid Approach** - Hybrid approach is an approach in which a business organization's performance can be evaluated by using both either financial measures like net profit, earning per share and non-financial measures like employee turnover, customer satisfaction.
- **Comparative Analysis Approach** - In this approach organization compare its performance with another organization which is quite similar to it. It is just like the benchmarking.
- **Ineffectiveness Approach** - Organization performance can be evaluated by focusing on those key factors which decelerate or preclude the growth of the organization.
- **Stakeholder Approach** - This approach measures the extent of an organization's ability to meet the needs and expectations of its stakeholders.

Following are the key objectives for measuring small organization performance.

- To evaluate, how much efficiently organization is performing.
- To ensure the managers that their subordinates are performing their jobs accurately and doing the right things.

- To budget: budgets are the basic tools for performance improvement.
- To motivate: Considerable goals are given to employees to be achieved and then focus on employee's work and philosophy by using performance measurement tools and at the end rewarded employees by periodic accomplishments.
- To celebrate: It is needed for the organization to celebrate their employee's accomplishments and give them a sense of individual and collective relevance.
- To ensure the stakeholders that organization is performing well, doing good job and in safe hands.
- To learn grounds behind good or bad performance.

Objectives of and Significance of the Study

The basic and the primary objective behind company measures are to improve company performance. For timely corrective actions, effective and efficient performance measurement is vital. Performance evaluation is the most important part of performance management. It focuses on performance improvement. The success of an organization is impossible without knowing what to improve. Without knowing "where to allocate or re-allocate resources? How to compete others? Whether organization is improving or declining? Whether or which policies, procedures, or employees are producing desired results that are cost effective and efficient?" In this research, the main focus is on small businesses in Lahore, because for developing countries like Pakistan, small businesses act as pillar of economy.

LITERATURE REVIEW

A number of studies have been conducted on the issues regarding the performance measurement of the small business organizations'. Some of these are quoted here. Garengo et al (2005) stated that Performance Measurement System plays a vital role in managerial development of small organizations But Short Term Strategic Panning & Lack of Financial and Human Resources are two main barriers due to which organizations don't follow this system.

Kaplan, Norton (1992) explained that generally trend is to use Balance Scorecard Approach for performance measurement of small organizations. Approach focuses on integration of four aspects which are: financial measures, internal process, learning and customers. Henri (2004) was of the view that organization's performance can be measured by using different approaches which include: Goal approach, Time frame approach, Ineffectiveness approach, System approach & Balance Scorecard Approach. Etzioni (1960) acknowledged that Performance of any organization can be evaluated by focusing on its ability to accomplish its goals i.e. by using Goal Approach.

Yuchman, Seashore (1967) provided details about System Approach which measures the performance on the basis that how much access organization has to its inputs or resources? Daft (1995) pointed that performance can be measured by evaluating the capability of an organization to meet its stake holder's needs & demands i.e. through Stakeholder Approach. Quinn, Rohrbaugh (1981) stated that Competing Value Approach is based on developing four other models which include: rational goal, open system, internal process & human relations. This approach expands the series of other approaches.

Pfeffer, Salancik (1978) explained that among Goal approach, System Approach, Balance Scorecard Approach, Ineffectiveness approach; Goal Approach is considered as the best approach for performance measurement due to its straightforwardness. Neely et al (1999) were of the view that Balance Scorecard Approach evaluates the performance of an organization by balancing financial & non-financial measures. It helps in looking & moving towards progress. Mochal (2003) pointed out that Matrices can be used as a basis for performance measurement.

An effective Benchmarking program is to be implemented which makes organization successful in marketplace. Program requires blend of predefined matrices which results in well-defined processes.

Henezel (2002) explained that to measure performance, organizations establish some standards. Then, they gauge & evaluate their strategies, values, practices & performance against Benchmark (high performance organization anywhere in the world.) Antony, Bhattacharyya (2010) provided that organization's performance & excellence can be measured by proposing a conceptual framework which contains variables. Excellence is redefined as the ability of one performance variable to influence the other performance variable in an organization. Staw , Epstein (2000) gave the idea that small organizations can evaluate their performance by using conventional accounting measures of profit. For example Return on Assets which is obtained as the annual profit or net income divided by the average assets over the year.

Van Dyck et al (2005) stated that Return on Assets can evaluate operational efficiency as well as overall performance of small organizations by reflecting long term financial strength. But it is not always an optimal measure. Huselid (1995) suggested that profit is associated with performance but compute output of employees to evaluate organization's performance. Productivity/output is obtained as the revenue divided by total number of employees. Salamon, Robinson (2008) stated that to determine the performance of organization, sales or sometimes variants of sales can be utilized e.g. sales relative to target. In this approach, sales performance of each site is to be calculated to arrive at overall performance of organization. Sales performance of a site will be better if employees of site felt responsibility and accountability.

Gong et al (2009) were of the view that performance can be evaluated by using related measures of sales e.g. total sales growth. Studies show that many HR systems can enhance the performance including Career Planning, Extensive Training, Competitive Pay, and Participation in Decision Making & Performance Appraisal. Delaney, Huselid (1996) pointed out that to evaluate performance, utilize measures which combine benefits of subjective measures with merits of objective measures. For example series of subjective questions may be asked from contestants to acquire objective measures.

Ostraff (1992) explained that measures specific to particular industries can evaluate the performance. For example, to measure performance of a school, five realms were established: student contentment, student performance, teacher's turnover, academic achievement & managerial performance. Taticchi, Balachandran (2008) stated that now a day, organizations give much attention to measure their performance by utilizing Performance Measurement & Management (PMM) Systems but they felt difficulty in implementing these systems. To overcome difficulty, organizations should use framework which integrates five systems: a cost system, planning system, a benchmarking system, a performance system, a capability evaluation system.

McAdam et al (2008) were of the view to develop a theoretical model for performance evaluation and benchmarking. There is a need to develop new approaches to evaluate the performance due to environmental instability, rapid changes in technology & market. Lockamy (1998) provided that Performance measurement system is very much essential for organizational actions, firm's strategies & performance. Long term objectives are important for effective performance of organization & to gain competitive edge in specific markets or market segments. Gomes et al (2004) suggested that both financial and non-financial measures can evaluate the performance but study shows that non-financial measures are more important & useful for performance measurement of small organizations.

Behn (2003) stated that basic purpose of performance evaluation is to improve performance but measures that are not directly linked with improving performance (like measures that are aimed at better communication with employees to build trust) are measures are meant to achieve that ultimate purpose of performance evaluation.

Kravchuk, Schack (1996) explained that performance is measured for evaluating how well organization is performing? For this purpose management need to know what were strategies, mission, vision set by the organization before it at time of establishment.

RESEARCH DESIGN

This study was conducted on the SMEs located in Lahore, Pakistan. The data was collected through a structured questionnaire and was analyzed using SPSS.

Data Analysis

The information collected from the respondents is presented here in the form of tables and graphs.

Table 1 Maintaining Record of Revenues

Particular	Frequency	(percentage)
Yes	161	80.9%
No	38	19.1%
	199	100%

Table 1 shows that 81% of the SMEs maintain the record of their revenue whereas the remaining 19% of the SMEs don't maintain record of their revenue. It may be concluded that SMEs in Pakistan maintain the record of their revenues

Table 2 Calculating Profit on Regular Basis

Particular	Frequency	(percentage)
Yes	87	43.7%
No	112	56.3%
Total	199	100%

Table 2 shows that almost 44% SMEs calculate their profit on regular basis whereas the remaining 56% SMEs did not maintain there profit on regular bas is. It may be concluded that more than 50% SMEs did not maintains their profit on regular basis.

Table 3 Calculating Profit on Regular Basis

Performance Evaluation Measure		
Particular	Frequency	(percentage)
Sales Revenue	50	25.1%
Profitability	66	33.2%
Number of customers	45	22.6%
Market Share	38	19.1%
	199	100%

Table 3 shows that 25% of SMEs through sales revenue was their performance evaluation measure. 33% SMEs were of the view that profitability was their performance evaluation measure. 23% SMEs said that Number of Customers was their performance evaluation measure and almost 19% SMEs said that Market Share was their performance evaluation measure.

Results showed that profitability was the most popular measure of performance evaluation among others.

Table 4 Performance Evaluation Measure in Relation to Competitors

Particular	Frequency	(%age)
Sales Revenue	58	29.1%
Profitability	45	22.6%
No of Customers	69	34.7%
Market Share	27	13.6%
	199	100%

Table 4 shows that 29% SMEs were of the view that sales revenue was their performance evaluation measure when they compared their performance with their competitors. 22% SMEs said that they used profitability for performance comparison with competitors. 35% SMEs supported number of customers as criteria for comparison & 14% SMEs used market share. No one supported Marketing Techniques for this purpose. Results showed that most of the people used profitability for performance comparison with competitors.

Table 5 Measure to Judge

Particular	Frequency	(%age)
Personal Judgment	56	28.1%
Comment Card	56	28.1%
Number of old Customers	47	23.6%
Number of visits by a customer during a time period	70	35.2%
	199	100%

Table 5 shows that 28% SMEs were of the view that they used comment card to judge the level of customer satisfaction. 28% SMEs also used personal judgment. 24% SMEs observed number of visits by a customer during a particular time period to judge satisfaction of customers & 35% SMEs used number of old customers for this purpose. Results showed that observing number of old customers was the most popular way to judge the level of customer satisfaction.

CONCLUSIONS

The research study shows that most of the people maintain record of their revenues to measure performance of their organizations. Profitability is also a determinant of performance when it is compared with competitors but people don't calculate their profit on regular basis to evaluate performance.

Research shows that sales revenue, profitability & customers are the basic focuses of small businesses to measure their performance. These aspects are included in Balance Scorecard Approach. It is multidimensional approach for performance evaluation. This approach incorporates performance & exertions from lowest level in the organization to achieve quality, superiority & distinction in overall performance of organization. Most important aspect of Balance Scorecard Approach is customer satisfaction. If customers are satisfied with products & services provided by organization, then it can be said that organization is performing well. In fact customers are assets which can maximize your return.

Literature also supports usage of Goal Approach for performance evaluation by small business organizations but this approach focuses only on goals. For such organizations which use goal approach for performance evaluation, goals must be SMART; otherwise inadequate goals may lead the organization to ineffectiveness.

Some small business organizations also use other approaches for performance evaluation like System Approach, Hybrid Approach, Comparative Analysis Approach, Ineffectiveness Approach & Stakeholder Approach but all these approaches are not very much popular for performance measurement & are not frequently used.

REFERENCES

- Antony, J. P., and Bhattacharyya, S. (2010), Measuring organizational performance and organizational excellence of SMEs – Part 1: a conceptual framework. *Measuring Business Excellence*. 14(2), 3–11.
- Behn, R. D. (2003), Why Measure Performance? Different purposes require different measures. *Public Administration Review*. 63(5), 586-606.
- Daft, R. L. (1995). *Organization Theory and Design*, West Publishing, New York.
- Delaney, J., and Huselid, M. (1996), The impact of human resource management practices on perceptions of organizational performance. *Academy of Management Journal*. 39, 949-969.
- Etzioni, A. (1960), Two approaches to organizational analysis: A critique and a suggestion. *Administrative science Quarterly*. 5, 257-278.
- Garengo, P., Biazzo, S., and Bititci, U. S. (2005), Performance measurement systems in SMEs: A review for a research agenda. *International Journal of Management Reviews*. 7(1), 25–47.
- Gomes, C. F., Yasin M. M., and Lisboa, J. V. (2004), An examination of manufacturing organizations' performance evaluation: Analysis, implications and a framework for future research. *International Journal of Operations & Production Management*. 24(5), 488-513.
- Gong, Y., Law, K. S., Chang, S., and Xin, K. R. (2009), Human resources management and firm performance: The differential role of managerial affective and continuance commitment. *Journal of Applied Psychology*. 94, 263-275.
- Henzel, S. (2002), Benchmarking measuring and comparing for continuous improvement. *Information Outlook*. 6(7).
- Henri, J. F. (2004), Performance measurement and organizational effectiveness: bridging the gap. *Managerial Finance*. 30(6), 93–123.
- Huselid, M. A. (1995), The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*. 38, 635-672.
- Kaplan, R. S., and Norton, D. P. (1992), The balanced scorecard - Measures that drive performance. *Harvard Business Review*. 71-79.
- Kravchuk, R. S., and Schack, R. W. (1996), Designing effective performance measurement systems under the Government Performance and Results Act of 1993. *Public Administration Review*. 56(4), 348-358.
- Lockamy, A. (1998) Quality-focused performance measurement systems: a normative model. *International Journal of Operations & Production Management*. 18(8), 740–766.
- McAdam, R., Hazlett, S. A., and Anderson-Gillespie, K. (2008), Developing a conceptual model of lead performance measurement and benchmarking: A multiple case analysis. *International Journal of Operations & Production Management*. 28(12), 1153–1185.
- Mochal, T. (2003), Plan your benchmarking approach before starting to collect metrics.

- Neely, A. (1999), The performance measurement revolution: why now and what next?. *International Journal of Operations & Production Management*. 19(2), 205-23.
- Ostroff, C. (1992), The relationship between satisfaction, attitudes, and performance: An organizational level analysis. *Journal of Applied Psychology*. 77, 963-974.
- Pfeffer, J., and Salancik, G. R. (1978). *The External Control of Organizations: A Resource Dependence Perspective*, Harper and Row, New York.
- Quinn, E. R., and Rohrbaugh, J. (1981), A Competing Values Approach to Organizational Effectiveness. *Public Productivity Review*. 5, 122-140.
- Salamon, S. D., and Robinson, S. L. (2008), Trust that binds: The impact of collective felt trust on organizational performance. *Journal of Applied Psychology*. 93, 593-601.
- Staw, B. M., and Epstein, L. D. (2000), What bandwagons bring: Effects of popular management techniques on corporate performance, reputation, and CEO pay. *Administrative Science Quarterly*. 45, 523-556.
- Taticchi, P., and Balachandran, K. R. (2008), Forward performance measurement and management integrated frameworks. *International Journal of Accounting and Information Management*. 6(2), 140–154.
- Van Dyck, C., Frese, M., Baer, M., and Sonnentag, S. (2005), Organizational error management culture and its impact on performance: A two-study replication. *Journal of Applied Psychology*. 90, 1228-1240.
- Yuchtman, E., and Seashore S. (1967), A system resource approach to organizational effectiveness. *American Sociological Review*. 32, 891-903.
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Takeover Speculation and Merger Premium: US Banking Industry Experience

INTRODUCTION

While rumor has a major and traceable social effect, its economic role has not been received widespread attention in the financial economics literature. An early study of the economic property of rumor relates to the work of Rose (1951) who investigates the effect of rumor on the stock prices of a sample of US firms between 1937 and 1938 and between 1948 and 1949. Rose devises a measurable index of rumor named the “factor of stickiness” to evaluate the role of rumor in stock price run-up. His findings support the hypothesis that if rumor affects the stock market, it will do so by creating “a unidirectional trend” over a short period of time.

Two Studies by Pound and Zeckhauser (1990) and Zivney, Bertin, and Torabzadeh (1996) address the economic role of rumor in the market for corporate control. They provide evidence of the market moving power of the takeover rumors. Both studies find that stock prices of firms subject of takeover rumors tend to increase surrounding the published rumor dates.

Zivney, Bertin, and Torabzadeh (1996) also analyze the stock returns patterns with respect to the ultimate outcome of the rumors (true versus false rumors). They find that those firms subject of false rumors (for which no takeover bids being received for one year after the rumor publication date) realize about 10 percent abnormal return during a 21-day period from day -20 through day 0 (the rumor publication date). However, almost all of the gains disappear in the one year post-rumor period. On the other hand, they find that the market's reaction to the true rumors is stronger in the pre-rumor publication period as indicated by higher pre-rumor price run-up. Specifically, those firms which receive actual takeover bids sometimes after the rumor publication date experience approximately 15 percent abnormal returns during the pre-rumor period and an additional positive significant abnormal returns of about 15 percent after the rumor publication date. Their findings of persistent stock price run-up over a longer period of time for the true rumors suggest that, condition upon the likelihood of an actual bid arriving, as perceived by the market, the rumor causes the stock price of the rumored firm to move to a higher equilibrium level.

Kosfeld (2005) focuses on the observed price run-up documented by Zeckhauser (1990) and Zivney, Bertin, and Torabzadeh (1996) and proposes an analytical framework for evaluating the effects of rumors on the markets. His model supports the empirical findings of rumor induced price run-up. Specifically, his model supports the proposition that if the rumor stays persistently present, long-run equilibrium prices deviate from pre-rumor values so that the rumor generates a price run-up for the security that is positively targeted by the rumor. Similarly, Bommel (2003) analyzes the phenomena of rumor in a theoretical framework and arrives at the same conclusion. He suggests that spreading rumors makes economic sense, as it increases demand for a security and can drive its price beyond the price that the rumormonger privately knows.

Based on the empirical and theoretical foundation presented by previous research, the present study seeks to examine the association between takeover rumor and the acquisition payment. I suggest that takeover rumor plays another economic role: It tends to extract a higher premium from the acquiring firm when a successful takeover emerges.

At least two forces lead the acquirer to pay a higher premium for a takeover rumored firm. First, we have evidence that a takeover rumor causes the equilibrium price for the target to increase and, for the true rumor, the new equilibrium price persists over a long-run. We also have evidence that the prevailing market price of a target firm serves as a floor over which the bidding price is being established. The new established higher base price, in turn, forces the bidder to offer an additional premium in order to secure the success of its bid.

Second, the rumor (especially once it is covered by financial press) provides information and highlights the properties of the target firm. In this context, the (published) rumor serves as an advertising vehicle promoting the target firm as an attractive acquisition partner (i.e. higher synergy). Furthermore, the rumor creates an artificial auction market and it directly or indirectly invites bidders to compete. In this type of auction market the identities of the competitors as well as the competing prices remain unknown. Motivated by the attractiveness of the properties of the rumored target as advertised and fearing of losing the bid to other competitors, acquisition-seeking firm agrees to pay a higher price for the rumored firm.

Hence, I hypothesize that in a successful acquisition, the returns to target firms that are subject of prior takeover rumors are higher than the returns to target firms with no prior takeover rumors.

A surge in takeover activity along with increased published takeover rumors after the 1980 enactment of the Depository Institutions Deregulation and Monetary Control Act followed by the 1982 Garn-St Germain Depository Institutions Act, provides an excellent opportunity to test this hypothesis within the banking industry.

SAMPLE AND METHODOLOGY

A total of 512 usable bank acquisitions are analyzed in this study. The sample is from the *Mergers and Acquisition Rosters* from 1991 to 2003. I searched the *Wall Street Journal (WSJ)* over one year prior to the acquisition date for information on takeover rumors. I searched the *WSJ* for any phrase such as takeover rumor, takeover speculation, attractive target, or attractive acquisition candidate to classify a bank as a rumored target. Other data such as total prices paid for the target banks, method of payment (cash, stock, combination of cash and stock), location of the acquiring and target banks, and financial data for the target banks are from the *WSJ*, *Mergers and Acquisition Rosters*, *COMPUSTAT*, and banks' annual reports.

A multiple regression analysis is conducted to investigate the effect of rumor on the acquisition payment. Similar to the prior research, the dependent variable is the final price paid for the acquisition divided by the total book value of the target bank (see Adkisson and Fraser, 1990, Frieder and Petty, 1991, Gart and Al-Jafari, 1999, and Jackson and Gart, 1999). A series of financial and transaction related variables are used as control variables. The model is:

$$P/BV = \alpha_0 + \beta_1 R_i + \beta_2 LTA_i + \beta_3 ROA_i + \beta_4 CA_i + \beta_5 NPA_i + \beta_6 MP_i + \beta_7 SAME_i + \beta_8 REG_i + e_i$$

Where

Dependent variable:

P/BA = Purchase price to book value.

Analysis variable:

R = Rumor status (1 if the target was subject to prior takeover rumor, otherwise 0).

Control variables:

LTA = Log of total assets of the target bank.

ROA = Target bank's return on assets.

CA = Target bank's capital to assets ratio.

NPA = Target bank's non-performing assets to total assets.

MP = Method of payment (cash, stock, combination), combination is the default variable.

$SAME$ = 1 if both target and bidder are from the same state, otherwise 0.

REG = Region of the target bank (north, south, west, mid-west), south is the default variable.

Table 1 shows some descriptive statistics of 512 bank acquisitions from 1993 to 2003. There are 72 acquisitions subject of prior takeover rumor. This represents about 14 percent of the total sample. As it is common in the bank industry, the dominant method of payment is stock exchange. Of the 512 acquisitions, 379 transactions or 74 percent use stock exchange as a method of payment. The acquiring and target banks are equally distributed with respect to their locations. Finally, most of the target banks (230 or 45 percent) are from the North region and the least (62 or 12 percent) are from the West region.

Table 1. Descriptive Statistics for 512 Bank Acquisitions from 1993 to 2003.

	Frequency	Percentage (as decimal)
Method of Payment:		
Cash transactions	77	0.15
Stock transactions	379	0.74
Combination of cash and stock	56	0.11
Rumor Status:		
Rumored banks	72	0.14
Non-rumored targets	440	0.86
Bank Type:		
National Banks	223	0.43
State Banks	289	0.57
Targets locate in:		
North	230	0.45
Mid-west	133	0.26
West	62	0.12
South	87	0.17
Targets and Acquirers are from:		
The same state	250	0.49
Different state	252	0.51

Table 2 presents some financial characteristics of the target banks. The average total assets for the sample of banks subject to takeover rumor is \$4.42 billion which is almost four times larger than that of the non-rumored sample banks (\$1.12 billion). The mean *ROA* and *CA* ratio are higher for the rumored banks.

However, the *NPA* ratios for both samples are basically the same.

Table 2. Financial Characteristics of 512 target banks acquired from 1993 to 2003.

	Mean	Standard deviation
Total Assets:		
Rumored banks (bil.)	\$4.42	\$7.63
Non-rumored banks (bil.)	1.12	5.25
Return on Assets:		
Rumored banks (%)	1.35	0.64
Non-rumored banks (%)	1.21	0.61
Capital to Asset Ratio:		
Rumored banks (%)	10.23	3.10
Non-rumored banks (%)	9.56	2.52
Non-performing assets to total assets:		
Rumored banks (%)	0.77	0.89
Non-rumored banks (%)	0.72	0.68

RESULTS

Table 3 shows the results of the regression analysis. As Table 3 shows, the rumor status is significant indicating that acquiring bank on average pay about 3 percent higher premium for

target banks subject to prior takeover rumors. The coefficients of the size variable (*LTA*) and non-performing assets to total assets (*NPA*) are both negative and significant, indicating that acquiring banks pay smaller premiums for those banks that are larger and having larger non-performing assets. These results are consistent with those of Palia (1993), Jackson and Gart (1999), and Gart and Al-Jafari (1999). The coefficient of return on assets (*ROA*) is positive and significant, indicating that target banks with higher returns on assets command higher takeover premium. This result is also consistent with those of Palia (1993), Jackson and Gart (1999), Henderson and Gart (1999).

Table3. Result of Regression Analysis for 512 Acquisitions from 1993 to 2003.

<i>Variables</i>	<i>Coefficients</i>	<i>t-statistics</i>
Constant	2.53	4.40**
R	0.03	2.42*
LTA	-0.06	-2.33*
ROA	-0.23	-2.26*
CA	-0.88	-1.22
NPA	-8.62	-5.23**
MP:		
Cash	0.27	3.84**
Stock	0.03	1.01
SAME	-0.01	-1.62
REG:		
North	-0.00	-0.63
Mid-West	0.01	0.94
West	0.00	0.03
** Significant at .01 level		
*Significant at .05 level.		
Adjusted R² = 0.29		

Consistent with the bank (Akhigbe, Madura, and Whyte, 2004) and non-bank merger studies, the coefficient for the *cash* variable is positive and significant. This implies that target banks experience higher premium when they are purchased with cash. The coefficient for the location of the acquiring and target banks (*SAME*) is insignificant indicating that the price paid for the target bank is the same whether the acquirer is from the same or different state. This finding is in contrast with the studies by Jackson and Gart (1999) and Akhigbe, Madura, and Whyte (2004).

Jackson and Gart find that intrastate acquisition necessitates higher price for the target bank than an interstate acquisition. In contrast, Akhigbe, Madura, and Whyte find target banks experience more gains when they are involved in interstate acquisitions. A direct comparison, however, is not possible since these studies use different methodologies and use different samples taken from different time periods.

Finally, none of the coefficients for the location of the target banks is significant. Price is basically the same regardless of the region in which the target bank is headquartered. The results are not surprising given a trend toward nationalization and globalization of the operations of the commercial banks.

SUMMARY

This study investigates the association between the takeover rumor and the premium involved in bank acquisitions. The study investigates a total of 512 acquisitions from 1993 to 2003. Of 512 acquisitions, 72 or 14 percent of the target banks were subject of takeover rumors one year before the acquisition announcements.

The results indicate that those target banks subject to prior takeover rumors as published in the *Wall Street Journal* receive about 3 percent higher premium compared to their counterparts with no prior takeover rumors. The study also finds that the premium becomes smaller in acquisitions involving larger target banks.

Other variables which significantly and positively affect the size of premium include return on assets, non-performing assets, and method of payment. This study, consistent with the results of other studies, suggests that published rumor plays an economic role as evidenced in the acquisition activities.

The author's endnotes have been removed for space considerations.
For a copy of the paper with them retained, contact the author.

REFERENCES

- Adkisson, J. A., and Fraser, D. R. (1990), The Effect of Geographical Deregulation on Bank Acquisition Premiums. *Journal of Financial Services Research*, 4, 145-155.
- Akhigbe, A., Madura, J., and Whyte, A. M. (2004). Partial Anticipation and the Gains to Bank Merger Targets. *Journal of Financial Services Research*, 26, 55-71.
- Bommel, J. V. (2003). Rumors. *Journal of Finance*, 22, 1499-1520.
- Frieder, L., and Petty, P. (1991). Determinants of Bank Acquisition Premiums: Issues and Evidence. *Contemporary Policy Issues*, 9, 12-34.
- Gart, A., and AL-Jafari, M. (1999). Revisiting the Determinants of Larger Merger and Acquisition Premiums. *Journal of Applied Management and Entrepreneurship*, 4, 76-86.
- Henderson, H., and Gart, A. (1999). Key Variables Explaining Acquisition for Large Commercial Banks. *Bank Accounting and Finance*, 99, 29-36.
- Holdren, D. P., Bowers, H. M. and Mason, W. J. (1994). Bank Holding Company Acquisition Activity: Evidence from Pre- and Post-Deregulation Periods. *Financial Review*, 29, 275-292.
- Jackson, R. and Gart, A. (1999). Determinants and Non-determinants of Bank Merger Premiums. *The Mid-Atlantic Journal of Business*, 35, 149-157.
- Jarrell, G. A., Brickley, J.A., and Netter, J. M. (1988). The Market for Corporate Control: The Empirical Evidence Since 1980. *Journal of Economic Perspectives*, 2, 49-68.
- Jensen, M., and Ruback, R. (1983). The Market for Corporate Control: The Scientific Evidence. *Journal of Financial Economics*, 11, 5-50.
- Kane, E. J. (1996). De Jure Interstate Banking: Why only Now? *Journal of Money, Credit, and Banking*, 28, 141-161.
- Koshfeld, M. (2005). Rumors and Markets. *Journal of Mathematical Economics*, 41, 646-664.
- Lang, L., Stulz, R. M., and Walking, R. A. (1991). A test of the Free Cash Flow Hypothesis: The Case of Bidder Returns. *Journal of Financial Economics*, 29, 315-335.
- Palia, D. (1993). The Managerial, Regulatory, and Financial Determinants of Bank Merger Premiums. *Journal of Industrial Economics*, 41, 91-102.
- Pound, J. and Zeckhauser, R. (1990). Clearly Heard on the Street: The effect of Takeover Rumors on Stock Prices. *Journal of Business*, 63, 291-308.
- Rose, A. M. (1951). Rumor in the Stock Market. *Public Opinion Quarterly*, 15, 461-486.
- Strahan, P. E. (2002). The Real Effects of U.S. Banking Deregulation. Working Paper (Boston College and Wharton Financial Institutions Center).
- Torabzadeh, K. M., and Bertin, W. J. (1992). Abnormal Returns to Stockholders of Firms Acquired in Business Combinations and Leveraged Buyouts. *Journal of Accounting, Auditing, and Finance*, 7, 231-239.
- Zivney, T. L., Bertin, W.J., and Torabzadeh, K. M. (1996). Overreaction to Takeover Speculation. *Quarterly Review of Economics and Finance*, 63, 89-115.

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Relationships Between HRM and Performance: Organizational Learning Capability as Mediator

INTRODUCTION

The link between human resource management (HRM) and organizational performance has been of long standing interest to both researchers and practitioners alike. While many studies have offered empirical support for a positive relationship between effective HRM and organizational performance, the exact nature of the relationship remains unclear. The general consensus is that the link between HRM and bottom-line performance does not take on a direct cause-effect path. Instead, HRM is likely to affect the quality of internal processes, resources, and operating conditions. The interactions between these and the external environment will in turn determine organizational performance.

The impact of HRM on organizational performance is strengthened when HR practices are matched with the competitive requirements inherent in an organization's strategic orientation (Youndt et al., 1996). During the past two decades, the literature on organizational studies has emphasized on the role of knowledge as the key resource that underpin sustainable competitive advantage. The process where organizations acquire, disseminate, interpret, and institutionalize knowledge is known as organizational learning (OL) (Huber, 1991). Researchers called on organizations to develop a strong OL capability, in order to foster and support effective development and exploitation of knowledge that is valuable, rare, inimitable, and non-substitutable. A strong OL capability contributes to meeting the knowledge needs for the pursuit of specific competitive strategies. OL capability can be assessed by examining the managerial practices and internal conditions which support learning (Goh, 2003). Likewise, developing OL capability involves the implementation of distinct practices, structures, and processes in order to create ideal conditions for effective learning.

The present study proposes that HRM can contribute to organizational performance of Malaysian small and medium sized enterprises (SMEs) through its role in developing OL capability. Malaysian SMEs constituted the majority of business establishments in the country. They contribute to the creation of employment opportunities, the diffusion of new innovation, entrepreneurship development, and the formation of a strong domestic industrial base. In spite of their dominance, researchers concede that SMEs in general, continue to be associated with high failure rates and weak competitive capabilities.

We set out to validate the link between HRM, OL capability and performance of SMEs by undertaking the following. First, we advance the HRM literature by exploring the key HR practices adopted by SMEs and identifying the conceptual underpinning for the grouping of these practices. Existing conceptualization of HR practices are mainly based on large corporations in

developed economies while the limited empirical findings on HRM in SMEs have been inconsistent. Second, we respond to calls for clearer understanding of the nature of the link between HRM and organizational performance by testing OL capability as a mediating variable. Specifically, we expect that the overall impact of HRM on organizational performance is strengthened through its role in enhancing OL capability. And third, we draw on our empirical findings to discuss how managers can use HRM to develop a strong OL capability as a key strategy for sustaining the competitive advantage of SMEs.

Human Resource Management

While studies on HRM within SMEs have been limited, Rutherford et al. (2004) point out that there has been an increasing focus within the large-organization literature on the critical role of HRM to an organization's success. Researchers largely concur that (1) human capital can be a source of competitive advantage; (2) HR practices have the most direct influence on the human capital of a firm; and (3) that the complex nature of HRM systems of practice can enhance the inimitability of the system. Thus, it is an important source of competitive advantage to the organization (Delery and Shaw, 2001).

Brand and Bax (2002) list two reasons to suggest that the study of HRM is relevant in the context of SMEs. First, previous surveys indicate that HRM among SMEs is problematic as many reported serious human resource problems, particularly in relation to employee development and retention. Second, the capability to manage human resources is critical for SMEs because human resources play a vital role in developing and sustaining competitive advantage. As a direct result of their small scale, each individual employee has a higher stake in determining the eventual performance of an SME, as compared to larger organizations (Bacon et al., 1996). This increases the relative importance of every single HRM decision.

Adding to these, a third reason is proposed. The kinds of human resource (HR) practices used, and their relative degree of formalization vary widely among SMEs. Often, the approach taken by SMEs towards HRM is determined by the ideology and pluralistic goals of the owner-manager, rather than by any formal decision-making processes as found in larger enterprises (Koch and De Kok, 1999). As studies on HRM among SMEs have remained largely at the exploratory stage, there is a need to take stock of the observed HRM characteristics, in developing theoretical models that would adequately account for the variations among SMEs (Hayton, 2003).

One of the most important developments in the strategic HRM literature in the past decade has been the growth in studies on how specific configurations or bundles of HR practices can be utilized to enhance organizational performance. According to Horgan (2003), there exists a substantial and growing body of research claims that enormous economic returns can be obtained through the implementation of what are variously called flexible production systems (MacDuffie, 1995; Pil and MacDuffie, 1996), high involvement system (Lawler, 1986), high commitment system (Walton, 1985), human-capital enhancing system (Youndt et al., 1996) and high performance work system (Becker and Huselid, 1998). Collectively, these high performance HR systems are claimed to provide mutually beneficial ('win-win') outcomes for firms and workers (Boxall, 2003) as these engender greater employee participation, enhanced skills, motivation, and attitude.

High performance HR systems typically consist of a bundle of key HR practices which include rigorous selection criteria, commitment to investment in employee training and development, more comprehensive incentive systems (e.g., employee bonuses and internal career ladders) as well as participative structure of management and work systems which improve opportunity for employees to contribute (e.g., self-managing teams and quality circles). An underlying principle

of these high performance systems is that HR practices affect performance not individually, but rather, as an internally consistent bundle of practices. Furthermore, effective performance requires that such HR bundle be integrated with existing organisational policies, structure and work systems under a certain 'organizational logic' where each component would complement and reinforce one another (Ashton and Felstead, 1998). It is argued that the systemic effect of the complementarities among the HR practices would result in significant performance improvement as compared with standalone practices.

In the present study, we will conduct an exploratory analysis of the HR practices adopted by Malaysian SMEs and seek to identify combinations of HR practices which can be theoretically defined using the systems/complementarities perspective. Following this, we test the relationship between the HR system and performance of SME. The following hypothesis is proposed:

H1: The application of distinctive HR practices has a significant positive effect on SME performance.

Organizational Learning Capability

Contemporary organizations have been urged to innovate and explore new opportunities in order to sustain their competitiveness in an increasingly turbulent environment. The innovation literature describes knowledge as the basic building block of innovation and the key resource which underpins sustainable competitive advantage of firms. According to Kogut (2000), the performance heterogeneity among firms can be traced to differences in their knowledge base as well as their capabilities to develop and exploit knowledge. Researchers refer to the process where organizations develop and exploit knowledge as organizational learning (OL). Huber (1991) defines OL as the process of firm-wide information processing, involving the acquisition, dissemination, interpretation and institutionalization of knowledge. It is a dynamic process which involves individual, group and organizational-level actions and interactions (Crossan et al., 1999), being shaped by the structural and social context of the organisation. An organisation is deemed to have learned when knowledge acquired by individuals is transferred and integrated into the organisation's knowledge base, leading to changes in its range of potential behaviour.

Organizations need to develop a strong capability to engage in effective OL. The strategic management literature defines a capability as organization's abilities to deploy and coordinate different resources, using internal processes to affect a desired end (Amit and Schoemaker, 1993). Consistent with capability perspective, Goh (2003, p. 217) defines OL capability as "the ability of the organization to implement the appropriate management practices, structures and procedures that facilitate and encourage learning". This can be complemented with Jerez-Gomez et al. (2005a)'s conceptualization of OL capability as "the capability of an organization to process knowledge – in other words, to create, acquire, transfer, and integrate knowledge, and to modify its behaviour to reflect the new cognitive situation, with a view to improving its performance" (p. 2). Together, these definitions of OL capability underscore two key propositions. First, managerial interventions are necessary to support effective OL. Second, OL needs to be directed at the development and exploitation of knowledge that would contribute towards the pursuit of desired organizational goals.

The literature on learning organization (LO) offers insights on the types of managerial practices and organizational conditions that would support effective OL. Marsick and Watkins (1996, p. 206) point out that while all organizations learn, learning organizations are characterized by "proactive interventions to generate, capture, store, share and use learning at the systems level in order to create innovative products and services". Senge (1990) prescribes five 'disciplines' which are associated with attaining the ideals of a learning organisation. These are (1) personal mastery; (2) mental models; (3) shared vision; (4) team learning; and (5) systems thinking.

Garvin (1993) suggests that developing learning organizations require competencies in five key activities: (1) systematic problem solving; (2) experimentation with new approaches; (3) learning from own experience and past history; (4) learning from the experiences and best practices of others; and (5) transferring knowledge quickly and efficiently throughout the organisation.

Goh (2003) identifies five main conditions and management practices that characterize a strong OL capability. These are (1) clarity of mission and vision; (2) strong leadership commitment and employee empowerment; (3) readiness to experiment with and reward new ideas; (4) effective transfer of knowledge; and (5) application of team-based problem-solving. Likewise, Jerez-Gomez et al. (2005a) propose that organizational learning capability consists of four dimensions, namely, (1) a strong managerial commitment to learning; (2) a shared perspective among organizational members; (3) open-mindedness and readiness to experiment with new ideas; and (4) effective transfer and integration of knowledge.

A strong OL capability enhances organizational performance by supporting the development and exploitation of knowledge for pursuing strategies that lead to achievement of desired organizational goals. Previous studies provide empirical evidence linking effective OL with the introduction of innovate products (Hurley and Hult, 1998); exploration of new opportunities (Hitt et al., 1998); promotion of a 'change-friendly' culture (Schein, 1993); improvement of product and service quality (Cole, 1999); development of human resources (Smith, 2004); and ultimately enhanced business performance (Takeuchi et al., 2003). Consistent with these, the following hypothesis is proposed:

H2: A strong OL capability exerts a significant positive effect on SME performance.

Relationships between HRM, OL capability and Firm performance

Human resource management plays a key role in developing OL capability. The management can signal a strong commitment to learning by implementing distinctive HR practices to support learning at the individual, group and organization levels. The use of formal selection criteria ensures that new recruits possess the requisite skills and knowledge that serve as basis for further knowledge development (Schmidt and Hunter, 1998). Investment in training and development enhance the human capital of the firm and individuals' absorptive capacity (Jerez-Gomez et al., 2004). Compensation schemes that reward the development of new skills and knowledge provide the motivation for individuals to experiment with new ideas, leading to the development of new knowledge (Jerez-Gomez et al., 2005b; Lawler et al., 2001). The use of teams and cross-functional collaborations promote knowledge sharing among individuals (Appelbaum and Reichart, 1998; Lepak et al., 2007). These support the transfer and integration of knowledge at the group and organizational levels (Garvin, 1993; Goh and Ryan, 2002). Likewise, these practices together with those which promote clear communication and broader work experience within the organization will foster cohesion and shared perspective among organizational members.

HR practices will exert a stronger impact on OL capability when they are applied as a system of mutually reinforcing practices (Minbaeva, 2005). Selection of HR practices should be based on the extent that one practice would complement or reinforce the effect of another. Referring to Milgrom and Roberts's (1995) theory of complementarities, a HR practice complements another when its application increases the benefits gained from the other. The systemic effect of the complementarities among the HR practices would result in significant improvement in OL capability, when compared with the effects from adopting standalone practices (Ichniowski et al., 1997). In the present study, we will conduct an exploratory analysis of the HR practices adopted by Malaysian SMEs and seek to identify combinations of HR practices which can be theoretically defined using the systems/complementarities perspective. Following this, we test

the relationship between the HR system and OL capability. The following hypothesis is proposed:

H3: Human resource system exerts a significant positive effect on SMEs' OL capability.

Researchers in the field of HRM have lamented the lack of strong and consistent empirical evidence linking HRM and firm performance. It can be reasoned that HRM does not affect firm performance directly, but indirectly, through its impact on other mediating variables, which in turn directly affect firm performance. Identification of such mediating variables is important in order to establish the strategic value of HRM. In the present study, we assess OL capability as a mediating variable in the relationship between HRM and firm performance. The rationale for selecting OL capability is three-fold. First, individuals are the primary agents of OL as it is through them that the organization can mobilize its resources to learn (Hughes, 2000; Kim, 1993). Second, HRM has a direct effect on the ability and motivation of individuals to learn. Distinctive HR practices can be implemented in order to facilitate the different processes and levels of learning. Third, a strong OL capability contributes to sustained competitive advantage through the development of knowledge-based resources which are valuable, rare, inimitable and non-substitutable. We therefore propose the following hypothesis:

H4: OLC mediates the relationship between HR system and SME performance.

RESEARCH DESIGN

A cross-sectional design was adopted, where data was collected from a sample drawn from the SME population in the Malaysian state of Sarawak, utilizing a survey questionnaire. The data for the present study forms part of a broader study that analyzes the relationship between OL capability, selected organizational contextual variables and competitiveness of SMEs. A pilot study was undertaken with the aim of testing the validity and reliability of the survey instrument. Non-random purposive sampling technique was used to select 55 managerial-level executives from 24 SMEs as respondents for the pilot study. These SMEs are members of the Associated Chinese Chamber of Commerce and Industry of Sarawak. Analysis of the collected data indicated the scales achieved desired level of reliability.

The population for the main study consisted of 3,975 SMEs operating in the manufacturing and services sectors in Sarawak. SMEs in the manufacturing sector are those establishments that employ less than 150 full time employees, and has an annual sales turnover of not more than RM25 million. On the other hand, SMEs in the services sector are enterprises that employ less than 50 full time employees or with annual sales turnover not exceeding RM 5 million. SMEs in the agriculture sector are not included in this study. They are relatively smaller in number and their contributions to total SMEs' output are less significant. A proportionate stratified random sampling technique was employed to obtain the sample. Stratification of the SME population was based on the economic sector in which they operate. A total of 795 SMEs, representing 20 percent of the estimated overall population of 3,975 SMEs in the manufacturing and services sector in Sarawak, was targeted for data collection. SMEs represent the unit of analysis while individual managerial-level executives of SMEs were the key informants. A questionnaire, accompanied by a covering letter was sent to each of the 795 SMEs. We requested for only one individual to complete the questionnaire. Target respondents were requested to complete and return the questionnaires within two weeks. A self-addressed reply pre-paid envelope was enclosed in order to encourage respondents in returning the completed questionnaires. Datasets from 286 SMEs were gathered over a 15-week period.

Variable measures

The construct of OL capability was measured using 16 items adopted from Jerez-Gomez et al.'s (2005a) OL capability scale. The items measured four dimensions of OL capability which have been identified and validated in previous empirical studies. These are (1) strong managerial commitment to learning; (2) prevalence of a shared/systems perspective; (3) openness and readiness to experiment with new ideas; and (4) effective transfer and integration of knowledge. Twelve items were used to measure the HR practices of SMEs. These items covered four key HR functions, namely (1) selection and recruitment; (2) reward and compensation; (3) training and development and (4) performance evaluation (Becker and Huselid, 1998; Ichniowski et al., 1997; Youndt et al., 1996). Organizational performance was assessed using five items, measuring perceptions on improvements in SMEs' performance over the last three years in the following areas: (1) sales growth; (2) market share; (3) profitability; (4) introduction of new production systems or managerial practices and (5) rate of new product development. These items were developed based on relevant literature. Sales growth, market share and profitability indicate short-term performance while introduction of new production systems and rate of new product development are associated with long-term performance. Responses to the questionnaire items were recorded using a five-point Likert rating scale with 1 being "not accurate at all" to 5 being "very accurate".

Statistical approach

The hypothesized relationships among the constructs under study were analyzed using a 2-stage structural equation modelling (SEM) technique via AMOS. SEM is a powerful statistical tool which combines elements of factor and path analyses, thereby enabling simultaneous testing of an entire model which consists of multiple separate hypothetical relationships (Hair et al., 1998). It is thus clearly advantageous when compared with conventional techniques which could only test a single relationship or regression equation at a time. A structural equation model typically consists of two parts: a measurement model and a structural model (Byrne, 2001). The measurement model depicts the relationships between indicator variables and the theoretical constructs which the former are measuring. The structural model deals with relationships between the theoretical constructs (Anderson and Gerbing, 1988). Based on Anderson and Gerbing's (1988) two-stage SEM approach, the measurement model was assessed first, followed by the structural model.

RESEARCH FINDINGS

Measurement model analysis

Consistent with Jerez-Gomez et al. (2005a), OL capability was modelled as a latent, multi-dimensional construct. A 2-step procedure was applied to assess the adequacy of the scales measuring the construct. In the first step, a first-order confirmatory model was evaluated with the aim of validating the theoretical dimensions of the construct. In the second step, a second-order confirmatory model was tested in order to validate the hypothesis that the theoretical dimensions do indeed underlie a single common latent construct, thereby confirming OL capability's multi-dimensional structure. The first-order confirmatory factor model was first assessed for their goodness-of-fit, using multiple adjunct fit indices. Initial results from SEM indicated that the measurement model had poor fit as majority of the index values were below the desirable goodness-of-fit levels. As a result, the modification indices produced by the AMOS program were referred to, and the model respecified. Indicator variables with strongly correlated measurement errors were subsequently removed (Anderson and Gerbing, 1988). The specification exercise resulted in the removal of 3 indicator variables from the OL capability dimensions. Doing so greatly improved the subsequent goodness-of-fit indices, as they either achieved or approached the desired goodness-of-fit levels. The standardized regression weights (SRW) and measurement errors of indicator variables were then assessed as a measure of

construct validity. Validity was established when each variable achieved a SRW of at least 0.50 ($p < 0.05$) and a measurement error below 0.80 (Hair et al., 1998). Reliability of the variables was tested by computing the composite reliability values, with the threshold value set at a minimum of 0.70. Results showed that reliability values for all four dimensions of OL capability were higher than 0.70. The standardized loadings, measurement errors and composite reliability values of the dimensions, as well as the goodness-of-fit indices are summarized in Table 1.

To validate the multi-dimensional nature of OL capability, a second-order confirmatory model was specified and analyzed. The standardized second-order factor loadings range from 0.45 to 0.81 and all were significant at the $p = 0.05$ level. The model also achieved acceptable goodness-of-fit levels. The standardized loadings, reliability values and goodness-of-fit indices of the model are summarized in Table 2.

We verified the discriminant validity of the four dimensions of OL capability by computing the average variance extracted of each construct and comparing these with the squared variances of the construct with other constructs (Hair et al., 1998). Discriminant validity was established as the average variance extracted was larger than the squared variances. These are reported in Table 3.

A 12-item scale was used to measure SMEs' HR practices. To evaluate the psychometric properties of the HR practices, the goodness-of-fit of alternative HRM measurement models were analyzed. Specifically, four models, namely, a null, one-factor, two-factor and three-factor models were constructed and tested. As shown in Table 4, a one-factor model achieved the best fit with the sampled SME population.

To further improve the goodness-of-fit of the one-factor model, four indicator variables were deleted, one at a time, based on the modification indices produced by the AMOS program. The exercise improved the model's goodness-of-fit considerably as the final eight-item scale meets the benchmarked value for each of the fit indices. The eight HRM items drew on three main HRM activities, namely, training and development; incentive and compensation; and recruitment and selection (See Appendix). A common theoretical theme underlying the practices and policies measured by the eight items was that they contribute directly to enhancing the stock of human capital within the organisation. These items reflect Youndt et al.'s (1996) human-capital enhancing HR system. Consistent with this, we conceptualize the bundle of HR practices within our one-factor model as human-capital enhancing HR system. The psychometric properties of the final one-factor model are summarized in Table 5.

Five items were employed to measure managerial perceptions of improvements in the performance of SMEs in five areas over the past three years. These are (1) sales growth; (2) market share; (3) profitability; (4) introduction of new production systems and (5) rate of new product development (See Appendix). The proposed model achieved acceptable goodness-of-fit levels. Results from the analyses of psychometric properties of the performance construct are summarized in Table 6.

An overall measurement model analysis was then undertaken, with the individual measurement models correlated with one another, within a single overall measurement model. Initial goodness-of-fit indices of the model indicated a poor fit with sample data. To improve model fit, three indicators with SRWs below 0.70 were removed and the model re-estimated. As shown in Table 7, the resulting fit indices approached a satisfactory fit.

Structural model analysis

A hypothesized partially-mediated model of the relations among the three constructs was estimated and the results inferred upon to test the hypotheses of the study. In the model, the human-capital enhancing HR system exerts a direct effect on firm performance, as well as an indirect effect through OL capability. The hypothesized model M1 is shown in Figure 1. Standardized regression weights, goodness-of-fit values and amount of variance in SME performance explained by human-capital enhancing HR system and OL capability are presented in Table 8. The fit indices show that the hypothesized model M1 achieved satisfactory fit with the sampled data. In addition, human-capital enhancing HR system and OL capability account for 21 percent of the variance explained in SME performance. Next, the results show that HR practices exerts a significant positive direct effect on SME performance ($\beta = .189$; $p < 0.01$). Consistent with previous empirical findings, hypothesis H1 which postulated that HR practices construct is a significant predictor of SME performance is therefore supported. Human-capital enhancing HR system also exerts a significant positive direct effect on OL capability ($\beta = .560$; $p < 0.01$), thus supporting hypothesis H2. OL capability in turn, exerts a significant positive effect on SME performance ($\beta = .366$; $p < 0.05$), supporting hypothesis H3.

To test the mediating effect of OL capability, the total effect of the human-capital enhancing HR system on SME performance is inferred as $0.189 + (0.560)(0.366)$ and compared with the effect, controlling for indirect effect through OL capability (i.e. 0.189). It is evident that the presence of OL capability reduces the absolute value of the effect of human-capital enhancing HR system on SME performance by 0.205 (i.e. $0.394 - 0.189$). This provides initial evidence of the mediating effect of OL capability. To measure the significance of the mediating effect, the Sobel test (Sobel, 1982) was performed (Baron and Kenny, 1986; MacKinnon et al., 1995). The Sobel test produced a t-value of 3.306 ($p < 0.001$), indicating that the mediating effect of OL capability on the effect of human-capital enhancing HR system on SME performance is significant. Hypothesis H4 is therefore supported.

CONCLUSIONS

The present study contributes the following to the existing literature on HRM and OL capability. First, we identify and validate a bundle of HR practices adopted by our sample of Malaysian SMEs. A key conceptual theme that underpins these practices is that they contribute to the development of organizations' human capital. Hence, we conceptualize these practices as human-capital enhancing HR system. The statistical significance of these practices also suggests that these are prevalent among the sampled SMEs. Hence, contrary to the general notion that SMEs do not plan the management of their workforce and are not concerned with human capital development, we show that our sampled SMEs do adopt a set of HR practices which are consistent with one another, in terms of their impact on human capital development.

Second, we validate OL capability as a latent multi-dimensional construct. Consistent with Jerez-Gomez et al. (2005a), four dimensions of OL capability are identified; these being perceived managerial commitment to learning, shared perspective, openness to new ideas and effective knowledge transfer and integration. Our assessments of convergent and discriminant validity show that although the four dimensions are inter-related, they are distinct from one another. Third, we establish that the adoption of a set of HR practices that serve to develop organization's human capital can enhance OL capability. Indeed, individuals are the primary agents of OL, thus, developing their skills and motivation to learn would directly enhance OL. Formal managerial intervention to support effective OL should therefore incorporate human-capital HR practices. Nevertheless, it is important to note that the full effect of a HR system is dependent on the extent that the constituent practices mutually support and reinforce the effects of one another.

Fourth, we show that HRM can enhance SMEs' performance through its role in strengthening their OL capability. We therefore contribute to the gap in knowledge concerning the path through which HRM affects organizational performance. Indeed, the development of employees' ability and motivation to learn fosters the acquisition and development of knowledge-based resources. Effective exploitation of these resources can in turn contribute to quality improvements as well as introduction of innovative product offerings. These would enhance the performance of SMEs both in the short-term and long-term. Organizations differ in terms of their strategic orientation and objectives. Managers need to identify the knowledge needs of the chosen strategies and seek to create the ideal conditions for the development and exploitation of such knowledge. These can invariably involve the use of human-capital enhancing HR practices.

The following limitations are identified in the present study. First, it uses a cross-sectional design which has prevented the examination of cause and effect relationship between two constructs. In the application of SEM in cross-sectional studies, only association could be measured, not cause and effect (Gefen et al., 2000). In order to determine the causality in a relationship, a longitudinal study with similar intent is necessary. A cross-sectional design also precludes the examination of dynamic interaction effects among the constructs under study. For example, it could not rule out the possibility that better performing SMEs possess greater resources, thus could afford to hire more competent managers who in turn, implement contemporary management practices which were associated with development of OL capability.

The present study also did not consider other SME contextual variables which may otherwise exert significant impact on OL capability, or moderate the relationship between the constructs under study. At the individual level, examination of the effects of self-efficacy, morale, commitment, person-organization fit and learning styles could reveal useful insights on how individual employees improve OL capability. At the organizational level, examination of the role of key cultural values, resource endowment, strategic uncertainty as well as the adoption of Total Quality Management, on the development of SMEs' OL capability may add value to the existing body of knowledge.

We did not include large organizations in the sample population. Hence, comparisons between SMEs and large organizations are not done. The current sample size of 256 SMEs is relatively small as it represented only six percent of an estimated 3,975 manufacturing and services SMEs in Sarawak. Although the sample size has met the criteria for statistical analysis using SEM, it may limit the generalizability of the findings to the broader SME population. Future research is necessary to validate the findings from the present study on a broader sample of SMEs in other developing economies, such as Indonesia, Thailand and Vietnam.

The current generation of SMEs may well develop into multinational corporations of tomorrow. As the country progresses towards establishing a knowledge-based economy, SMEs need to ensure that they are well positioned to face the challenges and exploit emerging opportunities associated with an increasingly turbulent business environment. In context, a strong OL capability offers the foundation to developing a sustainable competitive advantage.

<p>Tables and references from this paper were omitted due to space considerations. For a copy of the paper with tables and reference list please contact the author(s).</p>

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The Impact of Employee Satisfaction on Employee Intention to Leave: A Case Study Analysis

INTRODUCTION

Employee satisfaction expresses whether employees are contented and happy at work. Employee satisfaction affects among other things, turnover intention, customer service, and organizational commitment. As a result, there is a direct relationship between low levels of employee satisfaction, low levels of customer satisfaction and poor business performance results (Pfau & Kay, 2002). Employee dissatisfaction leads to high levels of employee turnover intention. High employee turnover influences the morale of the organization and eventually will affect operational productivity, management effectiveness, and efficiency. The loss of good and competent employees can jeopardize work performance, deteriorate product and service quality, and furthermore, diminish an organization's competitive advantage and market growth.

Employee turnover is a critical problem faced by many manufacturing companies in Malaysia. To understand the root cause of this, a case study analysis was carried out at Company ABT, a manufacturing company producing high quality flexible packaging materials. In recent years, Company ABT has been challenged by high employee turnover and this has affected its bottom line. Company ABT is facing high employee turnover, manpower shortage, negative working attitudes, poor work performance and disciplinary problems among some Generation Y local employees. To minimize huge human capital losses resulting from high employee turnover, the purpose of this study is to identify and evaluate employee satisfaction dimensions that influence employee intention to leave. Specifically, the study will focus on job satisfaction, compensation, work environment, and communication as determinants of employee turnover.

Employee Satisfaction

Employee satisfaction is an emotional feeling of contentment and happiness that has a significant effect on employee morale, employee motivation and employee goal achievement in the workplace (Heathfield, 2010). Employee satisfaction creates high levels of employee loyalty, which generates good internal relationships and working environment that will improve products and services quality, enhance customer satisfaction, and develop profitable businesses. A satisfied employee will be motivated to perform better in his/her job and will stay longer in the organization (Buitendach & Rothmann, 2009). Though employees who are satisfied, are not commonly more productive, employees who are dissatisfied do tend to produce inferior quality work than satisfied workers, to absent more frequently and to leave more often (Ivancevich, 2010). Employee satisfaction is normally associated with employees' feelings about a multiplicity of both intrinsic and extrinsic work elements (Hirschfeld, 2000; Misener, Haddock, Gleaton & Ajamieh, 1996). Lucas et al. (1987) point out that a positive social exchange relationship between the superior and the subordinate helps satisfy employee intrinsic needs.

Job Satisfaction

Job satisfaction is the degree to which employees are satisfied or dissatisfied with their jobs (Spector, 1997). It is an employee's expression of emotion or feeling to a job, based on a comparison between actual and desired outcomes. Cranny, Smith and Stone (1992) define job satisfaction as a type of emotional reaction to the job and the workplace. Job satisfaction is a

subjective personal evaluation of the conditions of the job or outcomes of having a job (Schneider and Snyder, 1975) and priority of needs (Sempene, Rieger & Roodt, 2002). Additionally, Cook, Hepworth, Warr and Warr (1981) maintain that job satisfaction is a harmonious interaction of the individual with the environment. Job satisfaction has a huge impact on employees' physical health, longevity, mental health and their interaction with social life (Locke, 1976). Poor health increases absenteeism and subsequently leads to job dissatisfaction (Hedges, 1973). The equity theory (Adams, 1965) affirms that employees experience satisfaction with the rewards received from an effort in proportion to the effort they contribute. Maslow's motivation theory (1943) assists in enhancing job satisfaction and influences employee intention to leave while Herzberg's two-factor theory posits that certain factors in the workplace cause job satisfaction while another separate set of factors will cause dissatisfaction (Herzberg, Mausner & Snyderman, 1959).

Spector (1997) contends that employee personalities influence job satisfaction while Hom and Griffith (1995) emphasize more on autonomy in decision making. Other factors such as enjoyment at work, advancement opportunities, harmonious relationship with co-workers and superiors, and a fair remuneration package augment job satisfaction (Kleiman, 1997). Equally important are feedback (Ashford, 1986; Bauer et al., 1996; Hackman & Oldham, 1976), good leader-member exchange relationship (Buitendach & Rothmann, 2009; Engle et al., 1997; Griffith, 2004; Howell & Shamir, 2005; Kreitner & Kinicki, 2004; Leung et al., 2001; Levinson, 1965; Liden & Maslyn, 1998; Lucas et al., 1987; Mihir, Anubha & Vivekanand, 2008; Mowday et al., 1979; Podsakoff, Mackenzie & Hui, 1993; Riketta, 2005; Sparrowe, 1994; Wild, Hill & Ridgeway, 2010), and alignment of individual and organizational goals (Haworth & Levy, 2001; Herzberg et al., 1959). Job advancement opportunities and company policy such as gender equity are their major determinants in overall job satisfaction (Cravor et al., 2009). Ahmed et al. (2010) note that intrinsic factors such as recognition from the bosses, the work itself, opportunity for advancement, professional growth, job autonomy and responsibility, and good feeling about the organization affect job satisfaction. Herman (1973) relates job satisfaction to economic conditions. During an economic meltdown, employees are compelled to perform better and this indirectly leads to higher job satisfaction. On the contrary, poor market conditions may reduce company ability to reward employees accordingly, thus, leading to lower job satisfaction.

Demographic factors too seem to have an effect on job satisfaction. Research show that age and job satisfaction are positively correlated (Gibson & Klein, 1970), baby boomers are comparatively happier at the workplace (Hamermesh, 2001), and younger employees experienced relatively lower job satisfaction (Janson & Martin, 1982). However, the effect of educational level, work experience, and gender on job satisfaction is inconclusive. While Vollmer and Kinney (1955) argue a negative correlation between education level and job satisfaction, Wild et al. (2010) insist on a positive relationship. Idson (1990) maintains that there is no significant relationship between education level and job satisfaction. Vasagam (1997) concurs that there is positive relationship between working experience and job satisfaction, but Wild et al. (2010) insist that there is no significant relationship. Similarly, while some claim that women employees are generally more satisfied (Clark, 1997; Jung & Moon, 2007; Wild et al., 2010) others state otherwise. Though Forgiionners and Peeters (1982) refutes that male employees are more satisfied, others conclude that there is no significant differences between gender and job satisfaction (Bender, Donohue & Heywood, 2005; Mason 1997).

Compensation

Compensation deals with the total of all types of rewards received by employees in exchange for their efforts, talents, time, and results. The overall objective of financial compensation is to create a system of rewards to motivate, attract, and retain employee (Mondy & Noe, 2005). Compensation is a necessity of life and is essential to effectively motivate, attract, and retain the

talents required to achieve desired business results. Compensation may directly influence key outcomes like satisfaction, performance, flexibility, attraction, cooperation, skill acquisition, and retention. It may indirectly influence the effectiveness of facilitating or constraining other human resource activities such as recruiting, selection, and training and development. However, monetary rewards do not necessarily lead to job satisfaction (Adams, 1963).

Direct financial compensation such as variable scales of wages, salary, incentive, bonus, and profit-sharing plans influences employee intention to leave; people are normally attracted to organizations offering a better remuneration package in exchange for their services or employment. Indirect financial compensation or benefits include those offered at employer's discretion such as various kinds of insurance, hospitalisation, retirement gratuity plans, and the legally required items. Benefits packages flexibility is the key factor in ensuring good employee retention, especially if it offers greater responsiveness to the specific circumstances and needs of employees (Smith, 2001). Employee perception of a positive linear relationship between rewards and performance are likely to enhance job performance and, hence, job satisfaction (Lawler & Porter, 1967). Nonetheless, employee satisfaction will only improve if employees perceive that the reward is equitable to others. Greene and Podsakoff (1981) also argued that rewarding top performers based on performance rather than seniority enhances job satisfaction.

Employees are likely to stay when their compensation is higher relative to the external market; they have greater opportunities for career development and growth inside the organization. Compensation provides support for the negative relationship between high relative remuneration package and employee turnover (Shaw et al., 1998). Most of the studies demonstrate the importance of compensation in attracting and retaining good employees, particularly for staff whose skills and responsibilities are indispensable or unique to the organization, or for those staff in whom the company has invested substantial resources in recruiting, and training and development. Conversely, Lawler (1990) argues that low salary and wage strategies may be appropriate if work is repetitive, simple, and requires little training. Compensation and benefits are incorporated into the employee retention efforts by companies having a clear understanding of their business objectives; and use compensation as a tool for influencing employee intention to leave, organizational and employee behavior (Lawler, 1990). Reward and incentives systems have been an important point for understanding meaning and motivation in work and have a strong impact on employee turnover intention across sectors (Borzaga & Tortia, 2006).

Work Environment

Workplace safety can contribute to productivity and business performance as well as improve individual employee's health. Workplace wellness and health initiatives will facilitate good relations on labour management, reduce safety and health costs, improves profitability and customer satisfaction. Physical work environment that is safe, without risks to health and support healthy lifestyles at work will enhance employee retention. Working environment covers a very broad range of aspects, such as the location and layout of workplace areas; the facilities and utilities, equipment and support service; traffic management; and environmental stressors such as temperature, lighting and ventilation, noise and vibration, and the presence of dusts and gases. All these aspects can have direct and indirect impacts on the safety and health of workers (Stranks, 2010) and will influence employee intention to leave.

Social work environment and personal resources that create good organizational culture, encourage work-family balance, achieve quality of work life, and provide the satisfactory welfare to employees, will reduce employee intention to leave. A sound quality of work life that includes such factors as supervisory and management style, autonomy and freedom to make decision on the job, satisfactory physical surrounding, flexible working hours, job safety and meaningful tasks to meet worker's needs will enhance employees' satisfaction (Ivancevich,

2010). Employees will have more control over managing family, work, lower work-family conflict, depression, and higher job satisfaction if they have access to flexible scheduling (Thomas & Ganster, 1995). Those employees who have work with people who are friendly, mobile within the organization, freedom to make job-related decisions, consider working as an important part of life, contribute to the organization, have supervisors who always assist their subordinates, and receive adequate monetary compensation are satisfied employees (Agho, Mueller & Price, 1993).

In addition, job stress also has an effect on employee turnover. Job stress is defined as the emotional responses and physical harm that occur when the job requirements do not match the capabilities, resources or needs of the worker (NIOSH, 1999). Job stress such as unrealistic deadlines, overwork, lack of clear instructions and decision-making, job insecurity and isolated working conditions will increase work-related injuries rates, cause poor health, and employee intention to leave. Bhagat (1982) asserts that extremely high time pressure on an employee may improve employee performance, but reduces job satisfaction. Similarly, Triandis (1979) concurs that organizational pressure affects job satisfaction level. Extremely low or high organizational pressure reduces job satisfaction as it can lead to complacency or burnout. In essence, companies that exert moderate organizational pressure and practise flexible work time schedule have more satisfied employees (Lawler & Porter, 1967). On the contrary, Sinclair (1993) explains that personal pressures such as own principles, and the need to support the family can improve employee job performance and job satisfaction to a certain extent. Miller and Percault (1976) add that role conflict and tension will lower an employee's job satisfaction level.

Collaborative working environment will promote workplace quality, coordination, productivity, and efficiency. Kerr and Jermier (1978) maintain that reduced competitive pressure among co-workers and good teamwork augment job satisfaction. Team coordination and collaboration with high involvement systems may improve organizational performance (Cohen & Bailey, 1997). For example, the ability to coordinate work with cross-sectional colleagues may improve flexibility of co-workers, work-life balance, meet family demands, and employee satisfaction. Employees will be committed and put more effort to continually refine and develop their knowledge, ability, and skills for achieving organizational goals. Erez and Arad (1986) report that job satisfaction improves if management involves employees in some of the decision making process. Likewise, Cotton et al. (1988) reiterate that participatory management approach and employee ownership enhances employee job performance and job satisfaction.

Communication

Communication is defined as the process of people's search for shared meaning via the transmission of symbolic message that involves shared meaning, symbols, and people (Stoner, Freeman & Gilbert, 1995). Organizational communication is defined as both symbols and behaviors, generated either unintentionally or intentionally, occurring among and between people who assign meaning to them, within an organizational setting (Byers, 1997). Organizational communication is very important for the process of power, leadership, and decision-making (Stoner, Freeman & Gilbert, 1995). The communication system and their understanding of each other's work style or habits can significantly affect employee satisfaction, performance, career development, and turnover intention. If the employees are reasonably treated by the outcomes they received or the processes that are implemented, employees will be satisfied (Bateman & Snell, 1999). When there is lack of effective communication, the level of satisfaction declines and work stress increases. Eventually, the employee's intention to leave will increase.

The costs to poor employee communication include dwindling morale, low productivity, increased absenteeism, increased employee turnover, poor customer service, dissatisfied customers, lack of focus on business objectives, higher product reject rates, and discouraged

innovation (Effective Communication, 2010). It is essential to retain good employees through open, responsive, and two-way communications. Non disclosure of company's information can rapidly change high performing employees into a group of discouraged and disgruntled job-seeking workers (Harris & Brannick, 1999). Effective internal communication will reduce employee intention to leave. Employee involvement, teamwork, quality of the supervisory relationship and supportive communications with immediate supervisors and senior management will encourage employee retention. Gerstner and Day (1997) affirm that ineffective communication between the superior and their subordinates will result in low level of employee job satisfaction. In contrast, frequent and quality communication often clears out the doubt in the employees and increase job satisfaction (Soonhee, 2009).

Employees with connection to their superiors are engaged in their work more productively and effectively. Employees who have better understanding of the dynamics of their work relationship will assist both parties appreciate their perspectives. Thus, mutual understanding will create a positive working relationship with high productivity (Profiles International, 2010). Nonetheless, as communication between members deteriorates as a result of increased group size, job dissatisfaction will eventually set in (Indik, 1965).

Employee Turnover Intention

Turnover refers to the number of employees leaving the organization for whatever reason. 'Avoidable' turnover is distinguished from 'unavoidable' so that proper emphasis can be placed on the avoidable portion (Phillips & Edwards, 2009). Mello (2006) confirms that involuntary turnover (on organization's request) or voluntary turnover (on their own initiative) can cause disruptions in teamwork dynamics, unit performance, and operations. High turnover rates have been connected with decreased productivity, customer satisfaction, profitability, and future revenue growth. High employee turnover affects business performance such as operational, productivity, product and service quality and profitability. Furthermore, product quality, customer service, and company reputation can be undermined by high employee turnover.

McShane and Glinow (2008) identify that job dissatisfaction is one of the key contributors of turnover. Many believe that satisfied employees will be motivated to perform better, and will stay longer in the organization (Buitendach & Rothmann, 2009; Price & Mueller, 1986). Similarly, Davis and Newstrom (1997) reveal that organizations with lower employee satisfaction levels face higher employee turnover rates. Employee will quit if job satisfaction levels are continuously low. Individuals may choose to resign for many different reasons such as feeling dissatisfied, insecure, uncommitted, and attractive alternative job opportunities. Taylor (2002) argues that the major causes of employee turnover fall into four categories: pull-type resignations, push-type, unavoidable and situations. The main determinants of employee turnover include individual work-related variables like abilities, values, satisfaction, expectations, commitment, and intentions; individual non-work variables such as family considerations, and spouse's career; organizational factors like leadership, job design and the reward system; and the external economic condition which affects the availability of alternative jobs (Mobley, 1982). Other factors are the status, attractiveness, and characteristics of the job; employees' perception that the company is in financial difficulty; organizational culture; demographic and biographical characteristics of employees; employees' dissatisfaction with the working environment; and the individual, influenced turnover intention.

METHODOLOGY

Conceptual Framework

The independent variables of employee satisfaction consist of job satisfaction, compensation, work environment, and communication. Employee satisfaction or dissatisfaction will influence employee intention to stay or leave. The conceptual framework is as shown in Figure 1.

Hypotheses

Employee intention to leave is measured as degrees of relationship to the following dimensions of employee satisfaction - job satisfaction, compensation, working environment, and communication. The following hypotheses were evaluated at a significance level of 0.05.

- H1: There is a relationship between employee satisfaction and employee intention to leave.
- H1a: There is a relationship between job satisfaction and employee intention to leave.
- H1b: There is a relationship between compensation and employee intention to leave.
- H1c: There is a relationship between work environment and employee intention to leave.
- H1d: There is a relationship between communication and employee intention to leave.
- H2: Employee satisfaction significantly explains the variance in employee intention to leave.
- H3: There is a relationship between demographic factors and employee intention to leave.
- H3a: There is a significant difference in intention to leave for males and females.
- H3b: Employee intention to leave depends on ethnicity.
- H3c: Employee intention to leave depends on tenure.
- H3d: Employee intention to leave depends on which department they work.
- H3e: There is a difference in employee intention to leave at the different levels of education.
- H3f: There is a difference in employee intention to leave at the different job categories.
- H3g: There is a difference in employee intention to leave at the three different income groups.
- H3h: There is a difference in employee intention to leave at the different age groups.

Site and Subjects

The study was carried out in a manufacturing company that manufactures high quality flexible packaging materials that carry appealing designs to meet precise customers' specifications and requirements, in both roll and pouch/bag form. The company is located in Selangor and listed on the Bursa Malaysia Securities Berhad. The questionnaire survey was distributed to all the 100 employees in the four departments: Finance & Administration, Marketing & Sales, Factory & Production, and Quality Assurance & Quality Control. However, due to time constraint and voluntary participation, only 52 per cent of the employees completed the questionnaires at the end of the one-week period. Though 55 questionnaires were returned, three questionnaires were rejected and excluded from the study due to incompleteness.

Procedure

The study began with a literature review of related studies in the domain. Information was obtained from the internet, library catalogues, electronic databases, management books, published indexes, reference lists, and articles in journals. The next step involved the collection of primary data through questionnaire survey. To refine the questionnaire, a pilot survey was carried out whereby 20 questionnaires were distributed to the Finance & Administration Department. Permission to conduct the questionnaire survey was obtained from the Managing Director prior to the distribution of questionnaire to all the employees. A cover letter providing a brief description of the purpose and benefits of the study, and the questionnaire were handed out to all the respondents in the Factory & Production Department and the Quality Assurance & Quality Control Department, and sent by e-mail to all the respondents in the Finance & Administration Department and the Marketing & Sales Department. Respondents were assured that their participation would be anonymous and their responses would be confidential. The questionnaires were collected back within a week.

Measures

The questionnaire is divided into two sections. Section 1 comprises of 23 questions related to the four independent variables of job satisfaction (5), compensation (5), working environment (6), communication (4) and one dependent variable of employee intention to leave (3). Section 2 is related to demographic data – department, gender, ethnicity, education level, job function, length of service, monthly income, and age. The respondents were asked to indicate their degree of agreement with the statement ranging from (1 = very dissatisfied), (3 = neutral) to (5 = very satisfied), or (1 = strongly disagreed), (3 = neutral) to (5 = strongly agreed).

Data Analysis

The data were transformed into useful information for management decision making and recommendation for improvement. Descriptive statistics and various hypotheses testing methods were used for the analysis. Cronbach's alpha coefficient was calculated to determine the reliability and internal consistency of the questionnaire survey.

RESULTS

The inter item consistency reliability of the four independent and dependent variables were all above 0.70. Table 2 presents the means, standard deviations, and correlations for all study variables. Results of the correlation analysis provide support for discriminant validity considering the low correlation among variables that are supposed to be unrelated. Examining further, none of the correlation coefficient is above 0.90, indicating that all the variables are distinct (Amick & Walberg, 1975). Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity, and homoscedasticity. The VIF scores for all the variables are well below 10 and, therefore, there is no concern for multicollinearity (Pallant, 2007).

The Pearson correlation matrix obtained for all the variables show that intention to leave is significantly and negatively correlated with work environment (0.360), and communication (0.458). That is, a good and conducive working environment, and open communication reduce employee intention to leave. Work environment is also positively correlated to job satisfaction (0.454), communication (0.358), and compensation (0.338) while communication is positively correlated to job satisfaction (0.568). As may be seen, at 5% significance level, hypotheses H1a and H1b are not substantiated, while hypotheses H1c and H1d are substantiated. That is, there is no significant relationship between job satisfaction and employee intention to leave ($p=0.119$), and compensation and employee intention to leave ($p=0.06$). However, the results show that work environment ($p=0.009$) and communication ($p=0.001$) are significantly related to intention

to leave. Thus, the first hypothesis that there is a relationship between employee satisfaction and employee intention to leave is partially substantiated.

To test if the four independent variables of employee satisfaction will significantly explain the variance in employee intention to leave, multiple regression analysis was done. As indicated in Table 3, the total variance explained by the model as a whole was 24.1 percent, $F(4, 47) = 5.045$, $p < 0.05$. Thus, hypothesis 2 is substantiated. From the results of the multiple regression analysis, it is clear that communication is the most influential factor in explaining employees' intentions to stay with or leave the organization. Efforts to enhance communication at the workplace will therefore help reduce employee intention to leave the organization and induce them to stay. The fact that the four employee satisfaction measures explained only 24.1 percent of the variance in intention to leave meant that 75.9 percent is still unexplained. Hence, other additional variables that are important in explaining employee intention to leave need to be considered.

An independent-samples t-test was conducted to compare the intention to leave scores for males and females. There was no significant difference in scores for males ($M = 3.344$, $SD = 0.791$) and females ($M = 3.317$, $SD = 0.415$; $t(47.54) = 0.158$, $p = 0.875$, two-tailed). The magnitude of the differences in the means (mean difference = 0.027, 95% CI: -0.312 to 0.365) was very small (eta squared = 0.0005). The results are shown in Table 4.

ANOVA was used to determine whether intention to leave would be the same irrespective of differences in ethnicity, tenure, working department, education level, job category, income, and age. The results are as shown in Table 5.

The results of the ANOVA tests do not indicate any significant differences in intention to leave based on ethnicity, tenure, working department, education level, job category, income, and age. Respondents divided into four ethnic groups (Bumiputera, Chinese, Indian, and Others) do not show any significant difference in their intention to leave: $F(3, 48) = 1.271$, $p = .295$. Similarly, intention to leave is the same for their tenure with the organization (less than 1 year, 1 to less than 2 years, 2 to less than 5 years, 5 to less than 10 years, and more than 10 years): $F(4, 47) = 0.306$, $p = .873$; working department (Finance & Administration, Marketing & Sales, Factory & Production, and Quality Assurance & Quality Control): $F(3, 48) = 0.992$, $p = .404$; education level job (SPM/STPM, Diploma, Degree, and Others): $F(3, 48) = 0.622$, $p = .604$; category income (Executive, Officer, Supervisor, Sales executive, Quality control, Clerical, and Operator): $F(6, 45) = 0.746$, $p = .615$; income (Less than RM1000, RM1001 - RM3000, and RM3001 - RM6000): $F(2, 49) = 0.562$, $p = .574$; and age (Less than 25 years, 26 - 30 years, 31 - 40 years, 41 - 50 years, and 51 - 55 years): $F(4, 47) = 0.464$, $p = .762$. Thus, hypothesis 3 was not substantiated.

DISCUSSION

This study found that the key predictor of employee turnover intention in Company ABT is communication. The regression analysis gave emphasis on communication in predicting employee intention to leave. The finding of a significant negative relationship between communication and intention to leave is consistent with Herzberg's Motivator-Hygiene Theory (Herzberg 1968) where communication is one of the extrinsic factors of employee satisfaction. In the current study, the other extrinsic factors, namely compensation and working environment, and the intrinsic factor of job satisfaction have no significant effect on intention to leave. This study also supported Alderfer's (1972) ERG theory where the need for relatedness is linked to employees desire to fulfill and maintain essential interpersonal relationships with supervisor and coworkers, and effective communication. All these are important, as low communication in the organization will increase employee intention of leaving.

The findings contradict prior studies (e.g. Buitendach & Rothmann, 2009; Davis & Newstrom, 1997; McShane & Glinow, 2008; Price & Mueller, 1986) that a significant relationship exists between job satisfaction and intention to leave. Similarly, prior studies (e.g. Shaw et al., 1998; Smith, 2001; Stoner, Freeman & Gilbert, 1995) assert the important influence of compensation and benefits on employee intention to leave. This study, therefore, contradicts the equity theory and posits that high remuneration may not necessary reduce employee intention to leave. Management may have to consider beyond competitive compensation and benefits strategies to retain good employees. As income levels and job category have no significant effect on intention to leave, there is no urgency to benchmark salaries within the company against industry standards. Nonetheless, it may consider increasing the salaries of clerical and operators that fall below the norm. Additionally, the company may also standardize monthly allowances, incentive and indirect benefits for all employees as it will improve morale and motivation, boost productivity, increase effectiveness and efficiency, strengthen product quality and reduce employee intention to leave. Introducing performance-based compensation too will likely modify individuals' behavior in order to better align their activity with particular objectives and influence the development of particular types of company culture.

Results of the study indicate that a favorable working environment is unlikely to hinder employee intention to leave too. But, as past research shows that a safe physical work environment and healthy lifestyles at work will reduce employee intention to leave, this could not be totally ignored by the organization. Ivancevich (2010) affirms that a social work environment of sound quality of work life that includes supervisory style, freedom and autonomy to make decisions, satisfactory physical surrounding, job safety, flexible working hours and meaningful tasks will enhance employee satisfaction. As the correlation analysis shows a significant negative correlation between work environment and employee intention to leave, work environment and infrastructure at ABT need to be improved. Company ABT may consider upgrading their building, workspace, and facilities to good manufacturing practise in order to meet customer stringent requirements and discourage employee intention to leave. Developing workable and comfortable work environment, and effective and fair human resource policies for work-life balance will attract and retain talented employees. Therefore, it is recommended that management emphasize more on security, good health, workplace safety, and a conducive work environment that will help employees establish work-life balance.

Company ABT may need to improve the communication system in the organization as it is highly correlated to intention to leave. A poor communication system may instigate employee intention to leave as perceived lack of information reduces employees' sense of belonging and leads to social alienation. Such a working environment would be meaningless to employees as the current generation of workers value work-life balance. Therefore, it is imperative to establish open, responsive, and two-way communication systems in the organization. Effective daily communication with employees enhances transparency at the workplace and is likely to increase employees' satisfaction. Transparent and informative communication will most probably encourage open discussions and collaboration. A good leader-member exchange relationship and interactional justice may further enhance communication at the workplace. This study supported the notion that employee involvement, teamwork, quality of supervisory relationship and supportive communication with immediate supervisors and senior management will reduce employee intention to leave. Therefore, supervisors' knowledge, skills, and ability need to be improved in order to enhance their competency level on the fairness of its operation and enhance the quality of work-life balance. Additionally, Company ABT may consider empowerment and greater involvement of employee in decision-making and organizational practices. These practices include employee engagement, employee association, regular meeting, circulating and sharing information, and employee feedback surveys. Management needs to build commitment

for two-way communication among employees in an honest and open way to enhance trust; to assess their ability and capacity to engage in various initiatives; to provide constructive feedback; and to promote effective decision-making.

The implication of this study is, management and superiors, are the key predictors of employee satisfaction and employee intention to leave. A supportive leadership style, demonstrated through effective open communication, respect and recognition can enhance the level of employee satisfaction, and hence, reduces employee intention to leave. Company ABT may increase the level of employee satisfaction by establishing clear company strategies, objectives and policies; promoting attractive compensation and benefits system; providing appropriate work environment; imposing attractive human resource policies; improving quality of work and work-life balance; defining clear duties and responsibilities of employees; supporting human resource training and development; and encouraging equal opportunity for career advancement and promotion. Company ABT may also increase commitment to the company's vision, strategies, and goals in line with the company's values. Rewards and commitment practices aim at generating a greater sense of belonging and commitment to the company include job rotation, job enrichment, performance-based pay, and indirect benefits. As demographic factors have no significant effect on employee intention to leave, Company ABT need not focus on these factors in efforts to reduce turnover intention.

CONCLUSIONS

In essence, employees are the most important human capital and resource of the company. Therefore, it is imperative that management studies and understands human behavior, human nature, the basic needs, wants and competencies of employees, and how their attitudes and behaviors impact employee satisfaction. Management may consider introducing a transparent communication system; and creating good working environment that enhances motivation and performance at the workplace. This study provides useful information in drawing up human resource strategies, policies and operational plans to reduce employee turnover problems. Additionally, human resource policies to improve employee work attitudes and behaviors, and enhance employees' knowledge, skills and competencies within the company can be done through practices such as constructive feedback, performance appraisals, training needs analysis review, and evaluation of training and development. In order to retain good employees and minimize employee intention to leave, the company among others, needs to support lifelong education; invest in training and development; ensure equal opportunities for advancement; establish good corporate governance; advocate organizational justice; and promote organizational citizenship behavior.

<p>Tables and references from this paper were omitted due to space considerations. For a copy of the paper with tables and reference list please contact the author(s).</p>

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The Effect of FDI and Openness on Growth in Major Petroleum Exporters Countries

Key words: Foreign Direct Investment, Growth, panel regression, Major Petroleum Exporters Countries.

INTRODUCTION

The empirical investigations demonstrated that FDI played a significant positive role in the growth process for the transition countries. In the past 20 years, the inflow of FDI has increased tremendously in the world economy. In particular, it grew from 13 to 31% of GDP on average for all developing economies Henriot (2003). Thus Foreign Direct Investment (FDI) has gained significant importance over the past three decades or so as the tool for accelerating growth and development of economies in transition as well as MPEC countries. The impact of FDI on economic activities received attention in recent literatures.

The relationship between foreign direct investment (FDI) and economic growth has motivated a voluminous literature focusing on both industrial and developing countries. Following the criticisms in recent studies Kholdy (1995) of the traditional assumption of one-way causal link from FDI to growth, new studies have also considered the possibility of two-way or non-existent causality among variable of interest.

Balasubramanyam et al. (1996) used cross-section data relating to a sample of 46 countries and supported the hypothesis of Bhagwati: the growth-enhancing effect of FDI is stronger in countries which pursue an outward oriented trade policy than it is in those countries following an inward oriented policy. De Mello (1999) attempted to find support for an FDI-led growth hypothesis when time series analysis and panel data estimation for sample of 32 OECD and non-OECD countries covering the period 1970-1990 were made. Nair-Reichert and Weinhold (2001) apply mixed fixed and random estimation to examine the relationship between FDI and growth in developing countries and find that there is a causal link between FDI and growth. Wang (2002) explores the kind of FDI inflows most likely contribute significantly to economic growth. Using data from 12 Asian economic over the period of 1987-1997, and found that only FDI in the manufacturing sector has a significant and positive impact on economic growth.

At this paper's lead author's request, editorial correction of written English was restricted. Remaining errors are the authors'.

According to the panel co integration and causality test results of the study of Basu et al.(2003) on the data of 23 developing countries, in the open economies, a lateral causality between the foreign direct investment and growth, and in relatively closer economies, causality from the foreign direct investments towards the growth were observed. In their studies comprising the years 1970-2000 and 31 developing countries, Hansen and Rand (2004), came to a result that the causality relation between the foreign direct investments and the growth was mutual.

Papaioannou (2004), in his study comprising the years 1993-2001 which he made with the panel data of 43 developed and developing countries, has examined the effects of the foreign direct investments and the improvements in the information and communication technologies sector on the growth.

Chowdhury and Mavrotas (2005) examined the causality relation between the foreign direct investments and growth and they observed a causality relation from the growth towards the foreign direct investments in Chile and exposed that this relation was bi-directional Malaysia and Thailand. As a result, they stated that the foreign direct investments and the investments in the technology sector had higher effects on the developing countries than the developed ones.

Duasa (2007) examined the causality between FDI and output growth in Malaysia. The study found no strong evidence of causal relationship between FDI and economic Growth. Prabirjit (2007) found positive relationship exists between the two irrespective of income levels, openness and FDI-dependence. Abayie (2007) found FDI caused GDP growth in Ghana. Karimi (2009) examined the causal relationship between FDI and economic growth in Malaysia and concluded a positive and significance relationship between the two variables. Samimi (2010) investigated the relationship between the FDI and GDP growth for the period 2000-2006 in OIC countries and results showed that FDI inflow and Openness are important to GDP growth in these countries. ErÇakar (2011) studied the long run relationship between GDP growth and the macroeconomic variables of foreign direct investment, trade and inflation for Turkey using the data set which covers the period of 1970 - 2008 and the results showed that foreign direct investment, inflation and trade surplus have positive and statistically significant effect on GDP growth.

In this study we have used an innovative and more robust ‘Granger causality test’ Method and Panel (EGLS) Method to find the impact of Foreign Direct Investment and openness influencing Growth in MPEC countries.

DATA AND MODEL AND ESTIMATION

This article employs panel data for 21 countries over the period 2006-2009. All countries (MPEC) for which data are available over this period are included in this study. Used FDI inflows measured in current U.S. dollars divided from the UNCTAD Handbook of Statistics On-line (United Nations Conference on Trade and Development, 2011). The dependent variable is the Growth of GDP. Our independent variables include growth of FDI and Growth of Openness of the economy (computed as export plus import). Comparison of these data in table (1) indicates that measure of average GDP growth, average Openness and FDI in MPEC countries.

Table 1: Average of Variables in MEPC countries

	Average Foreign Direct Investment (million US\$)	Average GDP	Average Openness
Bahrain	1554.2	18106.8	23687.8
Iran	2216.8	279215.4	136399.6
Angola	11067.2	27595.6	56207.8
Congo	2048.2	8072.2	8678.2
Algeria	2006.2	133210.4	90289.4
Libya	2905	63119	59974.2
Sudan	2783.4	53833.8	15935.2
Nigeria	7537.2	165156	93641.4
Iraq	959.2	20368.6	67309.2
Kuwait	113.2	112619.8	79563.6

	Average Foreign Direct Investment (million US\$)	Average GDP	Average Openness
Oman	2207.4	41753.8	41255.6
Qatar	4705.8	75902.8	58567
Saudi Arabia	25144.6	377362	307061.2
Syrian	1077	41579	26138.4
United Arab Emirates	11119.2	209562	310956
Yemen	684	24764.6	14717.2
Gabon	204.2	10958.4	7919.6
Guinea	664.8	11236.6	2148.8
Ecuador	454.2	41309	28748.2
Trinidad and Tobago	1232.6	20069.8	20490
Venezuela	66.6	242943.8	106916.6

As it shown in Figure 1 the average of Foreign Direct Investment in Saudi Arabia is higher than other countries. (Figure 1 omitted for space considerations).

This study employs a Panel (EGLS) Method to find the factors affecting Foreign Direct Investment in MPEC countries.

The general form of the model is shown in the following equation.

$$GGDP_{i,t} = \alpha_0 GFDI_{i,t} + \alpha_1 Openness_{i,t} + U_{i,t}$$

The results are shown in table (2). Foreign direct Investment (FDI) and Openness have positive and significance impact on GDP growth.

Table 2: Estimation of Model (sample 2006-2009)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.93503	0.09468	52.1201	0.0000
GFDI	0.003725	0.00106	3.4978	0.0009
GOPENNESS	0.037060	0.00205	18.0319	0.0000
R-squared	0.86			
Adjusted R- squared	0.81			
Durbin-Watson stat	2.68			

SUMMARY AND CONCLUSIONS

This paper investigated the impact of FDI and Openness on GDP growth in MPEC countries for which the necessary data were available for the period 2006-2009. The results showed that FDI and Openness have positive and significantly effects on GDP growth in these countries and the results based on the panel regression data analysis show Openness are important to GDP growth in these countries. As the results show that openness effect is greater than the effect of FDI. Expansion in the amount of export and import, in other words the expansion in the volume of trade increases the growth in the employment and labor productivity, and consequently the

economic growth. Therefore, policies to improve international trade and FDI inflows in the Major Petroleum Exporters countries are suggested.

REFERENCES

- Abayie, O., & Fosu, E. 2007. Bivariate Causality Analysis between FDI Inflows and Economic Growth in Ghana. *MPRA Paper*, pp: 351.
- Balasubramanyam, V., & Mohammed, N., & Salisu, A. & Sapsford, D. 1996. Foreign Direct Investment and Growth in EP and IS countries. *Economic Journal*, 106: 92-105.
- Basu, P., & Chandana, C. & Derrick, R. 2003. Liberalization, FDI, and Growth in Developing Countries: A Panel Cointegration Approach. *Economic Inquiry*, Vol. 41, No.3, pp.510-516.
- Chowdhury, A., & George, M. 2005. FDI and Growth: A Causal Relationship, *United Nation University WIDER* (World Institute for Development Economics Research), Research Paper No. 2005/25.
- De Mello, 1999. Foreign Direct Investment Led Growth: Evidence from Time-Series and Panel data. *Oxford Economic Papers*, 51 : 133-151.
- Duasa, J. 2007. Malaysian Foreign Direct Investment and Growth: Does Stability Matters?. *The Journal of Economic Cooperation*, 28: 83-98.
- Jafari Samimi, A. ,& Rezanejad, Z., & Ariani, F. 2010. Growth and FDI in OIC Countries. *Australian Journal of Basic and Applied Sciences*, 4(10): 4883-4885, 2010,ISSN 1991-8178.
- Hansen, H., & Rand J. 2004. On the Causal Links between FDI and Growth in Developing Countries. Institute of Economics. University of Copenhagen Development Economics Research Group (DERG), Discussion Papers, <http://www.econ.ku.dk/wpa/pink/2004/0430.pdf> (12.03.2010).
- Henriot, A. 2003. Prospects for the location of industrial activities after EU enlargement. Retrieved November, 21, 2004 from World Wide Web: <http://www.coe.ccip.fr/02/documents/pdf/dt61.pdf>
- Karimi, M., & Zulkornain ,Y. 2009. FDI and Economic Growth in Malaysia. *MPRA Paper*, pp: 1499.
- Kholdy, Sh., & Sohrabian, A. 1995. Financial Market, FDI, and Economic Growth, Granger Causality Tests in Panel Data Model. *Working Paper Series*.
- Mehmet Emin ,E. 2011. Growth, Foreign Direct Investment, Trade and Inflation: An Empirical Application on Turkey. *Middle Eastern Finance and Economics*, ISSN: 1450-2889 Issue 9 (2011).
- Nair-Reichert, U., & Weinhold, D. 2001. Causality Test for Cross-Country Panels: A New Look at FDI and Economic Growth in Developing Countries. *Oxford Bulletin of Economics and Statistics*, 63: 153-171.
- Papaioannou, S. K. 2004 . FDI and ICT Innovation Effects on Productivity Growth: A Comparison Between Developing and Developed Countries, <http://www.fep.up.pt/pdf> (10.03.2010).
- Prabirjit, S. 2007. Does Foreign Direct Investment Growth? Panel Data and Time Series Evidence from Less Development Countries. *MPRA Paper*, pp: 5176.
- Statistical, Economic and Social Research and Training Center for Islamic Countries .2009. Available from <http://www.sesrtcic.org>

Figures and references from this paper were omitted due to space considerations.
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Investigation of the effective factors on empowerment of Hamyaran company stuff

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ABSTRACT

Human capital management is a response to dynamic society and today organizations competitive needs. According to experiences, most of the organizations have found that attention to the human resources increases their capabilities in competitive era and promotes their survival and durability significantly while enhancement of the efficacy. Today human force plays a key role in survival and profitability of firms. The management scholars believe that attention to human factor eliminates main confines and shortages of the production process.

At this paper's corresponding author's request, editorial correction of written English was restricted. Remaining errors are the authors'.

In resent period progress and continuity of the organizations depend on the stuff capabilities. In deed the aim of the empowerment is to transfer achieving the organization goals to capable individuals by creating interest and motivation and education of the stuff capabilities and competencies. The necessity of the education stuff by self-management capabilities has been caused that human force empowerment has gained attention of the most management scholars as a new paradigm. This research was conducted in order to investigate capabilities level of the Yaran Sakhtar company stuff. "Kanger and Kanngo" model was used to measure the stuff capabilities level. The research is descriptive and measure mental and thirty individuals were selected as sample based on Kerjesi and Morgan table. According to the statistical tests it was specified that the level of capability in three criteria of organizational statues, management strategy and self-efficiency resources are %79.9, %85.7 and %69.7 respectively in this statistical population according to Kanger and Kanngo model. It indicates optimal condition of this organization.

Key words: empowerment, human force, organizational statues, efficacy

بررسی عوامل موثر بر توانمندسازی کارکنان شرکت همیاران

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چکیده

مدیریت بر سرمایه های انسانی پاسخی به نیازهای جامعه پویا و رقابتی سازمان های امروز است. بسیاری از سازمان ها به تجربه دریافته اند که توجه به منابع انسانی ضمن افزایش بهره وری، توانایی آنها را در عرصه رقابت افزایش داده، احتمال بقا و ماندگاری آنها را نیز تا حد زیادی بالا می برد.

امروزه، نیروی انسانی، سهم کلیدی در بقا و سودآوری شرکتها ایفا می کند و علمای مدیریت بر این باورند که توجه به عامل انسانی باعث از بین بردن عمده محدودیتهای و کمبودها خواهد شد که در فرایند تولید بروز می کند.

در عصر حاضر، پیشرفت و تداوم سازمانها به میزان توانمندی کارکنانش بستگی دارد. در واقع توانمندسازی برآن است که با ایجاد علاقه و انگیزش و آموزش قابلیت ها و شایستگی های کارکنان تحقق اهداف سازمان را بر عهده افراد توانمند بگذارد. لزوم پرورش کارکنانی که دارای توانایی خود مدیریتی باشند باعث شده است تا توانمندسازی نیروی انسانی به عنوان یک پارادایم جدید توجه بسیاری از صاحبان نظران مدیریت را به سوی خود جلب نماید. پژوهش حاضر به منظور بررسی میزان توانمندی کارکنان شرکت همیاران بوده که برای سنجش میزان توانمندی کارکنان از مدل «کانگر و کانگو» بهره گرفته شده است. روش تحقیق حاضر از نوع توصیفی و پیمایشی بوده و تعداد حجم نمونه برابر با 30 نفر که از جدول کرجسی و مورگان استفاده شده است. طبق آزمون آماری انجام یافته، مشخص گردیده که میزان توانمندی در سه معیار شرایط سازمانی، راهبرد مدیریتی و منابع خودکارآمدی طبق مدل کانگر و کانگو در این جامعه آماری به ترتیب برابر با 79/3 درصد، 85/7 درصد، 69/7 درصد می باشد که حاکی از وضعیت مطلوب این سازمان می باشد.

کلمات کلیدی: توانمندسازی، نیروی انسانی، شرایط سازمانی، بهره وری

مقدمه

پیتر دراگر معتقد است که عصر حاضر، عصر کارهای دانش بر است هرچند که با ارزشترین دارایی یک سازمان در گذشته ابزار تولید بود ولی دارایی اصلی سازمانها در عصر حاضر به نیروی انسانی آن سازمان به عنوان دانشگران هستند. لزوم پرورش کارکنانی که دارای توانایی خود مدیریتی باشند باعث شده تا توانمندسازی نیروی انسانی به عنوان یک پارادایم جدید توجه بسیاری از صاحبان نظران مدیریت را به سوی خود جلب نماید

کوبرگ بر این باور است که مدیران و کارکنان هر دو از مزایای توانمند سازی منتفع خواهند شد. توانمند سازی با پرورش احساس کفایت نفس و با بوجود آوردن آزادی عمل برای کارکنان این فرصت را بوجود خواهد آورد تا تواناییها و مهارتهای خود را بهبود و موجبات اثربخشی سازمان را فراهم نمایند، از سوی دیگر توانمند سازی با پرورش کارکنانی با انگیزه و توانا به مدیران امکان خواهد داد تا در برابر پویایی محیط رقابتی از خود عکس العمل سریعتر و مناسب تر نشان دهند (Koberg, 2003:46).

توانمندسازی

تعاریف مختلفی برای توانمندسازی نیروی انسانی از طرف صاحب نظران مختلف ارائه شده است. توانمند سازی کارکنان، عبارت است از مجموعه سیستمها، روشها و اقداماتی که از راه توسعه قابلیت و شایستگی افراد در جهت بهبود و افزایش بهره وری، بالندگی و رشد و شکوفایی سازمان و نیروی انسانی با در نظر گرفتن

توجه به هدفهای سازمان (Carter, 2001). توانمندسازی تنها به معنی اعطای قدرت به کارکنان و تفویض اختیار نیست؛ بلکه فرایندی است که به موجب آن کارکنان با فراگیری دانش، مهارت و انگیزه می توانند عملکردشان را بهبود بخشند، بنابراین توانمندسازی فرایندی است که از مدیریت عالی سازمان تا پایین ترین رده امتداد می یابد. (smith, 2005)

برای توانمندساختن نیروی انسانی در سازمانها مدل‌های مختلفی وجود دارد که در زیر به برخی از آنها اشاره می شود:

الف) مدل رابینز و کرینو و فرندال

بنا به اعتقاد این سه پژوهشگر، توانمندسازی به منزله یک محرک غریزی یا واکنش فرد در برابر یک محرک غریزی تعریف شده است، ولی در واقع توانمندسازی پذیرش یک طرح خاص است؛ پذیرش ساختار جدید شغل، انتقال قدرت، تفویض اختیار، مشارکت در اطلاعات و مشارکت در منابع. آنان معتقدند با تمرکز بر روی عوامل محیطی و عناصر فردی میتوان به بهترین حالت فرایند توانمندسازی، دست یافت.

اساسی ترین قدم در این فرایند خلق محیط‌های داخلی کار با بافت سازمانی وسیع است تا فرصتی برای به کارگیری تمام زمینه ها و جنبه های توانمندسازی ایجاد و انگیزه های لازم برای پیشبرد آن حاصل گردد (Robbins et al, 2002: 20).

ب) مدل باون و لاولر

باون و لاولر (1992) توانمندسازی را تنها نوعی راهبرد در سهم کردن هر چه بیشتر کارکنان در قدرت می دانند. در مدل او دسترسی به اطلاعات نقشی مهم در تصمیم گیری ایفا می کند که موجب توانمندی می شود این صاحب نظران عامل توانمندی را در چهار جزء سازمانی می دانند:

1. اطلاعات درباره عملکرد سازمان
2. پاداش بر مبنای عملکرد سازمانی
3. قدرت در اخذ تصمیمات موثر بر جهت سازمان
4. قدرت در اخذ تصمیمات موثر بر عملکرد سازمان (Bowen & Lawler: 1992).

ج) مدل مک لگان و نل

مک لگان و نل (1997) یک رویکرد چند بعدی در مورد توانمندسازی کارکنان ارائه کرده اند. به اعتقاد مک لگان افراد توانمند اختیارات و مسئولیت هایشان را به سطوح دیگر سازمان تفویض می کنند (Mclagan et al, 2000: 219).

د) مدل توانمندسازی گائو

مؤسسه گائو (2001) به نمایندگی از کمیته امور دولتی سنای امریکا، اقداماتی را که به توانمندسازی کارکنان منجر گردیده، اجرا کرد. این مؤسسه نتیجه مطالعات خود را در شش گام اساسی برای توانمندسازی کارکنان ارائه کرد و معتقد است توجه به توانمندسازی کارکنان و درگیرکردن آنان در امور اجرایی، تغییر را آسان تر می کند (GAO, 2001: 236).

ه) مدل مفهومی بلانچارد و همکارانش

مدل فوق یک رویکرد ارتباطی در غالب سه مرحله تواناسازی بشرح زیر است:

- 1- سهم شدن در اطلاعات با همه افراد سازمان
- 2- از طریق مرزبندی ها، خودمختاری به وجود آورد
- 3- تیم های خودگردان راجانشین سلسه مراتب قدیمی کنید (Blanchard, 2006).

و) مدل توماس و ولتوس

توماس و ولتوس چهار بعد از توانمندسازی روانی را در یک مدل مفهومی حاصل از یک پژوهش چنین مشخص کرده اند:

1. تاثیر Impact. 2. عزم شخصی Self – Determination. 3. شایستگی Competence. 4. معنا داشتن Meaning

منظور از تاثیر آن است که آیا انجام یک شغل یا وظیفه خاص تغییری در کل کار می آورد، هر قدر اعتقاد کارمندان بر این تاثیر بیشتر باشد، انگیزش بیشتری را احساس می کنند عزم شخصی یا انتخاب به معنای تعیین رفتار شخصی توسط خود فرد می باشد. مطابق این مدل افراد هر قدر فرصت بیشتری در انتخاب وظایفشان، چگونگی انجام کار و قبول مسئولیت نتایج کار داشته باشند، احساس توانمندی بیشتر می کنند بعد سوم شایستگی است برای آنکه توانمند شدن ممکن شود افرادی که کار به آنها واگذار می شود باید مهارتها، دانش، تجربه و سایر توانمندیهایی که برای حرکت با اعتماد به سمت جلو لازم است را داشته باشد. در نهایت با معنا بودن کار نوعی حیاتی و مهم است. این بعد به ارزش شغل یا وظیفه در ارتباط با عقاید، ایده ها و استانداردهای شخصی بستگی دارد.

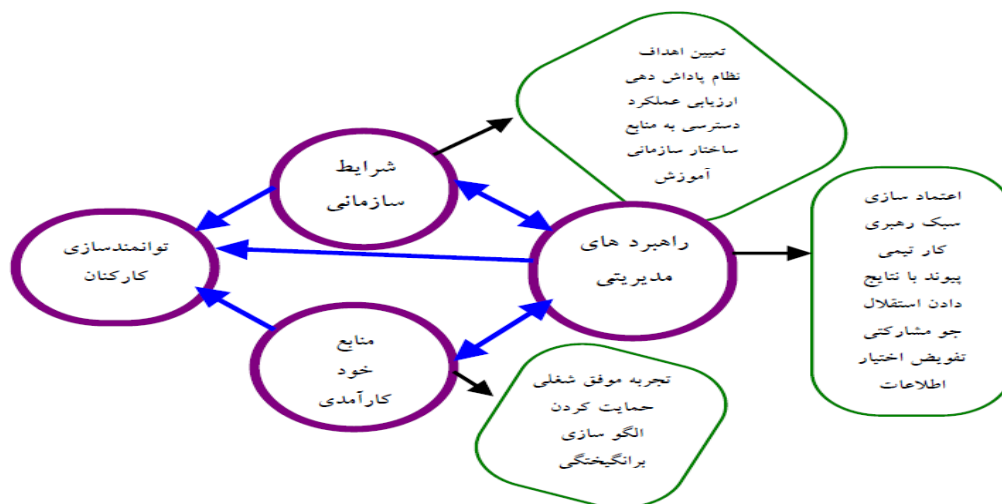
ز) مدل آلفرد باندورا

باندورا اعتقادات خود اثر بخشی و نقش آنرا در احساس توانمندی شخصی مفهوم سازی کرده است. حاصل پژوهش وی معرفی مدل با چهار عنصر به این شرح می باشد:

1. استفاده از حمایت احساسی مثبت در فشارها و هیجانات کاری
2. استفاده از ترغیب و تشویق مثبت
3. داشتن مدل از افراد موفق که اعضاء آنها را می شناسند
4. تحقیق تجارب واقعی از تسلط در انجام موفق کارها (تجربه موفق) (Alferedo Bandro,2004)

ط) مدل تحلیلی کانگر و کانگو

کانگرو کانگو در این مدل فرایند توانمند سازی به عنوان متغیر وابسته، متأثر از سه دسته از عوامل: راهبردهای مدیریتی، شرایط محیط سازمانی، منابع خود کارآمدی، راهبردهای مدیریتی است و همه این عوامل بر روی فرایند توانمند سازی موثر هستند. نمودار شماره 1 مدل توانمند سازی کانگرو کانگو



کانگر و کانگو دلایل زیر را برای ضرورت توانمند سازی مطرح می کنند. الف) تجارب مدیریتی نشان می دهد که توانمند سازی زیر دستان بخش مهمی از اثر بخشی سازمانی و مدیریتی است.

ب) تجربیات تشکیل گروه در سازمانها دلالت بر این دارد که استراتژی های توانمند سازی کارکنان نقش مهمی در ایجاد و بقاء گروه دارد.

تجزیه و تحلیل قدرت و کنترل در سازمانها دلالت بر این دارد که مشارکت کارکنان در قدرت و کنترل اثر بخشی سازمان را افزایش می دهد (عبداللهی و نوباوه، 1389).

دلایل دیگری نیز در خصوص اهمیت توانمند سازی کارکنان مطرح شده است (امیر کبیری، 1389) که به شرح ذیل می باشد:

الف- تحولات در فناوری داده پردازی یا اطلاعات، تحول در سیستم های اطلاعات مدیریتی و فناوری اطلاعات و کاربری رایانه

می شود افراد در سازمان توانمند شده باشند.

ب- رقابت فرایند و نتیجه آن افزایش ضرورت پاسخ گویی به تقاضای مشتری

ت- ساختار پرسنلی که سطح آموزش و انتظاراتشان افزایش یافته است.

ج- به طور کلی در سطح اجتماعی و به طور ویژه افزایش میل و تمایلات دموکراتیک شدن

د- نمایان شدن دانش و عنصر انسانی به عنوان مهمترین منبع مزیت رقابتی سازمانها

تا کنون مدل های مختلفی توسط صاحب نظران برای توانمند سازی ارائه شده است، همچون مدل توماس و ولتهوس و مدل بلانچارد، مدل آلفرد باندورا، مدل توانمندسازی گائو، مدل توانمندسازی مگ لاگان ونلو و ... همه این مدلها به نوعی برای بررسی فرایند توانمند سازی مطرح شده اند. در این پژوهش از مدل کانگرو کانگو جهت تجزیه و تحلیل استفاده شده است. در این مدل فرایند توانمند سازی به عنوان متغیر وابسته،

متاثر از سه دسته از عوامل: راهبردهای مدیریتی، شرایط محیط سازمانی، منابع خود کارآمدی (که هر کدام از این عوامل به عنوان یک متغیر مستقل در نظر گرفته شده اند که این متغیرهای مستقل نیز به نوبه خود توسط شاخص هایی مشخص می شوند. در این مدل راهبردهای مدیریتی نه تنها به عنوان متغیر مستقل مستقیماً بر روی توانمند سازی تاثیر دارد بلکه با تاثیر گذاری روی دو متغیر مستقل دیگر) شرایط سازمانی- منابع خود کارآمدی بر روی فرایند توانمند سازی نیز تاثیر می گذارد.

جامعه آماری پژوهش حاضر شامل کلیه کارکنان و مدیران شرکت یاران می باشد که در سال 1389 تعداد آنان 34 نفر برآورد گردیده است. در واقع محدوده جامعه آماری بررسی حاضر کلیه کارکنان شرکت یاران ساختار می باشد.

جهت تعیین حجم نمونه از جدول کرسی و مورگان استفاده شد و به تعداد 30 نفر، روش نمونه گیری به صورت تصادفی می باشد بعد از مشخص کردن جامعه آماری به کلیه کارکنان و مدیران شرکت پرسشنامه سنجش میزان توانمندسازی کارکنان با استفاده از مدل کانگر و کانگو جهت پاسخگویی داده شد.

عبارت سؤالات مربوط به سازه ها از طریق روش تعیین اعتبار محتوایی و با راهنمایی ها و نظرات استاد راهنما و مشاور تعیین شد و جهت سنجش پایایی و قابلیت اطمینان پرسشنامه از ضریب آلفای کرونباخ استفاده گردیده است. محاسبه ضریب آلفای کرونباخ برای پرسشنامه مربوط به تعیین توانمندسازی به شرح ذیل می باشد:

$$\rho = \frac{K}{K-1} \left[1 - \frac{\sum si}{\sum sum^2} \right]$$

ρ = ضریب آلفای کرونباخ

k = تعداد سوالات پرسشنامه

si = واریانس سوال i ام

sum^2 = جمع واریانس مجموعه سواها

در این تحقیق کلیه مراحل محاسبه توسط نرم افزار 16 spss انجام شده است و مقدار آلفای کرونباخ برای پرسشنامه سنجش توانمندی به صورت زیر می باشد: جدول شماره (2-3): جدول مربوط به پایایی متغیرها

ردیف	متغیر	آلفای کرونباخ
1	شرایط سازمانی	0/83
2	راهبردهای مدیریتی	0/91
3	منابع خودکارآمدی	0/92
4	توانمندسازی	0/87

بر اساس اطلاعات فوق با توجه به اینکه ضریب آلفای کرونباخ در هر کدام از متغیرها بیشتر از 0/67 می باشد پس بیانگر پایا بودن پرسشنامه است تحقیق حاضر از نظر کنترل شرایط پژوهش یک بررسی پیمایشی از نوع همبستگی است. روش گردآوری داده ها نیز با استفاده از ابزار اندازه گیری پرسشنامه با طیف لیکرت می باشد.

متغیرهای تحقیق

متغیر وابسته:

توانمند سازی نیروی انسانی (Empowerment):

توانمند سازی یعنی ایجاد ظرفیتهای لازم برای قادر ساختن کارکنان به ایجاد ارزش افزوده در سازمان، کارایی، اثربخشی و ایفای نقش و مسئولیتی که در سازمان به عهده دارند

متغیرهای مستقل:

- 1) شرایط محیط سازمانی:
- شرایط و عوامل سازمانی از قبیل مولفه های نظام پاداش دهی بر مبنای عملکرد، تعیین اهداف، ارزیابی عملکرد، ساختار سازمانی، آموزش کارکنان و حمایت کارکنان
- 2) راهبردهای مدیریتی:

اقدامات و رفتارهای مدیریتی نظیر؛ فراهم نمودن اطلاعات، تفویض اختیار، مشارکت در تصمیم گیری، کار تیمی، تعامل با مشتریان، اعتماد سازی، سبک رهبری مناسب، سهیم و شریک نمودن کارکنان در فعالیتهای سازمانی، انتقال قدرت تصمیم گیری به کارکنان به عنوان شکل دهنده راهبردهای مدیریتی در سازمان هستند .
(3) منابع خودکارآمدی:

به باورها و قضاوتهای فرد به تواناییهای خود در انجام وظایف محوله منابع خودکارآمدی گفته می شود که متشکل از چهار مولفه برانگیختگی هیجانی، تجربه موفق شغلی، الگوسازی مناسب جهت مقایسه و حمایت و ترغیب می باشد.

تجزیه و تحلیل داده ها

تجزیه و تحلیل داده ها با استفاده از نرم افزار آماری spss 1 نسخه 16 انجام شده است به طوری که برای توصیف صفات کیفی به محاسبه درصد و توزیع فراوانی و برای توصیف صفات کمی به محاسبه شاخصهای مرکزی و پراکنندگی پرداخته ایم. در نهایت برای آزمون روابط متغیرها از تحلیل رگرسیون خطی، استفاده شده است.

فرضیه اول : شرایط سازمانی بر میزان توانمندسازی کارکنان شرکت یاران ساختار تاثیر دارد.

ابتدا فرض آماری به صورت زیر نوشته می شود:

H0: شرایط سازمانی بر میزان توانمندسازی تاثیر ندارد.

H1: شرایط سازمانی بر میزان توانمندسازی تاثیر دارد.

مدل رگرسیون خطی ساده ی میزان توانمندسازی بر حسب شرایط سازمانی آنان برازش گردید نتایج در جدول (1-4) نشان داده شده است.

جدول شماره (1-4): برآورد رگرسیون خطی میزان توانمندسازی بر حسب شرایط سازمانی

متغیرها	ضرایب استاندارد		ضرایب بتا	آماره t	سطح معنی داری
	شیب خط	اشتباه			
مقدار ثابت	-1.931	2.329		-0.829	0.414
شرایط سازمانی	0.369	0.040	0.868	9.270	,000

مطابق جدول (1-4) ملاحظه می گردد سطح معنی داری برای فرض صفر بودن شیب خط (ضریب شرایط سازمانی در مدل رگرسیون) برابر 0.000 است و کمتر از 0/05 است پس فرض صفر بودن شیب خط جامعه رد می شود به عبارتی فرضیه **H0** رد شده و فرضیه **H1** قبول می گردد. یعنی بین توانمندسازی و شرایط سازمانی رابطه وجود دارد حال با توجه به شیب خط که مساوی 0.369 است نشان دهنده رابطه مستقیم دو متغیر می باشد و مقدار $r = 0.868$ و ضریب تعیین مدل رگرسیون برابر $(r^2 = 0.753)$ است یعنی 75/3 درصد از توانمندسازی از متغیر مستقل شرایط سازمانی می باشد.

فرضیه دوم: راهبردهای مدیریتی بر میزان توانمندسازی کارکنان تاثیر دارد. ابتدا فرض آماری به صورت زیر نوشته می شود:

H0: راهبردهای مدیریتی بر میزان توانمندسازی کارکنان تاثیر ندارد.

H1: راهبردهای مدیریتی بر میزان توانمندسازی کارکنان تاثیر دارد.

مدل رگرسیون خطی ساده ی میزان توانمندسازی بر حسب راهبردهای مدیریتی برازش گردید نتایج در جدول (2-4) نشان داده شده است.

جدول شماره (2-4): برآورد رگرسیون خطی میزان توانمندسازی بر حسب راهبردهای مدیریتی

متغیرها	ضرایب استاندارد نشده		ضرایب بتا	آماره t	سطح معنی داری
	شیب خط	اشتباه			

¹ - Statistical Package for Social Science

0.093	1.740		1.854	3.226	مقدار ثابت
0.000	11.961	0.915	0.032	0.379	راهبردهای

مطابق جدول (4-2) ملاحظه می گردد سطح معنی داری برای فرض صفر بودن شیب خط (ضریب راهبردهای مدیریتی در مدل رگرسیون) برابر 0.000 است پس فرض صفر بودن شیب خط جامعه رد می شود و چون شیب خط مساوی 0/379 است که نشان دهنده رابطه مستقیم دو متغیر می باشد و مقدار $r = 0/915$ و ضریب تعیین مدل رگرسیون برابر ($r^2 = 0/837$) است یعنی 83/7 درصد از توانمندسازی ناشی از متغیر مستقل راهبردهای مدیریتی می باشد.

فرضیه سوم: منابع خود کارآمدی بر میزان توانمندسازی تاثیر دارد. ابتدا فرض آماری به صورت زیر نوشته می شود:

H0: منابع خود کارآمدی بر میزان توانمندسازی تاثیر ندارد.

H1: منابع خود کارآمدی بر میزان توانمندسازی تاثیر دارد.

مدل رگرسیون خطی ساده ی میزان توانمندسازی بر حسب منابع خودکارآمدی برازش گردید نتایج در جدول (4-3) نشان داده شده است.

جدول شماره (4-3): برآورد رگرسیون خطی میزان توانمندسازی بر حسب منابع خود کارآمدی

متغیرها	ضرایب استاندارد نشده		ضرایب	آماره t	سطح معنی داری
	شیب خط	اشتباه			
مقدار ثابت	0.798	1.991		0.401	0.691
خودکارآمدی	0.220	0.034	0.773	6.448	0.000

مطابق جدول (4-3) ملاحظه می گردد سطح معنی داری برای فرض صفر بودن شیب خط (ضریب منابع خودکارآمدی در مدل رگرسیون) برابر 0.000 است پس فرض صفر بودن شیب خط جامعه رد می شود و چون شیب خط مساوی 0/220 است که نشان دهنده رابطه مستقیم دو متغیر می باشد و مقدار $r = 0/773$ و ضریب تعیین مدل رگرسیون برابر ($r^2 = 0/597$) است یعنی 59/7 درصد از توانمندسازی ناشی از متغیر مستقل منابع خودکارآمدی می باشد.

نتیجه گیری

نتایج حاصل از این تحقیق تاثیر سه عامل شرایط سازمانی، راهبردهای مدیریتی و خودکارآمدی را بر توانمندسازی کاملاً آشکار می کند و هر سه عامل رابطه مستقیمی یا توانمندی منابع انسانی دارند.

منابع و مآخذ:

امیرکبیری، حسین (1389). پایان نامه کارشناسی ارشد رشته مدیریت اجرایی. دانشکده مدیریت دانشگاه سازمان مدیریت صنعتی تبریز.

عبدالهی، مجید و نوباوه، احمد (1389). چابکی سازمان در برابر تغییرات متداوم جهانی، هفتمین کنفرانس بین المللی هند، دهلی.

Alfered Bandro, P.E., (2004). Interactive effects of perceived control and job stressors on affective reactions and health outcomes for clerical workers. *Work and stress*, 2,155-162.

Blanchard , R.M., & Kenny , D.A.(2006) . the moderator – mediator variable distinction in social psychological research : conceptual , strategic , and statistical considerations . *Journal of*

- personality and social psychology, 51(6), 1173-1182.
- Bowen, D.J., & Lawler, D.C.(1992) . The effects of job demands and control on employee attendance and satisfaction . Journal of Organizational Behavior, 12 (4, 598-608).
- Carter, T. (2001). repetitive work. in: Cooper, C. L. and Payne, R(Eds) Current Concerns in Occupational Stress, Wiley, Chichester, U.K.
- Coberg , A.B. Demerouti, E., Taris, T., Schaufeli, W. B. & Schreurs, (2003). A multi – group analysis of the job demands- resources model in four home care organizations, International Journal of Stress Management,.10, 16-38.
- GAO, D.C., & Fusilier , M.R.(2001) . Control in the workplace . in C.I., Cooper & I.Roberston (Eds.) , international review of industrial and organizational psychology (pp.235-280) . chi Chester: Wiley .
- Mclagan, S., Spector, P. E., & Kelloway, E. K., (2000), Using the Job-related Affective Well-being Scale (JAWS) to investigate affective responses to work stressors. Journal of Occupational Health Psychology,5,219-230.
- Robbins, J., Eby, L., & Sundstrom, E. (2002). Team based rewards : Current empirical evidence and directions for future research . Research on Organizational Behavior, 20, 141-183.
- Smith, R. P. (2005). Boredom: A review. Human Factors. 23, 329-340.
- Tomas, S.Y.& Voltos, J.L.(2005). Effects of control over office workspace on perceptions of the work environment and work outcomes . Journal of Environmental Psychology , 25,323-333
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Study the effective factors on non-oil exports growth of Iran

Keywords: Non-oil exports, GDP, Iran, ARDL

INTRODUCTION

Foreign trade is one of the major issues in economic development of each country. This sector's task is to provide foreign exchange revenues for investment and absorption of new technology to increase the country's production capacity. One of the major problems of developing countries is their government reliance on income obtained from export of limited amount of goods and, Iran's dependency on foreign exchange earnings from its oil exports has been the main point. Oil revenues fluctuation, in recent years, caused the economic planning to face with serious crisis . Thus, reducing oil revenues dependency and the harmful effects of oil price fluctuations appeared in the economy highlighted the importance of non-oil exports development. Since, the planning process in Iranian economy, according to its talents and economic potentialities did not have desirable results in recent years, a serious revision in the prevailing economic problems and hard efforts are required in the economic area. Among the most important requirements of economic attempt are; social capitals and people's contribution in science and technology advancement and more and better products on one hand, and decrease in the dependency on imports and consumption of foreign goods on the other hand. The main point in economic

At this paper's lead author's request, editorial correction of written English was restricted. Remaining errors are the authors'.

attempt is to transform consumption approach into production and employment approach which requires recognition of their resources and enhancement of their productivity. In this regard, the present study tried to investigate the effect of internal factors, including value added in non-oil sector and price index in Iran's economy on non-oil exports and, their short run and long run effects were specified too. Since industrial revolution, foreign trade has been the most important economic issue of the world. After World War II, economists had regard to the economic growth and development and the relationship between economic growth and exports became very important. Many researchers, reached believed that rise in exports would lead to an increase in economic growth. Studies of Michael, Balasa, Tyler and others indicated that export growth would increase the GDP growth rate. In contrast, another group believed that export might not be considered as an economic growth engine, because a country should reach to such an economic growth level to become capable of exporting industrial goods.

Analysis of the relationship between exports and economic growth is based on exports growth hypothesis. Under these assumptions, the export activity will lead to economic growth (Reppas and chirstopoulos, 2005). Theoretical discussion suggests that an increase in exports demand encourages privatization of an export sector and reallocation of resources from non-trade sectors with less efficiency to the trade sector of export with less productivity, which ultimately increases the productivity and production growth. It is particularly believed that higher exports increase access to advanced technologies and skills, training and experience-based learning, management techniques and economic activities and encourage entrepreneurs to solve problems related to foreign exchange.

The above argument was certainly criticized. Prebysh (1962) believed that hypothesis of export growth was not sustainable and, because of inefficient exchange rate and demand for the products of least developed countries, it became worse. The opponents of above mentioned hypothesis argued that economic growth was another factor which was far more important than exports (ibid). Experiments indicated that most developing countries exports were raw materials and no significant relationship between sustainable economic growth and their export was perceived. Hozhabr Kiani and Hassanvand (1998), in their study concluded that non-oil exports would reduce GDP growth. Above mentioned authors believed that Iran's economic growth was an obstacle to its export growth, due to its increased domestic demands. Finally, it was argued that the increased production and exports would expand production and increase export levels. In other words, causality between exports and economic growth would be bilateral (Esmaeili and Hassanpour Kashani, 2007).

Development of export caused rise in earnings and, while unused capacity or unemployment existed, economies of scale and improving production method resulted in enhancement of employment, efficiency, productivity of factors of production and employment. Thus, increased production and exports, not only did not raise domestic prices, however, it increased efficiency, economies of scale and improved production techniques, expanded domestic products, and decreased prices of domestically produced goods (Nazemi, 2009).

Hasanov and Samadova (2010) studied the effect of real exchange rate on exports of Azerbaijan during 2002 - 2009, quarterly. The effect of real exchange rate and non-oil real GDP difference equation on non-oil exports were studied, using error correction method. The results indicated that there were statistically a significant correlation between non-oil exports, non-oil GDP and the real effective exchange rate.

Saadiah and et al. (2009) investigated the roles of real exchange rate, macroeconomic stability, foreign demand and human capital on Indonesia, Malaysia, Singapore and Thailand exports,

using panel data methods. The results indicated a negative impact of real exchange rate and its fluctuation on exports.

Ahmed and Shoaib (2009) studied the effect of exchange rate instability on bilateral export growth, using vector error correction method. The results indicated that exchange rate instability had negative and enormous effect on bilateral export growth in short and long runs. Sabouhi and piri (2008) investigated the effect of exchange rate instability on the prices of agricultural products exports. Therefore, the effect of exchange rate fluctuations on Iran's saffron price was studied, using the ARDL approach. The results indicated that exchange rate fluctuations affected saffron export price in long run more than other factors including the level of domestic production of saffron and its export volume.

Homayounifar and Rastegari (2008) in a study investigated the effects of some factors including the real exchange rate, per capita income, population, consumer price index on Iran's non-oil exports during period 1995 - 2005 and the results indicated that there were a negative relationship between non-oil exports of Iran and real exchange rate and a positive relationship between real exchange rate and other explanatory variables, such as consumer price of exports index, respectively.

Egert and Morales (2005) estimated export functions of eastern and central European countries which were in transition period by panel data and ARDL method during 1990-2005. The results indicated the domestic and foreign earnings, foreign direct investment, relative prices and nominal exchange rate affected nominal exports, and also, the real exchange rate affected real exports.

Ehsani and et al. (2009) had investigated the effect of exchange rate instability on exports of Iran. In this study, using Johansen - Juselius method and ARDL positive effect of exchange rate instability and its negative effects on exports of Iran during the period 83-1338 have been approved. GDP and the logarithm of the ratio of export prices to domestic prices had significant positive impact, but domestic demand had negative and significant effect tradable goods supply.

Abrishami and et al. (2009) studied the impact of globalization, the price related factors and non-price related factors on non-oil exports of Iran, using GMDH neural networks as a tool with high capability in tracking and identifying complex nonlinear processes. The results indicated that the indices of globalization, global revenue growth and growth in capital goods imports and real exchange rate and export prices relative to the systemic effects of exogenous variables on the non-oil exports had far more effects than other variables, especially within system variables such as inflation, oil revenue, exchange rate, real output and productivity have grown while the actual production within the system as the most important factor, plays a decisive role in the growth of exports.

Karami and zibaei (2008) studied the effect of exchange rate volatility exports of agricultural products. In this study, supply of Iranian pistachio and dates exports has been investigated using the ARDL approach, during 1971-2001. These results indicated that exchange rate volatility had different effects, related to exports of different products and to various countries which are mostly commercial parties of Iran. That exchange rate volatility had a positive effect on pistachio exports to Italy and England and had a negative effect on export of dates to Britain and Germany. The effects of trade policies and regulations and consumer tastes and marketing services made in these country depended on the desired products.

Shakeri (2004) in a study surveyed the role of factors affecting price and non-oil factors as a basis for non-oil exports of Iran and for this purpose ARDL technique has been used during

1961-2001. The results of the model estimation showed that non-oil exports were dependent to the basis variables of productivity and competitiveness, although the price variables of the exchange rate had a positive effect on exports, but this effect was not significant and determinant.

Taghavi and Nematizadeh (2004) to investigate the effect of macroeconomic variables such as exchange rate, inflation rate, real GDP on exports paid during 1971-2001. They used VAR method and finally showed that GDP and exchange rates have a direct effect on non-oil exports, and inflation has a positive effect on non-oil exports, while this effect was not significant (in other words, the effect of inflation rate on exports is inert). Furthermore, prediction of 1381-91 years and results indicated that gross national product has no effect on exports in long-run. Fathi (1998) using simultaneous equations, surveyed exchange rate elasticity of non-oil exports and results of research entailed to accept the hypothesis that changes in the exchange rate elasticity of non-oil exports is larger than the unit.

In the next section, using the theoretical model presented and the results of the estimation model are studied and interpreted. The final section presented the conclusion and recommendations. In the next section, using the theoretical model presented and the results of the estimation model are studied and interpreted. The final section presents the conclusion and recommendations.

MODEL AND ESTIMATION

In the present study to estimate the effect of the gross national product price index of non-oil sector on non-oil exports of Iran Samadova Hasanov (2010) model was applied. Mentioned model was used because Azarbayjan's dependency on oil revenue is similar to Iran's reliance on oil revenues. The model is specified as follows:

$$X = f(Z, CPI, RER)$$

Where, Z represents real gross domestic product, after deduction of real net exports of non-oil sector, CPI, consumer price index of goods and services at the base year price of 1997 and the real exchange rate, RER, Real exchange rate was calculated multiplying nominal exchange rate by the ratio of domestic retail price index to retail price of foreign countries (as of Ehsani et al, 2009). According to theory and experimental foundations, other variables such as human capital, net foreign direct investment and domestic demand were also studied in the model. However, the model was eventually as mentioned above. Also, some variables used in short run estimation of the model applied lags of 1 or 2 time periods.

The optimal estimates of the ARDL approach and cointegration analysis are unbiased and efficient and prevented because of problems that may occur in the presence of correlation, (Karami and Zibaei, p 64). The ARDL approach to estimate long-term relationship of the two-stage method can be used as follows:

Firstly, a long-term relationship between studied variables was tested. For these purposes dynamic ARDL model is estimated. The convergence test required for the following hypothesis test was performed:

$$H_0 : \sum_{i=1}^m \beta_i - 1 > 0$$
$$H_1 : \sum_{i=1}^m \beta_i - 1 < 0$$

Quantity needed to perform the above test statistic t is calculated as follows:

$$t = \frac{\sum_{i=1}^m \hat{\beta}_i - 1}{\sum_{i=1}^m S\hat{\beta}_i}$$

After confirming long run relationship between variables, their long run relationship was estimated. Moreover, determination of optimal lag numbers of explanatory variables was completed by one of each Akaike Information(AIC), Schwarz Bayesian (SBC), Hannan- Quinn criterion (HQC), or was characterized by R² (Noferesty, 1999).

The classical assumptions of static variables and test results to estimate dynamic ARDL (1, 2, 5) model by Schwarz Bayesian criterion and the maximum number of lags of variables was shown in Table 1.

Also according to distinction tests, error term, because of cointegration, its functional form, the normality of distribution and homogeneity of variance all classic conditions was accomplished. The quantity t was calculated on the stated formula basis:

$$t = \frac{0 / 684 - 1}{0 / 10359} = -3 / 050$$

It's absolute value was larger than the critical quantity offered by Banerjee, Dolado and Master at 97.5 percent confidence interval, and therefore long-run equilibrium relationship between the variables exists. According to the table 1, one percent increase in non-oil exports would increase exports by 0.68% next year. One percent increase in non-oil GDP increased that year's non-oil export by 59/1 per cent, yet this influence was indirect over time (by two lags). The effect of price index and real exchange rate on exports was positive and significant. The results were often as expected.

Table 1 Results of estimating the dynamic model ARDL (1, 2, 5)

Variable	Coefficient	SD	T-statistics	Prob
X(-1)	684/0	103/0	912/6	000/0
Z	598/1	426/0	743/3	001/0
Z(-1)	366/0-	604/0	607/0-	549/0
Z(-2)	120/1-	449/0	491/2-	019/0
CPI	690/2	206/1	234/2	034/0
RER	360/1	543/0	502/2	019/0
$R^2 = 0/91$, $R^{-2} = 0/89$, $D.W = 1/59$, $F(5,26) = 53/91[0000]$				

The researchers calculated based software

Table 2 Results of model estimates long-term pattern

Variable	Coefficient	SD	T-statistics	Prob
dz	598/1	426/0	743/3	001/0
dz(1)	120/1	449/0	491/2	019/0
dcpI	120/2	038/0	234/2	034/0
dRER	690/2	206/1	502/2	019/0
(-1)ecm	315/0-	103/0	40/3-	005/0
$R^2 = 0/56$, $D.W = 1/59$, $F(4,27) = 8/546[0000]$				

The researchers calculated the model

According to economic theories, inflation has reverse effect on exports whereas in this study, the CPI had positive sign. However, other experimental studies such as Zibaei and Nematizadeh (2004), Homayounifar, Rastegari (2008) also obtained similar results. Point should be paid to it, this is .Point should be paid to it, this is where the government's economic policies manage the exchange rate , More pressure on themselves to make that official devaluations not explicitly It as the uncontrolled increase in prices of raw materials and the materials will be made. So part of the swelling is due to normal inflation in most economies in the world there is good and other parts of the ambiguity associated with the exchange rate has real value. Other strategies to increase the GDP and the real exchange rate, it also offers investment and increase their total exports will increase and subsequent decrease swelling. The results of estimated long run relation in the model (2) are attached.

Based on the results of real non-oil GDP in the short term, have a positive effect on exports, but over time the impact is negative. While on the table 2 and long-term results, the variable has no significant effect on exports. The positive and significant coefficient of non-oil real gross national product, this is consistent with the policies of economic growth and production of non-oil sectors in the economy of the country's export policies have been developed. In other words, in this case, the goals that they pursue economic growth, natural growth of exports also are offered. In such circumstances, policy-makers with the aim of developing non-oil exports, the country can strengthen the foundations of economic growth to accelerate and presence in international markets and increase exports to earn more foreign exchange resources. So the impact on exports of non-oil GDP is positive, non-oil sectors of the economy also means that policies for export promotion policies are not country.

The long-term results of the real exchange rate and had a significant positive effect on non-oil exports devaluation that could be a policy *to encourage non-oil exports*. *But since the devaluations, rising inflation, this policy issued a limited supply*. However, based on experimental studies, including study of karami and Zibaei (2008) exchange rate and naturally, the subsequent increase in domestic prices with export of various products and in connection with various major business parties that are Iran, which has different effects so that the effect of policies and laws related to commercial and consumer tastes in these countries the marketing of services had taken place on the desired products. Error correction model was studied in the model estimation results was attached in Table (3).

The coefficient of error correction -0.31 which indicates that this coefficient is negative and significant which in every period of about 0.3 exports of short-term imbalances, to achieve long-term balance is adjusted, the other takes about 3 years and 4 months of short-term imbalances are resolved.

The structural stability tests based on cumulative sum of residuals (CUSUM) and cumulative sum of squared residuals (CUSUMSQ) that reflect the stability of the coefficients are estimated over the period studied, If the cumulative residual or cumulative squared residual between the two is a straight line, the null hypothesis is accepted that the lack of structural failure (Tashkini, 2005). Graphs 1 and 2 are joined so as to confirm the structural stability.

CONCLUSIONS AND SUGGESTIONS

The purpose of this study was to investigate the effective factors on Iran's exports increase. Given serious problems related to employment, production, technology, public welfare and national income which Iran's economy faced with, issues of gross domestic product growth and

non-oil exports development were important, and when these aims were achieved, the problems of recession and unemployment would be eliminated. The important point was that medium or long run production and required planning should be considered to improve working conditions, thinking and patience for future prosperity.

In this study to investigate factors caused in rise of non-oil exports of Iran during 1974- 2004 period. To evaluate short-run and long-run relationship between exports and other explanatory variables in the model, ARDL method was used. The results indicated that the real exchange rate and price indices had positive and significant effect on exports of Iran in the short and long run, while non-oil sector's real gross national product in the short run had a significant and positive effect on non-oil exports and after differencing by two time lags, negative effect was indicated and in the long-run real gross national product had no effect on exports of non-oil sector. Also, this result was obtained by using the error correction model in which about 0.3 of short-term imbalances is adjusted, to achieve long run balance.

In fact, the coefficient of non-oil real gross national product was positive and significant, this implied that economic growth policies were consistent with non-oil production sectors in the economy and also with export development policies however, this has been disregarded during time. The real exchange rate in short run and long run had positive and significant impact on exports while economic policies in order to manage exchange rate, had caused explicitly greater pressure on devaluations and the results was rise in prices and inflation. So part of the price rise was due to normal inflation which was useful, the other part was due to ambiguity in its connection with the real exchange rate. Finally, it might be concluded that the effect of different variables on policies depended upon the business rules and consumer tastes and the countries which were the major trade parties of Iran and the marketing services that had taken place on the desired products.

Therefore, it is proposed that economic authorities in order to strengthen international communications, to improve and to expand their tourism industry, and to develop their long-run political and economic relations with other countries should consider short-run and long-run planning based on national product improvement and cultural promotions.

RESOURCES

- Abrishami, H., Gorji, E., Ahrari, M., and Najafian, F., (2009), The Effects of Globalization on Non- Oil Exports of Iran, Quarterly Journal of Commercial Researches, No. 51, Summer, pp. 24-1
- Admed, Md.S., Shoaib (2009), "An Empirical study on Exchange Rate Volatility and its Impacts on Bilateral Export Growth: Evidence from Bangladesh", ASA University Bangladesh, MPRA paper No. 19855, post 24.
- Alam, R. (2010), "The Link between Real Exchange Rate and Export Earnings: A Cointegration and Granger Causality Analysis on Bangladesh", International Review of Business Research papers vol.6, No.1, February.
- Egert, B. and Morales –zumaquero, A. (2005), "Exchange Rate Regimes, Foreign Exchange volatility and Export performance in Central and Eastern Europe", Focus on European Economic Integration, Oesterreichische National bank, Vienna.
- Ehsani, M., Abbasi, J., Khanalypour, A., (2009), The Effect of Exchange Rate Volatility on Non-Oil Exports of Iran, Journal of Economic Sciences, 9th year, No. 1 (32), Spring, pp. 34-1
- Esmaeili, A., Hassanpour Kashani, S., (2007), Investigate the Relationship between Exports and Economic Growth with the Emphasis on the Agricultural Sector: Application of ARDL Pattern, Sixth Conference of Agricultural Economics on November 8 and 9.

- Fathi, Y. (1998), Study Exchange rate Elasticity of non-oil exports, Journal of Commercial researches, No. 8 Fall, PP. 60-27
- Gabriel, D.B. and Lewis, M. and Martin, A. (2007), "Assessing Competitiveness and Real Exchange Rate Misalignment in low-Income Countries", IMF Working paper.
- Hasanov, F. and Samadova, I. (2010), "The Impact of Real Exchange Rate on Non-Oil Exports: The case of Azerbaijan's, Institutions Transition Economics: Macroeconomic Issues E-journal, Available at: ssrc.com
- Homayounifar, M. and Rastegari, F. (2008), "Analysis of Economic – Political Factors Affecting Non Oil Export of Iran", IDOSI publications.
- Jalali Naini, A., Rezazadeh Mohammadi, M., (1996), Exports and Economic Growth, Journal of Commercial Researches, No. 1, pp. 36-6.
- Karami, A., and Zibaie, M., (2008), The Effects of Exchange rate volatility on Agricultural Exports in Different Countries, Economic Research Journal, Year VIII, Number III, Fall, pp. 71-59
- Kiani, H., Hassanvand, K., and D., (1998), Study the Growth of Exports and Economic Growth, Journal of Commerce, No. 7, PP. 24-1.
- Nazemi, F. (2009) "The Effect of Macroeconomic Variables on Exports", Journal of Technology Management, Year IV, Number 10, pp 117-105
- Noferesty, M. (1999), "Unit Root and Cointegration in Econometrics", Rasa Cultural Services Institute Publications, second edition.
- Pourmoghim, S.J. (2004), "The Optimal level of Non-oil Export: A Theoretical Proposal of Iran's Case", Iranian Economic Review, Vol, 9, No. 10, spring.
- Reppas, P.A, and Chirstopoulos, D.K. (2005), "The Export –Output Growth Nexus: Evidence from African and Asian Countries", Journal of Policy Modeling , v(27) : 929-940.
- Saadiah, M. and Mahendhiran, N. and Kamaruzaman, J. (2009), "Exchange Rates and Export Competitiveness in Selected ASEN Economies", International Business Research, Vol, 2. No.2.
- Sabuhi , sabuni M. and piri M. (2008), "Consideration the Effect of Exchange Rate volatility on Agricultural Products Export Price , the Case Study of Iran's Saffron" , IDOSI Publications , Americom – Eurasian J. Afric. Environ. Sci., 2 (supple): 97-100.
- Shakeri, A. (2004), The Determinant Factors Non-Oil Exports of Iran, Iranian Journal of Economic Studies, No. 21, Winter, pp. 50-23
- Taghavi, M., Nematizadeh, S., (2004), The Effect of Macroeconomic Variables on Exports in the Iranian Economy, Economic Journal, 4th Year, Number 3, 14, pp. 71-96.

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Micro-financing and Household Economics in an Emerging Capital Market

INTRODUCTION

Microfinance institutes increased rapidly in the countryside in the past decade. Many households in the communes have used loans from microfinance for various purposes especially in everyday life. However, there is a dearth of research that investigate the effects of microfinance on household economics. As such, this study was aimed at finding the positive and negative effects of microfinance on households that have accessed loans from microfinance. Accordingly, the hypothesis that was tested was 'Microfinance increased income and assets for households.'

Microfinance includes a variety of financial services such as deposit, credit service, money transfer and insurance provided to low income families (ADB, 2000). Microfinance is known as an important financial sector in the Asian economy and its purpose is to improve the financial capital of the households in the countryside (Fukui and Llanto, 2003). Microfinance plays a vital role in poverty reduction and social and economic development. The spread of micro-credit will enable an increase in living standards of households in the countryside (Diagne and Zeller, 2001).

Microfinance/micro-credit

Many studies have shown that microfinance is an effective tool in socio-economic development (Simanowitz *et al.*, 2000). Microfinance increase income (Irobi, 2008; Rahman *et al.*, 2009) assets (Hashemi and Riley, 1996) and productivity (Chea, 2004). Microfinance provides financial aid to strengthen households' businesses and solve the unemployment problem (Shastri, 2009; Shetty, 2006; Moll, 2005) and increase social and economic welfare for households (Datar *et al.*, 2008). Also, it helped the poor to have enough food to eat (Ghalid, 2009; Swope, 2005) and strengthen children's health status in the countryside (Pitt *et al.*, cited in Goldberg, 2005). Moreover, microfinance has provided schooling opportunity to children in the countryside and improved affordability of medical care (Rahman, 2000 as cited in Develtere and Huybrechts, 2002; Chea, 2004; Matovu, 2006). Another advantage of microfinance is, it increases the thinking capacity of households (Khan and Rahaman, 2007) and it especially strengthens women's status, reduces violence in families (Kim *et al.*, 2007; Esmail, 2008) and decreases disparity between men and women in the society (Ghalid, 2009). On the other hand, microfinance provided some disadvantages to borrowers. It was found that it is not the best way to help the poorest among the poor (Datta, 2004). While microfinance helps to increase profit of households' businesses (Tra Pham and Lensink, 2008) it also causes arguments (Aktaruzzaman and GuhaKhasnobis, 2006) and violence in the family (Ebdon, 1995).

METHODOLOGY

The study used a combination of quantitative and qualitative research tools. The structured interview (questionnaire) was used in collecting data from 30 households that have accessed credit service.

The questionnaires were tested and validated before they were formally used. Secondary data such as theses, dissertations, journals and reports were extracted from the internet to be used for comparing the results of research in other countries.

The sample size was decided by using Non-probability Sampling method, only the households that have used micro-credit from microfinance institutions were chosen. In addition, Purposive Sampling method was used to choose the location for the study and Simple Random Sampling method was used to choose the households from a list provided by the local authority for interview.

The collected data were coded and transferred into Ms Excel and SPSS program for analysis. The data were divided into two parts, qualitative and quantitative data. Descriptive and inferential statistics such as Time Series Regression, ANOVA, Gini coefficient, Graphic and Diagram were used in this study.

RESULTS AND DISCUSSION

Socioeconomics of Households

Among the respondents, 76% are women. The average age is 43 years and most of them are head of the family. On the average, there are 6 people per family. Most households have accessed primary school education (55%). The main job in most families is farming (76%) and they can earn an average of 2 to 6 million Riels per annum.

Most households have land ownership of 1,001m² to 2,500m² (54%) with the house size of $\geq 20\text{m}^2$ (43%). Most of the houses are made out of wood (74%), galvanized iron roofs (86%), wallings made out of leaves (59%) and wooden floors (48%). Also most families use battery for electricity (57%) and the main drinking water is from the well (49%).

Most of the families have 2 to 6 hectares (54%) of rice fields. People living in the two villages have unequal land ownership. The results showed 20% of households owning small land sizes consists of only 1% of the total land size, but 20% of household owning large land size comprises land size up to 59% of the total land. The Gini computation revealed that Gini value equals 0.5865; meaning there is a strong inequality between land owning. Through the years 2006, 2007 and 2008, the values of Gini were: 2006 = 0.5468, 2007 = 0.5488, and 2008 = 0.5544. The value of Gini increased year by year, this means that the distribution was spreading out among the families from 2006 to 2008.

The Need of Micro-Credit Use

There are six microfinance institutes operating in the respondent-communes. About 80% of households in the locality used the micro-credit facilities of microfinance institutions. Farmers always use credit for buying seeds, fertilizer and gasoline etc. According to local authority, majority of the households have used micro-credit effectively; however, the minority of households with unclear jobs faced problems with credit payment.

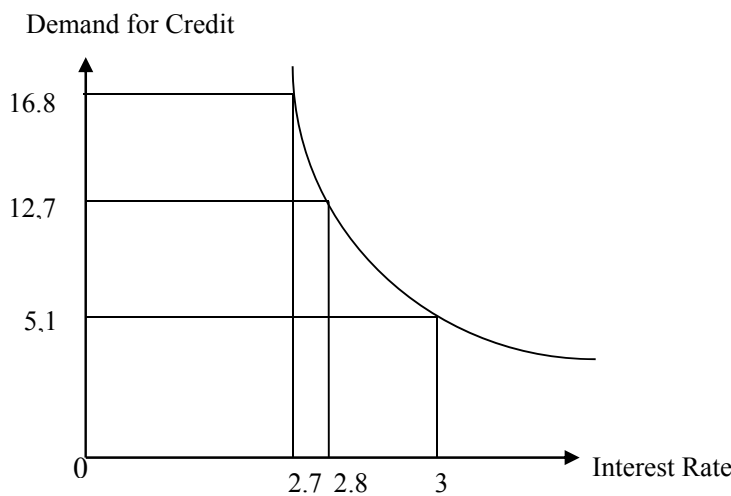
The microcredit from microfinance institutes has been accessed by households since 2004 and there was a large demand since 2007. The average interest rate was 3% in 2004; however, the

interest rate was decreased gradually in the following year up to 2.6 on average in 2011. Table 1 shows the changes in the interest rate

Table 1 Average Interest Rates of Microfinance Institutes

Year	Average Interest Rate
2007	3
2008	2.87
2009	2.87
2010	2.7
2011	2.6

Due to the decreasing interest rate, there was an increase in the use of credit. The demand curve of credit (Figure 1) shows there is an increase in credit demand when the interest rate is getting low. Obviously, when the interest rate given by microfinance institute was 3%, the demand of credit was US\$5,111; however, when the interest rate decreased to 2.7, there was a sharp increase in the amount of credit, from US\$5,111 to US\$16,817.



In general, most households borrowed below US\$750. The number of households using micro-credit has increased from year to year. The majority of households reported that they used to access the credit from microfinance institutes for more than once. On the average, most of the families borrowed less than or equal to 3 million Riels (82%).

Fig. 1 Demand curve of credit

The need for microfinance was found to increase every year (Table 2). According to Time Series Regression, microfinance has increased as shown by the following computation:

$$y = 2600.3x - 5212076$$

with Multiple R = 0.9594 and $R^2 = 0.9204$ (ANOVA: Significant level = 0.29* < 0.05).

Table 2: The need for microfinance

Year	x	Amount of Credit (Riels)	Amount of Credit (Dollars)
2004	1	1,380,000	337
2005	2	2,745,000	670
2006	3	8,040,000	1961
2007	4	20,955,000	5111
2008	5	52,440,000	12790
2009	6	53,640,000	13083
2010	7	56,650,000	13817
2011	8	66,770,000	16285

The need for using micro-credit increased as per the following computation: $Y = 2600.3X + 5212076$ ($R^2 = 0.9204$). The curve trend increased from 2004 to 2008 but it immediately

decreased from 2008 to 2009 and the trend has increased the following year up to 2011 as shown in Figure 2. Some economists attribute the decline to the 2008 global financial crisis which has caused many microfinance institutes using loans to change strategy, that is, the loan sizes were decreased and the loan for buying land was not allowed.

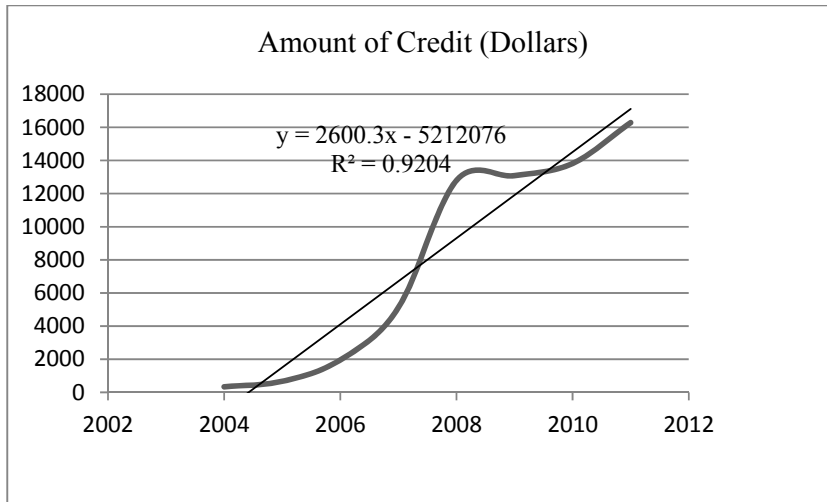


Fig. 2 Demand of micro-credit

Forecasting Credit Demand (2012-2015)

From regression equation $y = 2600.3x - 5212076$, $R^2 = 0.9204$ we can predict the amount of credit from 2012-2015 as follows which shows an increasing trend:

Table 3: Forecasting credit amount

Year (X)	Forecasting credit amount (US\$) (Y)
2012	19727.6
2013	22327.9
2014	24928.2
2015	27528.5

Income Elasticity Involved with Credit demand

$$E_{2010-2011} = \frac{\Delta Credit}{\Delta Income} \times \frac{Income_{2010\&2011}}{Credit_{2010\&2011}} = \frac{648 - 600}{552 - 515} \times \frac{552 + 515}{648 + 600} = 0.016$$

This result shows that the income is inelastic $\square < 1$, over the income range US\$ 515 to US\$ 552, each 1% increase in income cause about 0.016 percent caused by credits demanded.

Effect of Microfinance

Effect of microfinance on financial capital. The main job and sub job of households have changed (Table 4, Table 5). Many households have expanded their business and some have changed job, so that business activity has increased in this recent year. Moreover, from result analysis, the income have changed dramatically. Obviously, It resulted in a number of households having low income, whereas the high income households has increased (Table 6).

*Effect of Firm Size, Industry, and Time on Intellectual Capital Disclosure:
Evidence from the United Arab Emirates*

Table 4: Effect of Microfinance on Main job of households

Main-job	Households 2008(%)	Households 2009(%)	Households 2010(%)	Households 2011(%)
Farmers (rice producers)	74	77	78	79
Businessmen/women	3	6	6	6
Orchardmen/women	2	2	1	1
Fishermen	9	9	9	9
Commissioner	2	2	3	4
Service providers	10	4	3	1
Total	100	100	100	100

Table 5: Effect of Microfinance on Sub-job of households

Sub-job	Households 2008(%)	Households 2009(%)	Households 2010(%)	Households 2011(%)
Animal Raisers	11	17	18	24
Orchardmen/women	7	10	11	9
Fishermen	13	13	12	12
Businessmen/women	19	19	17	17
Commissioner	2	3	4	3
Service providers	27	28	30	29
Government officers	5	5	5	4
Farmers	-	-	1	1
Total	84	95	98	99

Table 6: Effect of Microfinance on households' income

Income (US\$1=Riels4000)	Households 2009(%)	Households 2010(%)	Households 2011(%)
>=1,000,000 Riels	2	1	2
1,000,001-4,000,000 Riels	37	35	29
4,000,001-7,000,000 Riels	29	28	26
7,000,001-10,000,000 Riels	14	11	15
10,000,001-13,000,000 Riels	4	8	8
Over 13,000,000 Riels	14	17	20
Total	100	100	100

Effect of microfinance on physical capital. By using Time Series Regression Analysis, the eight kinds of households' assets (TV, Handphone, Radio, VCD, Battery, Motorcycle, Bicycle and Hand tractor) showed that the number of those assets have increased and the trend of such an increase is related strongly with time (Table 7).

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Table 7: Effect of Microfinance on households' assets

Assets	Observations	Regression Analysis			
		Multiple R	R Square	Standard Error	Significant F
TV	12	0.9799	0.9603	3.7581	0.000***
Hand phone	6	0.9720	0.9448	4.0414	0.001**
Radio	6	0.9642	0.9297	2.6276	0.001**
VCD	7	0.9644	0.9300	1.9928	0.000***
Battery	9	0.9252	0.8560	9.3625	0.000***
Motorcycle	11	0.9054	0.8199	3.9171	0.000***
Bicycle	11	0.9774	0.9554	4.9441	0.000***
Hand tractor	11	0.9739	0.9485	2.2202	0.000***

Note: ns= Non-significant; *=Significant at 0.05; **=Strongly significant; ***=Very strongly significant

From the local authorities' observation, since microfinance has entered to serve the poor households, many households were able to have repairs in their houses as well as in some segments of the irrigation system in the communes/villages. Obviously, many leaf roofs have changed to GI sheet roofs. Moreover, by using loans, many households constructed clean restrooms that helped improve sanitation, hygiene and safety of households.

The hypothesis testing on income (ANOVA) showed that the average income of households increased to a significant level of 0.1% for the low income group from 2006 to 2008. Thus, the hypothesis was accepted. The increase in income is similar to results of studies in other countries which revealed that microfinance increased income (Rajat, 2007; ADB, 2007; Dieckmann, 2007; Khan and Rahaman, 2007; Irobi, 2008; Rahman *et al.*, 2009). However Aroca (2000) found that microfinance provided negative impact on household income. The study of microfinance of a village bank in Thailand revealed that microfinance did not change the income of household (Montgomery and Weiss, 2005) and did not generate profit for household businesses (Tra Pham and Lensink, 2008).

Through the hypothesis testing on household assets, the Model Time Series Regression showed the assets increased and was strongly related to time. Among the eight, TV, VCD, battery, motorbike and bicycle statistically increased by a significant level of 0.1% whereas in terms of handphone and radio, it statistically increased at the significant level of 1%. Thus, the hypothesis was accepted. This result of increased assets supported other studies in other countries which posited that microfinance increased household assets (Shetty, 2006; Rajat, 2007; Rahman *et al.*, 2009; Irobi, 2008).

Another result of this study revealed that microfinance have changed the housing conditions of many households. This finding is similar to Singh (2004) and Shetty (2006) who found that microfinance improved housing status for household. Moreover, the result also revealed that microfinance increased the schooling rate of the children and reduced the number of health vulnerable households. This result is similar to Matovu (2006) Chea (2004) and Rahman (2000) as cited in Develtere and Huybrechts (2002) who found that microfinance helps in human resource development.

Microfinance increased economic activity in the village. This finding is similar to those of Hazarika and Sarangi (2006) who have found that the people who used microfinancing have increased jobs. In like manner, Kaboski and Townsfiend (2002) found that the loan group of women who accessed the micro-credit have changed jobs.

Microfinance can help to empower women's status in the family and community. This result supports the finding of Karubi (2006) which revealed that microfinance provided women job opportunities and increased the role of women in the family.

However, microfinance was found to exert pressure on borrowers. Microfinance does not only exert pressure on borrowers but also contribute to arguments in the family and in society. This finding is different from the study result of Aktaruzzaman and Guha-Khasnobis (2006) and Kim *et al.* (2007) wherein households that accessed micro-credit have less arguments than households that did not access microfinance.

Lastly, microfinance was found to contribute negative effects on natural capital because households have sold land to pay the loan back.

CONCLUSION

Although this appears to be a case study due to the limited number of respondents, the findings have similarities to other related studies on microfinancing, which supports the following conclusion. Microfinancing plays an important role in economic development. It helps improve the living standard of many households as evidenced by increased income, assets and job opportunities. In addition, it helps to empower the women in the family/society, increase the enrollment rate of children and improve the affordability of medical care. However, microfinance exerts pressure on households and causes the loss of land ownership among families. In general, however, it can be said that despite some negative effects, microfinancing is an effective tool for economic development and poverty alleviation.

REFERENCES

- ADB (Asian Development Bank). (2000). Finance for the Poor: Microfinance Development Strategy. Final Report, Cambodia.
- ADB (Asian Development Bank). (2007). Effect of Microfinance Operations on Poor Rural Households and Status of Women. Special Evaluation Study. Pp.10-12
- Aktaruzzaman, K. and Guha-Khasnobis, B. (2006). Does Micro-Credit Increase Domestic Violence? Evidence from Rural Bangladesh. Department of Economic, University of Helsinki.
- Aroca, P. (2000). Microcredit Impact Assessment: The Brazilian and Chilean Cases. IDEAR, Universidad Católica del Norte Antofagasta, (Chile).
- Chea Lom Ang Phkar. (2004). The Performance of a Microfinance institute in Cambodia: Case Study of ACLEDA Bank PLC. Master Thesis. Asian Institute of Technology School of Management (Thailand). Pp. 42-44
- Datar, M.S., Epstein, M.J. and Yuthas, K. (2008). In Microfinance, Clients Must Come First. Stanford Social Innovation Review. Leland Stanford Jr.
- Datta, D. (2004). Microcredit in rural Bangladesh-Is it reaching poor? *Journal of Microfinance*, 6, 55-81.
- Develtere, P. and Huybrechts, A. (2002). Evidence on the social and economic impact of Grameen Bank and BRAC on the poor in Bangladesh. Katholieke University, (Bangladesh).
- Diagne, A. and Zeller, M. (2001). Access to Credit And Its Impact on Welfare in Malawi. International Food Policy Research, Washington D.C, America.
- Dieckmann, R. (2007). Microfinance: an emerging investment to opportunity. Deutsche Bank Research. Uniting social investment and financial returns, (Germany).

- Ebdon, R. (1995). NGO expansion and the fight to reach the poor: Gender implications of NGO scaling up in Bangladesh. *IDS Bulletin*, 26(3), 49-55.
- Esmail, Z. (2008). Neoliberal Development: The Impact of Microfinance on poverty Alleviation. Coalition of Journalists for Open Government. 1, 10-13.
- Fukui, R. and Llanto, G. (2003). Rural Finance And Microfinance Development In Transition Countries In South East And East Asia. Workshop on Rural Finance And Credit Infra Structure in China (France).
- Ghalib, A. K. (2009). Measuring the Impact of Microfinance Intervention: A Conceptual Framework of Social Impact Assessment. Impact Assessment Research Centre (IARC). IARC Working Papers Series No. 24/2009. University of Manchester (UK).
- Goldberg, N. (2005). Measuring the Impact of Microfinance: Taking Stock of What We Know. Grameen Foundation USA Publication Series.
- Hashemi, S.M., Schuler, S.R. and Riley, A.P. (1996). Rural credit programs and women's empowerment in Bangladesh. *World Development*, 24, 635-653.
- Hazarika, G. and Sarangi, S. (2006). Household Access to Micro credit and Child Work in Rural Malawi. The University of Texas at Aðownsville Brownsville, and Louisiana State University (Malawi).
- Irobi, C. N. (2008). Microfinance ad Poverty Alleviation; Degree Thesis in Economics (Business Administration), Swedish University of Agriculture. Ph.D Thesis.
- Kaboski, J.P. and Townsend, R.M (2002). Policies and Impact: An Analysis of Village-Level Microfinance Institutions (Thailand).
- Karubi.N.P. (2006) Development Micro-credit and Women's Empowerment : A Case Study of Market and Rural Women in Southern Nigeria. PhD thesis. University of Canterbury (Nigeria).
- Khan, M.A. and Rahaman, M.A. (2007). Impact of Microfinance on Living Standards, Empowerment and Poverty Alleviation of Poor People: A Case Study on Microfinance in the Chittagong District of Bangladesh. Master Thesis, Umeå School of Business (Bangladesh).
- Khan, M.A and Rahaman, M.A. (2007). Impact of Microfinance on Living Standards, Empowerment and Poverty Alleviation of Poor People: A Case Study on Microfinance in the Chittagong District of Bangladesh. Masters Thesis. Umeå School of Business (Bangladesh).
- Kim, J.C., Watts, C.H., Hargreaves, J. R., Ndhlovu, L.X., Phetla, G., Morison, L.A., Busza, J., John, D.H., Porter.MD. and Pronyk,P. (2007). Understanding the Impact of a Microfinance-Based Intervention on Women empowerment and the Reduction of Intimate Partner Violence in South Africa. *American Journal of Public Health*. 97(10), 1794-802.
- Matovu, D. (2006). Microfinance and Poverty Alleviation Uganda: a case study of Uganda finance trust. Master Thesis .Africa and International Development Cooperation School of Global Studies (Africa).
- Moll, A.J. (2005). Microfinance policies and rural development: Changes and Challenges. *Journal of Microfinance*, 7, 13-31.
- Montgomery, H and Weiss, J.(2005). Great Expectations: Microfinance and Poverty Reduction in Asia and Latin America, ADB Institute Research Paper No 63. Pp. 10-12.
- Pitt, M. M. and Khanker, S.R. (1998). The impact of group based credit programmes on poor household in Bangladesh: Does the gender of participants matter? *Journal of Political and Economy*, 106(5), 958-996.
- Rahman, S., Rafiq, R.B., Momen, M.A. (2009). Impact of Microcredit Programs on Higher Income Borrowers:
- Shetty, N.K. (2006). The Microfinance Promise in Financial Inclusion and Welfare of the Poor: Evidence from India. Research Scholar Centre for Economic Studies and Policy Institute for Social and Economic Change, Bangalore.

- Simanowitz, A., Nkuna, B. and Kasim. (2000). Overcoming the obstacles of identifying the poorest families in participatory approaches in microfinance and microenterprise development. Participation Group at IDS (UK).
- Shastri, R.K. (2009). Micro finance and poverty reduction in India (A comparative study with Asian Countries) *African Journal of Business Management*. 3, 136-140.
- Singh, S. K. (2004). Micro Finance and Empowerment of Scheduled Caste Women: An Impact Study of SHGs in Uttar Pradesh and Uttaranchal. BL Centre for Development Research and Action. New Delhi (India).
- Swope, T. (2005). Microfinance and Poverty Alleviation. Available at: www.essaydepot.com
- Trapham, T.T. and Lensink, R. (2008). Is microfinance an important instrument for poverty alleviation? The impact of microcredit programs on self-employment profits in Vietnam. Department of Finance, Faculty of Economics and Business. University of Groningen (Netherlands).
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Effect of Firm Size, Industry, and Time on Intellectual Capital Disclosure: Evidence from the United Arab Emirates

INTRODUCTION

Knowledge, innovation, and information management have driven the rise of the knowledge economy. This economical shift can explain the increased importance of Intellectual Capital as a research and business topic. Since Galbraith first introduced the term “Intellectual Capital” in 1969 (Bontis et al., 1999), research on Intellectual Capital has been mainly centred on intellectual assets, which have been analyzed from multiple perspectives. Researchers have found that there is a gap between the official declared values of companies, and between what the companies’ real worth is. This finding has shed the light on the field of Intellectual Capital, which proves to be something valuable (or invaluable), but cannot be measured using conventional methods. Most researchers have overlooked the negative (invaluable) side of Intellectual Capital, which is referred to as intellectual liabilities (Harvey and Lush, 1999). As per Harvey and Lush (1999), to balance the Intellectual Capital books, organizations must recognize their intangible liabilities. Thus, Intellectual Capital is the net intellectual worth, which equals intellectual assets minus intellectual liabilities.

However, conventional accounting methods, often fail to disclose the value of a firm’s Intellectual Capital and to meet stakeholders’ expectations. This has created the need for unconventional reporting. Many companies have adopted voluntary disclosure for several reasons, including closure of information gap, increased transparency, market liquidity, decreased cost of debt (Healey et al., 1999), decreased cost of equity (Sengupta, 1998), increased share performance, higher earnings, higher stock prices (Gelb and Zarowin, 2000), increased employees’ confidence, and others.

We conduct an exploratory study that measures voluntary Intellectual Capital (intellectual assets and intellectual liabilities) disclosure in the annual reports of publicly listed companies in the United Arab Emirates (UAE).

The originality and value of our research lie in incorporating intellectual liabilities in the framework, and in adding to the existing literature empirical evidence from a new country. This study poses two research questions in relation to voluntary disclosure of Intellectual Capital. First, what is the amount of Intellectual Capital (assets and liabilities) disclosure in publicly listed companies in the UAE? Second, what are the reasons that can explain the variations in Intellectual Capital disclosure patterns?

Using content analysis and descriptive statistical analysis, we conduct a longitudinal empirical study on the annual reports for the years 2007, 2008, and 2009 of 100 companies out of a total population of 165 (as of January 2011) publicly listed companies in the UAE stock exchanges, which are: Dubai International Financial Exchange (DIFX), Dubai Financial Market (DFM), and Abu Dhabi Securities Exchange (ADIX).

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Intellectual Capital Definition and Research Streams

There are various definitions of Intellectual Capital. The difference in the various definitions of Intellectual Capital is the fact that they make different compilations of Intellectual Capital components. According to Wright et al. (2001), Intellectual Capital consists of social capital, human capital, and organizational capital. According to Herremans and Isaac (2004), Intellectual Capital components are linked to employees. According to Kannan and Aulbur (2004), Intellectual Capital refers to “knowledge, information, intellectual property and experience that can be used to create wealth”. Organisational and individual variables are found in these non-physical assets. As per Sveiby (2001), human capital includes talents, learning skills, knowledge, and the worth of the employees. Roos et al. (2001) have classified Intellectual Capital into human capital, relationship capital, and organisational capital. The components of human capital are capabilities, talents, experiences, knowledge, and mental abilities of the employees (Tallarigo, 2000). Relationship capital comprises of relations with clients, suppliers, and other related stakeholders. Organisational capital is made of procedures, systems, configurations, trademarks, and copyrights. Seetharaman et al. (2004) provide another categorization of Intellectual Capital. The main variation to the previous ones is the existence of structural capital instead of organisational capital. The categorization of Seetharaman et al. (2004) can be drawn below in Figure 1.

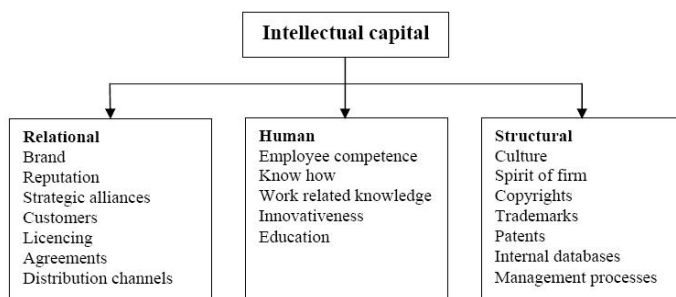


Figure 1. Types of Intellectual Capital (Seetharaman et al., 2004).

There are three streams in the field of Intellectual Capital research: an accounting stream, a measurement stream, and a management stream. Our research on intellectual assets and intellectual liabilities deals mainly with the disclosure in the UAE, and therefore falls under the first research stream.

Intellectual Capital Reporting and Disclosure

There are no legal or statutory requirements for Intellectual Capital disclosure. The measurement, reporting, and disclosure efforts are based on voluntary initiatives. Most frequently, information on Intellectual Capital is disclosed in the annual reports of the companies (Guthrie et al., 2004). Disclosure can take several forms, such as numbers, ratios, matrices, appendices to annual reports, and comprehensive narrative documents (Mouritsen et al., 2001).

Voluntary disclosure has been studied by many researchers, such as Brennan (2001) in Ireland, Bontis (2002) in Canada, Bozzolan et al. (2003) in Italy, April et al. (2003) in South Africa, Goh & Lim (2004) in Malaysia, Guthrie et al. (2004) in Hong Kong and Australia, Vergauwen and Van Alem (2005) in Netherlands, France, and Germany, Abdolmohammadi (2005) in the United States, Abeysekera and Guthrie (2005) in Sri Lanka, Vergauwen and Van Alem (2005) in France, Germany, and Netherlands, Sujan and Abeysekera (2007) in Australia, Guthrie et al. (2006) in Australia and Hong Kong, Dumay and Tull (2007) in Australia, Espinosa and Trombetta (2007) in Spain, and others. However, to date, no study has been done in the UAE, which among the Arab and Gulf countries, is a leading state in technology, innovation, and knowledge-based opportunities.

The development in research has led researchers to examine the correlation of Intellectual Capital disclosure with several factors, the most relevant of which are firm size and industry.

A positive relationship is detected between firm size and Intellectual Capital disclosure. The major studies that verify these findings are Bozzolan et al. (2003), Guthrie et al. (2004), Petty and Cuganesan (2005), Guthrie et al. (2006), and Bruggen et al. (2009). These studies used a different operational definition for the construct of firm size. Some studies use sales volume as the base, whereas others use market capitalization, total assets, or number of employees

Several studies were also conducted on the relationship between a firm's industry and its level of voluntary Intellectual Capital disclosure. The major ones in this stream are Bozzolan et al. (2003), and Petty and Cuganesan (2005). Bozzolan et al. (2003) found an interesting relationship in which high technology companies had a higher reporting level of Intellectual Capital than standard traditional companies.

Intellectual Liabilities

Although some studies demonstrate the possibility of the existence of intellectual liabilities (Harvey and Lusch, 1999; Caddy, 2000; Garcia-Parra et al., 2009), the importance still seems to be underestimated (Abeysekera and Guthrie, 2005). Although several recent research projects take liabilities into account (Tsai and Hua, 2006; Garcia-Parra et al., 2009; Stam, 2009), this is certainly not (yet) mainstream Intellectual Capital research.

Harvey and Lusch (1999) offered the first definition of intangible liabilities, together with a classification system and a six step managerial framework for assessing the magnitude of these liabilities. They developed conceptual frameworks by classifying intangible liabilities and assessing their impact. According to Caddy (2000), intangible liabilities are the result of inappropriate decisions made in the past. What happens when human decisions are continuously inappropriate, or when intelligence is wrongly used, or when work is inefficient? In his work, there was an implicit assumption that the meaning of Intellectual Capital is the difference between intellectual asset and intellectual liabilities. He stated that if accounting capital is the difference between assets and liabilities then Intellectual Capital should not be treated differently. In their study on intellectual liabilities, Garcia-Parra et al. (2009) built a research structure with a combination of mixed qualitative and quantitative methods

Thus, in conclusion, the review of literature on intellectual liabilities reveals that very little work has been done, and what has been done was mostly conceptual; hence, the need for researchers to further conceptualize intellectual liabilities into Intellectual Capital models, and to test them empirically.

Intellectual Capital in the United Arab Emirates

Nsour (2001) recommends in his study that for Arab countries to be successful in the realm of the economical changes, they must replace the existing processes, mindsets, and methods by shifting from the industrial mentality to the human capital mentality. Doraid (2000) claims that the real wealth of the Arab nations is not in their oil, but rather in the capacities of the people who live and work in these countries, and whom in the long run, will form the human capital of these nations. There have been several efforts to develop knowledge in the gulf region in general, and in the UAE in particular. Several universities have hosted international conferences in attempt to promote this concept. One of these events was the International Conference on Intellectual Capital and Knowledge Management that was held in 2005, and was hosted by the American University of Dubai. In addition, the Research and Development arm of Economic Zones World, in partnership with Fraunhofer IPK, a German applied research organization, announced the establishment of a framework for Intellectual Capital within the science and technology park in 2009. Despite these attempts, there is little research conducted on Intellectual Capital in the UAE. This provides both a challenge, and an opportunity to explore this field using the UAE as the field for empirically testing the extent of voluntary Intellectual Capital disclosure and its determinants.

Hypotheses Development

Based on the review of existing literature, we conclude that the practice of Intellectual Capital disclosure is more common amongst firms that are larger, and that are in industries that are of intellectual and knowledge-base. This fact is common across countries. Therefore, we propose that industry type is an important factor in the disclosure of Intellectual Capital, because Intellectual Capital is more important in some industries than in others, and as result, more relevant to the various stakeholders. This leads to the first hypothesis:

Hypothesis 1: The type of industry is relevant to Intellectual Capital disclosure

We also propose that firm size is a determinant of Intellectual Capital disclosure. This leads to the second hypothesis:

Hypothesis 2: Firm size is relevant to Intellectual Capital disclosure

In addition, and based on the disclosure levels of Intellectual Capital in countries which are more developed than the UAE, such as Australia and Italy, we propose that the level of Intellectual Capital disclosure in the UAE is low. This leads to the third hypothesis:

Hypothesis 3: Intellectual Capital disclosure in publicly listed companies of the UAE is low

RESEARCH DESIGN AND METHODOLOGY

Content Analysis Method

Content analysis is a widely used research method by many researchers to assess the frequency and type of Intellectual Capital disclosure (Beattie, 2004). Content analysis of the annual reporting of Intellectual Capital was pioneered by Abeysekera (2000), Guthrie and Petty (2000),

and Brennan (2001). This method of analysis is held to be empirically valid (Gray et al., 1995; Guthrie and Parker, 1990).

Annual Reports and Intellectual Capital Framework

The review of literature shows that the Intellectual Capital reporting studies in different countries have used corporate annual reports as the main source of data and have employed content analysis as the method of investigating intellectual reporting trends and practices.

We classify Intellectual Capital terms into 8 categories, with a total of 542 terms. Consistent with the work of Bruggen et al. (2009), we identify the existence of general Intellectual Capital terms, and therefore, place them under a separate category called general IC terms. The categories of intellectual liabilities are consistent with the frameworks of Harvey and Lush (1999) and Stam (2009). We use the count of Intellectual Capital related words as the unit of the content analysis (Gao et al., 2005). We then aggregate the disclosure frequencies of occurrence to determine the quantity of Intellectual Capital disclosure. To lower subjectivity, which is usually associated with the allocation of different weights to various Intellectual Capital categories, we follow a 0 - 1 coding scheme following the set of coding rules. The categories and the number of terms under each category are as per table 1.

Table 1

Category	Number of Terms
General IC Terms	11
Human Capital	158
Relational Capital	133
Structural Capital	146
External Liabilities	33
Human Liabilities	13
Relational Liabilities	17
Structural Liabilities	31
Total	542

Population, Sample Selection, and Independent Variables

This study focuses on publicly listed companies in the UAE. To study the industry effect on Intellectual Capital disclosure, we use the industrial classification of the Emirates Security and Commodities Authority (ESCA), which is made of four categories: Industrial, Banking, Service and Insurance. The number of companies in each sector is as per table 2.

Table 2

Industry	No. of Companies
Industrial	42
Banking	29
Service	66
Insurance	28
Total	165

The sources of the data are the annual reports of the years 2007, 2008, and 2009. We do not include the 2010 reports, because at the date of the preparation of the study a large of number of companies had not yet published their annual reports. The number of listed companies in the UAE is only 56 companies in 2006, and therefore, we use the annual reports starting from year 2007.

Based on the selected time period, 134 companies have full sets of annual reports for the three years period. Distribution by industry is as per table 3.

Table 3

Industry	No. of Companies
Service	49
Industrial	35
Insurance	25
Banking	25
Total	134

We utilize a stratified sampling procedure. All companies falling under the same industry are classified as a stratum. The lowest number of companies found in a stratum is 25 companies in each of the Insurance and the Banking Industry. We perform a random selection process to select 25 companies from each of the Service and Industrial sectors. In total, our sample is 100 companies.

Based on the preceding literature review, we use total assets as proxy of firm size, and we classify the companies into four categories: Micro, Small, Medium, and Large. Distribution of the sample by industry and by firm size is as per table 4.

Table 4

	Banking	Insurance	Service	Industrial	Total
Micro	1	15	5	13	34
Small	2	8	5	10	25
Medium	11	2	14	2	29
Large	11	-	1	-	12
Total	25	25	25	25	100

RESULTS AND DISCUSSION

General Disclosure

In total, the disclosure frequency of all categories is 37,202 hits as recorded by the content analysis software. The highest disclosure is under human capital, with 15,913 hits. The following

Table 5

Category	Total Frequency	Frequency
General IC Terms	2	0.01%
Human Capital	15,913	42.77%
Relational Capital	12,323	33.12%
Structural Capital	8,684	23.34%
External Liabilities	273	0.73%
Human Liabilities	-	0.00%
Relational Liabilities	-	0.00%
Structural Liabilities	7	0.02%
Total	37,202	100%

is relational capital, with 12,323 hits. Structural capital has 8,684 hits. We notice a lack of disclosure on human liabilities and relational liabilities and very low disclosure on general IC terms and structural liabilities. We also notice a relatively small, but interesting amount of disclosure on external liabilities. These findings prove that disclosure of Intellectual Capital in the UAE is significant, leading us to reject our third hypothesis. Disclosure frequency of

each category and its relative weight are as per table 5 (above).

Intellectual Capital Disclosure by Industry

Findings show that the disclosure in the Banking industry is the highest, with 14,775 hits. The next highest frequency is in the Service industry, with 12,898 hits. The third level of disclosure frequency is in the Industrial companies with 5,574 hits. Finally, the frequency in the Insurance industry is 3,955 hits. Disclosure frequency by industry type is as per table 6.

Table 6

Category	Banking	Insurance	Service	Industrial	Total Frequency
General IC Terms	1	-	1	-	2
Human Capital	5,837	2,133	5,259	2,684	15,913
Relational Capital	5,100	926	4,496	1,801	12,323
Structural Capital	3,680	868	3,062	1,074	8,684
External Liabilities	153	27	78	15	273
Human Liabilities	-	-	-	-	-
Relational Liabilities	-	-	-	-	-
Structural Liabilities	4	1	2	-	7
Total	14,775	3,955	12,898	5,574	37,202
Percentage of Total	39.72%	10.63%	34.67%	14.98%	100.00%

Intellectual Capital Disclosure by Firm Size

We analyze the disclosure by size categories on a per company basis due to the difference in the number of companies in each size category. Disclosure by firm size is highest in large companies and lowest in micro companies. Disclosure frequency of each category by firm size is as per table 7.

Table 7

Category	Micro	Small	Medium	Large	Total
General IC Terms	-	1	-	1	2
Human Capital	3,571	3,384	5,372	3,586	15,913
Relational Capital	2,066	2,371	4,377	3,509	12,323
Structural Capital	2,062	2,071	2,254	2,297	8,684
External Liabilities	25	68	105	75	273
Human Liabilities	-	-	-	-	-
Relational Liabilities	-	-	-	-	-
Structural Liabilities	-	6	1	-	7
Total	7,724	7,901	12,109	9,468	37,202
Companies in each Category	34	25	29	12	100
Frequency by Company	227	316	418	789	372

Intellectual Capital Disclosure by Date

We analyze the disclosure frequency by date, and we notice an increase of disclosure from 2007 to 2009. In 2007, the total frequency hits are 9,850. The frequency increases by 31.25% and reaches 12,928 hits in 2008. Then, it increases by 11.57% and reaches 14,424 hits in 2009. Disclosure frequency of each category by date is as per table 8 (below and next page).

Table 8

Category	2007	2008	2009	Total Frequency
General IC Terms	-	1	1	2
Human Capital	4,413	5,497	6,003	15,913
Relational Capital	3,259	4,273	4,791	12,323
Structural Capital	2,172	3,006	3,506	8,684
External Liabilities	4	148	121	273
Human Liabilities	-	-	-	-
Relational Liabilities	-	-	-	-
Structural Liabilities	2	3	2	7
Total	9,850	12,928	14,424	37,202

Intellectual Liabilities Disclosure by Industry

Our analysis shows that there is no disclosure of human or relational liabilities, whereas external liabilities and structural liabilities show a frequency of 273 and 7 hits respectively. Therefore, we will focus only on external liabilities. Out of the 273 hits recorded for intellectual liabilities, we notice that 256 hits are related to the economic and financial crisis. We also notice that the highest disclosures are in the Banking and Service industries. Details of the disclosure of external liabilities by industry are as per table 9.

Table 9

Terms	Banking	Insurance	Service	Industrial	Total
Acts of Terrorism	4	-	-	-	4
Ageing Population	-	-	-	1	1
Economic Crisis	18	4	19	2	43
Financial Crisis	125	23	53	12	213
Force Majeure	-	-	2	-	2

Terms	Banking	Insurance	Service	Industrial	Total
Global Warming	5	-	-	-	5
Political Instability	1	-	4	-	5
Total	153	27	78	15	273

Intellectual Liabilities Disclosure by Firm Size

We notice that medium companies show the highest disclosure of external liabilities with 105 hits, followed by large companies with 75 hits, whereas small and micro companies show 68 and 25 hits respectively. The dominance of disclosure of external liabilities by medium companies is not clear, but may be attributed to the larger effects that the financial crisis had on medium companies. Details of the disclosure of external liabilities by firm size are as per table 10.

Table 10

Terms	Micro	Small	Medium	Large	Total
Acts of Terrorism	-	-	-	4	4
Ageing Population	-	1	-	-	1
Economic Crisis	4	7	23	9	43
Financial Crisis	19	59	78	57	213
Force Majeure	1	-	1	-	2
Global Warming	-	-	-	5	5
Political Instability	1	1	3	-	5
Total	25	68	105	75	273

Intellectual Liabilities Disclosure by Date

The disclosure frequency of external liabilities increases from 4 hits in 2007 to 148 hits in 2008 with an obvious dominance of disclosures on the economic and financial crisis. However,

the disclosure decreases in 2009 to reach 121 hits. This supports our earlier explanation that the disclosure of intellectual liabilities in 2008 was due to the financial crisis. Disclosure frequency by date is as per table 11 (below and on page following).

Table 11

Terms	2007	2008	2009	Total
Acts of Terrorism	-	2	2	4
Ageing Population	-	1	-	1
Economic Crisis	-	21	22	43
Financial Crisis	-	122	91	213
Force Majeure	1	-	1	2
Global Warming	1	1	3	5
Political Instability	2	1	2	5
Total	4	148	121	273

In conclusion of our analysis, we notice that the variation among industries is significant, where the frequency of disclosure in the Banking and Service industries is the highest, even when we calculate the ratio of disclosed terms to the total number of words found in the reports of the companies in each industry. In addition, we conclude that variation among companies of different sizes is also

large but not as significant as the variation by industry. As for time, we conclude that the frequency of disclosure has significantly increased from 2007 to 2008, but has shown a modest increase from 2008 to 2009. This is an area for further investigation. A preliminary explanation is the attribution of the increased disclosure in 2008 to the financial crisis, and its detrimental effects, which led companies to increase transparency. This explanation is strengthened by our study on intellectual liabilities, where we conclude that the only significant disclosure is related to external liabilities, and specifically to the terms related to the financial and economic crisis, which increased significantly from 2007 to 2008, but then decreased in 2009.

CONCLUSIONS AND LIMITATIONS

The purpose of our study is to examine the degree of awareness of scope of voluntary Intellectual Capital disclosure of publicly listed companies in the UAE. We propose three hypotheses and we attempt to test them. Our first and second hypotheses are that firm size and

industry are relevant determinants of Intellectual Capital disclosure. Our third hypothesis is that Intellectual Capital disclosure is low. We conduct a longitudinal study over a period of three years (2007, 2008, and 2009), and we examine the annual reports of 100 companies. Using automated content analysis, we measure the frequency of disclosure according to 3 independent variables (Industry, Firm Size, and Date) across several categories, which are: general IC terms, human capital, relational capital, structural capital, external liabilities, human liabilities, relational liabilities, and structural liabilities.

Conclusions

The main findings of our study are as follows. First, the highest disclosure frequency is found in the banking industry, followed by the service, industrial, and service industries. This supports our first hypothesis. Second, the highest disclosure frequency is found in large companies, followed by medium, small, and micro companies. This supports our second hypothesis. Third, although the frequency of disclosure on a per word basis increases over time, we notice a decrease of the disclosure between 2008 and 2009, when measured as a percentage of the disclosed Intellectual Capital terms over the total number of words found in the reports each year. Fourth, Intellectual Capital disclosure, and especially intellectual assets, is quite significant in the UAE, when compared to other countries. This disproves our third hypothesis. Fifth, disclosure of intellectual liabilities is relatively low, and is related only to external liabilities.

Limitations

This study is exploratory in nature, as it is the first attempt to investigate Intellectual Capital disclosure practices in the UAE. Therefore, our study is subject to a number of limitations. The first limitation refers to the use of the content analysis method. Analyzing the annual reports based on the specified list of intellectual related terms may not provide the whole picture as well as the Intellectual Capital disclosure practices. A second limitation is the use of annual reports to measure Intellectual Capital disclosure. The third limitation is subject to the proxies used to count the frequency hits of intellectual assets and intellectual liabilities. Using other terms may yield different results.

REFERENCES

- Abdolmohammadi, M., J. 2005. Intellectual capital disclosure and market capitalization. *Journal of Intellectual Capital*, 6(3): 397-416.
- Abeysekera, I. 2000. The status of intellectual capital reporting in Sri Lanka. MGSME working paper: Sydney.
- Abeysekera, I. & Guthrie, J. 2005. An empirical investigation of annual reporting trends of intellectual capital in Sri Lanka. *Critical Perspectives on Accounting*, 16(3): 151-163.
- April, K. A., Bosma, P. & Deglon, D. A. 2003. IC measurement and reporting: Establishing a practice in South African mining. *Journal of Intellectual Capital*, 4(2): 165-180.
- Beattie, V. 2004. Moving the financial accounting research front forward: The UK contribution. *The British Accounting Review*, 37(1): 85-114.
- Bontis, N., Dragonetti, N., Jacobsen, K. & Roos, G. 1999. The knowledge toolbox: A review of the tools available to measure and manage intangible resources. *European Management Journal*, 17(2): 391-402.
- Bontis, N. 2002. There is a price on your head: Managing intellectual capital strategically. *Business Quarterly*, 60(4): 40-47.
- Bozzolan, S., Ricceri, F. & Favotto, F. 2003. Italian annual intellectual capital disclosure: An empirical analysis. *Journal of Intellectual Capital*, 4(4): 543-558.
- Brennan, N. 2001. Reporting intellectual capital in annual reports: Evidence from Ireland. *Accounting, Auditing & Accountability Journal*, 4(4): 423-436.

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Evidence from the United Arab Emirates*

- Brüggen, A., Vergauwen, P. & Dao, M. 2009. Determinants of intellectual capital disclosure: evidence from Australia. *Management Decision*, 47(2): 233-245.
- Caddy, I. 2000. Intellectual capital: recognizing both assets and liabilities. *Journal of Intellectual Capital*, 1(2): 129-146.
- Doraid, M. 2000. Human development and poverty in the Arab states. New York, NY: United Nations Development Program.
- Dumay, J. C. & Tull, J. A. 2007. Intellectual capital disclosure and price-sensitive Australian Stock Exchange announcements. *Journal of Intellectual Capital*, 8(2): 236-255.
- Espinosa, M. & Trombetta, M. 2007. Disclosure interactions and the cost of equity capital: Evidence from the Spanish continuous market. *Journal of Business Finance & Accounting*, 34(9): 1371-1392.
- Gao, S. S., Hervai, S. & Xiao, J. Z. 2005. Determinants of corporate social and environmental reporting in Hong Kong: A research note. *Accounting Forum*, 29(2): 233-242.
- Garcia-Parra, M., Simo, P., Sallan, J. & Mundet, J. 2009. Intangible liabilities: Beyond models of intellectual assets. *Management Decision*, 47(5): 819-830.
- Gelb, D. and Zarowin, P. 2000. *Corporate disclosure policy and the informativeness of stock prices*, New York, NY: New York University.
- Goh, P. C. & Lim, K. P. 2004. Disclosing intellectual capital in company annual reports: Evidence from Malaysia. *Journal of Intellectual Capital*, 5(3): 500-510.
- Gray, D., Rastas, T. and Roos, G. 2004. What intangible resources do companies value, measure and report? A combination of UK and Finnish Research. *IC Congress*: Helsinki.
- Gray, R., Kouhy, R. & Lavers, S. 1995. Corporate and social environmental reporting: A review of the literature and a longitudinal study of UK disclosure. *Accounting, Auditing & Accountability Journal*, 8(2): 78-101.
- Guthrie, J. & Parker, L. D. 1990. Corporate social disclosure practice: A comparative international analysis. *Advances in Public Interest Accounting*, 3(1): 159-175.
- Guthrie, J. & Petty, R. 2000. Intellectual capital: Australian annual reporting practices. *Journal of Intellectual Capital*, 1(3): 241-251.
- Guthrie, J., Yongvanich, K., Petty, R. & Ricceri, F. 2004. Using content analysis as a research method to inquire into intellectual capital reporting. *Journal of Intellectual Capital*, 5(2): 282-293.
- Guthrie, J., Petty, R. & Ricceri, F. 2006. The voluntary reporting of intellectual capital: Comparing evidence from Hong Kong and Australia. *Journal of Intellectual Capital*, 7(2): 254-271.
- Harvey, M. G. & Lusch, R. F. 1999. Balancing the intellectual capital books: Intangible liabilities. *European Management Journal*, 17(1): 85-92.
- Healey, P., Khakee, A. & Motte, B. N. 1999. European developments in strategic spatial planning. *European Planning Studies*, 7(3): 339-356.
- Herremans, I. M. & Isaac, R. G. 2004. Leading the strategic development of intellectual capital. *The Leadership & Organization Development Journal*, 25(2): 142-160.
- Kannan, G. & Aulbur, W. 2004. Intellectual capital: Measurement effectiveness. *Journal of Intellectual Capital*, 5(3): 389-413.
- Krippendorff, K. 1980. *Content analysis: An introduction to its methodology*, Beverly Hills, CA: Sage Publications.
- Krippendorff, K. 2004. *Content analysis*, Thousand Oaks, CA: Sage Publications.
- Lang, M. & Lundholm, R. 1993. Cross-sectional determinants of analysts' ratings of corporate disclosure. *Journal of Accounting Research*, 31(2): 246-271.
- Mouritsen, J., Larsen, H., Bukh, P. N. & Johansen, M. 2001. Reading an intellectual capital statement: Describing and prescribing knowledge management strategies. *Journal of Intellectual Capital*, 2(4): 359-383.
- Niemark, M. K. 1995. *The hidden dimensions of annual reports, sixty years of social conflict at General Motors*, Princeton, New Jersey: Markus Wiener.

- Nsour, M. 2001. Developing A strategic approach to intellectual capital development in the Arab States", New York, NY: United Nations Development Program.
- Petty, R. & Cuganesan, S. 2005. Voluntary disclosure of intellectual capital by Hong Kong companies: Examining size, industry and growth effects over time. *Australian Accounting Review*, 15(36): 40-50.
- Roos, G., Brainbridge, A. & Jacobsen, K. 2001. Intellectual capital analysis as a strategic tool, *Strategy and Leadership*, 29(4): 21-26.
- Seetharaman, A., Lock, T., Low, K. & Saravanan, A. S. 2004. Comparative justification on intellectual capital. *Journal of Intellectual Capital*, 5(4):. 522-539.
- Sengupta, P. 1998. Corporate disclosure quality and the cost of debt. *The Accounting Review*, 73(4): 459-474.
- Sonnier, B. M., Carson, K. D. & Carson, P. P. 2008. Intellectual capital disclosure by traditional US companies: A longitudinal assessment. *Journal of Accounting and Organizational Change*, 4(1): 67-80.
- Stam, C. D. 2009. Intellectual liabilities: Lessons from the decline and fall of the Roman Empire. *Journal of Intellectual Capital*, 39(1): 92-104.
- Sujan, A. & Abeysekera, I. 2007. Intellectual capital reporting practices of the top Australian firms. *Australian Accounting Review*, 17(2): 62-74.
- Sveiby, K. 1997. The new organizational wealth: Managing and measuring knowledge-based assets. *Research Technology Management*, 40(5): 60-60.
- Tallarigo, R. 2000. Beyond productivity: How leading companies achieve superior performance by leveraging their human capital. *Personnel Psychology*, 53(2): 481-484.
- Tsai, H. C. & Hua, M. S. 2006. Can intellectual capital powerfully explain the stock price of electronic companies?. *Taiwan Academy of Management Journal*, 6(2): 237-250.
- Vergauwen, P. G. M. C. & Van Alem, F. J. C. 2005. Annual report IC disclosures in the Netherlands, France and Germany. *Journal of Intellectual Capital*, 6(1): 89-104.
- Wright., P. M., Dunford, B. B. & Snell, S. A. 2001. Human resource and the resource based view of the firm. *Journal of Management*, 27(6): 701-721.
- Yi, A. & Davey, H. 2010. Intellectual capital disclosure in Chinese (mainland) companies. *Journal of Intellectual Capital*, 11(3): 326-347.
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Organizational Justice, Organizational Citizenship Behavior and Job Satisfaction: What is the Relationship?

KEYWORDS: organizational justice, organizational citizenship behavior, job satisfaction

INTRODUCTION

Perceptions of justice, equity, or fairness in the workplace are widely recognized as an influential factor in employee attitudes at the workplace (Adams, 1965; Cropanzano and Greenberg, 1997; Fields, Pang, and Chiu, 2000; Leventhal, 1976; Ramamoorthy and Flood, 2004). Employees would probably hold positive attitudes about their work, their work outcomes, and their

supervisors if they perceived that they are treated fairly (Moorman, 1991). Basically, organizational justice concerns three distinct, but related components of justice, namely, distributive, procedural, and interactional justice. Employees who perceive unfairness is likely to limit their commitment to citizenship, whereas employees who perceive equity will contribute to the system through continued citizenship (Moorman, 1991). A variety of studies have found a robust relationship between perceptions of procedural justice and organizational citizenship behavior (OCB). Procedural justice accounts for linear relationship with altruism (Farh, Podsakoff, and Organ, 1990); and altruism, courtesy, sportsmanship, and conscientiousness (Moorman, 1991). Their results were further substantiated by the findings of Niehoff and Moorman (1993). The importance of interactional justice is reiterated by Moorman (1991) who emphasized that interactional justice was the sole dimension of fairness to significantly relate to OCB. In essence, employees are more likely to exhibit OCBs if they perceive that their supervisors personally treated them fairly. Tansky (1993) affirms that the quality of supervisor-subordinate relationship is positively related to the five dimensions of OCB. Enhanced employee's trust in supervisor induces employees to reciprocate with increased OCB (Konovsky and Pugh, 1994) and employees are likely to engage in civic behavior if fairness is perceived (Robinson and Morrison, 2002).

Based on these arguments, this study attempts to explore further the concepts of organizational justice, job satisfaction and OCB in the manufacturing sector in Malaysia as it is imperative for the sustainability of the industry. Indubitably, a wealth of research on organizational justice, job satisfaction and OCB has been carried out in other countries, but the impact on the manufacturing sector in Malaysia is still ambiguous. Thus, this study hopes to test if what is observed in justice literature would be applicable in the Malaysian manufacturing environment. The findings from the study will likely fill the gaps in present knowledge and help resolve some of the inconsistencies in previous research. For this purpose, first, is to analyze whether perceptions of organizational justice and job satisfaction are primary antecedents of OCB. Then, the study aims to test whether perceptions of organizational justice influence the relationship between job satisfaction and organizational citizenship behavior.

THE EMPIRICAL RELATIONSHIP BETWEEN ORGANIZATIONAL JUSTICE, JOB SATISFACTION AND ORGANIZATIONAL CITIZENSHIP BEHAVIOR

Research in the justice domain revealed that perceptions of justice are related to organizational satisfaction. Studies include satisfaction with management (Alexander and Ruderman, 1987; Fryxell and Gordon, 1989); satisfaction with pay (Greenberg, 1987; Konovsky, Folger, and Cropanzano, 1987; Folger and Konovsky, 1989; Miceli and Lane, 1991; Sheppard, Lewicki, and Minton, 1992; Sweeney and McFarlin, 1993; Welbourne, 1998; St Onge, 2000); Tremblay, Sire, and Balkin, 2000); and job satisfaction and intent to quit (Alexander and Ruderman, 1987; McFarlin and Sweeney, 1992; Ball, Trevino, and Sims, 1994; Hendrix et al., 1999; Cohen-Charash and Spector, 2001; Colquitt et al., 2001; Latham and Pinder, 2005). Additionally, perceptions of fairness of outcomes or procedures have contributed significantly to other organizational phenomena such as organizational commitment (Flaherty and Pappas, 2000; Rhoades, Eisenberger, and Armeli, 2001); job performance (Ball, Trevino, and Sims, 1994; Alder and Tompkins, 1997); and pro-social behavior (Colquitt et al., 2001; Masterson et al., 2000; Murphy et al., 2006; William, Pitre, and Zainuba, 2002) which may be related to job satisfaction.

Fields, Pang, and Chiu (2000) posit a correlation between procedural justice and job satisfaction. Others affirm that procedural fairness enhances job satisfaction (Bartol, 1979; Igbaria and

Greenhouse, 1992; Korsgaard, Schweiger, and Sapienza, 1995; Quarles, 1994). Though research shows a positive correlation between organizational justice and job satisfaction, the impact of the different components varies. In some studies, it was observed that the relationships with pay satisfaction and organizational satisfaction were stronger for distributive justice than for procedural justice (Sweeney and McFarlin, 1993; Tremblay, Sire, and Balkin, 2000). On the contrary, other studies show that procedural justice is more strongly related than distributive justice to positive organizational outcomes such as job satisfaction (Schaubroeck, May, and Brown, 1994), and OCB (Ball, Trevino, and Sims, 1994). In a meta-analytic study, Colquitt et al. (2001) affirm that three types of organizational justice perceptions (including interactional justice) correlate to each other. The study showed that all three justice dimensions were related to job satisfaction, organizational commitment, evaluation of authority, pro-social behaviors, and employee withdrawal behaviors.

Prior research shows that the lack of equity in promotion has affected employees' satisfaction with the job (Dailey and Kirk, 1992; McFarlin and Sweeney, 1992) and pay (Folger and Konovsky, 1989; McFarlin and Sweeney, 1992). Promotion is a powerful source of motivation and satisfaction (Campbell et al., 1970; Igarria and Greenhouse, 1992; Rosenbaum, 1984) and an employees' career mobility that is constrained by unfair practices are likely to result in career dissatisfaction which will affect organizational commitment. Additionally, Lemons and Jones (2001) reiterate that employees are more likely to be satisfied with organizational outcomes when high procedural justice in promotion decisions exists. Promoted people who perceive high procedural justice in the decision will show a moderately higher level of career satisfaction than promoted people who do not perceive high procedural justice. This is probably because those who received a promotion are unlikely to question if the procedures are fair or unfair. In contrast, non promoted managers will ponder over the failure to secure a promotion. In doing so, non promoted managers will try to understand the procedure by which promotion decisions were made. Those who perceived low procedural justice will be particularly dissatisfied with their career. Those who were not promoted, but thought that the procedure was not unfair are likely to be less dissatisfied with their career (Lorsh and Takagi, 1987). They might decide to stay and to maintain positive attitudes and behaviors. Thus, career satisfaction results clearly show that procedural justice plays a pivotal role in determining managers' attitudes. Non promoted managers will decide to leave only if they perceive low procedural justice in their careers (Bagdadli, Roberson, and Paoletti, 2006; Dailey and Kirk, 1992). If they decide to stay, it is likely they will be less committed, less productive, and less supportive, and will demonstrate withdrawal behaviors.

Farh, Podsakoff, and Organ (1990) specifically studied the relationship between fairness, satisfaction, and OCB. Some studies have indicated significant correlations between job satisfaction and OCB. Smith, Organ, and Near (1983) found a correlation of .33 between job satisfaction and altruism and .29 between job satisfaction and compliance (conscientiousness). Organ (1988, 1990) asserts that the relationship between job satisfaction and OCB may be better described as one reflecting a relationship between perceptions of fairness and OCB. That is, the cognitive component of job satisfaction that appears to be related to OCB probably reflects the perceptions of fairness. Perceptions of fairness, and not job satisfaction, would be related to OCB if both job satisfaction and perceptions of fairness were both measured (Moorman, 1991). The reason for this is attributed to Adam's (1965) equity theory. Since unfairness will create tension within a person, changing of one's level of OCB is likely to be a response to inequity. Organ and Moorman (1993) assert that procedural justice rather than distributive justice or job satisfaction explains more of the variance in OCB. Another explanation is based on Blau's (1964) social exchange theory where an individual's relationship with the organization is one of social exchange. Employees may be more likely to demonstrate OCB if they favor social exchange. This study makes an additional contribution by expanding on prior research examining the

relationship between organizational justice and OCB by analyzing the role of perceived organizational justice-job satisfaction linkage. Hence, job satisfaction is not positively related to organizational citizenship behavior when organizational justice is controlled.

METHODOLOGY

Site and Subjects

As this study focused on the manufacturing sector, all manufacturing companies that were listed in the Federation of Malaysian Manufacturers Directory would be the sampling frame for the study. Questionnaires were distributed to ten management staff from each of the 100 companies selected using stratified random sampling. Overall 267 valid cases were used for the analysis.

Procedure

Primary data were collected from questionnaires written in English which were sent by post to the selected companies. Before sending out the questionnaires, the first step was to obtain permission to carry out the research from the Chief Executive Officer of the companies. After approval from the CEO, the next step was to contact the HR Department of each of the companies by telephone. Three requests were made – to randomly select respondents to complete the questionnaire, to distribute the questionnaire, and to collect and send back the completed questionnaires. A general outline of the research's aim and methodology was mailed to them in advance of the call.

Measures

Instruments universally used and have been tested for validity were adapted. Organizational citizenship behavior was measured with a scale developed by Podsakoff et al. (1990). The Cronbach alphas for the current study were 0.872 for courtesy, 0.871 for sportsmanship, 0.845 for altruism, 0.789 for civic virtue and 0.767 for conscientiousness. Brayfield and Rothe's (1951) Job Satisfaction Scale was used to measure job satisfaction. Price and Mueller (1986) reported reliability coefficients ranging from 0.78 to 0.99 while Moorman's (1991) study showed a reliability coefficient of 0.86 and Lambert et al.'s (2005) study 0.82. The Cronbach alpha for this study was 0.865. To assess each component of organizational justice, this study employed measures developed by Colquitt (2001). The Cronbach alpha for each component was 0.888 for procedural justice, 0.866 for informational justice, 0.914 for distributive justice, and 0.868 for interpersonal justice.

Analysis

Since the expected number of respondents was limited to about 30 percent, editing was done manually soon after the data have been gathered. Responses to some of the negatively worded questions were transformed in the reverse and missing responses to the main part of the questionnaire were assigned a midpoint in the scale. After the removal of outliers, a factor analysis rotated with Varimax was conducted. With eigenvalues set at 1.00, items with communalities more than 0.50 were retained. Correlation analysis was then conducted to describe the strength and direction of the linear relationship between the variables. Hierarchical regression was employed to test the hypotheses.

RESULTS

Of the 267 respondents, 56.6 percent are male and 43.4 percent are females. The majority of the respondents are aged between 25 and 40 years (67.8%) and about two thirds (66.3%) are married. More than half of the respondents have at least a Bachelor degree (68.5%) and slightly more than a third are managerial staff (36.3%). Half of the respondents are either engineers or

executives (50.9%). About half of the respondents (48.3%) have been with their current organization for between three to ten years.

Table 1 presents the means, standard deviations, correlations and reliability coefficients for all study variables. Results of the correlation analysis provide support for discriminant validity considering the low correlation among variables that are supposed to be unrelated. Examining further, none of the correlation coefficient is above 0.90, indicating that all the variables are distinct (Amick and Walberg, 1975). Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity, and homoscedasticity. The VIF scores for all the variables are well below 10 and, therefore, there is no concern for multicollinearity (Pallant, 2007).

Table 1 omitted due to space considerations.

Hierarchical regression analyses were employed to test the hypotheses. In Table 2, control variables (age, education level, tenure, and position) were first regressed followed by organizational justice on the dimensions of OCB. The objective was to see the influence of justice dimensions when control variables were controlled on dimensions of organizational citizenship behavior. The four control variables were regressed as there was a possibility that these variables might inflate relations between other variables (Staines et al., 1986). Regression analyses were then carried out to examine the influence of job satisfaction on OCB after justice dimensions were controlled.

At Step 1, the four control variables – age, education level, tenure, and position were entered, explaining 4.1 percent of the variance in courtesy. As indicated in Table 2, education level significantly predicted courtesy. The negative correlation implied that people who are more educated tended to be less courteous. At Step 2, components of organizational justice were entered. After entry of justice dimensions at Step 2, the total variance explained by the model as a whole was 13.2 percent, $F(8, 258) = 6.061, p < 0.001$. The four justice measures explained an additional 10.3 percent of the variance in courtesy; after controlling for age, education level, tenure, and position, R^2 change = .103, F change (4, 258) = 7.909, $p < 0.001$. After entry of job satisfaction at Step 3, the total variance explained by the model as a whole was 15.8 percent, $F(9, 257) = 6.530, p < 0.001$. Job satisfaction explained an additional 2.8 percent of the variance in courtesy; after controlling for justice measures, R^2 change = .028, F change (1, 257) = 8.818, $p < 0.003$. The results suggest that courtesy will be high when job satisfaction is perceived to be high. Thus, the hypothesis that job satisfaction is not positively related to courtesy when organizational justice is controlled is not substantiated.

Though the influence of job satisfaction on sportsmanship is significant when the influence of justice had been controlled, the impact is minimal. As indicated in Table 2, after entry of job satisfaction at Step 3, the total variance explained by the model as a whole was 5.1 percent, $F(9, 257) = 2.598, p < 0.007$. Job satisfaction explained an additional 1.8 percent of the variance in sportsmanship; after controlling for justice measures, R^2 change = .018, F change (1, 257) = 5.176, $p < 0.024$. The results suggest that sportsmanship will be high when job satisfaction is perceived to be high. Thus, the hypothesis that job satisfaction is not positively related to sportsmanship when organizational justice is controlled is not substantiated.

To test the hypothesis that job satisfaction is not positively related to altruism when organizational justice is controlled, the results of the regression after entry of job satisfaction at Step 3 showed that the total variance explained by the model as a whole was 9.3 percent, $F(9, 257) = 4.029, p < 0.001$. Job satisfaction explained an additional 1.6 percent of the variance in altruism. After justice measures are statistically controlled for, R^2 change = .016, F change (1,

257) = 4.592, $p < 0.033$. As indicated in Table 2, interpersonal justice and job satisfaction make a statistically significant contribution and suggest that altruism will be high when these dimensions are perceived to be high. Thus, the hypothesis that job satisfaction is not positively related to altruism when organizational justice is controlled is not substantiated.

The regression analysis for the influence of job satisfaction on civic virtue after controlling for organizational justice showed that the total variance explained by the model at Step 3 as a whole was two percent, $F(9, 257) = 8.453$, $p < 0.001$. As indicated in Table 2, education level, tenure and job satisfaction significantly predicted civic virtue, with job satisfaction scale recording a higher beta value (beta = .210, $p < 0.003$) than education level (beta = -.194, $p < 0.001$) or tenure (beta = .160, $p < 0.028$). The negative correlation implied that people who are more educated tended to have less civic virtues. Job satisfaction explained an additional 2.7 percent of the variance in civic virtue; after controlling for justice dimensions R^2 change = .027, F change (1, 257) = 8.843, $p < 0.003$. The results suggest that civic virtue will be high when job satisfaction is high. Thus, the hypothesis that job satisfaction is not positively related to civic virtue when organizational justice is controlled is not supported.

Examining the influence of job satisfaction on conscientiousness when organizational justice is controlled, at Step 3, the variance explained is 12.7 percent, $F(9, 257) = 5.285$, $p < 0.001$. As indicated in Table 2, distributive justice, interpersonal justice and job satisfaction significantly predicted conscientiousness. Job satisfaction explained an additional 2.1 percent of the variance in conscientiousness; R^2 change = .021, F change (1, 257) = 6.355, $p < 0.012$. Thus, the hypothesis that job satisfaction is not positively related to conscientiousness when organizational justice is controlled is not supported.

Table 2 omitted due to space considerations.

DISCUSSION AND MANAGERIAL IMPLICATIONS

The purpose of this research was to examine the relationship between organizational justice, job satisfaction, and organizational citizenship behavior. Specifically, the study sought to ascertain the extent to which OCB is correlated with job satisfaction when organizational justice was controlled. Interpersonal justice was an important predictor of OCB; it is significantly related to courtesy, altruism, and conscientiousness. The findings were similar to past studies that found a robust relationship between interactional justice and OCB (Greenberg, 1990; Lazar, Zinger, and Lachterman, 2007; Moorman, 1991; Skarlicki and Folger, 1997; William, Pitre, and Zainuba, 2002). Informational justice significantly predicted courtesy whilst procedural justice civic virtue. This contrasted past research that suggested that procedural justice would be more related to altruism (Farh, Podsakoff, and Organ, 1990); and altruism, courtesy, sportsmanship, and conscientiousness (Moorman, 1991; Niehoff and Moorman, 1993). The findings of the current study suggested that perceived fairness of interpersonal treatment by managers or other organizational representatives as well as adequate and sincere communication of procedures and outcomes rather than perceived fairness of decision outcomes would have a stronger impact on OCB. This was also incongruent with the findings of Nadiri and Tanova (2010) where distributive justice was a stronger predictor of OCB. Based on the current study, to enhance OCB, managers would have to make a concerted effort to treat employees with greater respect and dignity.

As far as the relationship between job satisfaction and OCB was concerned, job satisfaction significantly predicted all dimensions of OCB except sportsmanship. This confirmed the findings of other studies which indicated significant correlations between job satisfaction and OCB. For example, Smith, Organ, and Near (1983) found a correlation between job satisfaction and

altruism as well as conscientiousness. Murphy, Athanasou, and King's (2002) study suggested that a medium to strong positive relationship between job satisfaction and OCB. This concurred with Bateman and Organ's (1983) findings which show a 0.41 correlation between job satisfaction and OCB and Graham's (1986) 0.37 correlation between the two variables. Foote and Tang (2008) revealed similar findings. In the current study, only age has a significant impact on sportsmanship, implying that older employees complained less and avoid negative behaviors.

Besides job satisfaction, education level was significantly related to courtesy and civic virtue. Tenure also significantly predicted civic virtue. This was in contrast to Murphy et al.'s (2002) findings which emphasize the impact of age on OCB. In terms of importance, job satisfaction explained more variance in civic virtue than courtesy, altruism, or conscientiousness. In essence, job satisfaction had a big impact on employees' interest in the affairs and developments of the organisation. Satisfied employees proactively improve self awareness of happenings in the organisation and responsibly participate in company matters. Employees were likely to go for self improvement to enhance competencies at the workplace. Thus, practitioners would have to improve job satisfaction if OCB were to increase. This might entail increasing salaries and improving working conditions (Nadiri and Tanova, 2010). Apart from employee productivity, it might be useful for practitioners to monitor a wide range of employee behaviours that go beyond roles specified in the job description (Katz, 1964; George and Brief, 1992). Recognition of work behaviours that contribute significantly to organizational effectiveness could be a source of motivation for employees.

Job satisfaction had a significant influence on all dimensions of OCB when the influence of justice had been controlled; OCB was significantly explained by job satisfaction of employees. The findings contradicted empirical research which showed that the effect of organizational justice was stronger than job satisfaction in determining OCB (Konovsky and Organ, 1996; Lepine, Erez, and Johnson, 2002; Moorman, 1991; Nadiri and Tanova, 2010). In terms of total variance explained, the impact of job satisfaction on civic virtue remained strongest. This was followed by its influence on courtesy, conscientiousness, altruism and sportsmanship. Thus, it could be concluded that organizational justice did not have a strong effect on job satisfaction and OCB. This implied that practitioners should aim to improve OCB through improved job satisfaction. The effect on OCB would be minimal if practitioners were to focus on improving organizational justice. Increased job satisfaction would likely engage employees in civic behaviour – generating renewed interest in happenings in the organization. It would probably enhance teamworking, create a more disciplined and committed workforce, and improve behaviours and attitude at the workplace. Increased job satisfaction together with effective training has the potential to contribute significantly to the bottom line of any organization. A motivated and productive workforce would translate to better quality of goods which in turn would enhance customer satisfaction and loyalty.

Precisely, this research made not only a significant contribution to the understanding of the relationship between organizational justice and OCB, but also, the relationship between job satisfaction and OCB. Though much research have been carried out on the organizational justice-job satisfaction-OCB relationship, the nature of the relationship has not been well defined. The current study provided an insight of the importance of job satisfaction over and above organizational justice in explaining the variance in OCB. Focusing on addressing organizational justice issues alone might be insufficient to draw out employee work behaviors that surpassed those dictated by organizational policy and one's job description. Future research might consider looking into factors that enhances job satisfaction and its impact on the overall domain of OCB.

CONCLUSIONS

The strongest significance of this study was probably providing indicators that influence OCBs. Understanding the direct and indirect factors that affect OCBs would help the organization to increase its focus on those factors that encourage OCBs. The inclusion of all four types of organizational justice in the study would probably enlighten the organization on the relative importance of each and its effects on the employees. A corollary of this is that organizations would be able to see the effects of each type of organizational justice on each dimension of OCB. This would help the organization to decide which aspect of justice to work on to improve citizenship behavior among their employees. In essence, it provides the groundwork for organizations to study the dynamics through which fairness perceptions render OCBs appropriate (Moorman, 1991). Organizations may choose to cultivate a culture of fairness and influence employees' perception of a quality relationship between organizational justice and OCB (Tansky, 1993).

As the study looks at job satisfaction as well, organizations would have an insight of whether job satisfaction is a primary antecedent of OCBs. If it is indeed strongly related to OCBs, then measures may be taken to improve job satisfaction. Studies by Tansky (1993) provide evidence that job satisfaction is directly related to some dimensions of OCB. The study also gives an indication of the importance of organizational justice on job satisfaction. Furthermore, by comparison, one would be able to see which type of organizational justice would have a greater impact on OCB, and the importance of job satisfaction on OCB. Knowing which type of organizational justice is salient for each construct allows the management of organizations to take appropriate actions to improve conditions at the workplace.

The results of the study suggest that organizations need to pay more attention to programs and policies that enhance job satisfaction, but not at the expense of fairness if OCB is the priority of management. Specifically, organizations need to focus on overall justice to enhance job satisfaction, and OCB. In contrast to extant literature (e.g. Nadiri and Tanova, 2010), employees will demonstrate OCBs if management attempts to keep them satisfied even if employees do not perceive organizational justice. Thus, it is crucial for organizations to enhance job satisfaction while managing fairness effectively. Yilmaz and Tasdan (2009) suggest that a positive organizational justice perception may increase a positive citizenship perception, and the more positive the organizational citizenship perception is, the more positive the organizational justice perception will be, and hence, job satisfaction.

REFERENCES

- Adams, J.S. (1965) 'Inequity in social exchange', in L. Berkowitz (Ed.) *Advances in experimental social psychology*, New York: Academic Press, pp.267–299
- Alder, S.A. and Tompkins, P.K. (1997) 'Electronic performance monitoring: An organizational justice and concrete control perspective', *Management Communications Quarterly*, Vol. 10, No. 3, pp.259–289.
- Alexander, S. and Ruderman, M. (1987) 'The role of procedural and distributive justice in organizational behavior', *Social Justice Research*, Vol. 1, No. 2, pp.177–198.
- Amick, D.J. and Walberg, H.J. (1975) *Introductory multivariate analysis*. California: McCutchan Publishing Corporation.
- Bagdadli, S., Roberson, Q. and Paoletti, F. (2006) 'The mediating role of procedural justice in responses to promotion decisions', *Journal of Business and Psychology*, Vol. 21, No. 1, pp.83–102.
- Ball, G.A., Trevino, L.K. and Sims Jr., H.P. (1994) 'Just and unjust punishment: Influences on subordinate performance and citizenship', *Academy of Management Journal*, Vol. 37, No. 2, pp.299–322.

- Bartol, K. (1979) 'Individual versus organizational predictors of job satisfactions and turnover among professionals', *Journal of Vocational Behavior*, Vol. 15, pp.55–67.
- Bateman, T.S. and Organ, D.W. (1983) 'Job satisfaction and the good soldier: The relationship between affect and employee citizenship', *Academy of Management Journal*, Vol. 26, No. 4, pp.587–595.
- Blau, P. (1964) *Exchange and power in social life*. New York: Wiley.
- Brayfield, A.H. and Rothe, H.F. (1951) 'An index of job satisfaction', *Journal of Applied Psychology*, Vol. 35, pp.307–311.
- Campbell, J.P., Dunette, M.D., Lawler, E.E. and Weick, K.E. (1970) *Managerial behavior, performance, and effectiveness*. New York: McGraw Hill.
- Cohen-Charash, Y. and Spector, P.E. (2001) 'The role of justice in organizations: A meta-analysis', *Organizational Behavior & Human Decision Processes*, Vol. 86, No. 2, pp.278–321.
- Colquitt, J.A. (2001) 'On the dimensionality of organizational justice: A construct validation of a measure', *Journal of Applied Psychology*, Vol. 86, pp.386–400.
- Colquitt, J.A., Conlon, D.E., Wesson, M.J., Porter, C.O.L.H. and Ng, K.Y. (2001) 'Justice at the millennium: A meta-analytic review of 25 years of organizational justice research', *Journal of Applied Psychology*, Vol. 86, pp.425–445.
- Cropanzano, R. and Greenberg, J. (1997) 'Progress in organizational justice: Tunneling through the maze', in C.L Cooper & I.T. Robertson (Eds.), *International review of industrial and organizational psychology*, Chichester, UK: Wiley, pp.317–372
- Dailey, R.C. and Kirk, D.J. (1992) 'Distributive and procedural justice as antecedents of job dissatisfaction and intent to turnover', *Human Relations*, Vol. 45, No. 3, pp.305–317.
- Farh, J., Podsakoff, P.M. and Organ, D.W. (1990) 'Accounting for organizational citizenship behavior: Leader fairness and task scope versus satisfaction', *Journal of Management*, Vol. 16, pp.705–721.
- Fields, D., Pang, M. and Chiu, C. (2000) 'A comparative field study of the effects of distributive and procedural justice in Hong Kong', *Journal of Organizational Behavior*, Vol. 21, No. 5, pp.547–562.
- Flaherty, K.E. and Pappas, J.M. (2000) 'The role of trust in salesperson-sales manager relationship', *Journal of Personal Selling and Sales Management*, Vol. 20, pp.271–278.
- Folger, R. and Konovsky, M.A. (1989) 'Effects of procedural and distributive justice on reactions to pay raise decisions', *Academy of Management Journal*, Vol. 32, pp.115–183.
- Foote, D.A. and Tang, T.L. (2008) 'Job satisfaction and organizational citizenship behavior (OCB): Does team commitment make a difference in self-directed teams?', *Management Decision*, Vol. 46, No. 6, pp.933–947.
- Fryxell, G.E. and Gordon, M.E. (1989) 'Workplace justice and job satisfaction as predictors of satisfaction with union and management', *Academy of Management Journal*, Vol. 32, pp.851–856.
- George, J.M. and Brief, A.P. (1992) 'Feeling good-doing good: A conceptual analysis of the mood at work-organizational spontaneity relationship', *Psychological Bulletin*, Vol. 112, pp.311–329.
- Graham, J.W. (1986) 'Organizational citizenship informed by political theory'. Paper presented at the annual meeting of the Academy of Management, Chicago, IL.
- Greenberg, J. (1987) 'A taxonomy of organizational justice theories', *Academy of Management Review*, Vol. 12, pp.9–22.
- Greenberg, J. (1990) 'Looking fair vs. being fair: managing impressions of organizational justice', in B.M. Shaw & L.L. Cummings, (Eds.), *Research in organizational behavior*, Greenwich, CT: JAI Press, pp.111–157

- Hendrix, W., Robbins, T., Miller, J. and Summers, T.P. (1999) 'Procedural and distributive justice effects on turnover'. Paper presented at the Annual Meeting of the Society for Industrial and Organizational Psychology, Atlanta, GA.
- Igbaria, M. and Greenhouse, J.H. (1992) 'The career advancement prospects of managers and professionals: Are MIS employees unique?', *Decision Sciences*, Vol. 23, pp.478–499.
- Katz, D. (1964) 'The motivational basis of organizational behavior', *Behavioral Science*, Vol. 9, pp.131–133.
- Konovsky, M.A. and Organ, D.W. (1996) 'Dispositional and contextual determinants of organizational citizenship behavior', *Journal of Organizational Behavior*, Vol. 17, pp.253–266.
- Konovsky, M.A. and Pugh, S.D. (1994) 'Citizenship behavior and social exchange', *Academy of Management Journal*, Vol. 37, No. 3, pp.656–669.
- Konovsky, M.A., Folger, R. and Cropanzano, R. (1987) 'Relative effects of procedural and distributive justice on employee attitudes', *Representative Research in Social Psychology*, Vol. 17, pp.15–24.
- Korsgaard, M.A., Schweiger, D.M. and Sapienza, H.J. (1995) 'Building commitment, attachment, and trust in strategic decision-making teams: The role of procedural justice', *Academy of Management Journal*, Vol. 38, pp.60–84.
- Lambert, E.G., Cluse-Tolar, T., Pasupuleti, S., Hall, D.E. and Jenkins, M. (2005) 'The impact of distributive justice and procedural justice on social service workers', *Social Justice Research*, Vol. 18, No. 4, pp.411–427.
- Latham, G. and Pinder C. (2005) 'Work motivation theory and research at the dawn of the twenty-first century', *Annual Review of Psychology*, Vol. 56, p.485.
- Lazar, A., Zinger, A. and Lachterman, B. (2007) 'The influence of prefeedback selection justice on perceptions of overall procedural justice and organizational attractiveness in a real-life selection procedure', *European Journal of Work and Organizational Psychology*, Vol. 16, No. 1, pp.94–109.
- Lemons, M.A. and Jones, C.A. (2001) 'Procedural justice in promotion decisions: Using perceptions of fairness to build employee commitment', *Journal of Managerial Psychology*, Vol. 16, pp.268–280.
- Lepine, J.A., Erez, A. and Johnson, D.E. (2002) 'The nature and dimensionality of organizational citizenship behavior: A critical review and meta-analysis', *Journal of Applied Psychology*, Vol. 87, No.1, pp.52–65.
- Leventhal, G.S. (1976) 'The distribution of rewards and resources in groups and organizations', in L. Berkowitz and W. Walster (Eds.), *Advances in experimental social psychology*, New York: Academic Press, pp.91–131
- Lorsh, J.W. and Takagi, H. (1987) 'Keeping managers off the shelf', *Harvard Business Review*, pp.60–65.
- Masterson, S.S., Lewis, K., Goldman, B.M. and Taylor, M.S. (2000) 'Integrating justice and social exchange: The differing effects of fair procedures and treatment of work relationships', *Academy of Management Journal*, Vol. 43, No. 4, pp.738–748.
- McFarlin, D.B. and Sweeney, P.D. (1992) 'Distributive and procedural justice as predictors of satisfaction with personal and organizational outcomes', *Academy of Management Journal*, Vol. 35, No. 3, pp. 626–637.
- Miceli, M.P. and Lane, M.C. (1991) 'Antecedents of pay satisfaction: a review and extension', in K. Rowland & G.R. Ferris (Eds), *Research in personnel and human resource management*, Greenwich, CT: JAI Press, pp.235–309
- Moorman, R.H. (1991) 'Relationship between organizational justice and organizational citizenship behavior: Do fairness perceptions influence employee citizenship?', *Journal of Applied Psychology*, Vol. 76, No. 6, pp.845–855.
- Murphy, C., Ramamoorthy, N., Flood, P.C. and MacCurtain, S. (2006) 'Organizational justice perceptions and employee attitudes among Irish blue collar employees: An empirical test

- of the main and moderating roles of individualism/collectivism', *Management Review*, Vol. 17, No. 3, pp.328–343.
- Murphy, G., Athanasou, J. and King, N. (2002). 'Job satisfaction and organizational citizenship behavior: A study of Australian human-service professionals', *Journal of Managerial Psychology*, Vol. 17, No. 4, pp.287–297.
- Nadiri, H. and Tanova, C. (2010) 'An investigation of the role of justice in turnover intentions, job satisfaction, and organizational citizenship behavior in hospitality industry', *International Journal of Hospitality Management*, Vol. 29, pp.33–41.
- Niehoff, B.P. and Moorman, R.H. (1993) 'Justice as a mediator of the relationship between methods of monitoring and organizational citizenship behavior', *Academy of Management Journal*, Vol. 36, No. 3, pp.527–556.
- Organ, D. W., & Moorman, R. H. (1993). 'Fairness and organizational citizenship behavior: What are the connections?', *Social Justice Research*, Vol. 6, pp.5-18
- Organ, D.W. (1988) 'A restatement of the satisfaction-performance hypothesis', *Journal of Management*, Vol. 14, pp.547–557.
- Organ, D.W. (1990) 'The motivational basis of organizational citizenship behavior', *Research in Organizational Behavior*, Vol. 12, No. 1, pp.43–72.
- Pallant, J. (2007) *SPSS survival manual: A step-by-step guide to data analysis using SPSS for Windows*. Berkshire, England: McGraw-Hill Education.
- Podsakoff, P.M., MacKenzie, S.B., Moorman, R.H. and Fetter, R. (1990) 'Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors', *The Leadership Quarterly*, Vol. 1, pp.107–142.
- Price, J.L. and Mueller, C.W. (1986) *Handbook of organizational measurement*. Marshfield, Mass: Pittman.
- Quarles, R. (1994) 'An examination of promotion opportunities and evaluation criteria as mechanism for affecting internal auditor commitment, job satisfaction and turnover intentions', *Journal of Managerial Issues*, Vol. 6, pp.176–194.
- Ramamoorthy, N. and Flood, P. (2004) 'Gender and employee attitudes: The role of organizational justice perceptions', *British Journal of Management*, Vol. 15, No. 3, pp.247–258.
- Rhoades, L., Eisenberger, R. and Armeli, S. (2001) 'Affective commitment to the organization: The contribution of perceived organizational support', *Journal of Applied Psychology*, Vol. 86, No, 5, pp.825–836.
- Robinson, S.L. and Morrison, E.W. (2002) 'Psychological contracts and OCB: The effect of unfulfilled obligations on civic virtue behavior', *Journal of Organizational Behavior*, Vol. 16, pp.289–298.
- Rosenbaum, J.E. (1984) *Career mobility in a corporate hierarchy*. Orlando, FL: Academic Press.
- Schaubroeck, J., May, D.R. and Brown, F.W. (1994) 'Procedural justice explanations and reactions to economic hardship: A field experiment', *Journal of Applied Psychology*, Vol. 79, pp.455–460.
- Sheppard, B.H., Lewicki, R.J. and Minton, J.W. (1992) *Organizational justice: The search for fairness in the workplace*. New York: Lexington Books.
- Skarlicki, D.P. and Folger, R. (1997) 'Retaliation in the workplace: The roles of distributive, procedural, and interactional justice', *Journal of Applied Psychology*, Vol. 82, pp.434–443.
- Smith, C.A., Organ, D.W. and Near, J.P. (1983) 'Organizational citizenship behavior: Its nature and antecedents', *Journal of Applied Psychology*, Vol. 68, pp.653–663.
- Staines, G.L., Fudge, D.A., & Pottick, K.J. (1986). Wives' employment and husbands' attitudes toward work and life. *Journal of Applied Psychology*, Vol. 71, pp.1118–1128.

- Sweeney, P.D. and McFarlin, D.B. (1993) 'Workers' evaluations of the 'ends' and the 'means': An examination of four models of distributive and procedural justice', *Organizational Behavior and Human Decision Processes*, Vol. 55, pp.23–40.
- Tansky, J.W. (1993) 'Justice and organizational citizenship behavior: What is the relation?', *Employee Responsibilities and Rights Journal*, Vol. 6, No. 3, pp.195–207.
- Tremblay, M., Sire, B. and Balkin, D.B. (2000) 'The role of organizational justice in pay and employee benefit satisfaction, and its effects on work', *Group and Organizational Management*, Vol. 25, pp.269–90.
- St Onge, S. (2000) 'Variables influencing the perceived relationship between performance and pay in a merit pay environment', *Journal of Business and Psychology*, Vol. 14, No. 3, pp.459–479.
- Welbourne, T.M. (1998) 'Untangling procedural and distributive justice', *Group and Organizational Management*, Vol. 23, pp.325–346.
- Williams, S., Pitre, R. and Zainuba, M. (2002) 'Justice and organizational citizenship behavior intentions: Fair rewards versus fair treatment', *The Journal of Social Psychology*, Vol. 142, No. 1, pp.33–44.
- Yilmaz, K. and Tasdan, M. (2009) 'Organizational citizenship and organizational justice in Turkish primary schools', *Journal of Educational Administration*, Vol. 47, No. 1, pp.108–126.

Tables 1 and 2 were omitted due to space considerations.
For a copy of this paper with the tables included, please contact the author.

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The Moderating Role of Firms' Structure during the Implementation Stage of Technology Transfer in Malaysia

Keywords: Organizational size, decision making, formalization, absorptive capacity, technology transfer.

INTRODUCTION

Technology nowadays has become an important element for a nation's industrial and economic development in which it provides a basic requirement to stimulate growth. One of the ways to obtain advanced technology is through technology transfer from foreign or advanced firms in similar or related industries. Osman-Ghani (1999) suggested that technology transfer is an avenue for firms to increase their technological innovation. It is a necessity for firms to acquire and cope with the latest technology in order to increase their technological capabilities (Geeta & Hong 2003). This is important especially when firms' internal Research and Development (R&D) is limited. However, relying on the imported technology is insufficient as the technology must correspond to the firms' needs and ability. In acquiring the technologies from another firm,

several management processes are embedded in the learning such as organizational structure and top management support and these situations varies from one firm to another. The discrepancies in the management process between the technology provider and recipient created a gap which complicates the technology transfer process. Thus, technology transfer is very complex as it involves transferring technology from provider firms to the recipients which are different in terms of the professional people involved, their strategic planning, distance, aims and competitive barriers. Due to the complexity in the process, a study on absorptive capacity and the effect of organizational structure is important to identify the progress of the transferred technology. Moreover, scholars (Gupta & Govindarajan, 2000 and Ganesan & Kelsey, 2006) had suggested that appropriate preparation is required for an effective transfer. Hence, this study aims to enlighten such issue by unfolding the effect of the management process specifically organizational culture towards the technology transfer process primarily absorptive capacity of the recipient firm. Therefore, this paper specifically will examine the role of organizational structure in the technology transfer process, then it will analyse the moderating effect of the organizational structure towards absorptive capacity and the implementation stage of technology transfer and lastly this study will determine the significant moderator predictor during the implementation stage of the technology transfer. This paper will elucidate the above objectives by discussing firstly, the meaning of technology transfer process, secondly the concept of absorptive capacity which is the core concept in the technology transfer and finally the effect of the organizational structure on the technology transfer during the implementation stage.

LITERATURE REVIEW

Technology is one of many mechanisms by which humans leverage their efforts in order to improve the quality of life. Technology has also become a key factor in defining firms' competitive advantage (Porter, 1985) and it is even a more pervasive factor of production. Technology is believed to be one of the major forces underpinning economic development (Reisman, 2005) and has become one of the most important elements for economic and social development in several newly industrialized countries in ASEAN (Tai-Yue & Shih-Chien, 2007). However, it is difficult to define technology due to its multidimensional nature (Souder & Padmanabhan, 1989).

Technology transfer is defined as a movement of ideas, skills, information, technical know-how and people from the providing organization to the recipient organization (Harrison & Samson, 2002). As such, technology transfer involves two parties, the transferor and the transferee who transfer their technical and managerial abilities. Such movement allows the recipient organization to produce innovative products and services that meet organizational goals and satisfy customers' needs. Consistent with this, Rogers (1983) also defined technology transfer as not a simple movement of unchanging technologies across boundaries, but rather a creative reinvention of products or ideas. They (Harrison & Samson, 2002; Rogers 1983) agreed that technology transfer does not indicate the transport of technology.

Meanwhile, absorptive capacity is an important element that strongly related to the technology transfer as it determines the success of the transferred process. The existing level of absorptive capacity for a firm indicates the extent to which its members are able to participate in transferred technology (Kumar, et al., 1999). Zahra and George (2002) re-conceptualize the concept of absorptive capacity and redefined it as:

“a set of organizational routines and processes by which firms acquire, assimilate, transform and exploit knowledge to produce a dynamic organizational capability” (p. 186)

They suggested that through incorporating the dynamic capabilities illustrated in the organizations' routines or processes, firms were able to analyze their stock of knowledge and use it for development of their competitiveness. Moreover, they also suggested that four dimensions

of external knowledge which include ability to identify, assimilate, transform and exploit the external knowledge should be combined together.

Previous studies used organizational phenomenon in explaining absorptive capacity (Cohen & Levinthal, 1990; Lane, Salk, & Lyles, 2001; Lane & Lubatkin, 1998; Mowery, et al., 1996; Szulanski, 1996). Cohen & Levinthal (1990) for example, studied the theoretical model of firm generation of technological knowledge and found that the appropriability and technological opportunity condition is affected by determinants of ease of learning, particularly the characteristics of knowledge inputs. They suggested that there is a need to develop people as innovation and absorptive capacity are closely related to path-dependence.

Meanwhile, structure is important in an organization as it indicates how knowledge is processed. Individuals in an organization interact as persons and also as actors performing the assigned roles in organizations. Structure also influences the communication process in an organization and it stores knowledge about the organization's perception regarding its environment (Lane & Lubatkin, 1998; Tushman & Nadler, 1978). Hence, a firm's knowledge processing system is reflected in its organizational structure.

Firms that have dynamic capabilities are usually flat organizations, highly entrepreneurial, have clear vision, high-powered incentives and high levels of autonomy (Teece, 2000). However, relying on high formalization to transfer learning may undermine creativity. People tend to receive orders and avoid thinking on how to tackle any issues surrounding them. Furthermore, Teece emphasise that even though firms have the knowledge assets grounded in experience and expertise of people, firms still need to provide the physical resources in order to develop the knowledge assets into firm competencies.

In addition, firm's organizational structures should be able to support absorptive capacity and any technology transferred. The surrounding environment facilitates the transfer among the people and encourages the flow of information to the person involved. Findings by Szulanski (1996) showed that the division of work and responsibilities affect groups in learning. In addition, Lane & Lubatkin (1998) had also discovered that firms that are similar in formalization, centralization and incentives with their partners would lead to positive inter-organizational learning.

On top of that, Southon, Sauer & Grant (1997) discovered that lack of fit among organizational structure and strategy structure pairing lead to diffusion problems. The result was supported by Md Zahidatul Islam (2001), whereby he found that decentralization does not offer greater success in technology transfer. In a different study by Zaafaran Hassan (1999), it was found that formalization and centralization act as moderators in influencing the adoption of innovation. The previous study indicates that the findings on organizational structure on transferred technology are inconsistent.

RESEARCH METHOD

This study used survey as a major research design and quantitative approach was used to examine the phenomenon. The target population for this study was Electronics and Electrical (E&E) firms and the population frame was obtained from the Directory of Foreign Affiliated Companies in Malaysia (2007) and the Japan Related Companies Yearbook 2007 (JETRO). These two authoritative sources of the databases were used because it provides detail information about the companies as well as foreign involvement in the ownership. As many foreign firms that are operating in Malaysia enter the country through foreign direct investments, therefore they are expected to involve in the technology transfer which include the parent companies to the

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domestic firms. The population was 525. Using a table produced by Krejcie and Morgan (1970), a sample of 226 was derived. Mails, self-administered questionnaires and e-mails were used to increase the response rate. Finally, the number of questionnaires received was 79 out of which 73 were usable. Hence, the respond rate was 17% from the total number distributed and 35% from the sample size required. The respond rate is similar to previous research in similar studies. Before further tests were performed, the construct was subjected to validity and reliability tests. Factor analysis was carried out to test the construct of the questionnaires. All constructs have acceptable loadings with Cronbach-alpha in the range of 0.6-0.8.

FINDINGS

The majority of the respondents were male (85%) with position as manager (52%). The details of the respondents' demographics are shown in Table 1 (following).

At the earlier part of the questionnaire, two questions were posed in order to assess the firms' engagement in transfer of technology. The first question was on the agreements that firms had with other firms which lead to technology transfer activities. The results indicate that 41.7% (30) firms were involved in technical assistance, 34.3% (24) were engaged in management or supporting agreements and 26.4% (19) firms were under licensing/ trademark /patent. From all the responses received, only 15.1% (11 firms) were under joint venture and 5.6% (4 firms) under turn-key agreements. The firms were also asked on whether they transferred their technology to other firm. From the total respondents, 41.1% said that they do not transfer technology to somewhere else. However, 28.8% indicated they transfer technology to their parent or subsidiary company, 9.6% transfer technology to other foreign companies overseas and 12.3% said that

Table 1 *Respondents' demographic factors*

Variable	Frequency (n=73)	Percent (Total 100%)	they transfer to local companies either foreign-controlled companies or local controlled companies.
Gender:			
Male	62	85	In order to test the effect of moderators on the technology transfer stage, a moderated regressions analysis (MRA) was utilized. The moderator effect was identified so that the results could provide some insights into the usefulness of them to the relationship between absorptive
Female	11	17	
Position held:			
Director	2	3	capacity dimensions and implementation stage of technology transfer. The steps used were in accordance to the suggestion by Sharma, Durand & Gur-Arie (1981) and Frazier, Barron & Tix (2004). In doing so, the predictor and moderator variables were standardized to provide a meaningful interpretation.
Senior Manager	15	21	
Manager	38	52	
Assistant Manager	8	11	
Executives/Engineers	10	14	

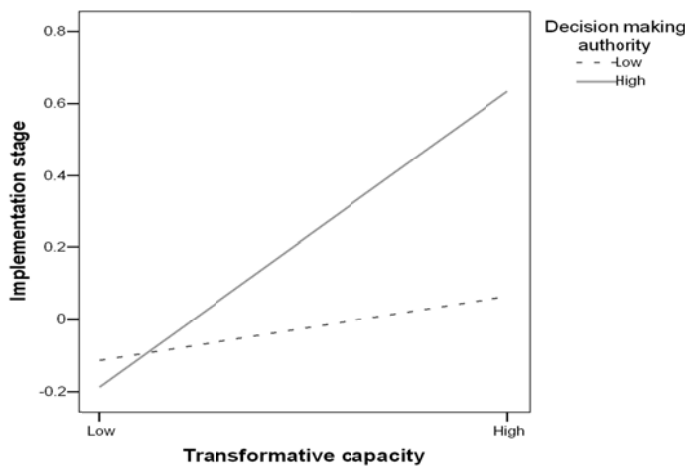
capacity dimensions and implementation stage of technology transfer. The steps used were in accordance to the suggestion by Sharma, Durand & Gur-Arie (1981) and Frazier, Barron & Tix (2004). In doing so, the predictor and moderator variables were standardized to provide a meaningful interpretation.

The steps started with control variable followed with an estimation of the un-moderated equation, then followed by the moderated relationship. Only the change in r^2 would indicate that there is a significant moderator (Hair et al. 1998). In cases where the variable is a moderator variable, a post-hoc graph would then be drawn to show the effect of the moderator in the relationship between the predictor and criterion variables.

Table 2.0 *The moderating effect of organization structure on the relationship between absorptive capacity dimensions and the implementation stage of technology transfer*

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Variables	Step 1 Control variables	Step 2 Without interaction	Step 3	Step 4 With interaction
Fully local	-0.005	-0.115	-0.183	-0.319
Majority local	-0.103	-0.254	-0.314	-0.299
Fully foreign	0.063	-0.069	-0.108	-0.361
Knowledge diversification		-0.075	-0.111	-0.635***
Strategic posture		-0.184	-0.222*	-0.146
Transformative capacity		0.203*	0.139	0.276
Decision-making authority			0.092	2.065
Formalization			-0.142	0.084
Knowledge diversification x decision- making authority				0.565***
Strategic posture x decision-making authority				-0.156
Transformative capacity x decision- making authority				0.336**
Knowledge diversification x formalization				-0.322**
Strategic posture x formalization				0.093
Transformative capacity x formalization				0.186
r ²	0.021	0.286	0.363	0.819
Adjusted r ²	-0.024	0.191	0.213	0.590
r ² change	0.021	0.265	0.078	0.456
Significant F change	0.712	0.002	0.261	0.002

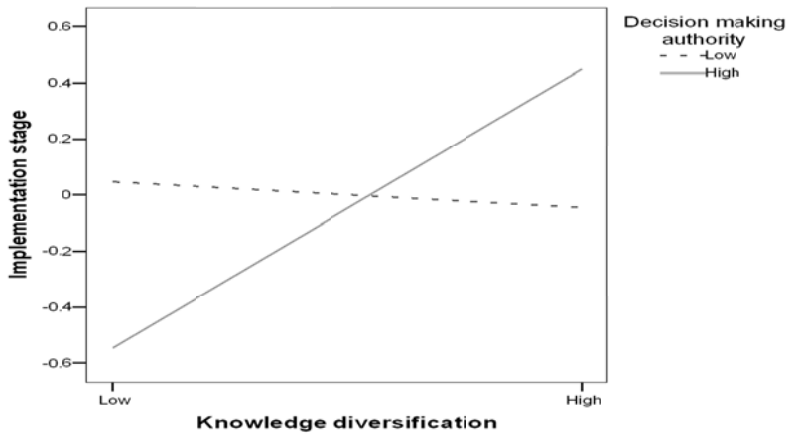


Step 2 shows the change in F is significant with transformative capacity. The beta value is 0.203 for transformative capacity, and shows the relative importance of these variables in this relationship. The moderator variables were introduced under Step 3. However, there is no significant F change that indicates there is no major effect from the moderator variables in the relationship between the predictors and criterion variables. Under Step 4, the interaction between the predictor variables and the moderators found that there

was a significant F change of 0.002.

The moderators that had a significant interaction with the predictors was decision- making authority. Since knowledge diversification and decision-making authority showed a significant interaction, a graph was plotted as shown in Figure 1. The graph indicates a positive relationship between knowledge diversification and the implementation stage in firms that practiced high decision-making authority. However, firms that had low decision-making authority had a slight

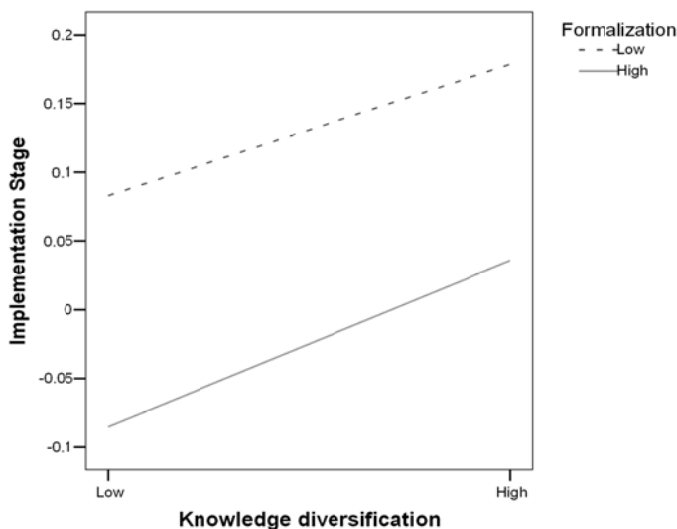
reduction in implementation of technology with the increase in knowledge diversification. This indicates that high decision-making authority is required to assist implementation when there is much diversification of knowledge.



The same pattern occurs in the relationship between transformative capacity and the implementation stage with the presence of high decision-making authority. Figure 2 shows a positive linear relationship between transformative capacity and the implementation stage.

The increase in the implementation stage is also achieved by low decision-making firms when transformative capacity is high. Yet the effect is less profound as compared to those with high decision-making.

A graph was also plotted on the relationship between knowledge diversification and the implementation stage with formalization as the moderator. Figure 3 shows that a low degree of formality would benefit firms in implementations of technology; with low formalization, implementation is higher when knowledge diversification is high.



between transformative capacity and the implementation stage.

implementation is higher when knowledge diversification is high.

CONCLUSIONS AND DISCUSSION

This study attempts to identify the impact of absorptive capacity and organizational structure on implementation stage of technology transfer. In order to determine the moderator effect, a multiple hierarchical regression was conducted. The role of organizational structure in the technology transfer is obvious primarily during the implementation stage of the technology.

Organizational structure tends to moderate the technology transfer process by enhancing the

acquired technology when the right and appropriate structure between the technology provider and technology recipient is being used. However, a vice versa would occur where acquired technology is less achievable if the organizational structure used between the partners are inappropriate or mismatch. During the implementation stage, the adjusted r^2 increase from 19% to 59% with the inclusion of the moderator variables. Hence, the moderators strengthen the prediction of the implementation stage of technology transfer.

Decision-making authority, a significant element in the organizational culture significantly affects the relationship in the expected ways. In both knowledge diversification-implementation stage relationship and transformative capacity- implementation stage relationship, with high decision making authority, there was an increase in implementation stage. The study indicates that the transfer requires not only the technology but also the inherent ability of persons in the organizations. Besides of having appropriate technology to ensure success in transfer, the organizational structure is also paramount. The findings support the study by Md Zahidatul Islam (2001) and Zaafaran Hassan(1999).

The findings indicates that that focus should be given to the human capital development. Government and firms should work together to help people gain the capabilities needed to capitalize on the transferred technology. Management is advised to establish process and systems that integrate both elements in their planning and strategic direction. Without implementation stage, it would be difficult for firms to move to further stage. Firms need to focus on knowledge diversification and transformative capacity as it relates significantly with technology transfer performances. Firms need to invest in diversification of knowledge through various training rather than restricted their employees on learning things related to the job alone. The reason is obvious, in order to enable a person to become a better decision maker, various information is required which is translated into various types of training.

However, there are few limitations in this study. The first limitation is regarding the sample of this study. Two aspects were involved here; sample frame and sample size. The sample frame was the Electronic and Electrical industry which indicates that the result cannot be generalized to another industry due to differences in the type of technology they used. Moreover, the respond rate is also limited which inhibit rigorous test on the data. Thus, the result cannot be generalized to all industries.

REFERENCES

- Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35, 128-152.
- Frazier, P. A., Barron, K. E., & Tix, A. P. (2004). Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Technology*, 51(1), 115-134.
- Geeta, B., & Hong, T. (2003). *SME Technical Efficiency and its Correlates: Cross-National Evidence and Policy Implications.*: World Bank Institute Working Paper.
- Gupta, A. K., & Govindarajan, V. (2000). Knowledge flows within multinational corporations. *Strategic Management Journal*, 21(4), 473-496.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis* (5th ed.). New Jersey: Prentice-Hall International Inc.
- Krejcie, R., & Morgan, D. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.
- Lane, P. J., & Lubatkin, M. (1998). Relative absorptive capacity and interorganizational learning. *Strategic Management Journal*, 19, 461-477.
- Lane, P. J., & Lubatkin, M. (1998). Relative absorptive capacity and interorganizational learning. *Strategic Management Journal*, 19, 461-477.

- Lane, P., Salk, J. E., & Lyles, M. A. (2001). Absorptive capacity, learning and performance in international joint ventures. *Strategic Management Journal*, 22(12), 1139-1157.
- Md Zahidatul Islam (2001). *Organisation structure and the success of technology transfer in Malaysian firms*. Unpublished Dissertation, Universiti Sains Malaysia, Penang.
- Osman-Gani, A. A. M. (1999). International Technology Transfer for Competitive Advantage: A Conceptual Analysis of the Role of HRD. *Competitiveness Review*, 9(9).
- Rogers, E. (1983). *The diffusion of innovation*. New York: Free Press.
- Sharma, S., Durand, R. M., & Gur-Arie, O. (1981). Identification and Analysis of Moderator Variables. *Journal of Marketing Research* 18(3), 291-300.
- Sarina Muhamad Noor, Rushami Zien Yusoff & Fariza Hashim. (2010). Firms' Absorptive Capacity and Technology Compability in Transferred Technology. *IEEE International Conference on Science & Social Research* (pp. 611-623). Kuala Lumpur: UiTM.
- Southon, F. C. G., Sauer, C., & Grant, C. N. (1997). Organizational impediments to successful technology transfer and diffusion. *Journal American Medical Informatics Association*, 4(2), 112-124.
- Szulanski, G. (1996). Exploring internal stickiness: Impediments to the transfer of best practice within the firm. *Strategic Management Journal*, 17(Winter Special Issue), 27-43.
- Tai-Yue, W., & Shih-Chien, C. (2007). The influences of technology development on economic performance- The example of ASEAN countries. *Technovation*, 27, 471-488.
- Teece, D. J. (2000). *Managing intellectual capital*. New York: Oxford University Press.
- Tushman, M. L., & Nadler, D. A. (1978). Information processing as an integrating concept in organizational design. *Academic of Management Journal*, 3(3), 613-624.
- Zaafaran Hassan (1999). *Managerial Innovativeness: An Exploratory Study of Middle Level Managers in Malaysian Financial Services Companies*. Paper presented at the The 3rd Asian Academy of Management Conference Kuala Terengganu Malaysia.
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Stock Market Movement and Macroeconomic Influences: Evidence from Saudi Arabia

INTRODUCTION

Scholars and practitioners over the past decades have investigated the relationship between macroeconomic variables and stock market price movement. The major focused has been on the effects of microeconomic variables such as gross domestic product (GDP), interest rates, and inflation rates. The government financial policies-fiscal and monetary; and macroeconomic events have huge impacts on general economic activities including the stock market. This has generated a lot of interest by researchers to investigate the dynamic relationship between macroeconomic variables and stock price movement. Based on US stock markets, Chen *et al.*, (1986) used the Arbitrage Pricing Theory (APT) developed by Ross (1976), with some macroeconomic variables to explain US stock market movement. Their findings showed that there is a positive relationship between the expected stock returns and industrial production, changes in risk premiums, and changes in the term structure; similarly the expected stock returns

are negatively related to the anticipated and unanticipated inflation rates. Furthermore, researchers who studied the relationship between stock returns and macroeconomic variables in developed countries employ co-integration methodology (Cheung and Ng, 1998; McMillan and Humpe, 1997; Mukherjee and Naka, 1995; Kwon and Shin, 1999; and Maysami and Koh, 2000). Although much have been seen in terms of direct foreign flows of capital from developed to emerging economies and its associated high returns (Ushad *et al*, 2008; Osinubi, 2004), not much have been seen in terms of exploring the emerging stock markets in the Middle East and North African (MENA) countries.

The objective of the present study is to examine the effects of selected macroeconomic variables on the movement of Saudi Arabia stock market proxy by Tadawul-All Share Index (TASI). This study results will be compared with the findings of studies in developed and emerging markets.

LITERATURE REVIEW

STOCK MARKET MOVEMENT AND MACROECONOMIC VARIABLES

The Dividend Discount Model (DDM) proposed by Miller and Modigliani (1961) illustrates theoretical relationship between stock prices and macroeconomic variables. This modeled the equality of the current price of an equity share and the present value of all future cash flows to the share. Thus, the determinants of share prices are the required rate of return and expected cash flows suggesting that economic factors have influence on the expected future cash flow and required rate of return including the share price (see for example Oyama, 1997; Gan et al 2006; Humpe and McMillian, 2007; Leibowitz, Sorensen, Arnott and Hansen, 1989; and Tessaromatis, 2003). Past research found that the expected real returns on bills and expected inflation rates are inversely related (Fama and Gibbon, 1982). This is due to the positive correlation between expected real returns on financial assets and real activity.

Fama (1981) investigated the relationships between stock prices and real activity, inflation, and money and found a strong positive correlation between real variables and stock returns; this positive correlation was further confirmed by Hamao (1988) using the multifactor APT model the relationship between Japanese stock returns and inflation. Also, recent study by Rapach (2002) on the relationship between inflation and stock prices in 16 industrialized countries stated that increase in inflation does not result in persistent depreciation of share real value.

In line with the dividend discount model, the share price and the required rate of return are inversely related. Thus the opportunity costs of holding cash rises with increase in interest rate, and the trade-off to holding other interest bearing securities would lead to a decrease in share price (Gan et al, 2006). Also it has been established that there is a negative relationship between stock returns and both the long term and short term interest rates (French et al., 1987). Bulmash and Tivoli (1991) also pointed out that there exist a positive correlation among previous month's US stock price, money supply, federal debt, tax-exempt government debt, long-term unemployment and the broad money supply.

METHODOLOGY & DATA SOURCES

This study makes use of monthly data for **TASI**, **CPI**, **DEPR** and **NFDI** from 2000:1 to 2010:12 for the study. All the data except Inward NFDI were extracted as at December 2011 edition of the DataStream database. The Inward NFDI data were obtained in annual form from the United Nations Conference on Trade and Development (UNCTAD); and interpolated by the method described by Goldstein and Khan (1976) to monthly (see Table 1 for a brief description of the variables).

Table 1: Description of Variables and Source of Data

<i>Variable</i>	<i>Concept</i>	<i>Description</i>	<i>Units</i>	<i>Source</i>
LTASI	Logarithm of Tadawul All-Stock Index	Tadawul-All Stock Index	31 Dec. 2011	DataStream Database
LCPI	Logarithm of Consumer Price Index	Monthly Index	Annual Percentage	DataStream Database
LDEPR	Logarithm of Interest rate	30-day Deposit rate	Annual Percentage	DataStream Database
LFDI	Logarithm of net Foreign Direct Investment Inflow	Total volume of foreign invested capital in the economy	In millions of USD	UNCTAD Database

Unit root tests

This study applies co-integration and the estimation of Vector Error Correction Model (VECM) to analyze the time series behavior of the data in line with Johansen & Juselius (1990); Johansen (1991 & 1995); this technique has been used by many researchers for testing the long-run relationships among variables (e.g. Cheung & Ng, 1998) and involves the use of maximum likelihood procedure. The methodological aspects with direct relevance to this study and the advantages will now be explained; hence the following procedures will be followed in estimating the co-integration: The study considers whether each of the series is integrated of the same order by considering the standard Augmented Dickey-Fuller test and Philips-Perrons unit root tests. The eigenvalue and trace test were tested with the number of co-integration ranks (r). The maximum eigenvalue statistics test the null hypothesis that there are r co-integration vectors; and the alternative hypothesis that there are $r+1$ co-integration vectors. Also, the null hypothesis of no co-integrating vector of the trace statistics test was tested against the alternative hypothesis of at least one co-integrating vector. Based on the above theoretical explanation, this study hypothesize that the relationship between stock prices and macroeconomic variables as follows:

$$TASI_t = \varphi_0 + \varphi_1 LDEPR_t + \varphi_2 LCPI_t + \varphi_3 LNFDI_t + \epsilon_t \quad (1)$$

Where,

φ_0 , Is the intercept of Tadawul All-Stock index, a constant terms when all the macroeconomic variables have no interaction on the index, hence zero contribution; and each of the φ_1 , φ_2 , and φ_3 , are the sensitivity of the microeconomic variables to the Tadawul index respectively; and ϵ_t is a stationary error correction term.

EMPIRICAL ANALYSIS

Descriptive Statistics of the Variables

Figure 1 and Table 2 present the logarithm and a summary of descriptive statistics of the variables respectively. Sample mean, standard deviation, skewness and kurtosis, and the Jacque-Bera statistic and p -value have been reported. The high standard deviation of TASI with respect to the mean is an indication of high volatility in the Saudi's stock market during the period under review. From the p -values, the null hypothesis that LCPI, LDEPR and LNFDI are normally distributed at 5% level of significance cannot be rejected.

Figure 1: Logarithms of each of the Variables

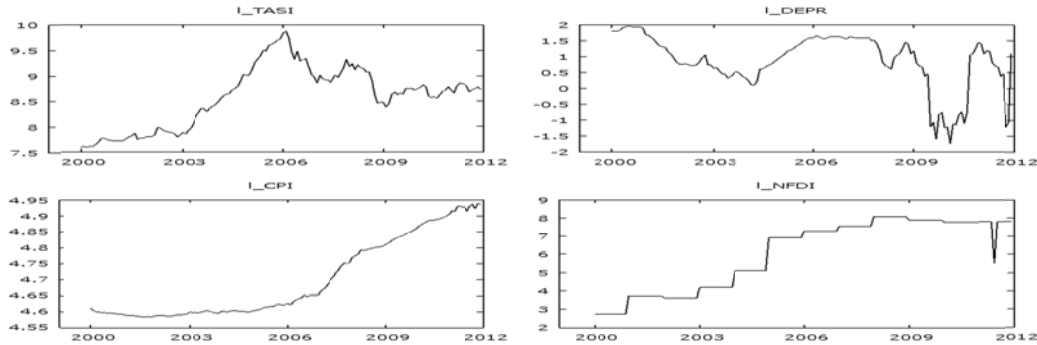


Table 2: Summary Statistics, using the observations 2000:01 - 2011:12

Descriptive Statistics												
Variable	Range	Minimum	Maximum	Sum	Mean	Std. Deviation	Jarque-Bera	Skewness	Kurtosis			
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
LTASI	2.2836	7.5947	9.8783	1237.2311	8.5919	.0502	.6024	5.1967	-.051	.202	-.915	.401
LDEPR	3.6906	-1.7373	1.9533	126.5671	.8789	.0706	.8472	45.8200	-1.274	.202	1.216	.401
LCPI	.3548	4.5839	4.9388	676.5892	4.6985	.0103	.1232	19.5246	.713	.202	-1.120	.401
LNFDI	5.3398	2.7246	8.0644	868.8141	6.0334	.1608	1.9295	18.1173	-.456	.202	-1.495	.401

Unit Root Test

Augmented Dickey-Fuller (ADF) tests were used to determine the order of integration and stationarity of the variables. Table 3 shows the Augmented Dickey-Fuller (ADF) test statistics for the presence of unit root of the level and first difference over the sample period. For the level of variable series, the results show the existence of unit root for all variables as it fails to reject the null hypothesis of nonstationary for all variables, hence all the data are non-stationary at levels but first differences are stationary at 5% significant level.

Table 3: Unit Root Tests on Level and First Differences

Variables	ADF STATISTICS	
	Level of Variable	First Difference of Variable
LTASI	-0.0268244	-0.570150
LCPI	-0.0191892	-0.435799
LDEPR	-0.1088320	-2.265980
LNFDI	-0.0309955	-1.997570

Notes: the augmented Dickey-Fuller (ADF) statistic at 95% critical value is 2.8859.

Table 4 shows the Engle-Granger co-integration results following the test on the residuals from the co-integrating regression in equation 1. The hypothesis of no integration is rejected for the model since the t-statistics are greater than the critical value in absolute terms. The Tadawul stock return co-integrated with consumer price index, and net foreign direct investment, but no integration with deposit (discount) rates.

Table 4 Engle-Granger Co-integration Test Results

Variables			ADF STATISTICS
Dependent	Independent		ADF Statistic
LTASI	LCPI		-0.002523
	LDEPR		-0.119556
	LNFDI		-0.025688

Table 5 shows multivariate co-integration test results based on Johansen co-integration model. The *max* test statistic (eigenvalues) and the *trace* test statistic of null hypothesis of no long-run relationship among

variables, i.e. $r = 0$ cannot be accepted at the 5% significant level. The Engle-Granger tests indicate cointegration in three out of four models.

Cointegration Test and Vector Error Correction Model

The next step involves estimating the model and determining the rank, r to find the number of co-integrating relations in our model. The optimal lag length was determined by both Schwarz (SIC) and Akaike Information Criterion (AIC) using 12 maximum lags in the general VAR model. The aim is to choose the number of parameters, which minimizes the value of the information criteria. The SIC has the tendency to underestimate the lag order, while adding more lags increases the penalty for the loss of degrees of freedom. To make sure that there is no remaining autocorrelation in the VAR model, AIC is selected as the leading indicator. The model lag length reported in Table 5 indicates appropriate lag length of 3 for SIC.

The study proceeds to test for the presence of long-run relationship among the variables by using Johansen's Maximum Likelihood approach. An intercept and no trend are specified for the co-integration test. The trace statistic suggests four co-integrating vectors, and the maximum eigenvalue statistic indicates one co-integrating vector at the 5% significance level. Given evidence in favor of at least one co-integration relation, a test of zero coefficients on each factor in the co-integrating vector is conducted to determine whether the coefficients for all factors in the co-integrating VAR model are significantly different from zero. This indicates the stock market index and macroeconomic variables are in tandem, moving in the same long-run equilibrium path. The co-integration graph (see Figure 2 below) confirms that there are more than “one” mean reversion effect in the co-integration vector over the period and signifies a good error correction behavior in the co-integration system. Consequently, the estimated long-run relationship via co-integration analysis and the error correction coefficients are appropriate. The long-run co-integration relation between the macroeconomic factors and stock prices normalized on LDSI is given by:

$$\beta^1 = \begin{pmatrix} LTASI_t & LDEPR_t & LCPI_t & LNFDI_t \\ 1.000 & -0.98255 & 3.4696 & -0.84063 \end{pmatrix}$$

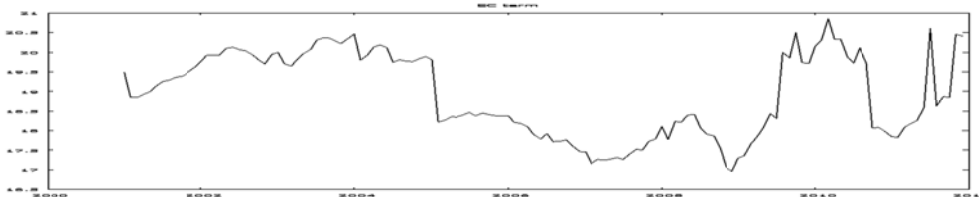
This can be re-parameterized as:

$$LTASI_t = 0.98255LDEPR_t - 3.4696LCPI_t + 0.84063LNFDI_t - \text{Constant}$$

Table 5: Johansen (Multivariate) Co-integration Test

	Lag	r = 0	r <= 1	r <= 2	r <= 3
λ_{trace}	3	73.81	36.35	20.35	6.82
λ_{max}	3	37.47	16.00	13.53	6.82

Figure 2: A Plot of Cointegration Vector normalized on LTASI



The coefficients of LCPI and LNFDI are correctly sign. Contrary to our expectation,

LDEPR has positive signs. The negative relationship between LCPI and LTASI is expected because inflation rate will lead to change in monetary policy in response to an increase/decrease in the rate of inflation leading to economic tightening/relaxing policies, which eventually increases/decrease the nominal risk-free rate and hence raises/reduces the discount rate in the valuation model. The shifting of funds between risky equity and risk-free assets by portfolio managers is thus expected in such a situation. When deposit rate is high, rational investors would tend to invest in less risky assets with high returns.

With regards to the positive relationship between LNFDI and LTASI, the study argues that the opening of the market to non-resident Saudi Arabia and foreigners in June 1997 as well as general economic openness were big boost to the development of the market. The exchange control permission given to investors to invest through the exchange without prior approval attracted a number of top-rated foreign institutional investors.

The positive relation between LDEPR and LTASI though not expected may be in support of the Fisher (1930) hypothesis during high inflationary period as was the case of Saudi Arabia (19% in 2005), implies a positive one-to -one relationship between stock returns and inflation. It also implies that investors are compensated for inflationary increase in prices.

As an export dominated economy the depreciation of the Tadawul may be regarded as a mean to correct the imbalance of government policies regarding the closed nature of the economy. The exchange rate of the Saudi Riyals was not used in this study because it is pegged to the dollar at 3.75/\$ throughout the period as the study assumed no significant impact on stock prices in Saudi Arabia.

Given the evidence in favor of at least one co-integrating vector, the study proceeds to estimate the Vector Error Correction Model (VECM) to examine the short-run causal linkages between the variables. The result of the VECM estimation is reported in Table 6.

Table 6 shows the VECM for LTASI with significant error correction term in the TASI equation.

Table 6

	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-ratio</i>	<i>p-value</i>	
constant	0.0503046	0.0147182	3.4178	0.00097	***
d_1_DEPR_8	-0.00413404	0.00148055	-2.7922	0.00645	***
d_1_CPI_3	0.302932	0.10311	2.9380	0.00424	***
EC1	-0.00250052	0.000748677	-3.3399	0.00124	***

Mean dependent var	0.002599		S.D. dependent variable	0.004983
Sum squared resid	0.001235		S.E. of regression	0.003789
R-squared	0.620386		Adjusted R-squared	0.421751
rho	0.015520		Durbin-Watson	1.966476

The error correction coefficient is negative and significant and indicates the direction and speed of adjustment towards the long-run equilibrium path; implies that, in the absence of variation in the independent variables, the model's deviation from the long run relation is corrected by increase in the dependent variable.

The regression analysis results show that R-squared is high, about 62% implying that overall goodness of fit of the VEC model is satisfactory. The diagnostic test statistics reported in Table 6

indicates that the model passes serial correlation, functional form misspecification, non-normal errors and Heteroscedasticity test at the 5%.

Impulse Response Function and Forecast error Variance decomposition

As the co-integration does not provide information on responses of variables to shocks or innovations in other variables; the study employs the Impulse Response Function and Forecast Error

Variance Decomposition based on the VECM to examine how TASI responds to shocks in the other variables. Figure 4 shows the impulse response functions while the variance decomposition at the 5% significance level is presented in Table 7 (omitted for space considerations – see author if table is desired).

Table 8: Forecast Error Variance Decomposition of LTASI

Period	LTASI	LDEPR	LCPI	LNFDI
1	100.0000	0.0000	0.0000	0.0000
4	91.9814	0.6661	4.4042	2.9483
8	88.4019	1.2297	6.1367	4.2318
12	88.8036	1.5955	5.8414	3.7595

The study observe from the variance decomposition in Table 8 that the variations in LTASI are mainly due to its own variations at the end of the first month, with

no contribution from innovations of the microeconomic variables. After 4 months LTASI continues its dominant trend through to 8 months explaining a total of 92% in the fourth month and about 88% of LTASI variation in 8 months. The trend continues, LTASI is significantly explained again by its own variations after 12 months by accounting for 89%. However, the fraction accounted for by LFDI dropped to less than 4% after 12 months.

Figure 6: Forecast for Tadawul All-Share Index for 2012 - 2013

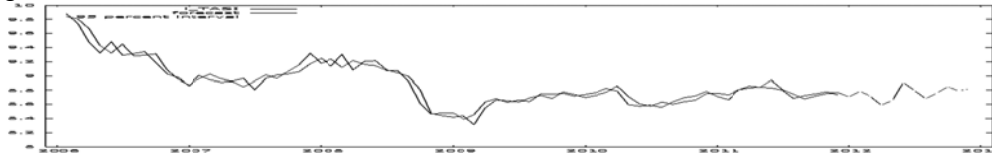


Figure 6 represents the 12-month forecasted price movement for Tadawul All-Share index based on VECM as its will witness a fall within a narrow marginal in the first month of 2012 next before staging an upturn in the second month of February 2012 to peak in April 2012 by about 20%; then the index will witness a jump of about 30% between April and June 2012. The Tadawul index will again witness a down turn of 10% in the third quarter of 2012, before rising to 10% in the last phase of 2012; and will stabilize in the fourth quarter of 2012 with relatively small variation between 0.5% and 1.0%.

CONCLUSIONS

In this study examined the relationship of selected macroeconomic variables on stock market movement for the period 2000:1 to 2011:12 and forecasted stock market movement over a five-year period 2012:01 to 2017:12. The study considered the Tadawul-All Stock Index, deposit (discount) rate, inflation and net foreign direct investment using the co-integration methodology. The study explored the long run relationship between the variables using Johansen's multivariate co-integration tests. Also, the Short-run dynamics were traced by means of impulse response function and forecast error variance decomposition analysis. The co-integration analysis provides evidence in support of a long-run relationship between variables over the time horizon. Contrary

to the study hypothesis, we find deposit (discount) rate to be positively relate to TASI. Based on the VECM, five-year forecast for Tadawul All-Share index was derived.

An accurate estimation of the relationship between the stock market behavior and economic variables as well as the forecasted stock movement enables the investors - both local and global to make effective investment decisions. At the same time, for the policy makers, a precise prediction of this type of relationship and forecasted movement of stock prices may help government central banks and other agencies in designing policies to attract more capital inflows into the Kingdom of Saudi Arabia' capital investment.

REFERENCES

- Anari, A. and Kolari, J., (2001). "Stock prices and inflation", *Journal of Financial Research* 24, 587-602
- Bulmash, S. and Trivoli, G. (1991), "Time-lagged interactions between stock prices and selected economic variables", *Journal of Portfolio Management*, Vol. 17 No. 4, pp. 61-7
- Chen, N.F., R. Roll and S.A. Ross, (1986), "Economic Forces and the Stock Market", *Journal of Business* 59, 383-403.
- Cheung, Y. and Ng, L., (1998), "International evidence on the stock market and aggregate economic activity", *Journal of Empirical Finance*, 5, 281-296
- Clive Granger, (1981) "Some Properties of Time Series Data and Their Use in Econometric Model Specification", *Journal of Econometrics* 16: 121-130
- Johansen, Søren, "Estimation and Hypothesis Testing of Cointegration Vectors in Gaussian Vector Autoregressive Models", *Econometrica*, Vol.59, No.6 (Nov 1991) 1551-1580
- DeFina, R.H., (1991), "Does Inflation Depress the Stock Market?", *Business Review*, Federal Reserve Bank of Philadelphia, 3-12.
- Engle, Robert F., Granger, Clive W. J. (1987) "Co-integration and error correction: Representation, estimation and testing", *Econometrica* 55(2), 251-276.
- Fama, E.F., (1981), "Stock Returns, Real Activity, Inflation and Money", *American Economic Review* 71, 545-565
- Fama, E.F. and Gibbons, M. (1982), "Inflation, Real Returns and Capital Investment" *Journal of Monetary Economics*, 1982, Vol. 9, No. 3, pp. 545-565.
- Firth, M., (1979), "The Relationship between Stocks Market Returns and of Inflation", *Journal of Finance* 34 (June 1979).
- Fisher, I., (1930). *The Theory of Interest*, Macmillan, New York
- French, K. R., Schwert, G. W. and Stambaugh, R. E. (1987)), "Expected Stock Return and Volatility", *Journal of Financial Economics*, 19, 3-29
- Gan, C., Lee, M., Young, H.W.A. and Zhang, J., (2006), "Macroeconomic Variables and Stock Market Interaction: New Zealand Evidence", *Investment Management and Financial Innovations*, Volume 3, Issue 4
- Geske, R. and Roll, R., (1983). "The fiscal and monetary linkage between stock returns and inflation", *Journal of Finance* 38, 1-33
- Goldstein, M., and Khan, M.S., (1976) "Large Versus Small Price Changes and the Demand for Imports" *IMF Staff Papers* 23, 200-225.
- Granger, C. and Newbold, P. (1974) "Spurious regressions in econometrics", *Journal of Econometrics* 2:111-120
- Granger, C.W.J., (1986), "Developments in the Study of Cointegrated Economic Variables", *Oxford Bulletin of Economics and Statistics* 48, 213-27
- Granger, C., (1987), "Co-Integration and Error Correction: Representation, Estimation, and Testing", *Econometrica*, 55, 251-276
- Gultekin, N. B. (1983), "Stock market returns and inflation: evidence from other countries", *Journal of Finance* 38, 49-65.

- Gunasekarage, A. and Power, D.M., (2001), "The Profitability of Moving Average Trading Rules in South Asian Stock Markets", *Emerging Markets Review*, 2: 17–33.
- Hamao, Y. (1988), "An empirical investigation of the arbitrage pricing theory", *Japan and the World economy*, 1, 45-61
- Hatemi-J, A. (2008) "Tests for cointegration with two unknown regime shifts with an application to financial market integration" *Empirical Economics*, 35, 497-505.
- Ho, Y., 1983, Money Supply and Equity Prices: An Empirical Note on Far Eastern Countries, *Economic Letters* 11, 161 – 165.
- Humpe, A., and Macmillan, P. (2007) "Can Macroeconomic Variables Explain Long Term Stock Market Movements? A Comparison of the US and Japan", CDMA Working Paper No. 07/20
- Hussain F., and Mahmood, T. (2001), "The stock Market and the Economy of Pakistan", *The Pakistan development Review* 40:2. 107-114
- International Financial Statistics, September 2008 issue.
- Johansen, S., (1991), "Estimation and Hypothesis Testing of Cointegrating Vectors in Gaussian Vector Autoregressive Models", *Econometrica* 59, 1551-1580
- Johansen, S., (1995), *Likelihood based Inference in Cointegrated Vector Auto-Regressive Models*, Oxford University Press.
- Johansen, S. and Juselius, K., (1990), "Maximum Likelihood Estimation and Inference on Cointegration with Application to the Demand for Money", *Oxford Bulletin of Economics and Statistics* 52, 169-210.
- Jorion, P. (1990). "The Exchange rate exposure of U.S. multinational" *Journal of Business*, Vol. 63 No: 3, 331-345
- Kaneko, T., & Lee, B. S. (1995) "Relative importance of economic factors in the U.S. and Japanese stock markets" *Journal of the Japanese and International Economies* 9, 290–307.
- Kwon, C.S. and Shin, T.S. "Cointegration and Causality between Macroeconomic Variables and Stock Market Returns" *Global Finance Journal*, 1999 Vol. 10, No. 1, pp. 71-81
- Lee, B.S, (1992), "Causal Relationships among Stock Returns, Interest Rates, Real Activity, and Inflation", *Journal of Finance*, 47, 1591-1603.
- Luehrman, T. A. (1991), "Exchange rate changes and the distribution of industry value". *Journal of International Business Studies*, 22, 619-649.
- Luintel, K.B., and Paudyal, K (2006) "Are Common Stocks A Hedge against Inflation?" *Journal of Financial Research* XXIX, (1), 1–19.
- MacKinnon, J. G., Haug, A. A. and Michelis, L. (1999), "Numerical Distribution Functions of Likelihood Ratio Tests for Cointegration," *Journal of Applied Econometrics*, 14, 563-577
- Maysami, R. C. and Koh, T. S., (2000), "A Vector Error Correction Model of the Singapore Stock Market, *International Review of Economics and Finance* 9, 79– 96
- Osinubi, T. S. (2004) "Does Stock Market Promote Economic Growth in Nigeria?" *The ICAFI Journal of Applied Finance*, IJAF Volume 10, Number 3, pp 17-35,
- Oyama, Tsuyoshi (1997), "Determinants of Stock Prices: The Case of Zimbabwe 1997", IMF Working Paper No. 97/117
- Rapach, D. E. (2002) "The long-run relationship between inflation and real stock prices" *Journal of Macroeconomics*, 24, 331–351
- Saudi Arabia (Tadawul) Stock Exchange Quarterly Report, December 2011.
- Soenen L.A. and Hennigar E.S. (1988) "An Analysis of Exchange Rates and Stock Prices: The US Experience between 1980 and 1986" *Akron Business and Economic Review* 19: 71-76

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Hybrid Strategy: A New Strategy for Competitive Advantage

Keywords: Cost leadership strategy, differentiation strategy, single strategy, hybrid strategy

INTRODUCTION

In the current era of globalization, competition among rivals is inevitable regardless of whether they are domestic, international, or global, of which are depending upon products or services.

In this paper, we use cost-leadership and differentiation strategies, because they are the commonly used strategy dimensions in the literature (Dess and Davis, 1984; Nayyar, 1993).

However, for a firm to earn superior profits and outperform its competitors, it must make a clear choice between a cost-leadership or a differentiation strategy in order to avoid “the inherent contradictions of different strategies” (Porter, 1996, p. 67).

Many believe, in competitive industries, that the companies would not be able to survive unless they adopt two corporate strategies, of which are cost strategy, to process the value chain in the most efficient way, in order to produce products or services with the lowest price without jeopardizing the quality, and differentiation strategy, to produce unique products or services compared to its competitors, such as better quality, simpler way to operate, better looking, in other words, the company should have the ability to innovate.

According to Porter (1985), each of these three generic competitive strategies is a completely different way of creating a sustainable competitive advantage. A firm must, therefore, make a choice between cost-leadership and differentiation strategies or it will become stuck-in-the middle without coherent strategy (Acquaah and Yasai-Ardekani, 2006).

Many evidences show that companies have done very well in a single strategy. For example Wal-Mart and Air Asia are successful companies that have implemented a single strategy – a cost-leadership strategy.

Meanwhile, according to Tutor Vista.com, 2010, a number of companies have implemented a single strategy – differentiation strategy can be described by some basis of differentiation strategy such as differentiation by Brand (Harley Davidson, and Mercedes Benz); differentiation by design (Titan watches with gold studded gems, diamonds and precious metals), differentiation

by positioning: Domino Pizza (“30 minutes delivery”); differentiation by technology (Apple Computers); and differentiation by innovation (3 M)

Furthermore, there are companies, such as IKEA, German’s Auto Industry and Tesco that have been successful with the Hybrid-strategy (companies which are implementing both cost-leadership and differentiation strategy simultaneously).

PORTER’S THREE GENERIC STRATEGIES

Porter’s Generic Strategies consists of: Leadership Strategy, Differentiation, and Focus, and are shown below in Figure 1.

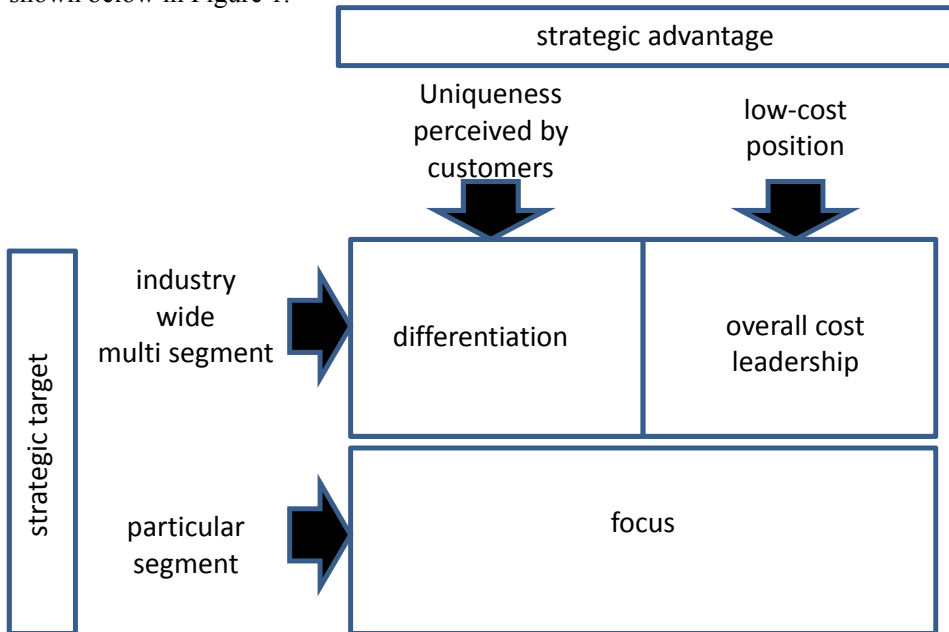


Figure – 1: Porter’s Three Generic Strategies. (Source: *Proven Models b.v. 2005*)

The Porter Three Generic Strategies has Strategic Target on its vertical axis which can be divided into two different segments: Industry wide multi – segment and particular segment. The horizontal axis is Strategic Advantage which is divided into two positions - Uniqueness perceived by Customer and Low-Cost Position.

The differentiation strategy is located in the Industry wide multi-segment (within the Strategic Target) and the Uniqueness Perceived by Customer (within the Strategic Advantage). Thus, the differentiation strategy is implemented in large industries where products or services are perceived unique by the customer. The Overall Cost Leadership strategy is located in the Industry Wide multi-segment (within the Strategic Target) – and the Low-Cost Position (In the Strategic Advantage). Thus the Overall Cost Leadership strategy is implemented in large industry and perceived low-cost provider by the customer. Focus strategy is located in the Particular segment (in the Strategic Target) and the Low-Cost Position (in the Strategic Advantage). Thus, the Focus strategy only exists in the particular segment, and can be implemented in the customers’ perception of being unique and or being low-cost provider.

Cost and Differentiation Strategy

Cost Leadership Strategy. The cost leadership strategy is an integrated set of action taken to produce goods or services with features that are acceptable to customers at the lowest cost, relative to that of competitors (Ireland, et. Al, 2011)

The cost leadership strategy represents attempts by firms to generate competitive advantage by achieving the lowest cost in the industry. The focus of firms implementing a cost leadership strategy is on stringent cost control and efficiency in all areas of operation (Porter, 1980).

A company that decides to follow a cost leadership strategy has the objective of being able to realise its offer at lowest possible cost. The competitive advantage of cost leadership is achieved by performing important value chain activities at lower cost than competitors (Porter, 1985).

Cost-leadership strategy strives to supply a standard, no-frills, high-volume product at the most competitive price to customers (Li and Li, 2008). Cost leadership strategies are preferred in developing countries such as Indonesia, Malaysia, India and China where they have lower labour cost, and hence, a lower production cost (Aulakh et al. 2000). A differentiation strategy is to create value to customers by providing superior quality, innovative products, brand image, and good services. This will differentiate the product which means the product will be more competitive than others (Hutchinson et al. 2007; Frambach et al. 2003; Porter, 1980).

Cost Leadership tends to be more competitor oriented rather than customer oriented (Frambach, et. al, 2003). Cost leadership requires a strong focus on the supply side as opposed to the demand side of the market, as this requires a high level of competitor orientation. (Day and Wendley, 1988). Therefore, firms pursuing a cost leadership strategy must continuously benchmark themselves against other competing firms in order to assess their relative cost (and therefore profitability) position in market place.

A firm that pursues cost leadership strategy achieves a low-cost position by emphasizing on “aggressive construction of efficient-scale facilities, vigorous pursuit of cost reductions from experience, tight cost and overhead control, avoidance of marginal customer accounts, and cost minimization in areas like research and development (R&D), services, sales force, advertising, etc” (Porter, 1980).

The cost leadership strategy has been successfully implemented in Japan. For example, the Toyota company system - Its superior competitiveness in cost reduction, quality and delivery time, has provided the impetus for a worldwide shift toward increasing efficiency through cost-cutting strategies (Schonberger, 1994). In Japan, customer service is defined somewhat differently than in the West, which may explain its presence in this cost leadership factor makeup (Allen and Helms, 2001).

Differentiation Strategy. The generic of differentiation strategy involves creating a market position that is perceived as being unique industry-wide and that is sustainable over the long run (Porter, 1980). Such differentiation can be based upon design or brand image, distribution, and so forth (Frambach et. al, 2003). In particular, differentiator firms create customer value by offering high-quality products supported by good service at premium prices (Walker & Ruekerts, 1987).

The effectiveness of differentiation strategy depends on how well the firm can balance product benefits and product costs for the customer, relative to competitive offerings (Slater and Olson, 2001). Companies following a differentiation strategy strive to create and market unique products for varied customer groups. They aim to create a superior fulfilment of customer needs

in one or several product attributes in order to develop customer satisfaction and loyalty, which can often in turn be used to charge a minimum price for the products (Morshett et al., 2006). A firm that pursues a differentiation strategy seeks to create a perception in the minds of customers that their products or services possess superior characteristics that are unique from those of its competitors in terms of image and reputation, reliability, design features and quality (Dean and Evans, 1994; Sashi and Stern, 1995). A firm creates this perception by incorporating real qualitative difference in its products and services, engaging in advertising programs, marketing techniques, and charging premium prices (Miller, 1986).

According to Acquaah and Yasai-Ardekani (2006), differentiation firms are able to achieve competitive advantage over their rivals because of the perceived uniqueness of their products and services. Porter (1980) stated that, competitive strategies deal with the development of attributes that characterise a company and differentiate the value it creates and offers in comparison to its competitors. In addition, “the core idea is about how the firm can best compete in the market place” (Pearce and Robinson, 1994, p. 220).

The differentiation strategy has been successfully implemented in companies of advanced countries and these companies are likely to go to the less developed countries as foreign companies (Aulakh et al, 2000). As foreign companies, they enjoy inherent advantage over domestic firms with regard to adopting a differentiation strategy. The foreign companies having advantage in terms of financial and technological resources, trained human capital, new and modern management systems, innovative production methods better fulfil the conditions required to implement a differentiation strategy successfully (Aulakh et al., 2000).

According to Pearce II, and Robinson (2011), differentiation strategy is a business strategy that seeks to build competitive advantage with its product or service by having it “different” from other available competitive products based on features, performance, or other factors not directly related to cost and price. The difference would be one that would be hard to create and/or difficult to copy or imitate.

The combination (Hybrid) strategy. The centrality of Porterian Generic Competitive Strategies (1980, 1985) of overall cost-leadership, differentiation and focus to strategic management research cannot be overemphasized.

Low cost and differentiation strategy may be compatible approaches in dealing with competitive forces (Allen and Helms, 2006; Miller, 1992; Spanos, et al., 2004), and postulated the pursuit of what has been termed ‘*hybrid*’, ‘*mixed*’, ‘*integrated*’, or ‘*combination*’ strategies (Kim et al., 2004; Spanos et al., 2004). These ‘hybrid’ strategies are the ones which combine low cost and differentiation elements (Gopalakrishna and Subramanian, 2001; Proff, 2000).

A combination competitive strategy involving high level of emphasis on both cost-leadership and differentiation strategies simultaneously should be distinguished from “stuck-in-the-middle” strategy where a firm fails to successfully pursue both cost-leadership and differentiation strategies (Acquaah and Yasai-Ardekani, 2006).

A combination strategy has been shown to be viable and profitable (Kim et al., 2004; Miller and Dess, 1993; Wright et al., 1991). Since cost-based and differentiation-based advantages are difficult to sustain, firms that pursue a combination strategy may achieve higher performance than those firms that pursue a singular strategy. Pursuit of a differentiation strategy for low-cost firms will help minimise their vulnerability due to reliance on cost-based advantages only (Yasai-Ardekani and Nystrom, 1996).

A hybrid strategy seeks simultaneously to achieve differentiation and low price relative to competitors. This success strategy depends on the ability to deliver enhanced benefits to the customers with low price while achieving sufficient margins for reinvestment to maintain and develop bases of differentiation. This is, in fact, the strategy Tesco is trying to follow. (Strategy Explorer, 2010)

A best –cost provider strategy: giving customer more value for the money by offering upscale product attributes at a lower cost than rivals. Being the best cost producer of an upscale product allows a company to under-price rivals whose products have similar upscale attributes. This option is a hybrid strategy that blends elements of differentiation and low-cost in a unique way. (Thompson et. al, 2012)

According to Ireland (2011), most consumers have high expectations when purchasing a good or service. In general, it seems that most consumers want to pay a low price for products with somewhat highly differentiated features. Because of these customer expectations, a number of firms engage in primary and support activities that allow them to simultaneously pursue low cost and differentiation. Firm seeking of using this use the integrated cost leadership/differentiation strategy. (Ireland et.al, 2011)

THE APPLICATION OF SINGLE STRATEGY

Cost Leadership Strategy

The cost leadership strategy is the basis for the long-run, sustainable competitive strategy compared to the price competition strategy. The price competition strategy is easily duplicated (Porter, 1980; Ellis and Kelley, 1992).

In the retail business industry, for example (Giant supermarket and Carrefour), companies strive for cost leadership strategy; all sources related to cost reduction must be exploited. A retail business company must minimise cost throughout its value chain (and possible intercompany chain) activities. Therefore, the most important issue for the retail business company is to pinpoint the sources which are related to the Cost of Goods Sold (COGS).

Large retail business companies usually achieve cost leadership more easily than smaller retail companies, because large retail business companies usually have power over suppliers which enable them to secure low procurement prices for purchased goods (Ellis and Kelley, 1992; Anderer, 1997).

Datuk Tony Fernandez as CEO of AirAsia Berhad said his philosophy is very clear: before a business can grow, it needs to have its costs under control. It must be cost-efficient and profitable, and it must create value. Based on what Datuk Tony Fernandez said, AirAsia can grow in the airline business if they can control their cost, (become more) efficient and reliable. AirAsia is currently a market leader as a Low Cost Carrier (LCC) in Malaysia, Thailand, and Indonesia, but will face competition from both existing and new players. In order to sustain its competitive advantage, AirAsia needs to leverage its competency in creating cost advantages across multiple value chains (Kho et al., 2005). Accordingly, AirAsia needs to stress more on being the lowest cost carrier in the airline industry. As the demand for low cost carrier is growing rapidly; it is an opportunity for AirAsia Company to enhance its business (The AirAsia Company Strategic Management, 2009).

Differentiation Strategy

Firms in most developing economies implementing the differentiation strategy do not focus on a single dimension but emphasize on several dimensions such as image, gain customer loyalty,

quality, innovation and level of service, all at the same time (Kim et al., 2004). Thus, a differentiation strategy in a developing economic environment may be based on simultaneously creating customer loyalty by generating differences in product image through intensive marketing and image management (Miller, 1988), and creating products that are innovative, dependable, durable, and serviceable (Beal and Yasai-Ardekani, 2000).

As an alternative to price competition a retail business company can differentiate its products and services from its competitors. Davis (1992) demonstrates that the rise of efficient and professional chain store operation leads to lower cost differentials between them which simultaneously intensifies the need to use non-price attributes to distinguish and characterise retail business company. Specifically in retail business, the uniformity of competition which resulted in a lack of profiled retail business companies with a clear image, is often criticised and blamed on a one-sided focus on price competition (Martineau, 1958, Wortzel, 1987, Walters and Knee, 1989; Corstjens and Corstjens, 1995).

Differentiation in retail business can be seen as a strategy with the objective of adapting certain store attributes more closely to the specific needs of chosen customers segments. (Morshett, et al., 2006). In retail business, as for manufacturing companies, two main arguments against Porter's framework have emerged (see for example Mintzberg, 1996; Wortzel, 1987; Zentes and Anderer, 1994):

- Strategies that combine several competitive advantages are not considered by Porter.
- The reduction of possible competitive advantages to two basic types is simplistic, and especially differentiation advantages can be reached in many different ways.

The differentiation strategy may also be viable in transition economies like Ghana. Due to economic liberalization policies, customers have been exposed to imported products with greater variety and higher quality (Acquaah and Yasai-Ardekani, 2006).

Other data show that the differentiation strategy has also been successfully implemented across the globe (i.e. in the developing, transition and developed economies) with evidence, among others: (Tutor Vista.com, 2010):

- Differentiation by Brand : Harley Davidson, and Mercedes Benz
- Differentiation by design: Titan watches with gold studded gems, diamonds and precious metals.
- Differentiation by positioning: Domino Pizza "30 minutes delivery".
- Differentiation by technology: Apple Computers.
- Differentiation by innovation : 3 M

THE IMPLEMENTATION OF COMBINATION (HYBRID) OF COST LEADERSHIP AND DIFFERENTIATION STRATEGY

This new, hybrid strategy, may become even more important--and more popular--as global competition increases. Compared to companies relying on a single generic strategy, companies that integrate the generic strategies may position themselves to improve their ability to adapt quickly to environmental changes and learn new skills and technologies. This would more effectively leverage core competencies across business units and product lines and would also help produce products with differentiated features or characteristics that customers' value and provide these differentiated products at a low cost, compared to competitors' products. This is because of the multiple, additive benefits of successfully pursuing the cost leadership and differentiation strategies simultaneously. *Differentiation* enables the company to charge premium prices and *cost leadership* enables the company to charge the lowest competitive price. Thus, the

company is able to achieve a competitive advantage by delivering value to customers based on both product features and low price. (Open Learning World.com)

Acquaah and Yasai-Ardekani (2006) justified that the implementation of a combined competitive strategy is not only feasible, but will also generate superior incremental performance over the implementation of single competitive strategies. The implementation of a combined competitive strategy results in multiple sources of competitive advantage (e.g., economies of scale and brand/customer loyalty) as compared to advantages gained through pursuit of single competitive strategies. Moreover, the pursuit of a combined competitive strategy, and each of the single competitive strategies will generate superior incremental performance over the inability to successfully pursue any of the singular competitive strategies (i.e., stuck in the middle). Furthermore, firms that pursue a differentiation strategy may also be able to achieve a low-cost position by emphasizing efficiency in their value creating activities, thereby further strengthening their competitive position vis-a-vis their rivals. The success of Japanese companies such as Toyota, Canon, and Honda has been attributed to the simultaneous pursuit of cost leadership and differentiation strategies (Ishikura, 1983).

Successful organizations adopt a combination of competitive aspects to build a Hybrid Strategy. Examples are: IKEA (differentiate in design + low cost), Toyota (quality - although under pressure + price) and Ahold (quality + price). Just competing on price is not good enough anymore (Daan Assen's Learning, 2010).

Field survey result

To strengthen the theory and the above findings, we decided to make confirmation whether or not the Hybrid Strategy has been implemented in the industry.

Then, on October 7, 2011, we went to a giant Home Appliances the producer in Malaysia, which operates globally. And, the home appliances producer confirmed implement hybrid (both Cost Leadership and Differentiation strategy) globally. The home appliances producer, later, will be called "the company".

The method to collect all of the information from the company was using an interview method, guided by a set of pre-prepared questions. During the interview, the General Manager of the company, accompanied by the Marketing Manager, were interviewed. All data were recorded during interview, then after the data were analyzed and processed. The results of the process and analysis were then written down.

The implementation of the hybrid strategy can be explained as the following:

Since the company operates in a global market, the company serves different types of market. The types of market, according to the company are: saturated market, stable market and emergent market.

- a. **Saturated market** (developed economies): The Company defines market in highly developed countries as saturated market. The indicators of saturated market are among others: very high purchasing power of customers, sophisticated needs of customers (much more than the basic functionalities of home appliances product), and strong competitive rivalry among competitors. Examples of saturated markets are: North America, Europe, South Korea and Australia.
- b. **Stable market** (transition economies): The Company defines market in developed countries as stable market. The indicators of stable market are among others: high purchasing power of customers, customers' demand for high quality products (more than the basic functionalities of home appliances product) and high level quality products offered by competitors. Examples of stable markets are: Malaysia, China and Taiwan.

- c. **Emergent market** (developing economies): The Company defines market in developing countries as emergent market. The indicators of emergent market are among others: low purchasing power of customers, customers’ need basic functionalities home appliances product, and stiff competitive rivalry. Examples of emergent markets are: Indonesia, Philippines, India, Brazil, and some countries in Africa.

The company implemented different strategies according to the market condition:

Differentiation strategy: The company implemented a differentiation strategy in the following markets:

- a. **Saturated markets:** In order to compete with its competitors, the company implements the differentiation strategy. With the differentiation strategy in the saturated markets, the company offers very high quality home appliances products with many features to differentiate from its competitors, and to enhance customer value.
- b. **Stable Markets:** In order to compete with its competitors, the company implements differentiation strategy. With the differentiation strategy in the stable markets, the company offers high quality home appliances products with some features to differentiate from its competitors, and to enhance customer value.

Cost leadership strategy: the company implemented the differentiation strategy in following markets:

- a. **Emergent Markets:** The Company has only recently penetrated the emergent markets. When the company entered the emergent market, it implemented the cost leadership strategy to compete with its competitors. With the cost leadership strategy, the company keeps maintaining the quality of the home appliances products while reducing the features offered, hence, maintaining an affordable price. With this cost leadership strategy, the company is able to serve the lower income customers within the emergent markets. From the above evidence, we conclude that the Hybrid strategy is a new strategy for competitive advantage.

Generally Cost Leadership, Differentiation and Hybrid strategies have been successfully applied in developing, transition, and developed economies (across the globe). Those strategies have been applied for a very broad range of products and services, e.g. from retail products to the luxury products, and services like airlines. The explanation is summarized in Table – 1.

No	Strategy	Where has the strategy been applied	Products/Services that the strategy has been applied (Example)
1	Cost-leadership	Developing, transition and developed economies (Worldwide)	Cars industry (Toyota) , Airline business (Air Asia), Retail business (Giant and Carrefour Supermarket)
2	Differentiation	Developing, transition and developed economies (Worldwide)	Cars and Motor cycle (Mercedes Benz and Harley Davidson - by Brand) Watches (Titan Watches - by design) Domino Pizza (by positioning) Apple Computers (by technology) 3M (by Innovation)
3	Hybrid	Developing, transition and developed economies (Worldwide)	Car Industry (Toyota, Honda) Furniture Industry (IKEA) Home Appliances industry

Table 1: The Application of Cost Leadership, Differentiation and Hybrid strategy

CONCLUSIONS

The above literature review shows that many research, observation, analysis and assessment have been done by researchers, and academicians on Cost leadership, Differentiation, and Hybrid strategies. Besides, from the above company analysis, there are no questions that hybrid strategy has been applied very well and successfully in one giant company in Malaysia. The analysis shows that the company has successfully implemented it in the developed countries, developing countries, and emerging countries. And if we combine both literature review analysis and the company analysis, actually both analyses have given a clear signal that hybrid strategy has been implemented very well and successfully.

Nonetheless, it is too early to conclude that hybrid strategy has been implemented in the market. It is a challenge for us to prove that the hybrid strategy is implemented in the market. To answer the challenge, we are going to do research on the implementation of the hybrid strategy in the Malaysian market.

REFERENCES

- Acquaah, M., & Yasai-Ardekani, M. (2006). Does the implementation of a combination competitive strategy yield incremental performance benefit? A new perspective from transition economy in Sub-Saharan Africa. *Journal of Business Research*, 61, 346 – 354.
- Allen, R.S., & Helms, M.M. (2001). Reward practices and organizational performance. *Compensation and Benefits Review*, 74-78.
- Allen, R.S., & Helms, M.M. (2006). Linking Strategic Practices and Organizational Performance to Porter's Generic Strategies. *Business Process management* 12(4), 433-454.
- Anderer, M. (1997). *Internationalisierung im Einzelhandel*. Frankfurt, Deutscher Fachverlag.
- Aulakh, Preet, S., Kotabe, M. & Teege, H. (2000). Export strategies and performance of firms from emerging economies: Evidence from Brazil, Chile and Mexico. *Academy of Management Journal*, 43(3), 342-361.
- Beal, R.M., Yasai-Ardekani, M. (2000). Performance implication of aligning ceo functional experiences with competitive strategies. *Journal of Management*, 26, 733-762.
- Bingxin Li, C., & Juan Li, J. (2008). Achieving superior financial performance in china : differentiation, cost leadership or both? *American Marketing Association, Journal of International Marketing*, 3, 1-22.
- Corstjens, J. & Corstjens, M. (1995). *Store wars, the battle for mindspace and selfspace*. Chichester, Wiley.
- Daan Assen's Learning, (2010). *Hybrid strategy: Sustainable competitive advantage*. Retrieved from <http://www.daanassen.com/hybrid-strategy-sustainable-competitive-advantage>.
- Davis, G. (1992). Positioning, Image and the Marketing of Multiple Retailers. *International Review of Retail, Distribution, and Consumer Research*, 1(2), 13-34.
- Day, G., Wensley, R. (1998). Assessing advantage: A framework for diagnosing competitive superiority. *Journal of Marketing* 52, 1-20.
- Dean, J.W., & Evans, J.R. (1994). Management organization and strategy. St. Paul, MN, *Total Quality*. West Publishing Co.
- Dess, G., & G., Davis, P.S. (1984). Porter's (1980) generic strategies as determinants of strategic group memberships and organizational performance. *Academic of Management Journal* 27, 467-488.
- Ellis, B., & Kelley, S. (1992). Competitive advantage in retailing. *The International Review of Retail, Distribution and Consumer Research*, 2(2), 381-396.
- Frambach, Ruud T., Prabhu, J. & Verhallen, T.M.M. (2003). The Influence of Business Strategy on New Product Activity: The Role of Market Orientation. *International Journal of Research in Marketing*, 20(4), 377-97.

- Gopalakrishna P., & Subramanian, R. (2001). Revisiting the Pure versus Hybrid Dilemma: Porter's Generic Strategies in Developing Economy. *Journal of Global Marketing*, 15 (2), 61-79.
- Hutchinson, Karise, Alexander, N., Quinn, B. & Doherty, A.M. (2007). Internalization motives and facilitating factors: qualitative evidence from smaller specialist retailers. *Journal of International Marketing*, 15 (3), 96-122.
- Ishikura, Y. (1983). *Canon, Inc.: Worldwide Copier Strategy*. Boston : Harvard Business School Case Services.
- Pearce II, J.A., Robinson, R.B. (2011). *Strategic Management, Formulation, Implementation, and Control* (12th Edition), International Edition: McGraw-Hill.
- Kim, E., Nam, D., & Stimpert, J.L. (2004). Testing the applicability of Porter's Generic Strategies in the digital age: A study of Korean cyber malls. *Journal of Business Strategies*, 21, 19-45.
- Kho, C., & S. H. Aruan. (2005). *AirAsia- strategic IT initiative*. Faculty of Economics and Commerce_University of Melbourne.
- Martineau, P. (1958). The personality of the retail store. *Harvard Business Review*, 36(1), 47-55.
- Miller, D. (1986). Configuration of strategy and structure: Towards a synthesis. *Strategic Management Journal*, 7, 233-249.
- Miller, D. (1988). Relating Porter's Business strategies to environment and structure: Analysis and performance implications. *Academy of Management Journal*, 31, 280-308.
- Miller, D. (1992). Generic strategies: Classification, combination and context. In: Srivastava, P. (Ed), *Advances in Strategic Management*, 8, 391-408.
- Miller, A., & Dess, G. (1993). Assessing Porter's (1980) model in terms of its generalizability, accuracy and simplicity. *Academy of Management Journal*, 36(4), 763-788.
- Mintzberg, H. (1996). Generic Business Strategies.. In: Mintzberg, H., Quinn, J. (Eds), *The Strategy Process*, 3rd Edition, Upper Saddle River/NJ ,Prentice Hall International, 83-92.
- Morshett, D., Benhard Swoboda, & Hanna Schramm-Klein. (2006). Competitive Strategy in Retailing – An Investigation of the Applicability of Porter Framework for Food Retailers. *Journal of Retailing and Customer Services*, 13, 275-287.
- Nayyar, P.R. (1993). Performance effect on information asymmetry and scope in diversified service firms. *Academy of Management Journal*, 36, 28 -58.
- Open Learning World.com. (2009). *Integrated Cost Leadership - Differentiation Strategy*. Retrieved from <http://www.openlearningworld.com/olw/courses/books/Business%20Strategies/Business%20Strategy/Integrated%20Cost%20Leadership%20-%20Differentiation%20Strategy.html>
- Pearce, J., & Robinson, R. (1994). *Strategic management—formulation, implementation and control*, 5th Edition, Burr Ridge/IL, Irwin.
- Porter, M.E. (1980). Techniques for analyzing industries and competitors. *Competitive Strategy*. New York, Free Press.
- Porter, M.E. (1985). Creating and sustaining superior performance. *Competitive Advantage*. New York, Free Press.
- Porter, M.E. (1996). What is strategy. *Harvard Business Review*, 74, 61-78.
- Proff, H. (2000). Hybrid strategies as a strategic challenge. The Case of the German automotive industry. *The International Journal of Management Science*, 28, 541-553.
- Proven Models B.V. (2005). *Porter's Three Generic Strategies*. Retrieved from <http://www.provenmodels.com/27>
- Sashi, C.M., & Stern, L.W. (1995). Product differentiation and market performance in producer good industries. *Journal of Business Research*, 333,115-127.
- Schonberger, R. (1994). Human resource management lessons from a decade of total quality management and reengineering. *California Management Review*, 36(4), 109-134.

- Slater, S.F., & Olson, E.M. (2001). Marketing's contribution to the implementation of business strategy: an empirical analysis. *Strategic Management Journal*, 22, 1055-1067.
- Spanos Y.E., Zaralis G. & Lioukas S. (2004). Strategy and industry effects on profitability; Evidence from Greece. *Strategic Management Journal*, 25(2), 139-165.
- Strategy Explorer (2010). *Do you have a competitive strategy: Bases of Competitive Advantage - The Strategy Clock*. Retrieved from <http://www.strategyexplorers.com/whitepapers/Do-you-have-a-competitive-strategy.pdf>
- The AirAsia Company Strategic Management (2009). *How AirAsia can be a leader in the lowest cost carrier in the airplane industry*. Retrieved from <http://itsaboutmymot.wordpress.com/2009/08/31/the-airasia-company-strategic-management-%E2%80%9C-how-airasia-can-be-a-leader-in-the-lowest-cost-carrier-in-the-airplane-industry%E2%80%9D/>
- Thompson, Peteraf, Gamble, and Strickland (2012). *Crafting and Executing Strategy, Concepts and Cases* (18th Edition), Global Edition, McGraw-Hill.
- TutorVista.com. (2010). *Differentiation Strategy*. Retrieved from <http://www.tutorvista.com/math/differentiation-strategy>
- Walker, O.C., Ruekert, R.W. (1987). Marketing's role in the implementation of business strategies: a critical review and conceptual framework. *Journal of Marketing*, 51, 15-33.
- Walters, D., & Knee, D. (1989). Competitive strategies in retailing. *Long Range Planning*, 22(6), 74-84.
- Worztel, L., (1987). Retailing strategies for to day's mature market place. *Journal of Business Strategy*, 8, 45-56.
- Wright, P., Krull, M., Tu, H., and Helms, M. (1991). Generic strategies and business performance: an empirical study of the screw machine products industry. *British Journal of Management*, 2, 1-9.
- Yasai-Ardekani, M., & Nystrom PC. (1996). Design for environmental scanning systems: Test of a Contingency Theory. *Management Science*, 187-204.
- Zentes, J., & Anderer, M. (1994). Retail monitoring 1/94: customer service as a way out of crises. *GDI-Retailer-Trendletter*, 2(1), 1-29.
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Balanced Scorecard and Education Sector: A Case of SKANS School of Accountancy, Lahore, Pakistan

INTRODUCTION

The history of the performance measurement is as old as the history of business organizations. Performance measurement has been there in its orthodox form when emphasis was laid upon financial measures such as return on investment, earning per share, net profit rate, etc. As the financial measures were profit oriented, these were thought to be short-term measures. We can reduce the training, research and development cost to improve the current profitability. On the other hand, we can spend more on non-financial variables to have the future benefits but it would

reduce the current profitability. Thus the balance between the financial and non-financial measures was inevitable.

In order to create a balance between financial and non-financial measures, Kaplan and Norton introduced Balanced Scorecard in 1992. The Balanced Scorecard introduced by Kaplan and Norton measures the performance of an organization from four different perspectives. These are Financial Perspective, Customer Perspective, Internal Business Perspective and Learning and Growth Perspective

Financial Perspective

The Financial Perspective deals with the long term objectives of the organization. Kaplan and Norton (1996) summarize the financial perspective as rapid growth, sustain and harvest. Growth stage measures the volume of sales, sustain puts stress on return on capital employed; net profit rate etc. and the harvest stage deals with cash flow analysis. In short, financial measures are similar to the ones we use in the traditional performance measurement.

Customer Perspective

The customer perspective measures the extent to which the customer is satisfied with the products or services of the organization. It can be divided into two measures. These are market share and customer retention and customer acquisition.

Internal Business Process Perspective

Internal business process perspective deals with innovation of the production process and the product itself. Kaplan and Norton (1996) identified three basic internal business processes. These are innovation process, operation process and warranty and repair activities.

Learning and growth perspective

Learning and growth perspective measures to what extent our human resources are capable of meeting the future requirements. This perspective measures the satisfaction of employees, retention of employees and employee productivity

SKANS School of Accountancy was established in 1994. Since then it is growing at a very steady pace. It is a recognized institute of Association of Certified Chartered Accountants UK and Institute of Chartered Accountants of Pakistan. It provides coaching for Certified Accounting Technician, Associated Certified Chartered Accountants and Chartered Accountancy. To what extent they are following the Balanced Scorecard, this article aims at this point.

LITERATURE REVIEW

Colin Drury (2000) said that prior to 1980s, management accountant used to focus on the financial measure such as return on capital employed, profit margin, earning per share etc. Niven (2005) stated the experience of Horizon Fitness. The CEO there was worried about the strategy implementation. The author and the CEO developed Balanced Scorecard for the Horizon Fitness. It was so effective that the sales revenue reached \$85 million in the third year of Balanced Scorecard implementation from \$6.6 million in the first year of its operation. Barkley (2000) said that a recent survey showed that 88% of the organizations felt that the Balanced Scorecard had improved the performance of the employees. Balanced Scorecard was considered motivating, measuring and rewarding the people and then innovating the strategies.

Will Kaydos (2004) explained that each old system was to be replaced with a new system. The same was the case with performance measurement where Balanced Scorecard is very popular those days. Finally the author stated that the Balanced Scorecard was the best performance

measurement system but its success is dependent upon its proper implementation. Lincoln (2008) has quoted Bailey, CEO of Nemours, stating that the success that they had at Nemours was proof of the usefulness of the Balanced Scorecard.

Martin (2004) explained that the Balanced Scorecard created a balance between short term and long term measures, internal and external business processes, leading and lagging indicators, objective and subjective measures etc. Elefalk (1998) stated that the Swedish police adopted the Balanced Scorecard in 1998. The perspectives of the Balanced Scorecard were different from the ones given in the original Balanced Scorecard. The perspectives included in this Balanced Scorecard were operational, staff, citizen and resources.

Stawar T (2002) studied Kaplan's famous book "Balanced Scorecard: Measures that drive Performance" and concluded that Balanced Scorecard was much more than the traditional performance measures. Rhom (2004) said that Balanced Scorecards was equally applicable to public sector organizations only after having certain modifications. This change may be in the form of an additional perspective. Stella Mooraj et al (1999) stated that the Balanced Scorecard was necessary good because it covered all the features of the management control system.

Lapointe (1999) stated that Balanced Scorecard helped marketers and executives. It provided measures for input and outcomes. He suggested that the Balanced Scorecard might be adopted or adapted. Whatever the case was, it must have observed the organization from various angles. Some organizations might be using some other names for the Balanced Scorecard and many companies used it without even knowing it. Averson (1998a) said that performance-based management was introduced during and after World War II by "Whiz Kidz" in Ford Motor Company and the same was used in the Pentagon during Viet Nam war. Figg (2000) said that many of the world's leading organizations had got benefits out of Balanced Scorecard approach. Despina (2008) stated that originally the Baldrige Criteria and Balanced Scorecard were developed for the business organizations but these could be equally adopted by the nonprofit organizations.

RESEARCH METHODOLOGY

This study aims to know the extent to which SKANS School of Accountancy is following the four perspectives of the Balanced Scorecard. To accomplish the objectives, literature was reviewed and the interviews of the various officials including the CEO were conducted.

Findings

SKANS school of Accountancy is following the financial perspective of the Balanced Scorecard in its true spirit. Financial measure taken by SKANS School of Accountancy includes revenue per student, contribution per student, and cost per student. Customer perspective aims to assess the level of satisfaction of the customers. SKANS School of Accountancy seems to be very keen in this particular matter. There are various measures used to assess the level of satisfaction of the students. These are discussed hereunder.

Feedback from the student is taken in three ways. Internal feedback where a close ended questionnaire is given to the students. The level of satisfaction of the students is judged by analyzing these filled questionnaires. The problem with the internal feedback is that the student can give their opinion about the given questions only. At the same time, they have limited number of options. On the other hand, external survey is conducted through a third party i.e. external agency. The external agency contacts the students of SKANS independently and gets their opinion. Here the students are asked open ended question and they can give their opinions about anything. The external agency then assesses the level of satisfaction and gives its report to

the management. SKANS School of Accountancy conducts external feedback on continuous basis. The third source of feedback is meeting with the students and parents. The course co-ordinator selects some students randomly from each class and tries to assess the level of satisfaction of the students and their parents.

The level of satisfaction is also assessed by the number of students. In 1999, there were less than two hundred students. The number of students has increased to over four thousand by January 2010. However the increase may be because of trend towards CAT and ACCA. So, the management does not consider it a good measure for the assessment of the level of satisfaction of the students. Alternatively they consider the level of retention of the students. The proper measure is the number of students who did CAT from SKANS and continued their ACCA from the same institute.

The third perspective of the Balanced Scorecard is internal process. This perspective observes the improvements that have been made to the internal process to meet the expectations of the students. The various measures to judge the internal process are given here.

The external survey referred above helps the management to know the level of satisfaction of the customer and at the same time it keeps the management aware of the requirements of the students. The important measure here is the number of time the external feedback was conducted. The second way to know the preferences of the students is parents-teachers meetings. Here the parents give their suggestions and requirements. So far as the application of this measure is concerned SKANS School of Accountancy informs the parents of the absent students on the same day they are absent. On the one hand it is information to the parents but on the other hand it is an opportunity for the management to get the suggestions of the parents for the improvement of the working of the institute. The third way to remain in touch with the parents is via monthly performance reports of the students. The parents of the students with poor performance are called and their suggestions are sought to solve the problem.

In order to know whether we are meeting the requirements of the customers or not, the number of new students is considered. Technically it is known as acquisition. The level of acquisition signifies the extent to which the organization is meeting the expectations of the students and parents. SKANS School of Accountancy has taken the following steps to improve the internal business process.

1. The construction of separate purpose built campuses for CAT and ACCA.
2. The development of fully equipped and modern computer labs.
3. Maintenance of contact books and updating these on daily basis.
4. Deployment of teacher assistants to help the students outside the classroom.
5. Development of quality assurance department
6. Monthly progress reports of the student and meeting with parents
7. Exam focused mocks.
8. Conducting the revision classes.
9. Career Counseling

Undoubtedly SKANS has taken the above-mentioned steps but there is lot to be done yet such as co-curricular activities, space for indoor/outdoor sports, pleasure trips, workshops, seminars etc. So far as the learning and growth is concerned, SKANS School of Accountancy arranges training workshops for the teachers on regular basis and at the same time, SKANS School of Accountancy encourages their teachers to participate in the training program arranged by ACCA Pakistan on annual basis. Teachers from Association of Certified Chartered Accountants UK come here and educate the local teachers about the latest teaching methodologies.

For the sake of learning and growth, students of the core papers who are interested in taking teaching as profession are attached with a senior teacher for training. These trainee teachers help the students outside the class and accompany the trainer teacher in the class and observe the sequence of the lecture and the way he delivers it. The trainee teachers are offered free education and stipend.

The course contents of CAT and ACCA keep changing periodically. These changes are communicated to the registered institutes a year before implementation. SKANS School of Accountancy informs the teachers about these changes so that they can prepare themselves for these changes.

CONCLUSION

SKANS School of Accountancy is partially following the Balanced Scorecard by virtue of practice. It has never tried to develop a proper Balanced Scorecard with purpose built measures. These findings support the findings of La Pointe who stated that the organizations followed the various perspectives of the Balanced Scorecard even without knowing that they were following the Balanced Scorecard. What is needed is the development of the proper Balanced Scorecard with the purpose built measures for each perspective.

REFERENCES

- Averson,P. 1998. Background and history of measurement-based management. Accessed August 10, 2006. Available URL: <http://www.balancedscorecard.org/bkgd/bkgd.html>
- Barkley,S .2009. Are you in balance? Outlook, 67 (4), 34. Master FILE Premier Database.
- Business Wire. 2008. New research shows balanced scorecard helps companies achieve an execution premium. 30 October, 2008.
<http://search.proquest.com.erl.lib.byu.edu/docview/444391442>. Accessed 5 May, 2010.
- Drury,C. 2000. Management & cost Accounting. *Thomson learning* . United Kingdom: Business Press.
- Elefalk, Kjell. 2001. The balanced scorecard of Swedish Police Service; 7000 officers in total quality management project. *Total Quality Management*, Vol 12(7-8):958-966.
- Figg , J.2000. Balanced scorecards receive high marks. *Internal Auditor*. Master File Premier Database.
- Kaplan, R. S. and D.P. Norton .1992. The balanced scorecard: Measures that drive performance, Harvard Business Review, (January-February): 71-79.
- Kaydos,W.2004. What should your company measure beside financial results. Balance Scorecard Institute.
- LaPointe, P.1999. The balanced scorecard: prelude to a marketing dashboard. Balanced Scorecard Institute.
- Martin, J. R. 2004. The balanced scorecard concepts.White Paper. Balanced Scorecard Institute.
- Mooraj, S. (1999). The balanced scorecard: A necessary good or an unnecessary evil. *European Management Journal*, 17 (5), 481-491.
- Niven, P. 2005. Driving focus and alignment with the balanced scorecard. for quality & participation. *Academic Search Premier Database* . Academic Search Premier Database.
- Rhom, H 2004. A Balancing Act. *Balanced Scorecard Institute*, 2(2) , 1-8. Balanced Scorecard Institute.

- Wilson, D. D., Norman, T. d.& Norman, A.E. 2007. The Measure of Library Excellence: Linking the Malcolm Baldrige Criteria and Balanced Scorecard Methods to Assess Service Quality. Jefferson, NC: McFarland and Company.
- Stawar, T. & Zipple,A. 2002. The strategy-focused organization: How balanced scorecard companies thrive in the new business environment. *Psychiatric Rehabilitation Journal*, , 26(2), 212. Retrieved July 15, 2009, from Academic Search Premier Database.
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A Cybernetics Perspective on Cross-cultural Differences of Stakeholders, Suppliers, Employees and Customers in Entrepreneurial Ventures

INTRODUCTION

We start with a definition of entrepreneurship adopted for our overall discussion about the challenges faced by entrepreneurs while doing daily business and the challenges faced by governments in fostering an environment conducive for entrepreneurial activities. We first present a literature review to assess the direction of further research along with our postulates from the review. Next, we discuss how the direction of research in entrepreneurship tends to coincide with work being done in the field of cybernetics. While cybernetics incorporates a number of theories, an introduction to one of its pillars - control theory is provided to prod entrepreneurship researchers into the field. Next, to further aid the journey of a researcher into cybernetics an ethnographic method under control theoretic perspective is proposed to consolidate the link between individuals, cultures and entrepreneurial activity. The method examines cross cultural differences among stake holders, employees, customers and vendors who interact with acknowledged entrepreneurs. Such experiments are to confirm the postulates derived from the meta-analysis of existing research discussed in the review section.

Key words: Comparative entrepreneurship, cross cultural measurement issues, control theory, entrepreneurial behavior.

ENTREPRENEURSHIP

Entrepreneurship encapsulates a definition of the entrepreneur, the nature of the business venture as well as the dynamics between the two. By combining the research and perspectives presented by Shane (2008) and Kelly, Singer & Herrington (2011) we arrived at two distilled definitions. First, an entrepreneur is a self actuated person with an intense desire and skill to create a long standing enterprise that provides jobs, revenues and an inspiration for future markets. However, the self actuated business owner is not acknowledged by the public as an entrepreneur until his or her venture succeeds in delivering the original vision stated by the business owner(s). So the entrepreneurial venture is a more significant testament to who is an entrepreneur. Second, an

entrepreneurial venture is a long standing business venture with a proven track record of esteemed revenues with added promise of future revenues through a business process, service, product or business outlook that is not typical within a market. Underlying concerns about what is long standing, how much revenues, etc. are omitted in our definition of entrepreneurship because those questions are considerably debatable and arriving at a scholastic consensus is not pertinent for the paper's topic.

The above distilled definitions were obtained through a thought process that involved asking the questions: Who is not an entrepreneur? And what is not an entrepreneurial venture? The answers to these question are likely to remain vague and personal but we assert that not every self-employed worker is an entrepreneur and similarly not every business start-up is an entrepreneurial venture. It is also worth noting that "nascent" entrepreneurial ventures with long "gestation periods" are bound to stay practically invisible to researchers and analysts who consider volume of sales or number of patents held by a company as the symptoms of entrepreneurship within a market. These sentiments have also been presented in a more rigorous argument by Uljin and Brown (2003).

With a conscious awareness of these ideas, we can move on to the basic objective of analyzing the dynamics between an entrepreneur and their peculiar venture using a cybernetics perspective. However, before introducing the precepts of systems engineering and cybernetics it is important to organize the body of entrepreneurship literature already available to better illustrate the path of our research motives.

Entrepreneurship research trends

A review of research trends can be obtained in the work provided by Matsumoto & Hee Yoo (2006). They provide a summary of the stages of research spanning from the early days of personality research based on the identities provided by Hofstede (1980) to current-day research focusing on international entrepreneurship with emphasis on cross-cultural challenges. This summary was developed with the knowledge that gleaned from Matsumoto & Hee (2006), McDougal & Oviatt (2000) and Licht & Siegel (2006). Licht and Siegel report that "virtually without exception, researchers used Hofstede's original four cultural value dimensions of individualism/collectivism, power distance, uncertainty avoidance, and masculinity/femininity." Research on the impact of a country's economic policies and conditions in entrepreneurship benefitted from the observation that rate of entrepreneurial activities were heterogeneous across the globe and some countries were more favorable for entrepreneurship. Further, it was noted by scholars across the globe that culture and cultural upbringing are a major factor in determining the nature of an entrepreneur. This however, might merely be an artifact of the observation that any human individual is affected by culture. In psychological context, the contribution to scholastic knowledge was provided by comparative studies on culture that filled in the gaps in research regarding behavioral development of an entrepreneurial personality with pedagogical implications.

Within this body of work we look at the effect of culture more closely to develop our line of research. Culture can be defined as a shared values and beliefs (Hofstede 1980; 2001). There has been a plethora of publications related to culture and cross cultural research reflecting theoretical and empirical considerations. The works of Matsumoto (1999), Karahanna et al. (2005), and Siehl & Martin, (1990) pointed to the fact that an individual's culture is the product of several levels of culture such as team, work group, company organization, national identity, etc. The focus of research on the national culture and its role in inspiring people in the country to become entrepreneurs attracted enormous attention (George and Zahra, 2002).

Entrepreneurship research simultaneously focused on differences in attitudes and beliefs at a cultural level. It was noted that at the micro level, an entrepreneur's culture and cultural orientations are also associated with cognitive styles. This leads scholars to consider cultures as 'systems of thought' (Nisbett et al. 2001; Peng et al 2001). Besenitz and Lau (1997) also posited that the operation of the entrepreneurial activities is from the cognition and perspectives of an individual. The entrepreneurs and the entities interacting behavior can be predicted as the national culture mediate through cognitive maps (Adler et al, 1986). These two tracks of literature provided the link between cognition, beliefs and intended behavior where attitude, that is, one's positive or negative perspective toward a behavior was shown to be influenced by one's beliefs about the consequences of the behavior. Based on the literature we were able to ascertain the following postulates before focusing on an introduction of cybernetics.

P1. The behavior and managerial decisions of entrepreneurs will be positively and negatively affected by the differences in the cultures of the suppliers, employees and the customers.

P2. Challenges due cross cultural interactions in developing and sustaining entrepreneurial activities will be influenced by governmental control, laws and regulations and tacit codes involving cronyism and nepotism.

P3. Cognitive work analysis of entrepreneurs will help them become better problem solvers and have better skills in smoothly running of the business. .

P4. In order to increase the pool of contacts of suppliers, employees and customers, the entrepreneur has to be active in networking circles.

P5. In order to better serve the customers, identify opportunities and increase financial resources, the entrepreneur has to be well aware and competent in dealing with culture, sub cultures and cross cultures of their customers, in particular.

Cybernetics

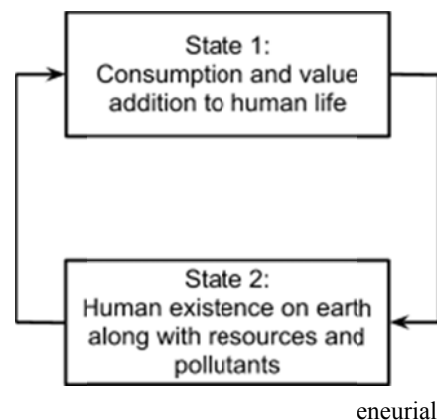
Cybernetics is a coalescence of a number of theories whose origins are in systems engineering and a worthy review of cybernetics for sociologist and psychologist can be obtained in works by McClelland and Fararo (2006). A generic adaptation in the context of entrepreneurship is provided below.

The literature review of entrepreneurship research shows that scholars identified a peculiar macro level industrial phenomena called entrepreneurship, call it *State 1*. As this phenomenon was related to people it was understood that an underlying process would exist at the individual and social level. Call this human oriented or micro level *State 2*. Study of *State 2* incorporated individual personality traits and "culture" where culture's definition was taken as shared personality. Next, researchers revisited the study of economic and business activities - *State 1* - and established links with *State 2*. And then, a finer resolution of *State 2* revealed that an interpretation of cultural differences was needed. Some clusters of individuals were identified explicitly based on anthropological or biological assumptions. The clusters as well as the individuals who constitute them are truly inseparable and therefore belong to the same state.

In essence, researchers have made an effort to prove the observability of the two states while asserting the fact that regardless of the type of anthropological or biological assumptions made, the notion of shared personality is bounded within distinguishable clusters of human individuals. The term observability means that knowledge of one state can produce inference about the other state(s).

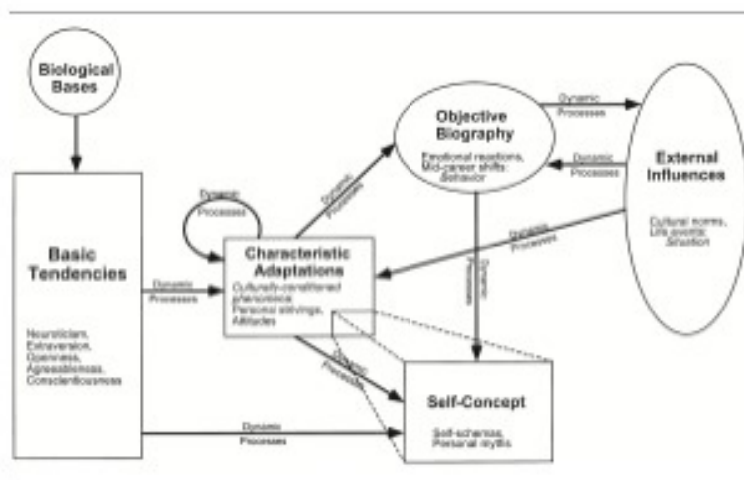
So what establishes the distinctness between these two states? As a definition, *State 1* is the

change in the physical world due to the consumption of natural resources and pollution generated along with value addition to human lives. While, *State 2* incorporates the autonomous actors - human beings - regardless of whether the actors are viewed as individuals or clusters as well as the physical world. It might seem peculiar that changes in *State 2* are taken as *State 1* and that the ultimate task is to measure the modicum of change in *State 1*. However, such an arrangement is more close to the definition of entrepreneurship adopted in this paper. And as may be observed, the ultimate measurement is a quadratic term. These two states collectively form the closed loop dynamical system under consideration where an action by the actors in *State 2* is impacted on *State 2* itself and this impact is fed back to *State 2* through *State 1*. Such a system is likely to “run off” and destroy itself when all consumables within *State 2* are turned into pollution and all humans perish due to pollution. Even under the assumption of infinite resources (infinite solar energy for instance) such a system would only stabilize after a very long time as pollution turns into resource and the rate of consumption stays in check with the rate of resource generation. We call this system the simplified entrepreneurial ecology as illustrated in Figure 1.



Now, as recent technological and scientific advances have taken observability to the nano realm, so must entrepreneurship research look into the cognitive styles that differentiates an entrepreneur with that of individuals in various clusters. Also, the mind of individuals engaged in a business scenario can be assessed regardless of whether the individuals can be classified as entrepreneurs or not. We advocate a deeper examination of *State 2* for establishing observability within the simplified entrepreneurial ecology with greater scientific rigor. The assumption here is that cognitive style bolsters certain behavioral traits and a collection of certain individuals further bolster these traits amongst themselves to generate a culture which ultimately determines how the earth gets consumed.

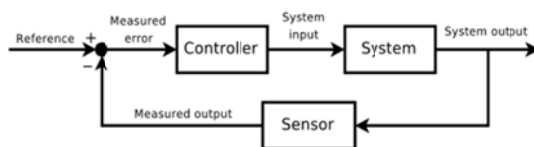
The sentiment to closely observe the human realm seems to have been intuitively captured by Hofstede in his relatively recent work (Hofstede, 2004). In Figure 2 we observe something that can be turned into a “state space diagram” of an individual’s mind that incorporates dynamic feedback mechanisms with respect to the individual’s environment. (Honestly, Wikipedia is an advisable resource for an introduction to state space diagrams.)



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Figure 2 also has similarities to a data flow diagram (for a review of DFD see Bruza and Van Der Weide, 1993). The direction of the arrows between the blocks show Hofstede's notion of how information flows between individuals and their environment and how this entire arrangement or system is dynamic. This corroborates the impetus to further move in the direction of connecting control theory and entrepreneurship research where, by all means, entrepreneurs and non-entrepreneurs are merely human individuals. With a basic foothold in control engineering theories as applicable to psychology and sociology we can better concentrate on issues pertaining to entrepreneurship using some more semantics of control theory that are as follows.

In control theory, a signal that needs to be measured and modulated is done so through the process illustrated by Figure 3.

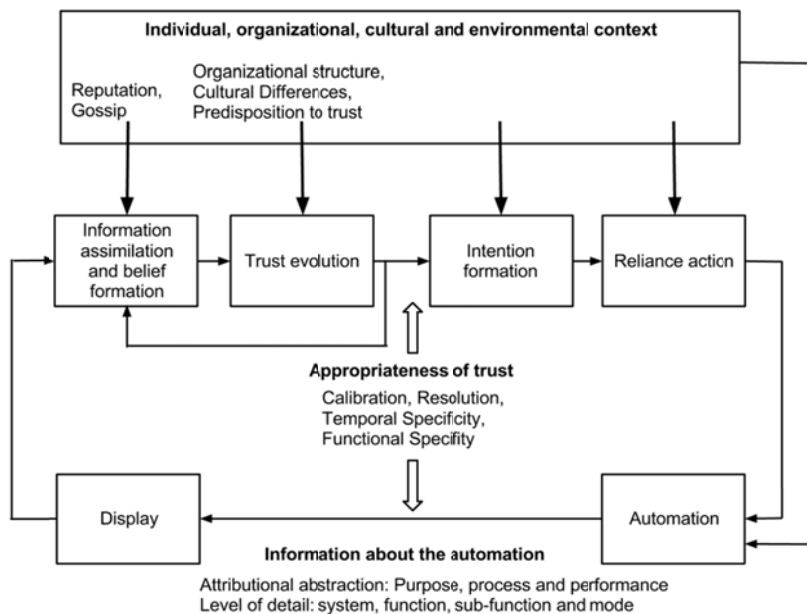


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In the context of psychology, for instance, this signal is regarded as any stimulus and in place of the controller a "mind" is used and in place of a system a "body" is used and the sensor is generally a portion of the mind-body interface. However, the loop is not completed without the black dot which is called a summer in control engineering. The summer essentially compares the reference signal (for instance, words in this paragraph) and the eventual output signal (understanding this paragraph, looking at the image, etc) while somehow allowing the system to not get stuck in a stolid infinite loop and making it move on. A metaphor for the summer in the psychological context is developed through a compression of streams of research in sociology and cognitive engineering.

Explicating the confluence between the two streams of research provides more strength in establishing the observability between an individual mind and their actions directed towards and within human society. As evidenced by Hofstede's research around the year 2004, his

diagrammatic representations conveniently overlap the realm of control theory and dynamical systems. Similarly around the year 2004 cognitive engineering researchers intuitively worked their way from control theory into the domain of psychology and sociology. Analyses concerning human individuals, group of the same and the physical world from a control theoretic perspective were used by Lee & See (2004) to discuss the process of evaluating trust in human-automation interaction. Their paper's generalizability impinges on human-human interaction because it was fundamentally derived from research on evolution of trust in human-human interaction. Their paper also provides a coherent and fairly expansive review of the research on trust by psychologists and sociologists. Their pictorial depiction of the looping mechanisms involved in comprehension and decision making, evolution of trust, formation of an intent to act and finally acting based on the assessment of a situation are shown in Figure 4. Their conceptualization is to be considered as the *State 2* of the simplified entrepreneurial ecology. A brief discussion of their conceptualization is provided next followed by a proposed research methodology that tests our assumption. The assumption is restated for emphasis: cognitive style bolsters certain behavioral traits and a collection of certain individuals further bolster these traits amongst themselves to generate a culture which ultimately determines how the earth gets consumed.



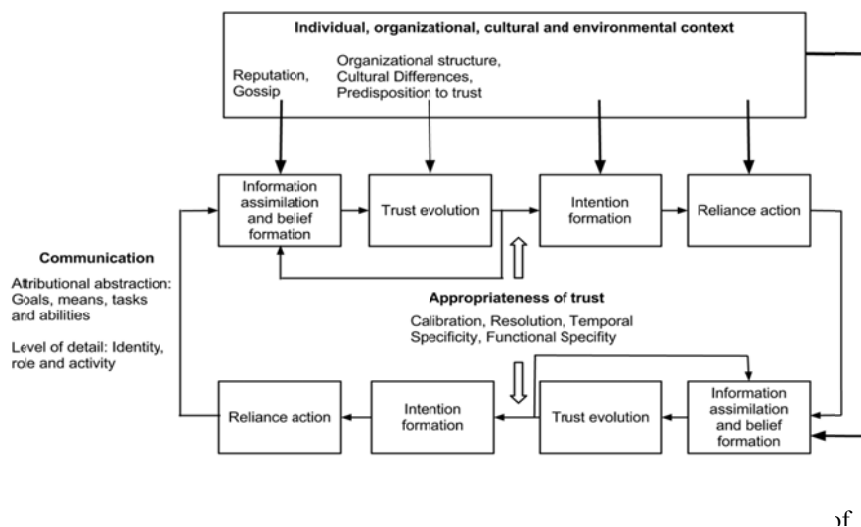
External factors such as other individuals, physical environment, etc. influence the human mind which is represented by the first row of blocks labeled as information assimilation and belief formation, trust evolution and intention formation. The diagram explicates that some particular part of the human mind is tasked with the nature that a summer would be as in a typical control theoretic model. Also, the three blocks in the diagram represent the notion that beliefs-attitudes-thoughts are internalized processes where beliefs and attitudes are more strongly reinforced or learned over time through an internal loop. The idea that trust is an attitude was one of the main contributions of Lee and See (2004). Reliance action is some form of behavior such as watching a screen, pushing a button, etc. which provides an input to some sort of an automated system like a programmed washing machine. The environment naturally also effects the automation and the

automation does inherit constraints from the environment much the same way the individuals does. Constraints such as gravity, lighting condition, time of the day, etc. Trust is calibrated by the transfer of information about the automation to the human through a display. The display may provide visual, auditory, tactile etc. cues to the human regarding the automation's purpose, process and performance. This feedback needs to be well calibrated, provide appropriate resolution, have functional specificity such that it provides the details of the system, its sub-functions and modes as well as accommodate for temporal specificity. Temporal specificity reflects the sensitivity of trust to changes in contexts of operation that affect the automations capabilities.

Lee and See's research on calibration of trust in automation were driven by a motive to solve productivity issues in complex socio-technical systems such as airports, space ships, etc. However, it turned out that everyday life has become technologically intensive and human-human interactions are often mediated by technologies like telephones, computers, internet, etc. Thereby their research became significant in a large variety of situations in the human factors domain encompassing human-human, human-automation-human and human-automation interactions. By calibrating trust appropriately the potential for misuse or disuse due to over-trust or under-trust can be reduced to maximize productivity.

For the sake of the topic of this paper, we inject yet another human in place of the blocks representing automation and the display. Let this arrangement be the interaction

between an entrepreneur and a vendor or an entrepreneur and a customer, etc. It can even be the interaction between two entrepreneurs for that matter.



In Figure 5 we intend to convey that a person should effectively communicate their goals, means for achieving those goals, tasks or chores and the abilities to perform those tasks. One important way of communication is to actually achieve the set goals. They should also communicate their identity, their role and their activity within the organization. Simultaneously, this person should understand these attributes and details pertaining to the other person(s). This is a challenging linguistic task that must be calibrated at the appropriate level of interpersonal trust, reputation, organization alignment etc. in order to achieve entrepreneurial activities.

With trust enabled mutual interaction the relationships between the stakeholders, employees, suppliers and customers can be envisaged through numerous transactions that lead to entrepreneurial partnerships and joint ventures. The dense ties not only bring a greater probability of shared experience, but also allow for the cultural lessons and values drawn on

those experiences to be more easily taught and positively reinforced within the shared community (Licht and Siegel, 2006).

The interactions and relationships among the entrepreneurs, stake holders, suppliers, employees and customers not only help in developing the ventures but also helps in finding new solutions to an industry's existing or forthcoming problems. However, the statistical challenges in studying such a system with diffusive clusters are immense. Therefore, we devote the next section to understanding few methods that are well suited for doing these kinds of research before a discussion on generalizability and impact of the ideas presented in this paper.

Psychophysics and Ethnography

Challenges in studying entrepreneurial development may be addressed by experiments in psychophysics and ethnography. Psychophysics is concerned with the science of measuring psychological processes with instruments and ethnography is concerned with the same task but it mostly uses gauges. Typical instruments used in current times include Functional Magnetic Resonance Imaging (fMRI), Electroencephalography (EEG) and video graphing techniques for studying eye gaze and human body movement. And gauges like questionnaires, interviews, visual confirmation by the examiner, etc. are also in use. Typically these tools - instruments and gauges - are coupled with statistical analysis methods and thereby it becomes important to understand the difference in the levels of accuracy and precision an instrument can deliver versus a gauge. This is important because the statistical methods and the examiners' perceptual biases amplify the errors in measurement within these tools. Quite arguably, instruments deliver better accuracy and precision however, they are markedly more expensive and technically challenging to use. Thereby, making a concerted use of gauges like questionnaires before using instruments like EEG can afford better utilitarianism. The design of the experiment while using such tools is very important and considerable care must be taken to ensure that the statistical methods used during analysis are suited for the experimental design. However, ethnography is generally concerned with qualitative classification of behavior and is more "fuzzy" than psychophysics (see Genzuk, 2003 for an introduction to ethnography). The fuzziness takes into account a multitude of factors that can influence individual behavior in an ecological setting. Thereby, the behavior of an individual to multiple factors is better analyzed using classifiers. In statistics, classifiers are a class apart from quantitative methods like ANOVA and we recommend the use of classifiers to better accommodate individual differences among test subjects and for better visualization of patterns that persist within the data (see Box, Hunter & Hunter, 2005, for a well-articulated discourse on statistical methods for experimenters).

DISCUSSION

This paper has given a broad overview of the cross cultural dimensions of the interactions of the entrepreneurs with suppliers, employees and customers. The framework developed in this paper brings forth an insightful examination of the entrepreneurial managerial process through a cognitive perspective. A cross cultural cognitive model is examined to investigate how the individual and cultural values of several entities interacting with the entrepreneurs contribute to the overall sustainability and profitability of the organizations. We next examine government policy makers have attempted to construct ecosystems for entrepreneurs to cope with challenges posed by these cross cultural dimensions or help harness potential advantages due to cross cultural differences in enabling communication and trust for business transactions.

With the prevalence and the popularity of the social media it becomes obvious that the information related to the entrepreneur's ventures would be buzzed over the internet in seconds. Such vital knowledge of culture, subculture and cross culture will assist entrepreneurs to shape and modify their marketing strategies. A wide variety of measurement techniques can be

employed by the entrepreneurs like surveys, projective methods, attitude, observations, content analysis etc. to evaluate and study the culture of their current and potential markets. The similarity and differences of the cross cultural consumption patterns have to be taken into account while making government policies and managerial decisions.

Government policy and managerial implications

It is recommended that transitional economies like UAE focus on research and development efforts that bring in knowledge based industries and workers that have low impact on pollution and high impact on localized value addition in the country's markets. Schiffman and Kanuk (2007) posited that culture shapes the consumer behavior of a society. Their study sheds light on enculturation (learning of one's own culture) and acculturation (learning of a new or foreign culture) which are important to understanding how people may acclimatize in an entrepreneurial ecology should such ecologies come to exist.

Efforts to create entrepreneurial ecologies have been made in the UAE with measurable impact and for greater developments to take place According to the GEM report 2009, the UAE's economic freedom score rose to 67.3 in 2010 ranking 46th out of 183 countries. The UAE is ranked 6th out of the 17 countries in the MENA region and its overall score is higher than the world and regional averages. The report identified improvements in business freedom, investment freedom and property rights as key reasons behind the improved economic freedom score. Business, trade, fiscal, monetary, financial and labor freedom, government spending, property rights, freedom from corruption are the economic freedom measurements. Further, in many of the areas UAE is reviewing existing laws and regulations and trying to improve the overall regulatory efficiency and fairness of markets across the UAE.

Entrepreneurs in such markets should be competently aware of the role that culture plays in influencing consumer behavior in terms of the consumer's interaction with the venture while purchasing the products or services, making contracts and while conveying satisfaction or dissatisfaction upon consumption. The utilization of technology, automation, and standardization in work place, managerial practices and business operations will help cope with the cross cultural challenges and foster trust in the interactions with stake holders, suppliers, employees and the customers.

The host country's culture is important as the working hours, climatic conditions, governmental regulations and tacit codes will be dominant forces in establishing relationships. For employees, cross cultural differences play a major role in perception of leader, freedom at work place, sense of ownership, perception of value and perception of time. Entrepreneurs in their managerial roles must work with their employees while being acutely cognizant that organizational culture can have a strong effect on beliefs, attitudes and behavior of individuals within the organizational boundaries (Martin, 1992; Schein, 1985; Schein, 1990).

CONCLUSIONS

The word "model" was avoided to the extent possible in this paper for "all models are wrong but, some are useful" (Box, Hunter & Hunter, 2005). By focusing too heavily on a model and falling in love with it we may continue to reinforce our confirmation biases and thereby it is important to look at models as allegories that help promote linguistic communication. This theoretical paper's objective was to provide hints and allegories to business, sociology and anthropology researchers about the work being carried out by cybernetics professionals. To illustrate the parallels between the various schools of thought the works of John D. Lee were put side-by-side with that of Greet Hofstede and Rober R. McCrae. We only provided a limited selection of amalgamated research in the above areas so that a researcher making their journey from business

research to cybernetics would not be inundated by the mathematically laborious texts of information theory, control theory and systems theory. There is also a need to rigorously understand the area of neuroscience while making the journey which is still a very expensive chore. However, the hope preserved in this paper is that governments like that of the UAE and entrepreneurs will bring the essence of the fruits of such schools of thought in a beneficial and tangible state for the human society at large.

The development of meta-analysis of prevalent studies connected schools of thought provided insights into “entrepreneurial cognition” that plays an important role in the interaction of the entrepreneurs with suppliers, employees and customers for the sustainability of the ventures. Studies by Schneider and Angelmar (1993), and Walsh (1995) have examined managerial behavior and cognition in organizations and suggested that cross cultural interactions are going to grow and become more prevalent in the UAE and the world as globalization and mobility of individuals is growing at a fast pace. The relevance of entrepreneurial challenges due to differences and similarities in cross cultural interactions will become very vital to the smooth functioning of organizations.

There is naturally the possibility that communication or miscommunication can bring out the best or worst amongst people. Furthermore, high levels of alignment and coupling that promote malevolent behavior can even arise where an entire culture of debauchery can persist. And if one cluster of people perceives another cluster as invasive, great tensions can arise because there is after all, very limited space and resources on this earth. It is therefore a task of paramount importance for the survival of human species that we as a society at large adopt appropriate ways of communicating our intent, identity, etc. while being sufficiently empathetic to the other fellow being.

Future research

As scientists we look for primitives and underlying principles. Innovative research strategies and experiments are to be defined by researchers in order to bring forth the advantages and disadvantages of the cross cultural effects on entrepreneurial activities. Our agenda in future research is to establish the extent to which a coupled system illustrated in Figure 1 would be observable and controllable. Establishing controllability will be a key challenge which will provide high payoffs in terms of pedagogy, government policies and managerial practices. We will also be able to observe how entrepreneurial personalities arise depending on the way positive and negative feedback loops form within intrapersonal and interpersonal concerns. Such studies would be particularly worthwhile to conduct in social settings like that of the UAE where a large number of multi-heritage and multi-cultural individuals reside. Places like the UAE offer an opportunity to compare this new cluster of multicultural personas to those who attest to only a single heritage and cultural identity. One can speculate whether “hybrid” cultures promote more or less education, crime, entrepreneurial activities, living standards, etc. as opposed to traditional cultures that seek to ardently retain a set cultural identity. However, the statistical challenges in studying such a system with diffusive clusters are truly large but very inviting.

REFERENCES

- Adler, N.J., Doktor, R and Redding, S.G (1986) From the Atlantic to the Pacific Century: Cross Cultural Management Reviewed, *Journal of Management*, 12(2), 295-318.
- Box, G. E., Hunter, W.G., Hunter, J.S., Hunter, W.G. (2005). "Statistics for Experimenters: Design, Innovation, and Discovery", 2nd Edition, New Jersey: Wiley & Sons Inc.
- Bruza, P. D., Van der Weide, Th. P., "The Semantics of Data Flow Diagrams", University of Nijmegen, 1993.

*A Cybernetics Perspective on Cross-cultural Differences of Stakeholders,
Suppliers, Employees and Customers in Entrepreneurial Ventures*

- David Matsumoto and Seung Hee Yoo (2006) Toward a New Generation of Cross Cultural Research, Association for Psychological Science,
- Doherty, N.F. & Doig, G. (2003). An analysis of the anticipated cultural impacts of the implementation of the implementation of data warehouses. *Transactions on Engineering Management*, 50 (1), 78-88.
- Fishbein, M., & Ajzen, I. (1975). Belief, attitude, intention, and behavior: An introduction to theory and research. Reading, M.A: Addison-Wesley.
- Gescheider, G (1997). Psychophysics: the fundamentals (3rd ed.). Lawrence Erlbaum Associates.
- George, G., and Zahra, A. S. (2002) National Culture and Entrepreneurship: A Review of Behavioral Research, *Entrepreneurship Theory and Practice*, 26:33-49.
- Global Entrepreneurship Monitor (GEM), (2009). *2009 GEM Report on Entrepreneurship in the United Arab Emirates*, Dubai, UAE: Zayed University
- Gouldner, A.W. (1957). Cosmopolitans and locals: Toward an analysis of latent social roles. *Administrative Science and Quarterly*, 2, 281-306.
- Hofstede, G (1991). Cultures and organizations: Software of the mind. London, UK: McGraw-Hill.
- Hofstede, G. (1984). Culture consequences. Newbury Park, CA: Sage.
- Hofstede, G. H. (1980) *Culture's Consequences: International Difference in Work Related Values*, Thousand Oaks: Sage.
- Hofstede, G. H. (2001) *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations*. Thousand Oaks, CA: Sage.
- Huang, J. C., Newell, S., Galliers, R.D. & Pan, S. (2003). Dangerous liaisons? Component-based development and organizational subcultures. *Transactions on Engineering Management*, 50(1) 89-99.
- Karahanna, Elena; Evaristo, J Roberto; Srite Mark (2005) Levels of Culture and individual behavior: An integrative perspective. *Journal of Global Information Management*; Apr-Jun, 13, 2.
- Kelly, D. J., Singer, S. & Herrington, M. (2011). Global Entrepreneurship Monitor 2011 Global Report, Global Entrepreneurship Research Association.
- Lee, J.D., & See, K.A. (2004). Trust in automation: Designing for appropriate reliance. *Human Factors*, 46(1), 50-80.
- McClelland, Kent A., and Fararo, Thomas J. (Eds.), (2006). Purpose, Meaning, and Action: Control Systems Theories in Sociology
- Martin, J. (1992). Cultures in organizations: Three perspectives. Oxford, UK: Oxford Press.
- Matsumoto (1999) Culture and Self: An empirical assessment of Markus and Kitayamas Theory of independent and interdependent self-construal's. *Asian Journal of Social Psychology*, 2, 289-310.
- Ngwenyama, O., & Nielsen, P.A. (2003). Competing values in software process improvement: An assumption analysis of CMM from an organizational culture perspective. *Transactions on Engineering Management*, 50(1), 100-112.
- Nisbett, R. E, Peng, K., Choi, I., and Norenzayan, A. (2001). Culture and systems of thought: Holistic versus analytic cognition, *Psychological Review*, 108:291-310.
- Peng, Ames, D. R. and Knowles, E (2001) Culture and Human Inference in Matsumto, D., (ed) *Handbook of Culture and Psychology*. Oxford and New York: Oxford University Press.
- Schein, E. H. (1985). Organizational culture and leadership. San Francisco: Jossey-Bass.

- Schein, H. E. (1990). Organizational culture. *American Psychologist*, 45 (2), 109-119.
- Schneider, S.C and Angelmar, R. (1993) Cognition in Organizational Analysis: Who is minding the Store? *Organizational Studies*, 14 (3), 347-374.
- Siehl, C., & Martin, J. (1990). Organizational culture: A key to financial performance? In B. Schneider (Ed.) *Organizational climate and culture*. San Francisco: Jossey-Bass.
- Shane, S. A. (2008). *Illusions of Entrepreneurship: The Costly Myths that Entrepreneurs, Investors, and Policy Makers Live By* New Haven, CT: Yale University Press.
- Schiffman, L. G. & Kanuk, L. L. (2007). *Consumer behavior. Its origins and strategic applications*. Consumer behavior. Ninth Edition. New Jersey: Pearson Prentice Hall.
- Tiandis, H. C. (1972). *The analysis of subjective culture*. New York: John Wiley and Sons.
- Ulijn, J. and Brown, T.E. (2003). 'Innovation, Entrepreneurship and Culture: A Matter of Interaction between Technology, Progress and Economic Growth? An Introduction'. In T. Brown & J.Ulijn (Eds.), *Innovation, Entrepreneurship and Culture: The Interaction between Technology, Progress and Economic Growth*. Cheltenham, UK: Edward Elgar.
- Walsh, J. P. (1995) *Managerial and Organizational Cognition: Notes from a Trip Down Memory Lane*, *Organization Science*, 6(3), 280-321.
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Monetary Constituent Of Investment Security

Key words: economy, FDI, investment security, monetary security

INTRODUCTION

Our study is related to the issues of investment security with an emphasis on internal and external risk factors. Our main objective is to reveal the importance of improving investment climate and establishing trust among investors through various means of economic policy. Most of the contemporary theories and concepts on mentioned issues are based on the assumption that foreign direct investments (FDI) play a role of forceful engine to speed up the rates of economic growth. More particularly, this approach was adopted by many post-communist countries and their governments anticipating massive inflow of external financial resources into the real sector of economy. Moreover, FDI were given certain priority to resolve an entire constellation of challenges associated with the economic and social reforms. Despite the immense volumes of investments, specifically, involved in the overall process of privatization and related projects, as well as loans landed by the international financial organizations and western governments to the newly established private sector, rare examples may serve as trends to be continued in the years to come. In most of the newly independent states special law on "Protection of FDI" was adopted to protect foreign direct investments. This instrument, however, was better used by former communist "oligarchs" to launder the money from hidden sources in "off shores", register companies with western style brands and repatriate them and use legally with even better terms and privileges taking advantages of mentioned laws. In most of the cases such "foreign" companies were establishing joint ventures with "locals" and benefiting from tax holidays. In some countries like Armenia, only after careful examination of mentioned trends, tax benefits were lifted while implementing "second generation" reforms. We, therefore, presume that the

basic terms need to be one and the same for foreign and local investors. Furthermore, in some cases special attention is required for local investments based on a notion that less foreign investment may be anticipated if the local companies and individuals face lack of trust and be reluctant to invest in their homeland. Given this we believe a concept need to be developed covering the issues related to the IS environment and its continuous improvement.

CONTEMPORARY ISSUES RELATED TO INVESTMENT SECURITY

Defining Investment Security

We might attempt to define the investment security (IS) and state that it is such an order of segments in the investment environment, and its institutions when pledged growth, and protection of socially oriented economy, and financial markets along with the sum of financial relations, and processes of nation. IS is also the ability and readiness of investment institutions to create mechanisms of utilization and protection of interests of national economy, and finances within the framework of investment policy implantation.

Attractive investment climate is a vital precondition for efficient investment activities in priority sectors and for generating new sources for tax revenues to the state budget. Insuring investments from non-commercial risks and passing them from the investor to the insurance company for a fee plays a major role in supporting investment security. Insurance of investments allows to creating needed conditions for setting up investment funds, as well as providing government guarantees for implementing priority investment projects.

Insurance protection of investment projects is being done by and large in case of following groups of risks related to: changes in market structure and reliability of partners; emergencies as natural disasters, fires, robberies, etc.; technology crash and intellectual property protection; non returned loans in foreign trade and others. In parallel to it systems of insurance, re-insurance and providing guarantees from non returned loans may be created to strengthen the trust in investment returns.

Attempting to prioritize: foreign or local investments?

Search for foreign investments is justified since the local sources may not be sufficient to support the growth of the real sector of economy with justified economic strategy and policy of long term investments. Issuing Eurobonds in different denominations of local and foreign currencies and selling local securities to non residents are among various forms of attracting foreign investors. However, if the debt of foreign investors is being re-financed by issuing new state bonds in world markets, then the foreign debt of the State also starts to boost. In case of sudden and simultaneous order to redeem the bonds in big volumes of foreign debt the State may face financial default and economic crisis. From the other hand increasing volumes of foreign debt is resulting in vast amount of obligatory payments, and to erosion of state budget. In order to maintain investment security for sustainable development state bonds need to be issued considering the volume of foreign liquidity and budget resources for their payment.

IS may be maintained through foreign direct investments in joint ventures and establishment of foreign subsidiaries. In this case IS for the nation is also an advantage to foreign investor in terms of:

- access to raw materials and natural resources;
- penetrating new markets;
- utilizing the resources of qualified labor with relatively low cost for its reproduction;
- commercializing research for introducing new competitive products in foreign markets.

Besides providing proper level of IS locally, participating in joint ventures gives an opportunity to the host partner:

- to have an access to foreign technologies benchmarks;
- accumulate new sources for local investments;
- utilize foreign experience and “know-how”;
- use better systems of production and management;
- reduce unjustified imports and expenses in hard currency;
- increase the volume of local finished goods exports.

At the meantime, IS may become feasible due to the state strategy program to attract foreign direct investments, particularly in the production of consumer goods, in construction, and other priority areas by state guarantees in developing countries, when needed. IS may also be defined as an ability of State to eliminate economic threats related to the creation and maintenance of healthy and competitive investment climate. Among them – political instability, crime rate, unstable activities or malfunctioning of related industries, high level of inflation or hyperinflation, subjective treatment of bureaucrats in starting up a new business or modifying the terms for maintaining the existing one, expressions of discriminations, unfair competition, ever-changing Tax code or Customs code, to name a few.

IS is not only the task of the host government and local businesses, it strongly depends on the behavior of other players, too. Among them – foreign citizens, companies, organizations, associations and other entities allowed to make investments in accordance with the local and international laws and regulations, as well as foreign governments and international organizations. All mentioned players may invest in all different spheres of activities except those that are forbidden by law for foreign residents, are under direct government control, or require special license to practice particular type of business.

In order to generate sufficient amount of foreign investments investors need to be given IS in form of providing favorable and attractive conditions for investment activities. Advantages are intended to encourage foreign business activities in local markets while reinvesting earned profits, gathered funds and resources in the same or other areas. Investment advantages are being provided when the volume of investments reach anticipated volumes in designated priority industries of host nation or special investment projects as information technologies, modern equipment and service industry.

Overall, IS of the nation need to be based on the strategy of growth of the financial market, since its’ dynamic structure may strongly impact on sustainable development and make the economy attractive and competitive.

IS cannot be viewed apart from the other forms of economic security. Acceptable level of IS may be reached when the economic welfare of the host nation, economic priorities of economy are in harmony with the interests and the rights of foreign investors.

In sum, IS may be defined as a state of economy when local and foreign investors have equal and sufficient trust to contribute required amount of funds in form of human, natural, financial, industrial and other resources in the overall process of economic growth.

This means that investment security need to be granted high priority by the government in terms of eliminating investment risks, including expropriation, repudiation of contracts and discrimination and by granting a status of most favored nation treatment to investors. IS becomes more feasible not only by the efforts of local Government. Membership in World

Bank's Multilateral Investment Guarantee Agency (MIGA) clearly demonstrates given nation's commitment to create attractive investment climate and protect the interests of foreign and local investors. International Centre for the Settlement of Investment Disputes also plays a key role in reaching the goals related to IS. Usually the State creates Investment Promotion agencies or departments based on corresponding laws, particularly, Investment Promotion or Foreign Investments Protection and other Acts protecting against expropriation, cancellation of contracts and discrimination and others.

In some cases foreign investments are being politicized: certain advantages are being granted to strategic partners rather than to everyone. IS assumes actions against threats to national interests. In particular, "Exon-Florio Amendment" provided selective executive branch screening on national security grounds of foreign acquisition of control of businesses in the United States. This allows the President the authority to block the activities in case foreign owners "might take action that threatens to impair the national security" and if other laws "do not, in the President's judgment provide adequate and appropriate authority" to protect the national security (Hunt, 2006).

While protecting investment security, relevant threats must be considered: lobbying to set rules for protectionism; complicated tax policies and tax code discouraging foreign investors; the risk of apparent xenophobia.

Investment security through monetary integration

IS may not be established in a country where either local or foreign investments are dominating. Threatening dependence from external sources may be established in case of dominating foreign (sometimes politicized) investments with a lack of local investor trust, and unattractive climate will be present in case of rare, occasional and insufficient foreign investments and prevailing share of local investments. A balanced and effective approach to reach anticipated level of IS may be adequate degree of diversification of investment sources locally and internationally. In some countries tax breaks or certain limits for investments are established to promote more local and foreign investments. IS is also related to better investment opportunities in small towns and remote territories in order to equalize the levels of economic development between urban and rural areas.

Finally, the latest global financial crisis made conspicuous that the real investment security may be reached only in case of careful consideration of various components of economic policy, more specifically, paying focal attention to its monetary constituent. Our study clearly demonstrates a link between investment and monetary policies. In addition, we believe the ability of the state to pledge monetary stability and security need to be examined.

In order to better understand the essence of monetary security (MS) it is significant to disclose the role of money. The reason why monetary integration is considered to be the peak of economic integration is because of the change of the role of money itself in the global economy. Since the time of Karl Marx when the famous theory on the money functions was written, the role of money had been changed considerably. Measure of value, means of payment, means of circulation, means of hoarding and of world money underwent serious evolution during the past two centuries. First, the gold does not perform the function of world money. Convertible hard currencies – US dollar and euro mainly perform this function, although none of the central banks worldwide ceased gold from liquidity reserves for MS reasons. Second, credit money and non-cash circulation had reduced dramatically the amount of money in circulation and thus limited the function of money as means of circulation. Other functions of money also experienced essential transformation, however the role of money and monetary relations play greater role than the basic functions. During the dawn era of capitalist production monetary relations served

the process of production and the relations in the process of production determined the nature of monetary relations. Today monetary relations not only gained weight and sovereignty, moreover, they may be strong enough to impact on the process of production and determine its' further destiny. Monetary policies have even more impact on investment flows and investment security. Depending on the nature of monetary relations, the supply and demand equilibrium, production process can be more or less costly, therefore – more or less competitive, and in turn be continued or ceased. Financial markets themselves maintain significant impact on the process of production. Given the new and changing terms surrounding local, regional and global economies, the means to reach sufficient level of MS and IS and are being seriously modified thus having different impact on various nations depending on the level of economic development.

The overall nature of MS had been changed as well. From a part of local and regional problems of economic stabilizations MS associated with financial risk management and floating exchange rates and mass currency flows impacting local investments became a priority issue for the nations worldwide. MS deals with currency interventions, exchange rates fluctuations, inflation or hyperinflation rates, as well as to work out better rules and regulations for security houses, other non-bank financial institutions, and non-monetary policies related to unfair competition, subsidizing exports and dumping causing major obstacles for favourable investment climate and sustainable development. MS considers the significant impact of money on economic policy, through better use of banks for monetary and currency intervention and others. High level of MS allows further developing monetary integration and reducing the costs of economic transactions associated with foreign trade, FDI and others, thus leading to an increase of economic efficiency and competitiveness of goods and services.

Basic ingredients of MS based on monetary integration relate to the freedom of foreign economic relations, alterability of exchange rates, international liquidity, and sovereign means of regulating the balance of payments along with the data on foreign holding of key currencies need to be taken into account (Russell, 1973). Therefore, MS is based on the convergence of monetary policies primarily depends on the efficiency of coordinating the exchange rates and the adjustment of inflation, if needed. This in turn, presumes a move from regulating the strategies on currencies and exchange rates to a well designed monetary policy.

Monetary security and investment security

MS creates confidence and trust for IS brings together trading and strategic partners, reduces high transaction costs of doing business in many currencies, manage and control the processes associated with devaluations and revaluations of currencies and to block spreading the negative effects of deficient monetary and economic policy from country to country. MS is more obtainable in regional blocks and benefits nations participating on higher levels of economic integration, particularly the on the highest level -- political and economic union such as the MS reached through the formation of European Monetary System in 1979 and introduction of single European currency –Euro in 2001.

MS may also result from gradual elimination of obstacles to further trade liberalization, and currencies exchange rates fluctuations risks, later – by coordinating monetary and fiscal policies, introducing single currency or average value of the basket of currencies and finally, fixing the rules and regulations in local legislation and international agreements.

MS is mostly demanded whenever there are natural foundations for economic and political integration and when the currencies still create problems for investments, fair business practices and economic, financial and monetary disorders (market imbalances). Also, it might be included in the agenda when the “short sales” of some currencies at global financial markets further

depreciates them against other key currencies, and when the governments are escalating their debt through the increase of money supply and non-backed debt guarantees.

Gradually, more sophisticated forms of monetary integration allowed countries to reduce the currency risks and make the debtor keener to pay the debt obligations due to the concern of punishment measure from other nations. This mainly applies to regional monetary integration. Each of mentioned factors, particularly the change of interest rates is able to bring to a chain of changes of others and consequently cause a change in volumes of investments as well.

Today more than ever MS is linked to IS, and in turn, to political, economic, and financial integration. MS may only be based on strong political integration and commitment. Therefore, it seems almost infeasible that the activities of the European Central Bank in the European System of Central Banks could be possible without a capable European Parliament. From the other hand political integration necessitates monetary and financial integration and compels economic policy makers accountable to better coordinate economic policies, attract new investments by making exchange rates more predictable. In turn, the later may be reached by regulating the balance s of payments and the residues of trade turnovers, dynamic changes of mass flows of capitals, monetary and currency interventions, inflation or deflation and the interest rates. Links between monetary integration and political integration are becoming more active along with the shift from one form of economic integration to another. In turn, political integration is considered an essential precondition for the foreign policy in all areas undergoing minor or major transformations. Also, changes in interest rates lead to distributional outcomes since the distribution of income and wealth is more evident expressed in public spending and taxes (Eichengreen, 1996). In addition, local government's fiscal tasks of taxation remain the backbone of both political and economic independence. Broader international monetary and fiscal integration compels to come up with a proper mechanism of political integration to accomplish these goals. Fairly equal taxation of incomes and profits need to be translated to their equal distribution and to a reasonable social well fare in all countries. This will allow implementing proper monetary policies with thorough political surveillance to reach desirable level of MS and IS.

MS inevitably presumes financial integration, predominantly being fixed in precise laws and regulations called fiscal legislation. Finally, some countries participating in monetary integration always encounter different problems to be solved at the others expense. Bigger demand for investments and loans in one country, for example, may bring to certain increase of interest rates in all countries. However, given the current state of liberalization of monetary relations and global capital markets, it might be lower than expected regionally. Otherwise political integration may put certain limitations and restrictions to the monetary integration foundations through the changes in relevant laws and regulations avoiding deficit spending, hyperinflation, etc.

Current perceptible trends of diminishing "currency risks" and growing disinclination of participating nations to over-borrow at others' expense due to anticipated sanctions by others clearly displays the advantages of monetary integration and its' relationship with the financial integration. Moreover, countries that are still reluctant to sacrifice another portion of national sovereignty for the monetary integration realize that have nothing to lose but benefit in case of financial integration. The latter is being recognized as a close cooperation between governments, Central Banks, state and commercial banks, and non-bank financial institutions to minimize and better manage credit risks for financial security and IS for the sake of free and fair competition.

Financial defaults in a number of countries call for more focused consideration of preventive measures in order to avoid monetary, banking, investment and financial defaults and achieve MS. Even countries economically involved in diverse regional blocks are motivated in monetary and financial integration. Economic cycles strongly depend on given favourable or reverse monetary conditions promoting foreign trade of nations: natural or artificial appreciations of currencies hurt export industries through reduction of investments injections while competitors benefit from opposite trends.

An overall trend towards coordination of monetary policies concentrating on exchange rate targeting and on currency boards becomes extremely essential. Since the first years of the twenty first century banking not always and not accurately reveals the features of deteriorating industry: instead, capital markets better indicate the real situation.

More attention is being paid by the experts to risk management and monetary vulnerability. In order to have a realistic look at coming years it is indispensable to consider the experience of current and past challenges to design and implement economic and monetary policies. From 1944 to 1971 the post-war economies were recovered and further grown in a free market environment, whereas forced fixed rate system and artificial low price of gold seriously harmed economic growth worldwide. Such basic ingredients of the cost of gold as wages, transportation costs, expenses related to the production of gold grew steadily having no impact on the price of gold. At the meantime the currencies of fast growing economies in Germany, France and others became stronger, however, accepting the dominant role of the US dollar in world markets. European Union countries, being among developed market economies contradict the market laws by limiting the competition mainly within the region; equalizing different trends through monetary, financial, and political integration: many countries like Spain, Portugal, and Greece still need to catch up and continue to take advantage of high levels of competitiveness of others. In case of opposing broader economic convergence, limited monetary integration aimed to sustain stability by such artificial means as currency interventions, increasing or decreasing money supply and others may not be able to hide current discrepancies: it might only delay the time of economic and political collapse. Effects of the US dollar and Euro appreciations are different at home and abroad with their different impact on local environment for investments and for world economies. Lessons from the monetary integration in former Soviet Union with the single currency for 15 nations and the “rouble zone” are not yet analyzed to be considered for the future.

Further efforts to reduce the risks associated with MS and IS depend on a wide variety of factors and trends. Despite the discussions on the prospects of the return to the fixed rates system, it appears unrealistic due to two basic factors: the growing interest of those who makes money on floating rates is incomparable to those making theoretical assumptions, and fixed rates monetary system might recreate serious impediments to for money supply resulting in high prices, inflation, unemployment, thus slowing down investment flows and the overall economic growth. Monetary integration may be achievable mostly on a regional level. While almost no sign of monetary integration on global level appears feasible in the years to come, however, international efforts will be needed to reduce currency and credit risks around the world. Given the growing interdependence of local economies, monetary integration at the coordination level will be required and meetings of heads of nations on monetary issues will become more common and frequent measure of counterbalancing monetary and financial shocks and achieving MS and IS.

In coming years regional monetary integration and global coordination of monetary policies can impact positively on substantial reduction of “shadow economy” particularly in developing countries through financial and banking integration by making credit money to those companies

adhering Basel-2 principles and maintaining monetary and financial transparency for financial service providers. Considering further loss of economic independence in parallel with expanding and intensifying monetary integration self-adjustable fiscal stabilizers will be of more use, therefore financial transfers will be a better alternative to the exchange rate changes in case of compensating distinctive market imbalances. Also, better monetary integration will increase investment flows and bring to the continuous transformations of economic, financial and banking systems of participating nations.

Globally, MS is less achievable since there is no precise monetary system in the world economy. Monetary systems are becoming more diversified based on regional trends and developments. Currencies of emerging market economies like CIS countries are floating, others are in managed float, key international currencies (US dollar, Euro) are in frequent changes due to interventions, and other national currencies are tied to convertible currencies.

Competitive advantages of nations will require different approaches to solve MS and IS issues for each sector and branch of industry and the national economy. Balances of payments and trade balances will heavily depend on the outcome of bilateral and multilateral monetary integration. It is also possible that national currencies may become gradually oriented to the world basket of commodities prices. Coming to EURO, it may be used further for local and foreign investments not only by EU member countries, but also others (countries in CIS, Africa and the Middle East), that aside from geographical considerations, might prefer stable currency with predictable exchange rate to better solve the issues related to local, regional and global MS. Japanese yen and Chinese Yuan might emerge as international key currencies and preferable resources for investments backed by markets composing centres of power in the world economy. EURO and the US dollar will find better means and ways of co-existence without major exchange rates shocks, but rather considering interests of sustainable growth of the world economy benefiting all parties for a long run. Based on current trends, MS and IS become more feasible regionally with possible introduction of “amero” or other single currency between North and South Americas, as well as in South and South East Asia, Africa and CIS. And the role of gold may change but not similar to the role performed in the past: it will be considered as an indirect factor of monetary stabilization by regional and global institutions (Mundell, Robert, 1997).

CONCLUSIONS

Thus we may conclude that investment security largely depends on internal and external risk factors. Although most of the contemporary theories and concepts on mentioned issues are based on the assumption that foreign direct investments (FDI) play a role of forceful engine to speed up the rates of economic growth, we believe local investments carry foremost importance reflecting trust in favorable climate and stability in homeland. IS, therefore, is such an order of segments in the investment environment, and its institutions when pledged growth, and protection of socially oriented economy, and financial markets along with the sum of financial relations, and processes of nation. IS is also the ability and readiness of investment institutions to create mechanisms of utilization and protection of interests of national economy, and finances within the framework of investment policy implantation.

Also, attractive investment climate is a vital precondition for efficient investment activities in priority sectors and for generating new sources for tax revenues to the state budget. At the meantime, search for foreign investments is justified since the local sources may not be sufficient to support the growth of the real sector of economy with justified economic strategy and policy of long term investments.

Overall, IS of the nation need to be based on the strategy of growth of the financial market, since its' dynamic structure may strongly impact on sustainable development and make the economy attractive and competitive.

IS cannot be viewed apart from the other forms of economic security. Acceptable level of IS may be reached when the economic welfare of the host nation, economic priorities of economy are in harmony with the interests and the rights of foreign investors.

In sum, IS may be defined as a state of economy when local and foreign investors have equal and sufficient trust to contribute required amount of funds in form of human, natural, financial, industrial and other resources in the overall process of economic growth.

The latest global financial crisis made conspicuous that the real investment security may be reached only in case of careful consideration of various components of economic policy, more specifically, paying focal attention to its monetary constituent. Our study clearly demonstrates a link between investment and monetary policies. In addition, we believe the ability of the state to pledge monetary stability and security need to be examined.

High level of MS allows further developing monetary integration and reducing the costs of economic transactions associated with foreign trade, FDI and others, thus leading to an increase of economic efficiency and competitiveness of goods and services.

Today more than ever MS is linked to IS, and in turn, to political, economic, and financial integration. MS may only be based on strong political integration and commitment.

Financial defaults in a number of countries call for more focused consideration of preventive measures in order to avoid monetary, banking, investment and financial defaults and achieve MS.

REFERENCES

- Eichengreen, Barry, *On the links between monetary and political integration*, University of California, Berkley 1996.
- Hunt, Cecil, Foreign investment security fight commentary: What 'protection' does the U.S. have? *MarketWatch* March 10, 2006
- Mundell, Robert, *The International Monetary System in the 21st Century: Could Gold Make a Comeback?* Columbia University, Lecture delivered at St. Vincent College, Latrobe, Pennsylvania, March 12, 1997.

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Entrepreneurial self-efficacy: A study on Malay Women Small-scale Individual Entrepreneurs (WSIEs) in Malaysia

Keywords: entrepreneurial self-efficacy; women entrepreneurs; entrepreneurial performance

INTRODUCTION

Women are becoming a growing force in the entrepreneurial economy (Bergman, Rosenblatt, Erez, & De-Haan, 2011). Recently on the 25th of September 2011, the Prime Minister of Malaysia has presented the 2011 Prime Minister's Woman Entrepreneur of the Year award to Ken-Rich Chemical Production Sdn. Bhd. Chief Executive Officer, Hooi Lai Lin for her contributions to the nation and society in the fields of entrepreneurship (Mustaza, 2011).

In Malaysian economy, the government recognizes that successful businesses will create jobs and contribute to economic growth. Therefore, the focus of this study is on the entrepreneurial self-efficacy and performance outcome of Malay Women Small-scale Individual Entrepreneurs (WSIEs) in Malaysia. The previous studies on small business in Malaysia and other countries, among others, focused mainly on the problems faced by the women entrepreneurs in conducting and running their businesses such as; financial and family problems, lack of management skills and experience (Abdullah, Hamali, Deen, Saban, & Abdurahman, 2009; Aziz, 2006; Hosseini & McElwee, 2011; Mukhari & Chu, 2010; Reijonen, 2008). Even though there are barriers and severe resistance in handling their businesses, entrepreneurship is still identified as the key business activity which is most likely to lead to the successful economic change for the Malay WSIEs.

Therefore it is important to ask this question: Do demographic factors and entrepreneurial self-efficacy of Malay WSIEs explain the variation in their performance? Thus the objective of the study should be to examine the relationship between demographic factors and entrepreneurial self-efficacy, to examine the relationship between predictable environment and entrepreneurial self-efficacy, and to examine the relationship between entrepreneurial self-efficacy and entrepreneurial performance outcome.

LITERATURE REVIEW

The word entrepreneur is derived from the French verb *entreprendre*, which means to undertake, seized from the work of the Frenchmen who organized and managed military and exploration in the early sixteenth century (Jennings, 1994). According to Corman and Lussier (1996), an entrepreneur is a person who has the need to build and create something new and is a special type of individual, having specific characteristics in addition to those necessary to operate a small business. The standard definition of small medium enterprises (SMEs) provided by Small and Medium Industries Development Corporation (SMIDEC) is used in defining SMEs is based on a number of employees and annual sales turnover along with specific definitions for micro, small and medium enterprises (SMIDEC, 2009).

Hashim (2003), defined entrepreneurs as those people who are involved in the business, be it small, large or medium, particularly among those who had operated their own businesses. According to

Azmat and Samaratunge (2009), small scale individual entrepreneurs (SIEs) vary from petty traders to personal service workers like small street vendors, barbers and owners of small shops, and their number keeps on increasing. SIEs are sole owned with a maximum of five employees and mostly are labor intensive. Usually SIEs exist in the informal sectors and sometimes it might be or might not be registered by the owner of the enterprise.

According to Sloane (1999), in her book *Islam, Modernity and Entrepreneurship among the Malays*, Islamic officials have carefully pointed out that women work only at the discretion of men; for them, women's work is a privilege and certainly not a right. She further explained that, Malay wives often want to work to ensure that they are not too dependent upon men. Moreover, the feeling of self-determination by the modern, educated and economically ambitious Malay women, make them pursue entrepreneurial activity to prove that they do not need their husbands to provide them with respect or status. The previous study by Koshal, Gupta and Koshal (1998) also agreed that Malaysia is undergoing brisk changes from its traditional religious and cultural norms to contemporary values attitudes towards women managers. In addition, they explained that Malaysian government has taken steps to recognize women's role and their contribution to the economic development since 1975.

A study by Clercq, Menzies, Diochon and Gasse (2009) explaining nascent entrepreneurs' goal commitment has shown that age has a positive relationship with goal commitment in which older nascent entrepreneurs exhibit higher levels of goal commitment than their younger counterparts. A study by Khanka (2009) has found that married entrepreneurs perform better than their unmarried counterparts. This is because marriage is related to maturity of the entrepreneurs, and maturity enables entrepreneurs to cope better with business problems and thus perform better. The other reason is that, marriage creates obligation and responsibilities to raise one's need for more income or higher performance. A recent study by Kariv (2010) on the role of management strategies in business performance, on a Canadian sample of 115 entrepreneurs and an Israeli sample of 118 entrepreneurs, has found that nationality were insignificant in affecting business performance.

The previous studies showed mixed results regarding entrepreneur demographic factors. For example studies reported significant relationship such as age (Clercq, et al., 2009), on nationality (Boissin, Branchet, Emin, & Herbert, 2009), marital status (Khanka, 2009), and education level and experience (Kariv, 2010). With the above argument, the study hypothesized that:

H1: Entrepreneur demographic factors explain the relationship in entrepreneurial self-efficacy.

The Predictable Environment

Environment is a natural feature of a place and the general situation the entrepreneurs are in. According to Dess and Beard (1984) the border town environment is indicated by dynamic environment and hostile environment. According to Stam, Gibcus, Telussa and Garnsey (2008), dynamic environment is characterized by the rate of change and innovation in the industry. Allen (1999) defined dynamic environment as the degree of certainty or uncertainty in the environment, as well as the stability or instability of the industry. According to Covin and Slevin (1989), uncertain environments have been characterized as unstable industry settings with intense competition combined with harsh overwhelming business climates which lack exploitable opportunities, but a stable and certain environment is otherwise.

It seems that the kind of position faced by the Malay WSIEs in Malaysia has more predictable environment or more certain surroundings as compared to the uncertain environment faced by the Thai Malay WSIEs at home which leads them to enter the Malaysian markets. Researchers investigating entrepreneurship theory has suggested that entrepreneur experiencing uncertain environments tend to enter new markets more frequently than traditional entrepreneurs (Morgan, 1999). Morgan (1999) has argued that during this periods of environmental uncertainty, and in order to return to a degree of fit with the environment, entrepreneur will seek alternative revenue sources

through other market development strategy such as exporting.

Therefore, it is the contention here to examine the relationship whether environment influences entrepreneur behavior, and with the above argument, the study hypothesized that:

H2: There is a positive relationship between predictable environment and entrepreneurial self-efficacy.

Entrepreneurial Self-Efficacy

Entrepreneurial self-efficacy, according to McGee, Peterson, Mueller and Sequeira (2009), is conceptualized as a construct that measures a person's belief in their ability to successfully launch an entrepreneurial venture. They argued that entrepreneurial self-efficacy is particularly useful since it incorporates personality as well as environmental factors, and is thought to be a strong predictor of entrepreneurial intentions and action (Boyd & Vozikis, 1994). Chen et al. (1998) defines entrepreneurial self-efficacy as the strength of a person's belief that he or she is capable of successfully performing the various roles and tasks of entrepreneurship (Chen, et al., 1998), or the roles and tasks of an entrepreneur (Boyd & Vozikis, 1994).

A recent study by Boissin, Branchet, Emin and Herbert (2009) on 272 American students at United States and 340 French students at France, analyzed the differences in sensibility regarding the creation of enterprises among American and French students. The research compared their beliefs in order to identify differences and similarities. The results showed that the intention to start up a company is stronger in the United States than in France, and indicated important differences in beliefs. The perceived self-efficacy on intention showed a positive significant relationship with regard to the United States students. However, there was no significant relationship between perceived self-efficacy on intention with regard to the French students. In general, they have recognized that entrepreneurship intentions are more positive and advanced among American students than French students. This is because, for French, many students are hesitant and more negative about starting a business and would rather be employees. They have different belief which is actually based on economic and cultural backgrounds (for example, reward systems and government structures) that influence these beliefs (Boissin, et al., 2009).

Chen et al. (1998), who surveyed 140 university students also found that entrepreneurial self-efficacy was positively associated with the person's intention to set up their own business. A study by Clercq et al. (2009) that examined factors associated with nascent entrepreneurs' goal commitment has also hypothesized that nascent entrepreneurs' self-efficacy relates positively to their goal commitment. The results of the hypothesis showed support that nascent entrepreneurs' self-efficacy relates positively to their goal commitment (Clercq, et al., 2009).

The study by Barbosa et al. (2007) on the cognitive style and risk preferences among 528 university students from Russia, Norway and Finland found that, different cognitive styles and level of risk preference are associated with different types of entrepreneurial self-efficacy. They found that individuals with a high risk preference have higher level of entrepreneurship intentions and opportunity seeking self-efficacy.

The previous studies reported significant results on entrepreneurial self-efficacy (Barbosa, et al., 2007; Boissin, et al., 2009; Chen, et al., 1998; Clercq, et al., 2009; Luthans & Ibrayeva, 2006). This review leads the researcher to test the following hypotheses:

H3: There is a positive relationship between entrepreneurial self-efficacy and entrepreneurial performance outcome.

RESEARCH DESIGN AND METHODOLOGY

The research is a cross-sectional study and a survey method is used. The population size is 360 entrepreneurs and data was collected between the month of December 2010 and February 2011. The

questionnaire was personally administered to the respondent. To solicit the responses from the Thai Malay WSIEs, the researcher decided to use a trained interviewer to collect the data. A lady, who is well known to the community of Thai Malay businesses was engaged and trained to assist the researcher. The same method was used by Gima, Li and Luca (2006) in Shenzhen, China. This method of on-site data collection provides the key to the right respondents, correct use and understanding of terms and to get better response rate (Gima, et al., 2006). All the 360 business owners registered with Majlis Daerah Kubang Pasu and Majlis Perbandaran Kangar were approached and a total of 87 responses from women entrepreneurs were received.

Instruments on the environment consist of 13 items which measure the dynamic and hostile environment faced by the entrepreneurs. These items are adapted from Miller and Friesen (1982), and Covin and Covin (1990). The development of questionnaire for the measurement of entrepreneurial behavior is adopted from the work of Sirec and Mocnik (2010) and Chen et al. (1998). The dependent variable consists of three items which measures the entrepreneurial performance outcome. These items are adopted from Kropp et al. (2006). All the questionnaire consists of items presented on a five-point Likert scale. Respondents were asked to indicate their level of agreement to each of the items with a high score of (5) indicating the highest level of agreement and (1) indicating the lowest level of agreement.

The Statistical Package for the Social Science (SPSS) for Windows Software (version 19) has been used to analyze the data.

RESULTS

Profile of Respondents

Most of the respondents are operating their businesses at Padang Besar, Perlis which accounted for about 88.50% of the total respondents (see Table 1). 63.20% of the respondents have been working as entrepreneurs for more than five years. The Thai Malay WSIEs are about 63.20% and they are all operating their businesses at Padang Besar, Perlis.

Descriptive Analysis of Main Variables

The mean values and standard deviation are presented in Table 2. The mean value for dynamic predictable environment is 3.67 reflecting that the respondents have agreed that they have indeed faced that kind of expected situation in conducting their business. However, the respondents seem neutral on the

Table 1 *Profile of Respondents*

Variables	Descriptions	Frequencies	%
Place	Padang Besar, Perlis	77	88.5
	Bukit Kayu Hitam, Kedah	10	11.5
Age	Less than 25 years old	34	39.1
	More than 25 years old	53	60.9
Nationality	Malaysian	32	36.8
	Thailand	55	63.2
Marital status	Not married	15	17.2
	Married	72	82.8
Level of Education	Tertiary education*	24	27.6
	Secondary education**	63	72.4
Experience	Less than 5 years	32	36.8
	More than 5 years	55	63.2

Note: * Bachelor Degree and Diploma; ** Secondary and Primary School

entrepreneurial self-efficacy variable and the performance outcomes variable with the mean value of 3.10 and 3.48 respectively. The standard deviation of all variables ranging from 0.83 to 0.94 is rather small, indicating that most respondents are close to the mean of all variables.

Correlation Analysis

It is observed that predictable environment correlated significantly to entrepreneurial self-efficacy

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($r=.30$, $p<0.01$), and to performance outcome ($r=.30$, $p<0.01$). The multicollinearity is not a problem as all the coefficient r values are 0.30 ($p<0.01$) and below. Moreover, according to Allison (1999) there is no multicollinearity problem if the variables are below 0.8 .

Table 2 *Descriptive Statistics of the Environment, Entrepreneurial Behavior and Performance Outcome*

Variables	Mean*	Std. Deviation
Dynamic predictable environment	3.67	.94
Entrepreneurial self-efficacy	3.10	.85
Performance outcome	3.48	.83

Note: *A 5 point Likert type scale is used (1 = Strongly Disagree to 5 = Strongly Agree)

Table 3 *Pearson Correlation Analysis of Main Variables*

Variables	1	2	3
1. Predictable environment	-		
2. Entrepreneurial self-efficacy	.30**	-	
3. Performance outcome	.30**	.27*	-

Note: N = 87, ** $p<.01$ (2-tailed), * $p<.05$ (2-tailed)

Hypothesis Testing and Regression Analysis

Table 4 *Regression Result for Entrepreneurial Self-Efficacy*

Variables	Standardized Beta
Age (more than 25 years = 1)	.24***
Nationality (Thailand = 1)	.11
Marital status (married = 1)	-.07
Level of education (secondary education = 1)	.12
Experience (more than 5 years = 1)	.03
Dynamic predictable environment	.36**
R ²	.19
Adj. R ²	.13
F-value	3.08*

Note: N = 86; *** $p<.10$; ** $p<.01$; * $p<.05$; Demographic variables were dummy coded.

The hypothesis H1 predicted the relationship between demographic factors and entrepreneurial self-efficacy. There is a significant relationship between age and entrepreneurial self-efficacy. The beta value shows a positive significant relationship between age and entrepreneurial self-efficacy ($\beta=.24$, $p<.10$), thus H1a is supported.

The hypothesis H2 predicted a positive relationship between predictable environment and entrepreneurial self-efficacy. The beta value in the regression table shows a significant relationship between predictable environment and entrepreneurial self-efficacy ($\beta=.36$, $p<.01$), thus H2 is supported.

Table 5 *Regression Result between Entrepreneurial Behavior and Performance Outcome*

Variables	Standardized Beta
Entrepreneurial self-efficacy	.27**
R ²	.07
Adj. R ²	.06
F-value	6.82**

Note: N = 87; ** $p<.01$

Hypothesis H3 predicted a positive relationship between entrepreneurial behavior and performance outcome. The results for hypothesis H3, indicates a positive relationship between entrepreneurial self-efficacy and performance outcome, thus the hypothesis is supported ($\beta=.27$, $p<.01$).

DISCUSSION AND CONCLUSION

This study attempts to examine the relationship between demographic factors, predictable environment, and entrepreneurial behavior with entrepreneurial performance outcome among Malay Women Small-scale Individual Entrepreneurs (WSIEs). These relationships were analyzed using SPSS software and were tested using data obtained from the Malay entrepreneurs located at the two border towns in Malaysia, namely Bukit Kayu Hitam in Kedah and Padang Besar in Perlis.

Demographic Factors and Entrepreneurial Behavior

The results of this study reveal that there is a significant relationship between age with entrepreneurial self-efficacy. The results is consistent with the study by Clercq, et al. (2009). The results explained that the older WSIEs exhibits higher level of entrepreneurial self- efficacy than the young entrepreneurs. It seems that the older entrepreneurs have higher belief in their self to succeed in their business. They are more self-confident than the younger entrepreneurs.

Predictable Environment and Entrepreneurial Behavior

The results reveal a significant relationship between dynamic predictable environment and entrepreneurial self-efficacy. This finding is different from the findings by Luthans and Ibrayeva (2006) who found no support for the relationship between predictable environment with entrepreneurial self-efficacy. The findings show that the predictable environment within the border towns of Bukit Kayu Hitam and Padang Besar has an impact on entrepreneurial self-efficacy. One possible explanation is that these entrepreneurs are able to foresee the taste and preference of their customers which will make them increase their self belief that they will succeed in their business.

Entrepreneurial Behavior and Entrepreneurial Performance Outcome

The results show that entrepreneurial self-efficacy has significant relationship related to entrepreneurial performance outcome. This is consistent with the findings of Boissin et al. (2009), on American students self-efficacy as well as the study by Clercq et al. (2009), which shows that nascent entrepreneurs' self-efficacy relates positively to their goal commitment. The findings seem to suggest that the Malay WSIEs have within themselves the entrepreneurial self-efficacy spirit that makes them perform better in their business. Women entrepreneurs at the border have the self-belief that they will succeed in the business and perform better in the future.

Limitations and Suggestions for Future Research

This study has several limitations. The reluctant and unwillingness of the business owners to participate might affect the sample rate. The other limitation is on the performance measurements which are based on the respondents' perception. The use of objective data to measure the entrepreneurial performance in the future study is recommended. Future study should also include other border towns especially those with more unpredictable and hostile environment as well as involving other ethnics groups.

REFERENCES

- Abdullah, F., Hamali, J., Deen, A. R., Saban, G., & Abdurahman, A. Z. A. (2009). Developing a framework of success of Bumiputera entrepreneurs. *Journal of Enterprising Communities: People and Places in the Global Economy*, 3(1), pp. 8 - 24.
- Abdullah, S. (2006). A study on entrepreneurial characteristics among UUM's students. Sintok: Universiti Utara Malaysia.

- Allen, K. R. (1999). *Growing and managing an entrepreneurial business USA*: Houghton Mifflin Company
- Allison, P. D. (1999). *Multiple regression: A primer*. Thousand Oaks: Pine Forge Press.
- Aziz, A. (2006). *Masalah-masalah usahawan wanita: Kajian kes di Pekan Rabu, Alor Star, Kedah*. Universiti Utara Malaysia, Sintok.
- Azmat, F., & Samaratunge, R. (2009). Responsible Entrepreneurship in Developing Countries: Understanding the Realities and Complexities. *Journal of Business Ethics*, 90, pp. 437-452.
- Bandura, A. (1977). Self-efficacy: Toward a Unifying Theory of Behavioral Change. *Psychological Review*, 84(2), pp. 191-215.
- Bandura, A. (1982). Self-Efficacy Mechanism in Human Agency. *American Psychologist*, 37(2), pp. 122-147.
- Bandura, A., & Wood, R. (1989). Effect of Perceived Controllability and Performance Standards on Self-Regulation of Complex Decision Making. *Journal of Personality and Social Psychology*, 56(5), pp. 805-814.
- Barbosa, S. D., Gerhardt, M. W., & Kickul, J. R. (2007). The Role of Cognitive Style and Risk Preference on Entrepreneurial Self-Efficacy and Entrepreneurial Intentions. *Journal of Leadership and Organizational Studies*, 13(4), pp. 86-104.
- Bergman, N., Rosenblatt, Z., Erez, M., & De-Haan, U. (2011). Gender and the effects of an entrepreneurship training programme on entrepreneurial self-efficacy and entrepreneurial knowledge gain. *International Journal of Entrepreneurship and Small Business* 13(1), pp. 38-54.
- Blythe, K. (1992). *Effects of need for achievement, task motivation, goal setting and planning on the performance of the entrepreneurial firm*. University of Maryland College Park.
- Boissin, J.-P., Branchet, B., Emin, S., & Herbert, J. I. (2009). Students and entrepreneurship: A comparative study of France and the United States. *Journal of Small Business and Entrepreneurship*, 22(2), pp. 101 - 122.
- Boyd, N. G., & Vozikis, G. S. (1994). The Influence of Self-Efficacy on the Development of Entrepreneurial Intentions and Actions. *Entrepreneurship Theory and Practice*, 18, pp. 63-90.
- Chell, E. (2008). *The entrepreneurial personality: A social construction (Second ed.)*. East Sussex: Routledge.
- Chen, C. C., Greene, P. G., & Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing*, 13, pp. 295-316.
- Clercq, D. D., Menzies, T. V., Diochon, M., & Gasse, Y. (2009). Explaining nascent entrepreneurs' goal commitment: An exploratory study. *Journal of Small Business and Entrepreneurship*, 22(2), pp. 123 - 140.
- Corman, J., & Lussier, R. N. (1996). *Small Business Management: A planning approach USA*: Irwin.
- Covin, J. G., & Covin, T. J. (1990). Competitive Aggressiveness, Environmental Context, and Small Firm Performance. *Entrepreneurship Theory and Practice*, 14(4), pp. 35 - 50.
- Covin, J. G., & P.Slevin, D. (1989). Strategic Management of Small Firms in Hostile and Benign Environments *Strategic Management Journal*, 10, pp. 75-87.
- Deraman, N. (2005). *Kajian tentang ciri-ciri personaliti keusahawanan dikalangan usahawan-usahawan di bawah Majlis Amanah Rakyat (MARA) negeri Perlis*. Sintok: Universiti Utara Malaysia.
- Dess, G. G., & Beard, D. W. (1984). Dimensions of organizational task environments. *Administrative Science Quarterly*, 29(1), pp. 52-73.
- Dess, G. G., & Richard B. Robinson, J. (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, pp. 265-273.

- Forbes, D. P. (2005). The Effects of Strategic Decision Making on Entrepreneurial Self-Efficacy. *Entrepreneurship Theory and Practice*, 29(5), pp. 599-626.
- Ghazali, F. (1998). RM200 million new credit for small businesses and petty traders. *New Straits Times*,
- Gima, K. A., Li, H., & Luca, L. M. D. (2006). The contingent value of marketing strategy innovativeness for product development performance in Chinese new technology ventures. *Industrial Marketing Management*, 35, pp. 359 - 372.
- Gist, M. E. (1987). Self-Efficacy: Implications for Organizational Behavior and Human Resource Management. *Academy of Management Journal*, 12(3), pp. 472-485.
- Gist, M. E., & Mitchell, T. R. (1992). Self-Efficacy: A Theoretical Analysis of its Determinants and Malleability. *Academy of Management Review*, 17(2), pp. 183-211.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis* (Seventh ed.). New Jersey: Prentice Hall.
- Hashim, M. A. H. (2003). *Bisnes satu cabang Jihad: Budaya bisnes untuk survival* (Vol. satu). Kuala Lumpur: Utusan Publications & Distributors Sdn Bhd.
- Hodgetts, R. M., & Kuratko, D. F. (2001). *Effective Small Business Management* (Seventh ed.): Harcourt College Publishers.
- Hosseini, S. J. F., & McElwee, G. (2011). Improving the entrepreneurial potential of rural women entrepreneurs in Northern Iran. *International Journal of Entrepreneurship & Small Business*, 12(1), pp. 15 - 27.
- Ishak, K. A. (2006). Determinant factors for e-learning acceptance: Case study for BBA programme students. Sintok: Universiti Utara Malaysia.
- Jennings, D. F. (1994). *Multiple Perspectives of Entrepreneurship: Text, Readings ad Cases*. USA: South-Western Publishing Co.
- Johnson, B. R. (1990). Toward a Multidimensional Model of Entrepreneurship: The Case of Achievement Motivation and the Entrepreneur. *Entrepreneurship Theory and Practice*, 14(3), pp. 39-54.
- Kariv, D. (2010). The role of management strategies in business performance: men and women entrepreneurs managing creativity and innovation. *International Journal of Entrepreneurship and Small Business*, 9(3), pp. 243 - 263.
- Khanka, S. S. (2009). Correlates of entrepreneurial performance in a less developed region: evidence from Assam. *The Journal of Business Perspective*, 13(4), pp. 25-34.
- Koshal, M., Gupta, A. K., & Koshal, R. (1998). Women in management: a Malaysian perspective. *Women in Management Review*, 13(1), pp. 11-18.
- Kropp, F., Lindsay, N. J., & Shoham, A. (2006). Entrepreneurial, market, and learning orientations and international entrepreneurial business venture performance in South Africa firms. *International Marketing Review*, 23(5), pp. 504 - 523.
- Luthans, F., & Ibrayeva, E. S. (2006). Entrepreneurial Self-Efficacy in Central Asian Transition Economies: Quantitative and qualitative Analyses. *Journal of International Business Studies*, 37(1), pp. 92-110.
- Majid, A. H. A. (2005). Self-esteem, self-efficacy and preferences for pay systems criteria among business lecturers. Universiti Sains Malaysia, Penang.
- McClelland, D. C. (1987). *Human Motivation*. USA: Cambridge University Press.
- McGee, J. E., Peterson, M., Mueller, S. L., & Sequeira, J. M. (2009). Entrepreneurial Self-Efficacy: Refining the Measure. *Entrepreneurship Theory and Practice*, 33(4), pp. 965-988.
- Miller, D., & Friesen, P. H. (1982). Innovation in Conservative and Entrepreneurial Firms: Two Models of Strategic Momentum. *Strategic Management Journal*, 3, pp. 1 - 25.
- Moen, J., Rahman, I. H. A., Salleh, M. F. M., & Ibrahim, R. (2004). A Study on Entrepreneurial Attitudes Among Youths in Malaysia. Case Study: Institute Kemahiran Belia Negara,

Malaysia. *The Journal of American Academy of Business*, Cambridge, pp. 192-197.

- Mohamed, M. N. (1990). An exploration of the personality profile of a small-scale business Bumiputra and Non-Bumiputra entrepreneurs. Paper presented at the International Conference on Small and Medium Scale Enterprises.
- Morgan, R. E. (1999). Environmental determinants of export decision making: conceptual issues regarding the domestic market. *European Business Review*, 99(5), pp. 323 - 331.
- Mukhari, A. W., & Chu, L. A. (2010). Faktor-faktor yang mendorong peniaga untuk berniaga di pasar malam di Taman Ungku Tun Aminah, Skudai, Johor. Skudai: Universiti Teknologi Malaysia
- Munir, Z. A., Hassan, S. M. A., Samsudin, S., & Yusoff, Y. M. (2010). Assessing women entrepreneurship program (WEP) as a training tool in Malaysia *Journal of International Business and Entrepreneurship*, 15(1), pp. 73 - 84.
- Mustaza, M. (2011, 28 September 2011). Prime Minister honours women in business and activism. *New Straits Times*,
- Ndubisi, N. O. (2007). Evaluating the direct and indirect impact of traits and perceptions on technology adoption by women entrepreneurs in Malaysia. *Academy of Entrepreneurship Journal*, 13(2), pp. 1-20.
- Ndubisi, N. O. (2008). Gender differences in entrepreneurial traits, perceptions and usage of information and communication technologies. *Academy of Entrepreneurship Journal*, 14(2), pp. 107-121.
- Ong, J. W., & Ismail, H. B. (2008). Revisiting personality traits in entrepreneurship study from resource-based perspective. *The Business Renaissance Quarterly*.
- Reijonen, H. (2008). Understanding the small business owner: what they really aim at and how this relates to firm performance. A case study in North Karelia, Eastern Finland. *Management Research News*, 3(8), pp. 616 - 629.
- Sirec, K., & Mocnik, D. (2010). How entrepreneurs' personal characteristics affect SMEs' growth. *Our Economy*, 56(1/2), pp. 3-12.
- Sloane, P. (1999). *Islam, Modernity and Entrepreneurship among the Malays*. Great Britain: MacMillan Press Ltd.
- SMIDEC (2009). *Panduan langkah demi langkah MEMULAKAN PERNIAGAAN*. Kuala Lumpur: Small and Medium Industries Development Corporation.
- Stam, E., Gibcus, P., Telussa, J., & Garnsey, E. (2008). Employment growth of new firms. In H. Landstom, H. Crijns, E. Laveren & D. Smallbone (Eds.), *Entrepreneurship, Sustainable Growth and Performance*. *Frontiers in European Entrepreneurship Research*. Cornwall: Edward Elgar Publishing Limited
- Wood, R., & Bandura, A. (1989). Impact of Conceptions of Ability on Self-Regulatory Mechanisms and Complex Decision Making. *Journal of Personality and Social Psychology*, 56(3), pp. 407-415.

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A Superior Management Model for East Azerbaijan's Leather Industry

Keywords: management system, innovation, Leather industry.

INTRODUCTION

As authorities believe, the different scopes of management knowledge are the main element in progress of any organization and system and quality. The experience of developed countries shows that having products of high quality and emphasizing the quality is the growth element in the development of those countries, neither natural nor financial resources. Raising the quality of product is one of the elements of progress and development in any society and organization. Undoubtedly, growth of any organization depends on raising the quality of product. Having only the quality is not enough, however obtaining the materials, optimized use of raw materials, exploitation, maintenance, evaluation of the function, updating the knowledge and product output are the important points. Leather producing units are one of the important sectors of the society. And according to their role, the necessity of inspecting, and offering suitable pattern is felt regarding the present condition for quality of leather and obtaining useful results. On the other hand, leather-producing units are imposed to changes more than other sectors, and they must adopt themselves more quickly than other sectors. They must and raise the quality of their products and they must update their software and hardware and by replacing the culture in which evaluation of social process (decision making, planning and communication) is considered logical, the directors must create changes to raise the quality of the leather by modern methods and improve the quality of raw materials (Nasirian 2008).

Generally, production in the leather industry is a combination of art and science, it is the science that using the last phenomenon, machinery, combinations of materials, colour combinations and production on the bases of science, knowledge and art and using the scientific discoveries creates new works of artistic taste. The leather industry is one of the most important consumers of wastages of slaughterhouses (meat is produced by livestock, which is the most important protein resource of human) which produce skin. Otherwise, these materials produce high amount of carbon dioxide to the air and warms the temperature of the earth (Lakraflı, Tahiri, Albizane, & El Otmani, 2012).

Considering that the infrastructure of our country is based on farming and production, therefore, livestock farming could play an important role in the economy of the country. Skin as one of the livestock cultivating products could be influential in this regard. In order to raise the role of leather, the elements, which are affective in quality of skin, must be analyzed. Since in this case, we would be able to create the ground for rivalry with foreign goods. On the other hand, the same goods could be used as clothes, shoes, sofa and leather cover of the cars that provides the domestic needs and also increases the export of these products to abroad as non-petroleum

products. In order to achieve the mentioned aims the quality must be considered from the living time of the animal, transportation, slaughtering, and maintenance after slaughtering, maintaining the skin, transportation for tannery, and tannery methods. In the present research, mostly the managing elements, which are influential on the quality of the leather, are considered, that analyzing them could be affective on raising the quality of leather. Economic elements such as observing the standards for maintaining the livestock, transportation of the live animal, slaughtering and cincturing the skin, skin maintaining warehouses, necessary quarantines for skin transportation and finally the tannery are among the issues that could be addressed. Among the managing elements to supervise the mentioned issues and adopting according to the standards and using the modern technologies such as machineries, using the modern knowledge, all are influential for achieving high quality leather (Ray, 2011).

Everybody believes that for achieving growth and development in leather industry it is necessary to have an inclusive plan by complete recognition of the resources and consumption (Qian, 2011). Unfortunately, leather industry is among those industries that has been neglected through the years and the men of industry also neglected the same, the authorities of leather industry were involved in daily issues and the governmental authorities has forgotten that skin used leather industry is one of national resources. This is a fact that the authorities have neglected this industry; however, leather industry men are not innocence, since they never have thought about having pattern or plan. In the world of development, although, we have started this duty very late, but we are in a condition that we are able to manage the condition (Guillen et al., 2011).

Therefore producing a suitable pattern for raising the quality of industry is unavoidable issue, and theretofore we have not started the task, short term and case movements would not lead us to the aim. The main bases to draw a picture of pattern could be summarized in the following issues; restructuring and renewing the slaughterhouses, factories, livestock farming, maintaining and transporting the skin, commissioning technical system and creating university majors for up grading the education and increasing the expertise in units. Since there is no pattern to raise the quality of leather in this industry, the main aim of the researcher is to achieve a pattern to raise the quality of leather (Mandal, Dasgupta, Mandal, & Datta, 2010).

Leather industry and especially livestock farming, is one of the economic infrastructures of every country. Since in addition to supplying the meat, and needed milk, it creates employment in villages. Studying the condition of livestock farming, in different regions in order to provide employment, exploiting the local resources, recognizing agriculture and economy, preventing the immigration to the cities, having guarantee for social values, increasing production and productivity, affective presence of people in decision making, protecting the ecologic balance and finally resistant development and having suitable skin owns special importance in livestock farming. Considering the high population and biologic congestion and intensive limitation for number of live livestock, planning for optimized use of the limited facilities is necessary. Different elements cause the unsuitable use in the level unit. Temperature, raining, humidity, managerial and humanitarian elements, geographical location etc. are affective in increase or decrease of skin and leather quality. Incorrect exploitation of the livestock, skin and leather harms the economy of the industry and in general the national economy (Kumar, Majumdar, & Roy, 2008).

The position of skin and leather in domestic consumption pattern and lack of proper quality causes the import of high amount of shoes to country in different ways, not observing the necessary standards in slaughtering and maintaining the skin imposes high expenses to the society and causes the low quality of the leather. We can emphasize the role of leather in the society in economy of the society when, quality standards are able to show themselves, on the other hand considering the high uses of leather consumption (for shoes, purse, sofas, ...) in the

society, raising the quality of the leather could lead the consumers towards using domestic products. Introducing the leather industry to the consumption culture of the society could take necessary measures towards the development of the society (Carvalho et al., 2009).

If leather industry is able to gain its position before, production, in tannery process and after changing to the leather, it would be able to help to prevent exit of exchange from country. Consequently, every body that works in the following fields; livestock farming, slaughterhouses, maintaining the skin, skin transportation and leather factories, would be able to produce superfine leather with high quality that can compete with foreign rivals (Vatthanakul, Jangchud, Jangchud, Therdthai, & Wilkinson, 2010).

What is quality? Unfortunately, there is many ambiguities in interpreting the word “quality”. The definitions in international standards, attempt to clear the issue however, most of times there is an adverse results and even leads to more ambiguity. Quality, in practice refers to the satisfaction of the customer. The needs of some customers are very complex, some are not so, however all the customers think about their bought things that against whatever they pay, they must receive satisfaction. This is a fact about all customers whether general or industrial customer, a local department or a state one (Oliveira, Goncalves, Oliveira, & Guilherme, 2008).

There is nothing as certain quality. There are different things for different individuals. It is important that we must determine who are our customers, and what are their expectations concern the high quality goods or services. Quality is a word that could be named as undefined word. In fact quality does not have any meaning, however if we place it inside specified expressions, it would be able to show the expectations and needs of the real customers. Any service or product could be defined with all its necessary parts such as assuring, security, color, feeling, taste, smelling and etc. All these cases, are described in formal specifications and we can judge the product obviously. In some cases our customers may prefer legal entities and we want them not only to provide legal issues but in addition, it must show continuous adaptation, and indeed we act in this manner.

How we are able to achieve quality of the product? Affective and continuous research is the primary solution. The designer could satisfy the customer if the qualitative needs of the customer are all known. The designers must work closely with materials and providers of the components in order to be sure that not only the qualitative needs of the customer and the designer are understood but also they are committed to do them. The designer must be sure that the needs for structuring and supplying process of the product are considered totally and the designing inspects the same from the standpoint of these experiences. In complete structuring process it must be understood that quality must be “stable” and it could be “subject to inspection”. Finally, the marketing must guarantee that customer could trust the function, delivery of the product, after sale services and spare part preparation. Therefore the goods must satisfy the needs of the customer and facilitate the repairing and building. They must be built continuously by specified designing. The marketing must guarantee the exact advertising, on time delivery, useful service, and affective research in the market and to reflect the same in continuous improvements. In addition to the previously mentioned issues, there must be an inclusive and organized commitment for quality.

THE BACKGROUND OF THE RESEARCH

Ali Pahlavani Ata (1998) has studied the export of light leather productions and has offered suitable solutions to improve the same in a research. The results showed that realizing the preventions of exporting caused that according to scientific methods and managerial approaches, shading light over aspects of the subject, the authorities emphasized to remove the problems and

speed up the non-petroleum exports especially light leather products. Accordingly, using geodesic research and using questionnaires and documentary and library studies in six hypothesis about laws and regulation, the quality of leather products, product diversity, marketing knowledge of producers and exporters, production technologies, and price of the products, the data was collected for statistical hypothesis tests and through the research related suggestions and results were offered, either.

Amir Hourri (1997) has carried out a research under the title of strategy and developing the pattern of topology in leather industry. In the mentioned research, the topology of the leather industry has been studied. First, a brief acquaintance with definitions, history, production process and marketing has been provided. Then, replacing literature, and counting topology patterns are innovative, and in this part, Topsis method has been used which is a qualitative method. Since topology faces qualitative scales and expressive expression, therefore the same method has been used. Of course, in order to have a respond a questionnaire was prepared for experts. Using the statistical concepts and tests the results were examined and finally the cities were ordered using Topsis method respectively.

Mohammad Ghalebi (2005) carried out a research under the title of proportional advantage and ordering the aim markets of export in leather industry, of Iran. The results showed that recognizing and ordering the aim markets for special product is one of the necessities of a useful marketing strategy. This, on one hand prevents the expenses of those exporters that intend to enter the Iranian market. On the other hand, regarding export planners, it can play important role in helping the directors to prepare a commerce strategies and mutual negotiations. The main aim of the mentioned study is proportional advantage and ordering aim markets of export in leather industry of Iran. Therefore, using the combination of elemental and taxonomical analyses methods, and related indexes of the subject and according to the offered data by ITC and reports of the World Bank during 1996-2000 and according to HS code, the markets were classified.

THE METHODOLOGY OF THE RESEARCH

The method of the research is descriptive-geodesic. The statistical society of the research includes the lecturers of directing and industrial management majors in Tabriz universities and leather experts of Tabriz whose statistics are offered in table 1:

Table1. Leather experts of Tabriz

Statistical society	Number	Percent	Sum total
Lecturers	40	20	40
Experts	160	80	160
Sum total	200	200	200

The sample volume of the research considering the number and volume of the statistical society is N=200. According to Morgan table the sample volume is S=182. In order to carry out the research and collecting the data, two questionnaires are used; the first one is concerned with elements of raising the quality in leather industry and its indexes and the second one is related to the philosophy of the aims, theoretical principles, directing stages, evaluation system and feedbacks.

Considering the literature of research and four elements were extracted as follows: farming livestock, slaughterhouse, transportation condition and tannery. The first questionnaire includes 49 question and second one 29. Preparing the questionnaire it is tried to study the texts and using the ideas of experts, lecturers and consultants, the related indexes of the elements to be extracted.

The questions must be able to measure the cases and they must be reliable. Stability coefficient and alpha Krombakh for related questions of livestock is 0.8855, for slaughterhouse it is 0.8623 and for transportation condition, it is 0.8623 and for tannery questions is 0.8983.

Findings and suggested patterns

Question 1: What are the elements of quality raising patterns in leather industry? Considering the results of statistical analyses of the mentioned elements and indexes, and results of the tests, confirms all four elements and indexes. Since the average for elements are as follows: livestock farming (83.02), slaughterhouse (70.58), transportation condition (78.81), and tannery (76.69). Thus, it could be resulted that all four elements in framework of raising the quality are important part of leather industry.

Table2 Leather quality elements

<i>Element</i>	<i>Sub-element</i>
Raising the quality of livestock	<ol style="list-style-type: none"> 1. Preventing the scratch and hitting harms (8.54) 2. Preventing the harms caused by grassland (8.32) 3. Preventing the harms caused by hair and wool cut (8.16) 4. Preventing the harms caused by signing (8.20) 5. Considering the livestock sanitation such as washing (8.34) 6. Improving the maintaining halls (8.25) 7. On-time vaccination (8.50) 8. Protecting from parasites 9. Suitable feeding (8.56)
Slaughterhouse	<ol style="list-style-type: none"> 1. Using standard slaughtering tools (8.54) 2. Considering the sanitation and pesticide 3. Correct roundabout of the skin (8.29) 4. Complete washing the skin before applying the salt (8.21) 5. Using pure salt (8.13) 6. Correct controlling the salting and maintaining (8.16) 7. Skin sorting (8.05) 8. Standardizing the skin storage 9. Optimized uses of entrails and wastages
Transportation condition	<ol style="list-style-type: none"> 1. Using preserving materials if the transportation is long (8.16) 2. Using containers with refrigerators in warm seasons (8.18) 3. Transporting the skin at least one week after salting (8.15) 4. Considering all issues to prevent harming the skin in loading and unloading (8.12) 5. Using skin transporting vehicles (7.96) 6. The skin must be without any materials such as contents, excreta, blood
Tannery	<ol style="list-style-type: none"> 1. Soaking (7.95) 2. Removing the hair and applying lime (8.01) 3. Removing the polyps 4. Lime ashbalt (7.75) 5. Removing the lime and applying enzyme (8.01) 6. Acidifying (7.87) 7. Chrome tannery (7.79) 8. Determining the desired thickness (7.76) 9. Re-tannery, coloring (8.04) 10. Leather dying (8.03)

According to theoretical principles and the background of the research, the draft of the pattern includes four elements for raising the quality of leather industry as livestock farming, slaughterhouse, transportation condition and tannery.

Discussion and interpretation

Suggested pattern for raising the quality in leather industry has been inserted in questionnaire using four extracted elements from theoretical principles and experimental background, philosophy and the aims, theoretical principles and practical stages. After gathering the data and analyzing them, the elements of philosophy and aims, and theoretical bases of the pattern were confirmed. Practical stages and evaluation system of feedback were considered as limitations of the research. Four elements of understanding framework and thirty-five variables were confirmed.

Elements of livestock farming: this element includes preventing from scratching and hitting harms, preventing from harms caused in grasslands, preventing from harms caused by hair-cut, signing, considering the livestock sanitation such as washing, improving the maintaining alls, on time vaccination, protecting from parasites and suitable food. These elements were confirmed by variances and its nine variables were confirmed and were placed in ranks from one to four in the suggested pattern. As researcher believes, raising the leather quality is impossible without considering the maintenance of the livestock.

Transportation condition elements: In this element, the skin must be without any material, contents, excreta, blood, preservative materials, in the case of long transportation. The transporting container must have a refrigerator in warm seasons, the skin must be transported one week after applying the salt, and all issues must be considered for preventing during loading and unloading, and special cars for skin transportation must be used. These elements were confirmed by variance of 78.81 and its six variables were confirmed and occupied the fourth rank of suggested pattern.

Tannery elements: includes soaking, removing the hair and applying the lime, removing the meat wastes, lime ashbalt, removing the lime, applying the enzyme, acidifying, chrome tannery, determining desired thickness, re-tannery, coloring, applying oil, drying the skin, coloring the leather and these elements were confirmed by variance of 76.69 and all eleven variables were confirmed either and occupied rank three among four elements. As researcher believes, the reason for confirmation of the mentioned elements is that scales and standards have been evaluated correctly.

Slaughterhouse element: these element includes using standard slaughtering tools, considering the complete sanitation and pest siding the environment, correct girdling, complete washing before applying salt, using pure salt, correct control on applying the salt and maintaining methods, skin sorting, standardizing skin stores, optimized use of entrails and wastages. The variance of 70.58 and all 9 variables were confirmed. This element occupied rank fourth of suggested pattern.

CONCLUSIONS

The elements of philosophy, aims, theoretical principles and all four patterns were confirmed. This is the first pattern of raising the quality in Iran's leather industry and therefore could not be compared with other patterns (there is no any other pattern).

The first and the most important suggested element is farming the livestock, since it is prior to others and intends to be changed to a general and public element, because weight has a more

meaningful relation with other elements. The most insignificant element is slaughterhouse, because weight element is lower than other elements. The elements of transportation condition and tannery occupy the second and third places of the pattern. Among all 8 element and 57 variables, 6 element and 45 variables were confirmed and others were placed in the limitation part.

Suggestions

Quality raising pattern has been extracted for leather industry and it could be suggested to leather producers' council and private sectors.

It is suggested that by preventing from scratching and hitting harms, preventing from harms caused in grasslands, preventing from harms caused by hair-cut, signing, considering the livestock sanitation such as washing, improving the maintaining alls, on-time vaccination, protecting from parasites and suitable food, the suitable ways are recognized and it is suggested who must work in farms and what are their expertise. Therefore we can have good meat and healthy skin with high quality.

In transportation condition special attention must be paid to the following issues: the skin must be without any material, contents, excreta, blood, preservative materials, in the case of long transportation. The transporting container must have a refrigerator in warm seasons, the skin must be transported one week after applying the salt, and all issues must be considered for preventing during loading and unloading, and special cars for skin transportation must be used. These suggestions could be offered to leather producers' council and private sectors. In slaughterhouse part, if special attention is paid to the standards and conditions, the skins would be delivered to the leather maker without any problem and it does not create any problem. In tannery using updated technology and experiences of experts and updating all sectors and by having suitable skin, the beds for competition with famous countries are provided.

Managerial suggestions for the beneficiaries

Applying a pattern for raising the quality in leather industry need suitable bed, therefore it is suggested that necessary bases for practice of the pattern must be applied. In order to practice the pattern it must be suggested to leather Industrial Township and leather makers' council. Practicing the suggested elements needs planning, therefore work policies and aims must be defined. In order to have a stable quality rising program (suggested elements) strategic thinking and applying the special programs are necessary.

In detail this may mean creating the bed and necessary abilities in production units to perform the decentralizing policy in quality and renewing the production system on suitable quality. By stabilizing the suggestions, experts more and more could share their ideas and expertise in production units. Creating suitable evaluating and scientific system in order to evaluate the function of Charmshahr industrial township, of the leather producers council, of slaughterhouses, of veterinarian and livestock farming, of transportation and quarantine procedures and facilities, of the environment including the function of filtration part of Charmshahr township and the Jihad Sazandegi organization.

REFERENCES

Basegio, T., Beck Leao, A. P., Bernardes, A. M., & Bergmann, C. P. (2009). Vitrification: An alternative to minimize environmental impact caused by leather industry wastes. *Journal of Hazardous Materials*, 165(1-3), 604-611.

- Carvalho, M. F., Duque, A. F., Moura, S. C., Amorim, C. L., Ferreira Jorge, R. M., & Castro, P. M. L. (2009). Biological treatment of a contaminated gaseous emission from a leather industry in a suspended-growth bioreactor. *Chemosphere*, 74(2), 232-238.
- Cassano, A., Molinari, R., Romano, M., & Drioli, E. (2001). Treatment of aqueous effluents of the leather industry by membrane processes:: A review. *Journal of Membrane Science*, 181(1), 111-126.
- Decoufle, P. (1979). Cancer risks associated with employment in the leather and leather products industry. *Archives of Environmental Health*, 34(1), 33.
- Guillen, D., Ginebreda, A., Petrovic, M., Barcelo, D., Darbra, R., & Rydin, S. (2011). Additives in the Leather Industry. [Without Title], 1-21.
- Kumar, V., Majumdar, C., & Roy, P. (2008). Effects of endocrine disrupting chemicals from leather industry effluents on male reproductive system. *The Journal of Steroid Biochemistry And Molecular Biology*, 111(3-5), 208-216.
- Lakraflı, H., Tahiri, S., Albizane, A., & El Otmani, M. E. (2012). Effect of wet blue chrome shaving and buffing dust of leather industry on the thermal conductivity of cement and plaster based materials. *Construction and Building Materials*, 30, 590-596.
- Mandal, T., Dasgupta, D., Mandal, S., & Datta, S. (2010). Treatment of leather industry wastewater by aerobic biological and Fenton oxidation process. *Journal of Hazardous Materials*, 180(1), 204-211.
- Oliveira, D. Q. L., Goncalves, M., Oliveira, L. C. A., & Guilherme, L. R. G. (2008). Removal of As (V) and Cr (VI) from aqueous solutions using solid waste from leather industry. *Journal of Hazardous Materials*, 151(1), 280-284.
- Qian, C. (2011). The Physical Properties of Ultra-Short Leather Fiber Extracted from Chromed Leather Waste and its Use in Textile Industry. *Advanced Materials Research*, 322, 377-380.
- Ray, S. (2011). Econometric Analysis of Productivity Growth in Indian Leather Industry. *Journal of Economics and Sustainable Development*, 2(5), 87-96.
- Streit, K. F., Ferreira, J. Z., Bernardes, A. M., & Norberta De Pinho, M. (2009). Ultrafiltration/Nanofiltration for the Tertiary Treatment of Leather Industry Effluents. *Environmental Science & Technology*, 43(24), 9130-9135.
- Vatthanakul, S., Jangchud, A., Jangchud, K., Therdthai, N., & Wilkinson, B. (2010). Gold kiwifruit leather product development using Quality function deployment approach. *Food Quality and Preference*, 21(3), 339-345.

Notes

Papers Also Presented at the Conference

Due to page limitations sections of text, tables, graphs, figures, references, or other elements of the following papers may have been omitted. Interested readers are referred to the author(s) for copies of the complete papers.

Working papers and doctoral student papers presented are published in abstract form in a separate volume.

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Reactions of Stock Market to Monetary Policy Shocks during the Global Financial Crisis: The Nigerian Case

JEL Classification: E44, E52, G01

Key Words: Monetary Policy, GARCH, EGARCH, Rational Expectation Hypothesis (REH).

INTRODUCTION

Among others, the mandate of the Central Bank of Nigeria (CBN) is the promotion of monetary and price stability and a virile financial system. Achieving these would entail the use of wide range of instruments at the disposal of the CBN such as the monetary policy rate, open market operations through buying and selling of government securities and changes in monetary aggregate; narrow and broad money, CBN certificates, special Nigerian treasury bills (NTBs), discount window operations, repurchases transactions (repo) bills discounting, pledges and open buy back (OBB). The overall aim is to maintain a favorable and conducive environment for economic growth and development.

Literature a bound on the link between monetary policy and other broad macroeconomic aggregates; output, employment, prices, exchange rates, balance of payments, and the like. Equally, there is a strong connect between stock market performance and sound financial system, which monetary policy seeks to create. The theoretical basis for this stems from the works of new classical macroeconomics, rational expectation hypothesis (REH), in the early 1970s. The hypothesis according to Lucas (1972) postulates that the unanticipated not the anticipated monetary shocks influence real economic activity. The anticipated component according to him would be rationally taken into account by economic agents in their decision making, and hence will evoke no effect on output and employment. In a way, the hypothesis supports the neutrality of anticipated monetary shock. Early investigations in the area started with the works of Blanchard (1981) and Svensson (1986) on the theoretical analyses of stock market response to monetary shocks using rational expectations models with sticky goods prices and flexible asset prices. A classic empirical study by Kuttner (2001) verified the effect of unanticipated changes in the US policy rate on financial variables in line with rational expectations arguments and discovered it had no impact. Other empirical studies focusing on stock market response to monetary shocks, report that a 25-basis point increase in the Fed funds rate is associated with an immediate decrease in broad US stock indices that ranges from 0.6 to 2.2 percent, sample size and estimation method aside; Craine and Martin (2004), Rigobon and Sack (2004), Bernanke and Kuttner (2005) and Bjornland and Leitimo (2009). Earlier, Christiano, et al. (1999) carried out an extensive survey of empirical studies on the effect of monetary policy shocks on macroeconomic variables. Juat-Hong (2009) reveals that only the anticipated component of money supply shock affects the volatility of equity returns in Malaysian market but the unanticipated components do not.

Due to page limitations sections of text, tables, graphs, figures referred to in this article may have been omitted. Interested readers are referred to the authors for copies of the omitted portions of this article.

EMPIRICAL RESULTS AND DISCUSSIONS

This section presents the results of empirical analysis. As stated earlier, data are monthly from January, 2007 to August 2011, a total of 55 observations. The summary of statistics from preliminary analysis is reported in Table 1.

Table 1 omitted but would occur here

As can be seen in Table 1, all the series are non-normally distributed. The null hypothesis of normal distribution is rejected for the log of stock returns at the 1% level, and at the 5% level for the rest of the series. The mean and median of log stock return were negative and high at 0.85% and 0.87%, respectively. This suggests that stock returns especially at the beginning of the financial crisis were significantly negative and in line with traditional asset pricing theory, higher average returns either ways – negative or positive, implies larger risk exposure, Su and Fleisher (1998) and Chang Su (2010). Figure 1 further depicts the upheavals in the stock market returns from mid 2008 up to early 2009. The market, however, slowly inched up afterwards. Except the index of nominal stock returns, the rest of the series show evidence of platykurtic distribution with a Kurtosis less than 3.0. The ARCH test carried out using the LB Q-statistic shows evidence of serial correlation at all lag levels at the 1% level.

The ADF and KPSS tests of stationarity showed mixed results. Some series were found to be stationary at level; log of stock returns, M2 and MPR – although the latter two were at a lower level of significance. All the variables were found to be stationary at first difference at the 1% level for both the ADF and KPSS tests.

Figures 1 – 4 omitted but would occur here

Evidence of Time-varying Volatility

Table 2 presents results of restricted GARCH and EGARCH models. The mean equations for the two models reveal strong and statistically significant coefficients. The intercept of the variance equation, ω representing the long term average is not statistically significant. However, the value of the coefficient of ARCH, information about volatility observed in the previous period, and GARCH, last period's forecast variance, in the GARCH(1,1) model show statistically significant and consistent estimates, implying the presence of both ARCH and GARCH effects. The Wald test for volatility persistence, that is, the sum of $(\alpha + \beta)$ is above one, indicating that volatility is quite persistent. This is a common result often observed in high frequency financial data and in particular, this confirms volatility persistence in the Nigeria's stock market returns.

Table 2 omitted but would occur here

Similarly, the variance equation for the EGARCH (1,1) model show a strong and statistically significant intercept, and although the GARCH coefficient is not statistically significant, the ARCH and leverage effect coefficients are correctly signed and significant at the 5 percent or better level. Moreover, the positive sign of the leverage coefficient implies that positive innovations play more significant impact on stock return than negative innovations of the same magnitude. A simple interpretation would be that good macroeconomic policies, stable prices and exchange rate, strong institutions, are better determinants of stock returns as against bad macroeconomic policies, unstable prices and exchange rate and weak institutions. Equally, the Wald test reveals very high degree of volatility persistence, that is, larger positive or negative return will lead future forecasts of the variance to be high for a protracted period. The results for instance, suggest that stock return volatility in Nigeria in the current period is explained by the forecast error variance in the GARCH and EGARCH model approximately 63.1 percent and 36.6 percent, respectively. Somewhat similar results using the GARCH model of 60 percent was reported by Aliyu (2010), while using the EGARCH model, Sarmidi (2010) reported a moderate level of 15.3 percent for Nigeria. To test the robustness of the results, the ARCH effects in the residuals were investigated in the models using the Lagrangian multiplier and the LB (Q) and LB (Q2) statistics. Results for both GARCH(1,1) and EGARCH(1,1) models indicate that null hypothesis of autocorrelation and partial autocorrelation in the residual is rejected. Furthermore, Jacque-Bera statistic shows that the residuals in the two models are normally distributed. The SC model selection criterion, however, suggests that the GARCH(1,1) model is superior to the EGARCH(1,1) model

Monetary Policy Innovations and Stock Returns Volatility

The paper sets out to assess the responses of stock market response to monetary policy innovations in Nigeria. The methodology employed allowed the effect of monetary policy shocks to be decomposed into two components; anticipated and unanticipated components. Using the M2 money supply and MPR as policy instruments, an unrestricted GARCH and EGARCH models were estimated. Results presented in Table 3 show that like its corollary above, the unrestricted GARCH model has an intercept which is not statistically significant although it maintains a low value. The ARCH and the lagged conditional variance coefficients are statistically significant although the later violates the nonnegative sign restriction imposed by the GARCH model. However, the sum of the two coefficients is less than one (0.9168), suggesting that the model is covariance stationary with high degree of persistence and long memory in the conditional variance.

Table 3 omitted but would occur here

Evidences further show that the coefficients of anticipated monetary innovations on the MPR and M2 monetary aggregate are statistically insignificant though the latter is correctly signed. Conversely, the coefficients of the unanticipated components are all statistically significant at the 5 percent or better level. A logical explanation is that that a positive shock (expansioning) on M2 aggregate which lowers MPR and improves availability of credits would increase the cash-rate in the economy and henceforth, would also raise the speculative behavior of the stock market. Similarly, effect of a positive shock (tightening) on the MPR could trigger higher stock return volatility in the NSE through inflow of financial resources. Furthermore, Campbell (1991) adapted by Bernanke and Kuttner (2005) stated that a surprise increase in the MPR decreases stock prices in three ways: (i) decreasing the expected future dividends, (ii) increasing the future risk-free rate (iii) increasing the equity premium (above the risk free rate) required to hold equities. While the above findings show that a 1 percent change in the policy variables; MPR and M2 result in 5 basis points and 1.34 percent increases in stock volatility, respectively, Farka (2008) indicated that an unanticipated rise in policy rate by 1 percent causes a decline of around 5.6 percent in stock returns. The range reported in the literature lies between 2.5 and 4 percent.

Relating the findings to the theoretical arguments of the REH, it is clear that the smoothed component (anticipated) of M2 has the expected sign although not statistically significant. However, the coefficients of unanticipated components for both the MPR and M2 are positive and this suggests that monetary policy shock on either instrument has more destabilizing effect on stock returns than a shock negative of the same magnitude. Although Juat-Hong (2009) reported negative sign for both cyclical and trend effects using broad and narrow money supply, Abdul Qayyum and Anwar (2011) reported a positive leverage and repo rate effects on stock returns volatility using an EGARCH methodology for Pakistan. Thus, the finding by this paper affirms the argument of the REH that only the unanticipated as against the anticipated monetary shocks influences real economic activity.

Figures 5 – 6 omitted but would occur here

For the EGARCH unrestricted model, the intercept and the ARCH information effect are strong and statistically significant suggesting that volatility is sensitive to market events, while the GARCH effect is negative and insignificant as was obtained in the restricted model. However, since the conditional variance is modeled in the logarithmic form, the variance will always be positive even if the parameters are negative. The leverage effect (γ) of policy innovations is positive and very strong at the 1 percent level. This implies that monetary policy has a positive effect on volatility of stock returns in the NSE, and this conforms to findings by empirical studies reported above. The coefficients of MPR and M2 money supply are both correctly signed and statistically significant at the 1 percent level. The two suggest positive effect of policy innovations on stock returns volatility. Summarily, Figures 5 and 6 affirm the numerical accuracy of the two models in terms of capturing volatility of stock returns in the NSE during the period of the crisis. According to Zivot (2008) the numerical accuracy of model estimates can be examined by comparing the volatility estimates of the

GARCH model with the volatility estimates from ARCH (p) models. If the volatility estimates from the different models exhibit similar dynamics, then coefficient estimates from the models are appropriate. Looking at the shapes of the residual plots of the GARCH and EGARCH models, it is clear that both explicitly track the tremendous volatility of stock returns in the NSE from mid of 2008 until 2009.

Results of robustness tests reveal that the SC model selection criterion suggest that the EGARCH model proves to be superior to GARCH because it records significantly smaller value. Furthermore, Likelihood ratio test between EGARCH models using conventional Gaussian error distribution demonstrates that an EGARCH model specification offers a better fit of the sample data than GARCH model. Investigation of the ARCH effect in the residuals using the Lagrangian multiplier and the LB (Q) and LB (Q2) statistics was carried out. Results for both GARCH(1,1) and EGARCH(1,1) models indicate that null hypothesis of autocorrelation and partial autocorrelation in the residuals is rejected. This is further supported by the D.W statistic, which reveals absence of first order serial correlation in the residuals from the two models. The Jacque-Bera statistic for normal distribution shows that the residuals in the two models are normally distributed.

CONCLUSIONS AND RECOMMENDATIONS

The paper seeks to assess the responses of the Nigeria's stock market to monetary policy innovations during the period of global financial crisis and post banking sector consolidation. The study period is from January, 2007 to August, 2011, including a total number of 55 observations. Uniquely, the paper in line with some empirical studies in the area decomposed monetary policy innovations into anticipated and unanticipated components in order to test the theoretical postulation of the rational expectation hypothesis. The monetary policy instruments used are the M1, M2 and MPR as regressors while All Share Index stands as the regressand. The paper's preliminary investigation into the nature and time series properties of the data reveals that the data is characterized by a non normal distribution and a negative average monthly returns (in natural log) of -0.85% and a standard deviation of monthly returns of 9.62%. Evidence of autocorrelations using the Ljung-Box statistic was also established in the variables. With exception of log of stock returns which was stationary at level, others were stationary at first difference. These portray a picture of a market in turmoil with evidence of high volatility in the level of stock returns during the study period.

Results from restricted GARCH(1,1) and EGARCH(1,1) show evidence of strong ARCH and GARCH effects. The Wald test, for instance, suggests that volatility is quite persistent. Moreover, the positive sign of the leverage coefficient from the EGARCH model implies that positive innovations play more significant impact on stock returns than negative innovations of the same magnitude. The unrestricted GARCH model confirms strong evidence of ARCH GARCH effects, while the EGARCH specification yields a strong ARCH effect. The later model however, offers a strong and statistically significant positive leverage effect. Furthermore, only the unanticipated component of policy innovations on the broad money supply, M2 and MPR carry statistically significant coefficients whereas the unanticipated component does not. Results show that the unanticipated monetary policy innovations matter for stability of NSE because of their distabilizing effect on stock returns volatility. This confirms the postulations of the Rational Expectation Hypothesis that only the unanticipated components of policy changes would work while the anticipated component would be brought to naught because of economic agents' rationally behavior. The study conquer with the findings reported by Abdul Qayyum and Anwar (2011) on Pakistan's stock market, notwithstanding the fact that it is dissimilar to the finding by Juat-Hong (2009) on Malaysian stock market.

One key policy implication policymakers should reckon with is that market participants at the NSE do not buy in for surprises in monetary policy pronouncements. The MPC should unequivocally declare realistic and achievable monetary targets on broad money supply, MPR and exchange rate as well. It should also strive to maintain low level of inflation through a realistic and robust inflation targeting framework. These will go along way in promoting stability and confidence desired in the market.

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Strategically Planned Entrepreneurial Expansion into Emerging Markets: The Case of Argentina

Keywords: entrepreneurial expansion, emerging markets

INTRODUCTION

The concept of strategic entrepreneurship highlights the complementarities within strategy and entrepreneurship (Ireland, Hitt, and Sirmon, 2003). As in Agarwal and Helfat (2009:281), the term “strategic” can be defined as “that which relates to the long-term prospects of the company and has a critical influence on its success and failure.” Further, the term “entrepreneurship” is focused upon the Schumpeterian notion of the creation of new products, processes, markets, and organizational forms by way of “creative destruction” (Schumpeter, 1942).

Scholars have highlighted the need for entrepreneurial research from a strategic perspective (Agarwal, Audretsch, and Sarfar 2010). Whether undertaken by new ventures or established organizations, strategic entrepreneurship requires a focus on creating change, and exploiting or appropriating value, through such change. This paper focuses upon expansion into emerging markets from an entrepreneurial perspective.

Emerging markets have been defined as fast-cycle markets (Lash and Wellington, 2007). Fast-cycle markets are not shielded from imitation because imitation is often rapid and inexpensive. Firms competing in fast-cycle markets recognize the importance of speed. These companies appreciate that time is precious and that the costs of hesitation and delay can eliminate advantage. As such, fast-cycle markets place considerable pressures on entrepreneurs to quickly make strategic decisions that are effective.

The institutional context of emerging economies is very different from industrialized economies. Emerging economies display resource scarcities and the government may play a significant role in economic activities (Austin 1991). These institutional characteristics, coupled with economic liberalization, lead to firm-level changes in resources and capabilities that are different from those in industrialized economies. Thus, researchers have pointed out the need to study how firms adapt and learn in the face of environmental changes in emerging economies (Hitt et al. 2001).

Figure 1 provides an overview of our framework. This model is used to explain entrepreneurial expansion into emerging markets. The model begins with the role managerial resources play in firm growth into international markets.

Figure 1 omitted but would occur here.

THE ROLE MANAGERIAL RESOURCES PLAY IN FIRM GROWTH

The single-most important factor in the growth and sustainability of the firm is the senior management team (Barney, 1991; Penrose, 1959). Managers within firms have different perceptions of the

environment, the customer base, the nature of competition, and differential speeds of learning. Managerial resources drive the development of firm specific capabilities, which in turn, will determine what productive services the firm is capable of offering. As such, resources and capabilities are modified over time as (1) the environment, the customer base, and the competitive market changes externally and (2) learning is accumulated along the path the firm has chosen. Managerial resources have the unique ability to develop firm-specific resources to meet the changing needs of emerging markets. In many cases, emerging markets have rapidly changing conditions. They represent dynamic growth opportunities. In order to be effective within emerging markets, firms must have the capability to environmentally scan these markets.

PROACTIVE ENVIRONMENTAL SCANNING

The environment is made up of factors, external to the firm, over which the firm has little control. Sometimes external factors exert a great influence on the firm. As such, environmental scanning is utilized to provide the firm a better picture of the market(s) in which the firm is considered operating in. The picture is important when managers are faced with a dynamic, changing environment. Scanning is a resource to ascertain how the firm needs to change.

Scanning can also be utilized to determine the actions and reactions of competitors to a dynamic environment and to identify the strategic changes made by competitors. The top managers' perceptions and interpretations of the actions of competitors and others in the environment can affect decisions of the firm to change strategically. What is needed is to develop an accurate assessment of how the environment has changed and to link the firm's strategy to these changed conditions better than its competitors. Through effective proactive environmental scanning the firm may be able to create environmental change to a greater degree than the competition.

Proactive environmental scanning is crucial to identify emerging markets which provide potential for multi-national firms considering expansion into emerging markets. Porter's (1990) Determinants of International Country Attractiveness has been the standard by which firms select international market entry.

ASSESS COUNTRY ATTRACTIVENESS

Porter (1990) identifies several factors which are important when determining which international markets to enter. These factors include (1) demand conditions, (2) factors of production, (3) related and supporting industries, and (4) firm strategy, structure and rivalry (Porter 1990). While Porter's diamond does not specifically address the role of the government, governments play a particularly important role for entrepreneurial expansion into emerging markets.

The role of government acts as an "accelerator and a brake" to international expansion. From the brake perspective, the government can limit foreign expansion into emerging markets. Further, in countries where industries are state owned, the role of government becomes quite important. State ownership results in industries being controlled by international government and thus changes the role and power of government in these instances. From the accelerator perspective, government privatization provides multi-national firms the opportunity to enter emerging markets from a competitive perspective. This privatization of many industries in Argentina provides growth incentives for multi-national firms.

Argentina was selected as our target country for several reasons. One reason concerns demand conditions. The size of this market is a significant factor drawing foreign direct investments in emerging markets. Emerging markets such as Argentina, offer a large consumer base, which taken alongside the literacy and education level, result in highly educated and knowledgeable consumers (Saccomano, 2002). Local consumers in many Argentina markets also have a positive attitude towards foreign products and companies, deeming them higher quality and better value (Sharma, 2002).

Recent economic conditions cannot negate decades of economic progress and the resulting increase in GDP and per capita income, suggests a potentially large local consumer base.

Related and supporting industries in international markets provide an opportunity for multi-national firms to learn from one another in international markets. This learning could take the form of innovation (Porter, 1990). Several decades ago, Japanese firms established relationships with US universities to work together to enhance innovation. Japanese firms would provide money by investing in US universities to obtain R&D. As this R&D was achieved, Japan began to spin off the R&D across many different industries. The same is now happening in Argentina. The Argentine government has developed alliances with major US and European universities to provide funding for obtaining new R&D capabilities which may be used in a variety of industries within Argentina. In this specific case, the Argentine government acted as a source of capital to develop innovation for many industries within Argentina. In these specific cases, the original R&D became a source of innovation for related and supported industries to grow. Factor conditions (Porter 1990) are also important. Since Argentina is an emerging market, it provides challenges for international firms interested in establishing positions within it.

While the government is focusing on improving and expanding infrastructure within Argentina, Argentina lacks the road, rail, and air transportation necessary to reach their potential for business growth. While the country's internal market is large, the geographic distance between major cities remains an obstacle. Similarly, Argentina firms have difficulty reaching well developed country markets due to infrastructure limitations. Because Argentina's infrastructure is under-developed, it does not provide international firms the access to customer base unless they build infrastructure. Firm strategy, structure, and rivalry are dependent upon how Argentina has developed government policy over time.

Argentina is still recovering from their financial crises in 2002. Governmental policies and other underlying factors that led to the financial crisis and its after effects are still in the minds of business leaders and consumers. The government nationalized many businesses. These policies have led to low growth, trade deficits, budget deficits, hyperinflation, and devaluation of the currency. In particular, the country is constrained by fixed exchange rates, a weak banking system, politically-driven decisions, political irresponsibility, bureaucracy in the economy, poor-defined property rights, and use of bribes (Selim, 2005).

Based upon this history, firms entering Argentina may need to develop resources to fit this state of affairs. Firms may need to modify existing resources or develop new resources to be competitive within Argentina. The recognition of the role of the government and how Argentina is positioned from Porter's (1990) determinants of international competitive advantage may lead to success within emerging markets such as Argentina. The development of entrepreneurial strategies to implement these actions within Argentina is of crucial importance. Successfully implementing entrepreneurial strategies may depend on how the firm's resources are developed within Argentina. Based upon Porter's (1990) determinants and the role of government, firms may need to develop new resources to implement entrepreneurial strategies.

IMPLEMENT ENTREPRENEURIAL STRATEGIES

To the extent that the services made possible by new combinations of resources are capable of rendering new productive possibilities, they serve as the basis for the creation of new and better resources or new and better (i.e., more productive) ways of making resources (Penrose 1959; Moran and Ghospha 1999). In this way, new resource combinations constitute the source of all endogenous changes that characterize the process of economic development (Schumpeter, 1934; 64-65). This is the same process of "industrial mutation that Schumpeter describes as "creative destruction": the evolutionary process "that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one" (1942: 83; emphasis in original).

Since “creative destruction” occurs from within, the role of managerial capabilities becomes of central importance. Following Schumpeter, Penrose (1959) discusses this concept of “entrepreneurial imagination.” Penrose states: ‘The imaginative effort, the sense of timing, the instinctive recognition of what will catch on or how to make it catch on become of overwhelming importance. These services are not likely to be equally available to all firms’ (1959, p37). Penrose concludes: ‘It is the heterogeneity and not the homogeneity of the productive services available from its resources that gives each firm its unique character’ (1959, p75). Management teams that evolve over time are among the most valuable resources of the firm, since they yield entrepreneurial services in the form of intelligent and purposeful expansion capabilities (Penrose 1959).

Further, entrepreneurial action is required to transform knowledge investments from possessing the potential to create value into a form that enables its appropriation (Agarwal, Audretsch, and Sarkar, 2007).

Generally, emerging economy governments apply a range of specific policy instruments. Specific entrepreneurial strategies within Argentina would focus upon implementing a number of factors: (1) financial incentives for multi-national firms to enter Argentina (Lall and Teubal , 1998), (2) establishing product quality standards, and help in marketing research and distribution (Dominguez and Sequeira, 1993), and (3) provide marketing research and distribution support to reduce knowledge gaps, allowing international firms to broaden and to deepen their involvement in emerging markets (Johanson and Vahlne, 1977), and (4) establish product quality awards increase product development processes (Porter, 1980). Financial incentives attract international firms to emerging markets. In order to benefit from these actions, the entrepreneurial firm must be aware of strategic industry factors.

IDENTIFY STRATEGIC INDUSTRY FACTORS

The entrepreneurial manager must understand the strategic factors of the industry which has been targeted in the emerging market. Within Argentina, strategic factors at the industry level are driven by conditions within Argentina.

Improving infrastructure may be a signal to other multinational firms that an emerging market may be a good place to establish positions to take advantage of a country’s potential demand. It also provides an opportunity to use the emerging market as a lower cost alternative, as opposed to shipment of international products from a fully developed country. There are a number of strategic industry factors which may be generalizable across industries within Argentina.

While a financial crisis, such as the recent global recession, may disrupt the development of an infrastructure, a country’s efforts to improve the conditions during the crisis may attract multinational companies to increase their investment. It is crucial for the government to focus upon the development of infrastructure because products cannot be easily transported to customers in Argentina and for products exported or imported within Argentina. Furthermore, the financial crisis, while adversely affecting the local economy by causing unemployment and currency devaluations, does increase the appeal of the emerging market as a production base by decreasing costs for raw materials, site development, and quality labor force. Reduction of cost and the availability of these production factors could be key factors that attract companies to expand operations into emerging markets.

Once firms have selected emerging markets in which they have chosen to enter, it is important that the firm which is entering the emerging market have a clear understanding of what is needed to be successful within the firm’s primary industry. In emerging markets, which are privatizing, an understanding of how strategic industry factors change is crucial.

Strategic industry factors are focused upon competitors, regulators, investment banks and other firm stakeholders (Amit and Shoemaker, 1993). The new entrants to the industry, in particular, can exert strong influence on strategic industry factors through introduction of innovative practices that reduce costs and improve product and service quality. As strategic industry factors change and evolve over time, firms and their capabilities must also change, especially if the new environment involves rapid shifts and developments in technology (Eisenhardt and Martin, 2000). Once these strategic industry factors have been identified, the entrepreneurial manager must conduct an internal scan of its own firm to see if the firm has the capabilities to be successful within the selected industry in the emerging market.

CONDUCT INTERNAL SCANNING

A firm's experience at implementing strategies in which countries are moving from a period of state ownership to privatization is of crucial importance. This focus has transformed the business environment into one which encourages entrepreneurial innovation and growth. This privatization has opened up Argentina's markets to free competition (Hatun and Pettigrew 2006). Continued privatization of government owned industries improves competitiveness and encourages entrepreneurship. A competitive environment allows Argentina to develop technological innovations which had not been possible with state ownership. The infusion of entrepreneurial talent may result in new firms (Dana 1997). These new firms were able to compete with multinational firms which had been state owned.

A firm which has previous success with respect to entrepreneurial expansion will have a significant advantage versus firms which have not had this experience. While economists, government officials and business leaders continue to debate the current condition and prognosis for the Argentinean economy, entrepreneurship remains a means to achieve much needed growth (Hatun and Pettigrew 2006). While external environmental scanning is crucial for identifying changing trends within the environment, systematic internal scanning is also required before firm adaptation can occur.

For a firm to compete effectively in an emerging market, processes need to be redeveloped and aimed towards identifying current competitor's weaknesses and customer needs which may require renewal of resources and capabilities within the emerging market (Helfat, 1994). By identifying and evaluating its knowledge bases and unique capabilities, a firm will have a greater likelihood of developing new resource configurations and market positions that capitalize on its unique strengths.

Once the firm has completed its internal scanning process, it must make a determination as to whether the firm has the specific resources configured in a manner which will allow the firm to be successful in the emerging market.

BUILD ORGANIZATIONAL FLEXIBILITY

In the order to match strategic industry factors with the firm's internal capabilities, the firm may need to develop new capabilities if it is to be successful entering the industry within the selected emerging market. Because these capabilities are not known, before the fact, it is of crucial importance that the entrepreneurial manager instills organizational flexibility into the firm to permit successful expansion within the emerging market. This flexibility will provide the firm with capabilities that the entrepreneurial manager can implement to provide for successful entry into the emerging market.

In order to accomplish successful entry into the emerging markets, the firm must have the organizational flexibility to reconfigure its resources. Organizational flexibility is important for two reasons: first, because of its appropriateness to understanding unpredictable and uncertain conditions (D'Aveni, 1994; Foss, 1999; Volberda 1999, 1997), and second, the concept of organizational flexibility also sheds light on the enhanced capabilities organizations under environmental turmoil

develop to enable them to adapt quickly and to undertake a series of actions to achieve significant transformation (Bahrami, 1992; Volberda, 1999).

In emerging economies such as Argentinean, these environmental features have been exacerbated by a sudden opening up of the markets to free competition. In these circumstances, rapid adaptive organizational processes are essential to a firm's survival and success (D'Aveni, 1994; Volberda, 1999). One organizational process which Argentina has had success with is providing centralized call centers for multi-national firms.

Argentina's capability to develop call centers to a multitude of multinational firms provides for flexibility.

New services, including the development of these call centers to support multi-national firms' expansion into Argentina, provide growth opportunities. Virtually all multi-national firms have centralized call centers. The development of these centers to support international firms could allow Argentina to provide support services to multinational firms in many related and supporting industries. Providing call centers for firms in developed markets may provide Argentina the opportunity to service other industries in many related and supporting industries in these fully developed markets. If the firm has flexibility, it may be more likely to achieve a strategic fit to successfully enter and be competitive within the industry in the selected emerging market.

ACHIEVING DYNAMIC STRATEGIC FIT

Sustaining flexibility enables a dynamic strategic fit between the environment and a firm's resources and capabilities (Itami and Roehl, 1987). Continuous alignment of the firm's resource base to the environment provides the firm with a dynamic capability for generating new bases of competitive advantage and sustained long-term growth (Baird and Meshoulam, 1988; Powell, 1992).

If the multi-national firm's managerial resources believe that there is a strategic fit between the firm's resources and capabilities with the emerging markets selected, firms will enter these markets. If there does not appear to be a strategic fit, the firm will proceed with an analysis of other opportunities in different emerging markets. Once the correct emerging market has been selected, the firm will begin a learning process in the selected emerging market(s). Within Argentina, learning from an entrepreneurial view is important.

Entrepreneurship centers in Argentine universities, as well as the emergence of business plan competitions for students are growing along with governmental initiatives to support entrepreneurship. Further, government support of business careers and their value to the Argentine society support the rise in educational programs and provide the cultural foundation needed for business growth. Argentinean universities have been increasing entrepreneurship and governmental education programs (Postigo and Tamborini, 2005). Such programs such as the ISTU (the Institute of Scientific and Technological Undertakings) or the Institute of Scientific and Technological Entrepreneurship encourage entrepreneurship within the country by explaining how to support and sustain new start-ups. Liberalizing the economy and currency stability has helped to encourage new venture creation (Dana, 1997).

In responding to emerging markets, entrepreneurs face numerous challenges and opportunities in order to achieve dynamic strategic fit. Well-conceived assessment measures implemented in a timely manner, combined with a strategic mix of proactive globally-oriented activities, would likely be a path towards success. Identifying a strategic balance between the costs and benefits of selected strategies will remain a challenge for firms expanding into Argentina or any other emerging market. If a strategic fit is achieved, the firm can successfully enter the emerging market.

ENTERING ADDITIONAL EMERGING MARKETS

As the firm builds its position within its emerging market, learning takes place. This learning can provide an additional dimension to evaluate and assess other emerging markets. Without successful entry into the initial emerging market, the firm would not be able to enter additional emerging markets from a position of strength. It is usually better to fully develop resources in one market and then enter additional markets from a position of strength (Wernerfelt 1984).

In order for firms to be successful in emerging markets, firms must develop entrepreneurial management capabilities. As emerging markets become privatized, the role of these capabilities becomes important if firms are to be successful in emerging markets. In addition, managerial resources in emerging markets possess extensive knowledge of the country and selected industries. In these emerging markets, this knowledge base is of importance for firms to establish a successful position. Membership in alliances may provide firms entering Argentina the opportunity for growth into additional emerging markets.

Argentina is a member of the MERCOSUR trading bloc along with the nations of Brazil, Paraguay, Venezuela and Uruguay and associate members (without voting rights) Bolivia, Chile, Colombia, Ecuador, and Peru. Formed in 1985 by Argentina and Brazil, MERCOSUR includes all the major countries in South America. A proposed common currency, the *merco*, could facilitate financial transactions and improve trading against the world's major currencies (Malamud and Label, 2002). For entrepreneurs, the advantage of being part of this trading bloc is opportunities for trading partners, international growth within MERCOSUR, and additional alliances that can support new ventures.

Firms which expand into Argentina will have access to other South American firms in the MERCOSUR alliance. As such, firms may have the opportunity to easily enter these markets as a result of the strategic alliances Argentina has with these countries.

Harmonization of trade relations in regional economic groups, such as MERCOSUR, enables multinational corporations to serve a regional market considerably larger than that of any particular country.

CONCLUDING THOUGHTS

As was noted in the introduction, strategic entrepreneurship is "in its infancy." The role that strategic entrepreneurship plays in terms of how to enter emerging markets is even less developed. We have provided a framework to discuss the concept of how strategic entrepreneurs could enter emerging markets. Much further work is needed before we have an integrated framework to guide strategic entrepreneurs as they enter emerging markets. We hope that this framework can be more fully developed to achieve a fully integrated path by which strategic entrepreneurs can use to enter successive emerging markets.

The recognition that emerging markets must open up their boundaries to new countries, whether to developed or emerging markets, provides these emerging markets the opportunity to move more quickly from emerging to fully developed markets.

The opening up of these emerging markets to a significantly greater number of international firms provides strategic entrepreneurs with significant growth opportunities. Emerging markets provide entrepreneurs with new sets of resources. These new resources provide entrepreneurs with the opportunity to use their imagination to develop potential strategies and obtain new applications (Penrose, 1959; Mahoney and Kor, 2000) within emerging markets. These new capabilities provide for continuous growth (Penrose, 1959).

Expansion into emerging markets is more difficult for firms because they must deal with several variables at the same time. However, once these variables are understood by entrepreneurs, they form a basis for significant growth within emerging markets. It will not be easy for firms to successfully

integrate the factors into a viable entrepreneurial strategy for entry into emerging markets. However, with careful planning, entrepreneurially driven approaches (as shown in Figure 1) provide a framework for successful emerging market expansion.

Figures, tables, references, or appendices from this paper may have been editorially omitted due to space considerations. For a copy of the complete paper, please contact the author(s).

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Gender differences in online shopping behavioural intention among Malaysian students

Key words- Perceived ease of use (PEOU), Perceived Usefulness (PU), Behavioural Intention (BI) Trust and Malaysia.

INTRODUCTION

The advanced use of the internet has caused vast developments in the electronic commerce arena. Electronic commerce is defined as the trading of products and services among individuals and organizations by using the internet as the intermediary (Armash, Salarzahi, Yaghoobi, heydari, & Nikbin, 2010). By studying the influencing factors of consumer behaviors, the enterprise can identify the customer demand, enhance the factors that promote consumer purchasing, and change unfavourable factors, taking the satisfaction of consumer as the start point and ultimate goal of marketing behaviors (Li, 2011). Better understanding of consumers' perspectives of website visualization based on gender is important when it comes to designing a website that will attract young internet users and potential customers (Ozdemir & Kilic, 2011). Research on Internet-based e-commerce has been phenomenal over the past decade (Joo, Lim, & Kim, 2011). According to Akman & Mishra (2010), the demographics of internet users are an interesting area or study for many researchers. In Malaysia, online shopping is still new and there isn't much knowledge of about how the online shoppers behave and make repurchase decisions thus creating a gap in this area (Kwek Choon, Lau Teck, & Tan Hoi, 2010). For organizations with good and loyal customers, it is detrimental that they have proper customer management programs in place (Shih-Tse Wang, 2010). It is critical that even for online customers the notion of repeat purchases are successfully carried out (Chai Har, Uchenna Cyril, & Nelson Oly, 2011). Moreover, the need to predict and assess behavioral intentions (BI) of the Internet consumers has increased. Gender is an important variable in attitudes towards the Internet and online shopping behavior (Ozdemir & Kilic, 2011). Gender has the ability to impact the trends of online shoppers (Rodgers & Harris, 2003). Internet research has not fully explored gender as a key variable for market segmentation (Shih-Tse Wang, 2010). The investigation of the differences between gender and their online behavior and purchase is getting a lot attention

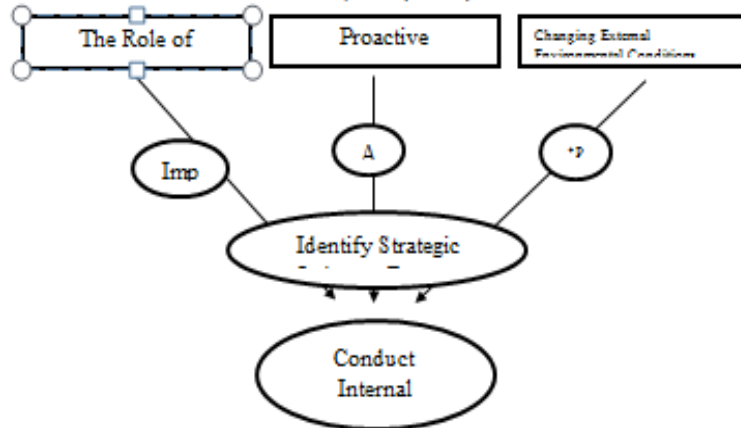
(Sebastianelli, Tamimi, & Rajan, 2008). Internet usage is a specific human behavior; gender plays an essential role in predicting behavior (Trombley, 2011). As Akman & Mishra (2010) explained that gender has significant impact on the average daily time spent on communication/e-mailing/ chat. Accordingly, compared to males, females have greater tendencies to use abbreviations, avoid using self denigration, and using informal language with no expert language (Ozdemir & Kilic, 2011). Some significant differences are found in both genders in such issues as usage of derogatory statements, expert language, colors in typeface, and straight lines. Some differences are also found in the use of blue/black typeface, abbreviations, informal language, and the use of formal images, headings, male figures, and formal typography (Ozdemir & Kilic, 2011). Meanwhile, Slyke, Comunale, & Belanger (2002) used gender as a determinant for observing online purchasing. In order to understand online shoppers behavior, it is important to know the demographic of these customers and how they behave online (J. Chang & Samuel, 2004). Hence, the problem statement of this research paper is to find out how gender differences influence online shopping behaviour in Malaysian students. According to Sih-Tse (2010) a deeper assessing differences between genders could make marketers more aware of the possible effects of browsing frequency. This study comes up with explanatory research objectives: 1) to understand the impact of Gender Differences on Online Shopping Behavioural retention among Malaysian Students. 2) To examine the impact of Perceived ease of use (PEOU), Perceived Usefulness (PU) and trust on behavioural retention of online shoppers.

Due to page limitations sections of text, tables, graphs, figures referred to in this article may have been omitted. Interested readers are referred to the authors for copies of the omitted portions of this article.

DISCUSSIONS OF RESULTS

By utilizing scientific method in the previous chapter and using statistics methods the conclusion and recommendation are explained to help online marketer to target company market segmentation more precisely in the light of gender differences. Gender difference of online shopper is a demographic variable which is crucial for marketer to understand it and then shape their prospect strategy. In this study impact of gender differences on online shopper behavioural intention among Malaysian students were examined. Based on data analysis of study in previous chapter, this study found that there is significant relationship between gender and BI o online shopper. According to ANOVA table, gender can be used to predict behavioral intention (BI). In the other hand, gender plays a significant role in predicting shopping performance among Malaysian students.

Figure 1: A Model of Online Purchasing Behaviour of University Students Based On TAM (Davis, 1989)



NS*: Non Significant Factor
S*: Significant Factor

According to research framework of study shown below, research hypotheses could be seen in term of level of importance. This study hypothesized Perceived Usefulness (PU), perceived ease of use (PEOU), and Trust is predictor's variables towards students' behavioural intention (BI) in online shopping. This study found that Perceived Usefulness (PU) and trust are key predictor factors in online shopping behavioural intention but perceived ease of use (PEOU) could not be a predictor for future behavioural intention of online shopper. Despite the fact that perceived ease of use (PEOU) was key predictor in acceptance and adoption of online shopping, but it is not main factor in online customer retention behaviour and loyalty.

Managerial Implications and Recommendations

According to Hasan (2010) a better understanding of web shopping attitude and behaviour is critical for designing and managing effective websites that can help companies attract and retain online customers. As explained above, manager should recognize gender differences among retained customer. In the other hand, online marketer should differentiate between male and female when designing and setting strategy for target customer. It could assume that behavioural retention of shopper is based on their gender and then gender influence on Perceived Usefulness (PU) and trust. Manager should find some ways to enhance usefulness of website as well as making trust on the internet. Perceived Usefulness (PU) and trust were significant antecedents toward online shopping acceptance and adoption and still these two factors seem to be antecedent's factor in light of customer retention and loyalty. But the main points are gender differences that are one of moderator factor in marketing area.

Limitations and Directions for Future Research

This study is not without limitations as with any research, so care should be taken when generalizing the results of study (H. H. Chang & Chen, 2008). This study left some limitation and recommends some area for future researcher in light of online shopping behavioural retention. Firstly, this study examines student's behaviour intention among students. Future study should target professional who are working to generalize the finding of this study achievements. Secondly, the data collection of this study was cross sectional data collection approach. Future researchers should utilize longitude data collection approach to understand behaviour of online shopper more precisely. Because of time constraint this study couldn't utilize the above limitation. Future researcher should apply this research framework in different country other than Malaysia to generalize the finding of study as well.

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Asymmetry in Value Relevance of Environmental Performance: Role of Industry and Size

Keywords: environmental performance, market premium, asymmetry, industry risk, size

INTRODUCTION

Within the academic literature, there has been an age-old tradition of research that demonstrates a universal relation between corporate environmental performance and the financial performance of companies employing a variety of theoretical frames and methodologies (Margolis et al, 2007). The evidence on that 'it pays to be green' has, however, been weak at best. This paper goes beyond the general relation by arguing that financial markets price environmental performance (EP) differently

across large and small companies and that the industry context moderates the relation. These contingencies can create an asymmetry in financial markets and provide explanation for the mixed universal relation found in previous research.

Three sets of theories can explain the phenomenon of the asymmetry. First, theory of market underreaction (Lang & Lingholm, 1996; Hong et al., 2000) predicts that information about large companies gets out more quickly across investors with relatively lower costs of acquisition and financial analysts, who primary clients are often institutional investors, follow large companies more closely than they monitor small companies. Second, social-political theories, such as economy, legitimacy, and stakeholder theories (Patten, 2002; Cormier & Magnan, 2003; Dhaliwal et al., 2011) predict that larger companies and companies in high impact, environmentally sensitive industries are more transparent about their environmental strategy and have higher magnitude of environmental spending due to relatively great political, regulatory, and stakeholder pressure.¹ Third, resource-based theory (Hart, 1995; Clarkson et al., 2010) proposes that not all companies can benefit equally from proactive environmental management.²

This paper investigates how differences in environmental regulations and corresponding environmental risk of the industry and company size drive asymmetry on OMX Stockholm. In other words, it looks for the evidence that corporate EP is not priced in a homogeneous manner across different industries and company categories. To do so, this paper tests a new effect that represents an interaction of corporate EP and two contingency factors such as size and industry risk. Contingent factor, DSize, is a categorical variable for company size, which indicates whether a company belongs to the group of high or low market capitalization companies (as reflected in SIX 300 Index 2005-2008).³ Contingent factor, Industry Risk, is a continuous variable, which measures the environmental risk of the industry in which a company operates. Main variable, Environmental Performance, is a degree of environmental management, which involves product performance, pollution prevention, and pollution control. Empirical evidence is based on a Swedish regulatory setting where environmental regulations through a direct carbon tax are particularly strong in high-impact energy-intensive sectors and imposes different regulatory effects across industries.

This paper finds that the relation between market premium and environmental performance is positive and stronger for large- and mid-sized companies in low-risk industries and less strong for large- and mid-sized companies in medium-risk industries. In contrast, there is a strong, negative relation for large- and mid-sized companies in high-risk, environmentally regulated industries. Consequently, financial markets impose risk premiums when pricing the environmental performance of companies in polluting and more regulated industries or ignore such effect at best. The relation does not hold for small companies; this study, therefore, concludes that market underreaction and financial constraints might drive this result. The conclusions are strengthened by the fact that financial analysts more closely follow large- and mid-sized companies and companies in high-risk industries.

Next, this study tests the effect of company size (total assets; Size) and industry risk (as reflected in three categories such as high, medium, and low; DIR) on market premium for within large- and mid-sized companies. These results provide further evidence that environmental performance is priced differently in financial markets. Specifically, the relation between EP and market premium is higher, a higher company size in low-risk industries while the relation is negative and independent of company size in high-risk, regulated industries. Further, companies in medium-risk industries get market premium from EP which is less driven by environmental regulations but appears to be higher, a higher company size. The investigation allows generalizing the results and provides statistically and economically meaningful estimates. An increase of 1.0 in EP is associated with a 0.18 increase in its market value in low-risk industries while it is related to a 0.27 reduction in market value in high-risk industries.

Overall, these findings are consistent with resource-based theory of the firm that in environmentally regulated industries, an increase in environmental performance is more compliance-driven and more costly for companies, which result in risk premium. Further, the findings suggest that an increase in

transparency of the company in less regulated industries is important in getting higher market premiums from environmental performance. Finally, all empirical tests control for potential endogeneity, which helps mitigate concerns that omitted company characteristics drive the results.

Due to page limitations sections of text, tables, graphs, figures referred to in this article may have been omitted. Interested readers are referred to the authors for copies of the omitted portions of this article.

PRIOR RESEARCH AND HYPOTHESIS

In a traditional financial market setting, scholars suggest that environmental management or corporate eco-efficiency embedded in the company internal processes improve operating efficiency and profitability and should be highly valued in financial market. Sinkin et al. (2008), Clarkson et al. (2010), Guenster et al. (2011) find that measures of corporate environmental performance (whether eco-efficiency or improvements in pollution propensity) relate positively to operating performance and market value. A consensus has emerged from this literature that corporate environmental performance is often rewarded in financial markets.

On the other hand, prior research on the determinants of environmental performance and disclosures suggests that company size and industry type play a role in a company decision to voluntarily disclose environment-related information and to invest in environmental management. In particular, Brammer and Pavelin (2006, 2008), Clarkson et al. (2008), Tagesson et al. (2009), Semenova (2010), and Cormier and Magnan (2003) find that in industries with severe environmental externalities, companies disclose more environmental information and strive to be leaders in environmental management. Further, Artiach et al. (2010), Tagesson et al. (2009), Brammer and Pavelin (2008), and Elsayed (2006) find that the effect of company size is a significant determinant of extensive environmental disclosures and superior environmental performance.

However, there is no evidence that demonstrates how the strength, or magnitude and direction of the relation between environmental performance and market premium can vary at different levels of the industry type (polluting versus clean) and company size (large versus small). For example, Brammer and Pavelin (2006) find that environmental performance has a heterogeneous and mixed reputational effect across industries. The reputational effect is positive in chemicals, consumer products, recourses and transportation sectors; negative in engineering; insignificant in construction, finance, high technology, publishing, retail, and utilities sectors. Based on the same approach of testing interaction terms between industry dummy variables and the EP scores, Elsayed and Paton (2005) find no industry differences in the impact of environmental performance on market value (Tobin's Q). Moreover, small companies are under-researched in this type of studies because of their relatively low level of transparency and the lack of available data. The majority of research investigate large companies and include company size as a proxy for the company's overall disclosure level and corporate transparency with investors and other stakeholders (Lang & Lundholm, 1996; Margolis et al, 2007). Environmental practices of small companies are seldom noticed in the financial market research. Such investigation is interesting because it provides result for an important set of small companies and deepens our understanding of factors that influence on how corporate environmental performance is priced in financial markets. Our arguments lead to the following hypothesis (in null form):

Hypothesis 1: The relation between environmental performance and market value is not contingent on the environmental risk of the industry and company size.

INSTITUTIONAL AND REGULATORY SETTING

This paper takes advantage of a Swedish institutional and regulatory setting because the environmental policy mix in Sweden consists of private initiatives aimed at the integration of environmental performance into fundamental valuations combined with a long-term regulation of

emissions in energy-intensive sectors with a CO2 tax. Institutional investors such as the Swedish National Pension Funds (AP funds), and the Swedish Society of Financial Analysts (SFF) have provided guidelines for the integration of environmental performance into investment strategies and decisions. In particular, the Swedish Government and the PRI Initiative drive national pension funds to consider ESG issues in all investment operations. Sweden enacted a tax on CO2 in 1991 as a complement to the existing system of energy taxes. CO2 tax imposes unique constraints in energy-intensive sectors while the other industries are less constrained or not subject to taxation. The energy sector accounts for 20-30% of the total Swedish CO2 emissions. Seven sectors such as pulp and paper, petroleum products, basic metals, energy, land transport, ship transport, and air transport account for approximately 65% of the total Swedish CO2 emissions (Löfgren & Muller, 2010). The fact that CO2 tax imposes different constraints across sectors makes a unique setting for testing the effect of environmental industry risk.

RESEARCH DESIGN

The Ohlson (1995) price-level model provides a framework that identifies how market value relates to accounting and non-accounting EP information. The model is modified by including proxies for size and industry risk and interactions among EP, industry risk and company size:

$$MV_{i,t} = \beta_0 + \beta_1 BV_{i,t} + \beta_2 NI_{i,t} + \beta_3 EP_{i,t} + \beta_4 IR_{i,t} + \beta_5 DSIZE_{i,t} + \beta_6 EP * IR_{i,t} + \beta_7 EP * DSIZE_{i,t} + \beta_8 IR * DSIZE_{i,t} + \beta_9 EP * IR * DSIZE_{i,t} + u_i + e_{i,t} \quad (1)$$

where $MV_{i,t}$ is a one-quarter lagged equity market value that gives financial markets plenty of time to affect performance expectations. The opening book value of equity is $BV_{i,t}$. The net income of the company is $NI_{i,t}$. Environmental performance is $EP_{i,t}$. A company is denoted by i , i.e., a cross-section observation, and t indicates time periods for each cross-section observation. All accounting and market-based variables are scaled by a one-quarter lagged total assets $TA_{i,t}$. $IR_{i,t}$ denotes the moderator variable of environmental industry risk. The moderating variable of company size in qualitative form is a dummy, $DSIZE_{i,t}$. $DSIZE$ indicates whether a company belongs to the group of high- or low-sized companies (as reflected in the market capitalization SIX 300 Index). The multiplicative term $EP * IR * DSIZE_{i,t}$ encompasses the three-way interaction effect and represents the dependency of $EP_{i,t}$ on $IR_{i,t}$ and $DSIZE_{i,t}$. The slope β_9 aims to measure the interaction effect. Further, the interaction effect is examined by the plotting techniques and post hoc statistical testing (Aiken & West, 1991). The study mitigates problems with multicollinearity among independent variables by using a residual-centring approach.

The empirical models are tested by using environmental risk ratings from the GES Investment Services Risk Rating database. The environmental performance of companies is evaluated based on a number of criteria, including eco- and energy-efficiency of operations, use of recycled materials, and the development of products with environmental benefits. Energy-intensive sectors, for example, metals and mining, pulp and paper get higher scores of environmental industry risk. GES environmental data were found in previous research to be reliable, valid, and consistent measures of environmental performance (Semenova, 2010). Market value, common shareholders' equity, net income, and the book value of assets are retrieved from the Thomson Datastream tapes. The sample consists of 224 SIX 300 companies listed on OMX Stockholm, which were rated from 2005 to 2008.

RESULTS

Table 1 provides the results of the regression model (1). The parameters are computed by using the fixed effects (within) OLS estimator with clustered standard errors which correct for within group correlation, endogeneity, and heteroskedasticity (Greene, 2003).

Table 1 omitted but would occur here

To start with, the first column of Table 1 reports the results of the tests for the main effects of environmental performance on market value. Environmental performance is significantly positively

related to the market value of equity ($\beta_3 = 0.06$, t -value = 2.30). Thus, the average results of this study are in line with previous findings that environmental performance adds value beyond financial fundamentals such as the book value of equity and earnings.

The second and third columns of Table 1 provides the results of the tests for the size effect by including the interaction between a continuous variable, EP, and a categorical variable, DSize, which indicates whether a company belongs to the group of high- and mid- or small-market capitalization companies. As reported, there is no evidence that large and mid-sized companies have higher market premium relative to small-sized (the coefficient on EP*DSIZE is insignificant). However, high collinearity between EP and EP*DSIZE (i.e. a low proportion of EP and EP*DSIZE variables' variance is independent) has biased this result.

Next, the test for size interaction effect is run by splitting the sample into the two sub-samples based on a categorical variable, DSize. The fixed effects estimates of environmental performance are significantly positive for companies with high market capitalization ($\beta_7 = 0.08$, t -value = 2.37), and significantly negative for companies with small market capitalization ($\beta_7 = -0.06$, t -value = -1.69). Based on the arguments of earlier studies that, first, there is positive relation between proactive environmental strategies of small companies and operating performance (Aragon-Correa et al., 2008) and, second, most anomalies are confined to small companies (Fama & French, 2008), the conclusion is that financial markets undervalue EP of small companies due to their low transparency and high financial constraints and assign premiums to the good environmental performers with large market capitalization.

The study further examines the industry effect on the market value of environmental performance at high levels of company size (as defined by large- and mid-market capitalization). The industry effect is studied by the analysis of the three-way interaction term in equation (1) and constructing conditional effects plots at different levels of industry risk. In column six of Table 1, the estimated interaction term from regressions of market value on the environmental performance is significantly negative ($\beta_9 = -0.04$, t -value = -2.58), suggesting that the relations are modified by industry risk and company size.

Figure 1 reveals a complex pattern of the regression of market value on environmental performance depending on the level of industry risk. Values of industry risk are chosen to be at the minimum value ($IR_{LOW} = -2.58$), at the mean ($IR_{MEDIUM} = 0$), and at the maximum value ($IR_{HIGH} = 3.42$). The regression equations indicate that the relation between market value of equity and environmental performance is significantly positive and stronger for large- and mid-sized companies at low level of industry risk (e.g. banks, diversified financials, and retailing and consumer services sectors) and less strong for large- and mid-sized companies at mean level of industry risk. In contrast, there is a strong, negative relation for large- and mid-sized companies at high level of industry risk. Consequently, financial markets impose risk premiums when pricing the environmental performance of companies in polluting and more regulated industries or do not consider this factor at best. A possible explanation here is that increased environmental performance is more likely linked to substantial investments made in order to reduce compliance costs with no return to shareholders.

Figure 1 omitted but would occur here

To further explore the effect of company size and industry risk on the relation between market premium and environmental performance, this study employs large and mid-sized companies and proxies for Size using a continuous variable, Total Assets, and industry risk DIR using a categorical variable that reflects three categories of industry risk such as DIR(High), DIR (Medium), and DIR(Low). The change in specification is indicated by putting an extra initial 'D' for a moderating variable of industry risk (DIR) and removing an initial 'D' for a moderating variable of company size (Size).

In Table 2, the estimated coefficient on EP*DIR(High) is significantly negative while the estimated coefficient on EP*DIR(Low) is significantly positive. The result is consistent with the finding of the MRA tests and also economically meaningful: environmental performance is associated with an

increase in market MV of 0.18 in low-risk industries and decrease in MV of 0.27 in high-risk industries. Further, there is indication that low-industry risk companies have higher market premium, a higher their company size (indicating a higher level of transparency). The interaction term $EP*DIR(Low)*Size$ is significantly positive and higher than is the interaction term $EP*DIR(Low)$. There is no indication that risk premium in regulated industries can be changed by company size (improved transparency).

Table 2 omitted but would occur here

CONCLUSIONS

This study extends previous research on the direct linear relation between environmental performance and market value by introducing confounding effects of company size and industry. This study found that market prices respond to environmental performance differently depending on the environmental risk of the industry and company size.

The identification of the major factors or company-specific drivers of asymmetry in SRI financial markets contributes to our knowledge in various ways. For example, researchers often use industry dummies to control for possible differences in the impact of environmental performance on equity market value. Such proxies are obviously noisy, reflecting, in addition numerous company- and market-specific attributes. The unique setting of this study suggests that environmental externalities occurred through a carbon tax create asymmetry when environmental performance is priced differently in financial markets depending on the environmental risk of the industry. Corporate transparency (as proxied by company size) is likely to affect the magnitude of pricing EP in general setting of large companies.

For practitioners in the realm of SRI, the asymmetry in pricing environmental management would, hopefully, guide mainstream investors to assign market premium for companies in environmentally sensitive industries that improve their environmental management in order to reduce environmental impacts before tougher environmental regulations and more taxes are introduced.

For companies, the research indicates that there is a need for integrated reporting that links environmental, social and governance (ESG) embedded values and reduced risks with financial performance. To date, successful environmental management which is difficult to observe and link to financial performance could lessen the significance of environmental performance to investors. Better quality of environmental information in corporate disclosures and financial analysts' reports, and higher level of corporate transparency are more likely to enhance the capability of pricing environmental performance in financial markets.

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Figures, tables, references, or appendices from this paper may have been editorially omitted due to space considerations. For a copy of the complete paper, please contact the author(s).

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Change of Company Ownership, CEO Turnover and the Origin of CEO: Case from Indonesia

Keywords: Ownership Structure, CEO Turnovers, Origin of CEO, Accounting Performance, Market Performance.

INTRODUCTION

The rise of issues about controlling rights owned by majority of shareholders in the company of the world, has become one of the research topic. Nevertheless, there is almost no research found that attempts to highlight the impact of ownership structure on CEO turnover. This is what motivated us to conduct research on the impact of ownership structure on CEO turnover in Indonesia. Because CEO has been considered as the most influential figure in the company, the most crucial figure in running the organizational blueprint, the journey and the future of the organization, so a research analyzing the topic of CEO turnover has to be done. Associated with a concentrated ownership, owners need to understand that every change of leadership will effect in a change of the organization that eventually will also effect the organizational performance (Baron, Hannan and Burton, 2001). In addition, changing the blueprint is merely has the same meaning with disturbing and unsettling the organization. CEO turnover will not only mean to change the top of management, but also mean to change the company blueprint that lives organizationally in the spirit of the employees. The organization will be “sick” due to a big change inside of it.

This research aimed to provide empirical evidence about the action of CEO turnover after the ownership structure change occurs. This change should not have been carried away without consideration because the change of CEO will effect the company performance. For example is a strategy which is in an achievement level can be stopped unpredictably, while the cost and span that have been sacrificed will be in vain and the next is that an opportunity and success that are nearly achieved will vanish. However, the result of this research shows that there is no significant finding that the ownership changing has a relationship with CEO turnover. This finding shows that the performance of the company is the factor that is statistically significant to be related with the turnover. This finding supports the previous researches that found the strength of the relationship between financial performance and the action in CEO turnover, like Warner, Watts & Wruck, 1988; Weisbach, 1988; Coughlan & Schimdt, 1985; Datta & Guthrie, 1994; Potter & Dowd, 2003; Fee & Hadlock, 2004; Huson, Parrino & Starks, 2001; Kaplan & Minton, 2006.

Contribution of this research is divided into three. First, this research is aimed to provide a research model that is still very rare to do in non western countries, because the data used in this study have to

be obtained manually (hand-collected), either for the CEO turnover data or the majority owners in Indonesia.

Due to page limitations sections of text, tables, graphs, figures referred to in this article may have been omitted. Interested readers are referred to the authors for copies of the omitted portions of this article.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The assumption underlying this research is agency theory, which explains that (1) the parties in the agency relationships are the individuals who attempt to maximize their satisfaction/interest through adequate resources and innovation in act, and (2) the parties involved in the agency relationship are able to build expectations that are not biased about the future, which company's management actually bear the cost consequences of differences in behavior through reduction in the price of the claim or right of the company (Whittred & Zimmer, 1990: 27).

The Changing of Ownership and CEO Turnover

Hambrick & Finkelstein (1995) explained that since Berle & Means documented a clear separation between control from the owner and manager of a big company in America in 1932, many researchers have tested the impact of ownership structure towards actions in the companies. Paper written by Hambrick and Finkelstein was focused in two configurations of ownership structure that were common to be used in the previous studies: (1) external party as the controller of the company, and (2) management part as the controller of the company. The structure of ownership controlled by external party represents condition where there is at least one shareholder that has majority of the stock (in America, majority rule is the ownership of 5% stock), meanwhile the structure of ownership controlled by management happens when there is no majority shareholder so that the shareholders will have less attention and care toward the performance of company management. Nevertheless, it is still needed to be considered that merger configuration is possible to occur, that is a joint control between management and non-management party. However, this merger condition is not concerned in this research.

Shareholder theory will be reflected in the condition when the company control is in the hands of external party, as meant by Hambrick & Finkelstein (1995). Moreover, majority shareholders will have the right to control and will be easy to monitor the top management activity (Shleifer & Vishny, 1986; McConnell & Servaes, 1990), change the existing CEO (Denis & Denis, 1997) and even change them with individuals that have a family relationship, to provide the guarantee of increasing the wealth of the shareholders.

Research that tries to relate the CEO turnover and the structure of ownership is still limited indeed. Brunello *et al.* (2003) focused on the ownership that was concentrated on the characteristic of the largest shareholders and the second shareholders. This study found that in the level of ownership that was concentrated would stimulate the high supervision, high turnovers and high sensitivity of changing towards performance. This finding supports the previous research done by Denis & Denis (1997) that found a significant impact between ownership structure and CEO turnover, by using stock price performance control variable. Denis and Denis showed that the pattern of ownership structure has an important impact in the effort to supervise company internal performance. CEO turnover that happens inside of the company is the effect of the internal supervision activity done by the owner. This research attempts to analyze the agency problem that happens between the owner and the company management. Issue related to the theoretical base and the previous research result is formulated in the first alternative hypothesis, that is:

H₁. The change of ownership effects of CEO turnover

Company Performance and the Origin of the CEO

The origin of CEO becomes one of issues discussed in the study of CEO turnover. Shen & Canella (2003) states that when new CEO comes from inside of the company, offered to replace the previous CEO, it is not only will be approved but also will get support from the other official. Yet, when substitute CEO comes from external party, there will be difficulty in building working association and coalition with the internal party of the company. Meanwhile, Vancil (1987) states that the most important task to the success of CEO is to build a working association and a strong social environment and coalition. This strong relationship, will ease the function of leadership that will coordinate all of the bottom lines to work together to achieve the organizational purpose.

The designation of new CEO from external party is done when the company is in a poor performance (Zajac, 1990). Same case with the result of the research that analyzes antecedent side of turnover, the result of the research in the study of CEO turnover consequence indicates that the turnover can have a positive result to the performance if CEO that is replaced can not create a good performance to the company (see Helmich, 1974; Davidson, Worrell & Dutia, 1993). Other researcher have found negative effects from the turnover (Grusky, 1963; Allen, Panian & Lotz, 1979; Carroll, 1984; Beatty & Zajac, 1987; Haveman, 1993) because it can generate disturbance to the organization. Meanwhile, on the other side, there is also a result of a research considering that turnover does not have consequence if the turnover is merely as a scapegoating action (Gamson & Scotch, 1964; Boeker, 1992).

Palmer (1973) explains that a big management control in the company will encourage the management to be individual that will have more focus to their own interest and less act to the interest of the shareholders. It is different if the control of the company is in the hands of external party. In this way, management will act hard to maximize the wealth of the shareholders. Due to these reasons, CEO that is appointed in the condition that the control is held by external party will result in an accounting and market performance that tends to be higher compared with the condition in which the ownership structure is controlled by management party. From the explanation above, alternative hypothesis of this research is:

H₂. Company performance is related with the origin of the substitute CEO. A worse company performance tends to appoint CEO that is from external party.

METHODOLOGY

Data

This study uses data in the period of year 1999-2007 that is obtained from annual report of listed companies in Indonesia stock market. Data from year 1999 until 2007 are needed to know the accounting performance before CEO turnover. Focus of CEO turnover that exists is in the period of year 2001-2007. CEO turnover is chosen if for consecutive three years, in the same company, the CEO turnover did not exist. Final data used in this research is as many as 149 companies that ranges from companies that do CEO turnover and those that never do any CEO in the observed period from year 1999-2007.

Model

Logit regression model in the equation (1) below is used to test the first hypothesis that states that the changing of ownership effects the company's CEO turnover.

$$\text{Turnover}_{i,t} (1,0) = \alpha_0 + \alpha_1 \text{Own}_{i,t} + \alpha_2 \text{Asset}_{i,t-1} + \alpha_3 \text{Sales}_{i,t-1} + \alpha_4 \text{ROA}_{i,t-1} + \alpha_5 \text{Earnings}_{i,t-1} + \varepsilon_{it} \quad (1)$$

Note: **Turnover** is the changing of CEO, 1 if the changing occurs and 0 if others. **Own** is the changing of ownership, 1 if the changing occurs and 0 if others. **Asset**, **Sales**, **ROA** and **Earnings** is the company performance that is used as the control variable.

Simple logistic regression model to test the second hypothesis about whether company performance has a relationship with the origin of substitute CEO is shown in the equation (2).

$$Origin_{i,t} (1,0) = \alpha_0 + \alpha_1 Perfmc_{i,t-1-3} + \varepsilon_{it} \quad (2)$$

Note: **Origin** is the origin of substitute CEO, 1 if coming from outside of the company (external party); 0 if other than that. **Perfmc** is the performance (earnings and assets) of the company, used to measure the managerial performance.

RESULT AND DISCUSSION

Table 1 Panel A dan Panel B show the result of this study. The first hypothesis test results in an insignificant finding towards the relationship between the changing of company ownership and CEO turnover. The significance of the relationship between both factors is with p-value= 0.65 means that the first hypothesis, a research that predicted that there is a relationship between the changing of ownership and CEO turnover is unproved.

Table 1 omitted but would occur here

Nevertheless, the result of statistic test for the four financial variable that becomes a control between the relationship of the ownership changing variable and CEO turnover seems to have a very strong significance. Each of the accounting performance (that are assets, sales, ROA and earnings) have p-value = 0.01; 0.004; 0.000 and 0.41. This finding indicates that CEO turnover that occurs in Indonesia, commonly is determined by the company performance and not by the domination of the company owner. The result of this research shows that four accounting variable that were tested as antecedent factors from CEO turnover, are related significantly. This thing indicates that the owners of big companies in Indonesia generally do not have an urge to change the managerial leadership if the leader has a good performance in the company. In the other words, a poor performance of a company will determine the CEO turnover and vice versa.

In the second hypothesis, it is stated that the company performance is related with the origin of the substitute CEO. A worse company performance tends to appoint new CEO that is from external party of the company. Statistic result of the second hypothesis test shows that a poor company performance tends to make the CEO turnover in which the substitute CEO comes from external party, and vice versa. Earnings are found to have a negative relationship and significant on the CEO from external party of the company at p-value= 0.0160. Meanwhile, asset is also found to have a negative relationship and significant at the point p= 0.0137.

Additional Analysis

Additional analysis done in this research is meant to provide a further investigation towards the company performance associated with the CEO turnover issue in the origin of the substitute CEO.

Figure 1 omitted but would occur here

Figure 1 shows the earnings performance of companies for five years (three years before and two years after) around the change of CEO with CEO origin from external and internal party.

Figure 2 omitted but would occur here

Figure 2 shows that the company assets of a company of which new CEO is from external party has a better growth compared with a company of which CEO is from internal party.

The condition of companies assets three years before and two years after CEO turnover, that for the next period those companies are lead by new CEO from external and internal party are shown in

figure 2. The average of companies assets that the new CEO comes from external party is less than a company of which CEO is from internal party (those are 2,207 and 2,343). However, the difference between those assets is not too far. The company of which new CEO is from external party is only able to increase assets growth as much as 5,950,723 (that is from 2,207 becomes 5,948,525), while CEO that is from internal party can create a growth as much as 3,740,172 (that is from 2,343 becomes 3,737,829). This finding again explain the positive effect of a change in a company (Helmich, 1974; Davidson, Worrell & Dutia, 1993) because it is proved to be able to increase earnings growth and better company assets. This thing also indicates the achievement of company owner's expectation that the new CEO from external party can bring a substantial change through new strategic and wisdom to the company.

CONCLUSIONS

This research does not find a relationship between the change of company ownership and CEO turnover in Indonesia, in the period of year 1999-2009. This finding indicates that the majority owner did not have pretension to change the company CEO if the CEO had been considered to be able to lead the company to a better growth. This finding is supported by the statistic result that is significant in the relationship between CEO turnover with four accounting variable. From the statistic result in the first hypothesis test, it is concluded that the owner of the company will only do the CEO turnover if it is proved that the existing CEO can not show a good performance to the company. Conversely, if the existing CEO is considered to be able to provide the prosperity to the company owner, the CEO will remain the same in the company.

Next thing is, from the result of this research, it can be concluded also that the company that gives a poor performance for years before turnover tends to choose new CEO that comes from external party of the company, compared with the company that has a better financial performance. This thing is allegedly done because the owner expects that the substitute CEO that comes from external party can bring significant changes to the company by a new wisdom that is different from the previous CEO's wisdom. Besides, it is possible that if the substitute CEO comes from internal party, the strategy and wisdom applied will not be different with the those applied previously so that there will not be any significant change for the development of the company growth.

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The Ethical Compass of the Board and the Environmental Performance of the Firm

Keywords: Board structure, board-member character, environmental performance, environmental reporting quality

INTRODUCTION

In accordance with the value-enhancing motives, a large number of academic studies have investigated the relation between the firm's environmental and financial performance in terms of

profitability and firm value (e.g. Orlitzky et al., 2003). These studies differ in both results and methodologies and recent studies have highlighted potential endogeneity problems in this research, i.e. financially wealthy firms might spend more on Corporate Social Responsibility (CSR) simply because they can afford to (Hong, 2011). Also, based on results from previous studies, the relation between environmental and financial performance seems both complex and non-linear. Traditionally, research has not focused on why organizations choose, or do not choose, to act in an environmentally responsible manner (Campbell, 2007; Rowley & Berman, 2000; Ullman, 1985). Researchers have therefore recently argued that future studies should be governed by attempts to find a link between corporate social and financial performance to better understand why some companies perform better than others in terms of environmental and social objectives (Campbell, 2007; Margolis et al., 2007). Along this line, studies have investigated how firm-specific factors and country-specific institutional factors affect firms' social and environmental performances (see Artiach et al., 2009; Ioannou and Serafeim, 2010). Most relevant to our research is the work of Post et al. (2011) and Kruger (2011). Both studies address the question of how corporate governance, or, more specifically, board composition, affects the environmental performances of firms. They use traditional measures of board composition, such as the proportion of outside directors and women on the board, as proxies for board diversity. We extend this line of research by focusing on the personal character of board members and top executives. Board decisions are made, influenced, and monitored by individuals, and the quality of these decisions may vary not only with firm characteristics and the structure of governance mechanisms, but also with the personal characteristics of directors and senior executives. Prior research on environmental concerns shows that environmental values vary across demographic characteristics (Fransson and Gärling, 1999).

This paper shifts the focus to the individual level by investigating the importance of individual characteristics of board members and CEOs to the environmental performance and reporting quality of firms listed on the Swedish stock market. More specifically, we include how past unethical risk behaviour (PURB) is linked to the environmental performance and reporting quality of the firm. PURB is measured in terms of the prior criminal records, bankruptcy histories, and records of non-payment of the individuals serving as board members in listed Swedish companies. Unlike much previous research trying to measure personal traits of company officials based on interviews, surveys, or experiments, this paper uses data capturing actual behaviour. We use a composite measure based on the three factors as a proxy for measuring ethical and risk preferences of board members and executives. Ethics and risk are two important constructs that have been theoretically and empirically linked to environmental concerns both at the individual and firm level. We hypothesize that when the proportion of board members with past unethical records grows and/or when the company has a convicted CEO, the environmental performance and reporting quality of the firm will be lower due to that board becoming more short-term oriented, having more-limited risk awareness, having inadequate monitoring and control mechanisms, and, ultimately, having a lower strategic decision-making capability in general. A board with a higher proportion of unethical and risk-prone individuals is less likely to manage potential environmental risks nor able to reflect on positive cash-flow effects from exploiting environmental opportunities.

In addition to environmental performance, we also examine how environmental reporting quality is related to PURB. After controlling for environmental performance, we expect boards with a high proportion of unethical and risk-prone individuals to pay less attention to the firms' environmental reporting. A positive relation, on the other hand, would be consistent with window dressing as suggested by sociological disclosure theories (e.g. Patten, 2002). Furthermore, based on previous research on the importance of board composition to the firm's financial performance, we study how the individual ownership incentives of board members affect the environmental performance. Specifically, we examine whether boards whose members have invested a large part of their total personal wealth in their firms perform better in environmental terms. Unlike previous studies, we are able to measure equity incentives in relation to the total wealth of the firm's key players. By relating individual economic incentives to environmental and social performance, we gain further insights into whether board members see investments in environmental activities as costly or, alternatively, as potentially value increasing. Hence, in our setting, we can control for whether board members are

voting with their wallets. By studying how ownership incentives affect environmental performance, we provide additional insights into the continuing debate on whether the firm's environmental performance is perceived to create or destroy shareholder value. All these hypotheses rely on theoretical insights into how executives' choices and interpretations are influenced by their personal traits, experiences, incentives, and values, and, ultimately, how these personal characteristics affect various corporate decisions (e.g. Hambrick, 1984, 2007). In the next sections, the paper develops hypotheses for relationships and then describes the data and results before presenting the conclusions.

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CONCLUSIONS

In this paper, we investigate the role of the personal character of board members and board composition for the firm's environmental performance. We contribute to the literature by constructing an ethical compass of the board. This is done by investigating how board members' past unethical risk behaviour, measured in terms of prior convictions, records of non-payment, and bankruptcies, is linked to environmental performance and reporting. Our analysis consistently shows that as the proportion of board members with these traits increases, the scores for environmental performance and reporting quality provided by GES Investment Services decrease. In this respect, our results are consistent with previous studies showing that board composition is related to environmental performance in a systematic way (Kruger, 2010; Post et al., 2011). On a more general level, the paper demonstrates the importance of having a diversified group of board members, in terms of both gender and the personal character of the individuals.

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Entrepreneurial Orientation and Organizational Performance: The Role of Managerial Traits

Keywords: Entrepreneurship, entrepreneurial orientation, organization performance, managerial traits

INTRODUCTION

The concept of entrepreneurial orientation (EO), its determinants and consequences have been drawing research attention for over four decades now (e.g., Despande and Farley, 2004; Gonzalez-Benito et al., 2009; Han et al., 1998; Hurley and Hult, 1998; Morris and Paul, 1987; Murray, 1981; Peterson and Berger, 1972). The basis of this interest in EO is that EO not only has firm-level performance implications but is necessary for the growth of the economy (e.g. Birkinshaw, 1997; Burgelman, 1983; Collins et al., 2004; Lumpkin and Dess, 1996; Morris and Kuratko, 2002; Naman and Slevin, 1993). The common thread across various views of EO is it reflects innovative, proactive and risk-taking decisions and actions of firms (e.g., Lumpkin and Dess, 1996; Wiklund and Shepherd, 2003). Much contribution has been made regarding antecedents to EO (Collins et al., 2004). The categories of determinants advanced in the literature are environmental characteristics, industry attributes, organizational structural variables, leadership styles, organizational control systems, the entrepreneurial opportunity itself, and the motivation of the individuals involved (Baum et al., 2001; Stewart and Roth, 2001; Kaufmann and Dant, 1998; Venkataraman, 1997; Morris et al., 2007). Though managerial traits have been proposed to affect EO, among other factors, research on managerial traits—EO relationships is limited and piecemeal (Entrialgo et al., 2000; Collins et al.,

2004). Entrialgo et al. (2000) suggest “..be interesting to learn more on how the psychological traits influence the strategic process and performance..” (Entrialgo et al., 2000:201). At the same time research on managerial traits’ direct influence on organizational performance is inconclusive (Aldrich and Weidenmayer, 1993; Collins et al., 2004; McClelland, 1965). Johnson’s (1990) meta-analysis found managerial traits to explain a very little variance in firm performance. In consequence, subsequent research explored various mediators in the managerial traits—performance relationship including motivation (Baum and Locke, 2004), organizational strategy (Baum et al., 2001), and top management team dynamics (Peterson et al., 2003). This study combines the above noted research on entrepreneurial orientation and managerial traits into a process model of managerial traits—entrepreneurial orientation—firm performance in an attempt to reconcile the present mixed results.

Among different conceptualizations of EO, three dimensions of EO—innovativeness, risk-taking propensity and proactiveness, were adopted and extended by several other studies (e.g. Covin and Slevin, 1989; Lumpkin and Dess, 1996; Miller, 1983). Innovativeness reflects the tendency to engage in and support new idea generation, novelty, experimentation and creative processes (Lumpkin and Dess, 1996). Proactiveness refers to the propensity of a firm to take the initiative to compete aggressively with other firms (Covin and Slevin, 1989). With the forward-looking perspective, proactive firms anticipate the future wants and needs and participate in emerging markets (Lumpkin and Dess, 1996). Risk-taking is the propensity of a firm to commit large amount of resources to uncertain and novel business (Lumpkin and Dess, 1996; Miller, 1983).

Although literature has advanced a host of managerial traits in conjunction with their various correlates, three managerial traits have most commonly been associated with entrepreneurship literature (Carland et al., 1984; Collins et al., 2004; Entrialgo et al., 2000; Long, 1983) and they are: need for achievement, tolerance for ambiguity and locus of control. Locus of control describes whether or not individuals believe they have considerable influence over outcomes. The characteristics of locus of control overlap with the characteristics of conformity and independence (Borland, 1974; Dunkelberg and Cooper, 1982; Hornaday and Aboud, 1971; Sexton and Bowman, 1986; Timmons, 1978). Nevertheless, the latter two have broader implications than the former, because they may affect top management team processes. Introducing these two traits into our study will contribute to our understanding of the multiple mechanisms besides EO underlying the relationship between managerial traits and organizational performance. Therefore, four managerial traits—need for achievement, tolerance of ambiguity, conformity and individualism will be the focus of our study.

In sum, this study will address how EO mediates the relationship between four managerial traits—need for achievement, tolerance of ambiguity, conformity and individualism—and organizational performance. In the next section, we review extant research and propose hypotheses about the relationship among these four managerial traits, EO and organizational performance. In the following section, we describe the sample, measurement and analytic techniques to test all the hypotheses. We then detail and discuss the results of statistical analysis. Finally, we discuss the implications for scholars and practitioners.

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DISCUSSION

The results were generally consistent with our theoretical framework and support the notion that EO serves as a mediating factor. Organizational performance is more strongly and directly impacted by EO than managerial traits although both are predictors. Our main contribution shows that EO is a partial mediator of the managerial traits to performance relationship.

One of the findings contrary to our predictions revealed that need for achievement was negatively related to performance. We speculate that need for achievement may operate more similarly to individualism than tolerance for ambiguity and conformity because of the strong emphasis on self-fulfillment over group accomplishments. Future research should investigate whether this finding is unique to transitional economies. Transitional economies may indeed benefit from team goals and accomplishments rather than solely the top manager's need for achievement.

We provide several shortcomings of this study. First, our analyses were based on information obtained from the branch manager. We collected data from a second manager for validation purposes but to truly tap our EO construct it would have been better to collect data from all top managers. Since all top managers are generally involved in EO activities, future research should consider the entire team and not just two key informants. Second, the generalizability of the study is affected by the use of banks in Jordan, a transitional economy. Therefore, although the findings provide evidence of EO as a mediator, future research should investigate similar relationships in various countries, industries, and phases of economic development. Third, because our results support using EO as an uni-dimensional construct, we do not employ a multi-dimensional construct in our analysis consistent with recent research. There is still debate on whether the dimensions of EO vary. The fact that our usage of EO does not support a multi-dimensional approach may be due to our adoption of the three dimensions instead of the five-dimension representation. Future research should investigate the numerous dimensions and their mediator role.

CONCLUDING REMARKS

Research illuminating the beneficial effects of managerial traits on EO behavior has implications for the decision-making process. Institutions could identify managers with certain traits if they are in pursuit of EO activity. Indeed EO activity has been a highly sought after phenomenon in marketing. Also, this is especially important when considering previous research on how EO relates positive to performance when moderated by managerial diversity and the environment (Lumpkin and Dess, 1996; Richard et. al., 2004; Wilkund and Shepherd, 2005). Now managers can consider not only the context in which EO improves performance but also the important antecedents that contribute to EO behavior. It is when we consider the big picture in relations to EO behavior when we truly understand how organizational performance can be significantly and consistently improved.

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The Relationship of Intellectual Capital, Innovation and Organizational Performance: A Preliminary Study in Malaysian SMEs

Keywords: Intellectual capital, innovation, organizational performance, SMEs

INTRODUCTION

The small and medium sector in Malaysia has long been hailed as a key driver of the national economy; it contributes 32% to the national Gross Domestic Product (GDP) (Low, 2007). Ninety-nine out of 100 Malaysian businesses are Small and Medium Enterprises (SMEs) and almost 5.6 million

The Relationship of Intellectual Capital, Innovation and Organizational Performance: A Preliminary Study in Malaysian SMEs

Malaysians work in the SMEs sector (Low, 2007). In the highlights of globalization, SMEs in Malaysia are no longer “protected” through tariff and non-tariff measures that enable them to garner significant market share in the country (UNDP, 2006). SMEs have to seek opportunities in the global marketplace (UNDP, 2006). As the economy is moving towards knowledge-based economy, the rich information is flowing from many sources and channels without any limitation. Capability of an organization to manage knowledge effectively becomes a prerequisite for success and innovativeness (Widen-Wulff & Suomi, 2007). In 2007, Malaysian Government had proposed to implement a total of 190 programmes, involving a financial commitment of RM3.7 billion to help SMEs building its competitiveness and capabilities (Low, 2007). These programmes are under key areas namely; physical infrastructure, information management infrastructure and regulatory infrastructure.

Hashim (2007) points out the business characteristics of successful SMEs in Malaysia are depending on sufficient capital, economies of scale, flexibility in costing, pricing latitude, ability to meet typical operating profit margin of the industry, costs variability at various production levels, ability to achieve greater efficiency, use of marketing in generating additional sales and ability to be innovative. Malaysian government strives to provide a business friendly environment with a supportive regulatory and institutional framework in which entrepreneurial activity is able to be thrive (SME Annual Report 2006). According to Man et al (2002) the success of SMEs is influenced by the key players and knowledge, experience and skills of the owners and workers is key factor for success. Basically, entrepreneurs have the ability to recognize a business opportunity which is the fundamental to the entrepreneurial process as well as growing a business (Hisrich et al, 2008). Entrepreneurs that able to act on business opportunities would be in a strategic position to develop innovation; new products/services. Key factors influencing the competitiveness of SMEs are internal factors, external environment and the influence of the entrepreneurs (Man et al, 2002). The strength of SMEs lies in motivation, good network, tacit knowledge in unique skills, shorter informal communication, less bureaucracy, greater proximity to market and internally which is important to be innovative (Nootboom, 1993). This gives SMEs flexibility in innovation especially of its close proximity to market information and customer information. The great variety of SME generates a variety of innovative ventures (Nootboom, 1993). Most of literature review highlights SMEs lacking of tangible resources, physical and financial capital, but the challenges for these SMEs is to be able to demonstrate the intangible resources embedded in the organization, entrepreneurial capital which is the extension of human capital (Erikson, 2002). While most of the intellectual capital studies are focusing on a larger organization, this study is focusing on intellectual capital or internal resources in SMEs. Intellectual capital is also known as an organizational knowledge which needs to be regulated in order to make sure that the knowledge is valuable. Globalization has encouraged innovation to be a prerequisite for SMEs to operate in more competitive global markets (Gunasekaran et al., 1996).

Although there are a number of studies on continuous improvement in SMEs (Gunasekaran et al., 1996) there is a relative paucity of in-depth of innovation implementation in SMEs (McAdam, 2001). Intellectual capital that provides structure, system, strategy and culture (Afuah, 2003) is antecedent of innovation. There are very few study of intellectual capital in SMEs (Cohen & Kaimenakis, 2006) and most of study of intellectual capital study done is Malaysia are based on accounting perspectives and in quantitative. This study is integrating intellectual capital and innovation for better SMEs’ performance. It is focusing on the inner resources of SMEs which should be regarded as their advantages. By doing this, SMEs are capable in emerging as a key player in the industry rather than thinking about their incapability especially in physical and financial capital (Man, Lau et al. 2002).

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FINDINGS/DISCUSSION

Human capital

The findings showed that human capital is important element of intellectual capital in SMEs as found by Cohen & Kaimnenakis(2007). Surviving on a small scale, SME tend to be creative, aggressive in exploiting the opportunity and produce more products compared to their competitors. Its size give SME an advantage to create friendly atmosphere, be creativity and have a close network to nurture cooperation of the employees plus. This also gives its employees equal opportunity to be creative. Not only that, as found by Desouza and Awazu (2006), employees of SME tend to be loyal and satisfied with their current job which is contrast to most studies that turnover in SME is high.

Structural capital

Even though, SME is said poor at storing knowledge (Kuan & Aspinwall, 2003; Levy, 2003), this preliminary study found that SME do keep their records of good practices in handling issues in future. In line with literature review, the culture of SME is not only creates mutual supports among its employees but also provides support and encourage creativity in the organization. Technology is important in SME as it helps SME to set a product quality level and produce new products and services.

Relational Capital

It is found that customer orientation is very important in SMEs. Limited in financial and expertise, SME are very focusing in their target market. Compared to large organizations, SME is closer to its customers therefore they are able to capture information on customers and market as their source of expertise and know-how. Therefore SME are most customer-focus and aware of their competitors' actions. Government support is important to SME. As SME is lacking of expertise, innovation supports by government, R&D centre and universities are crucial to SMEs. Again, subsidies and financial supports are very important in assisting SME to be competitive. The government training programs also help SME to be creative and innovative.

Innovation

Most of entrepreneurs interviewed agreed that they produced unique and innovative features to their customers. But their innovation is is not totally new or radical. However, as they are having close relationship to their customers, their products are fulfilling their customers' needs. Government supports help SME to produce high quality and technology superior products. There are mixed response in producing new products and new services. However, SMEs are not innovative in their operation processes and refining their existing products. Overall, SMEs' innovations are not risky. As mentioned by Lin & Chen (2007) found that 53.5% SMEs of manufacturing and services industries in Taiwan engaged in a combination of incremental and radical innovation.

The study also found that entrepreneurial orientation positively affects innovation thus lead to higher SMEs' performance (Alvonitis and Salavou 2007) which in line with other researchers. Davenport and Binny (1999, in Humphreys et al (2005) stated that SMEs increasingly need to develop their innovation capabilities beyond that of technical innovation. Furthermore, with the support of government; SMEs can embark on incremental innovation which eventually leads them to radical innovation whenever they are ready. SMEs managers need to focus not only on products, technology and processes but also on culture, norms, values and beliefs which is important for SMEs which have close-knit circle (Gunasekaran et al 1996 in Humphreys et al, 2005). Studies have shown that SMEs contributed to the main innovation of the twentieth century (Oakey, et al 1988; Rothwell and Zegveld, 1982; Rothwell, 1994 in Scozzi and Garavelli, 2005). More than that, innovation in SMEs can be more efficient and effective (Vossen, 1998 in Scozzi and Garavelli, 2005). Although many SMEs in incremental innovation (Lin & Chen 2007), many small companies also succeeded in introducing more radical innovations because of their genetic makeup (Stringer, 2000). Government plays a very important role in assisting SMEs to be competitive, either in terms of financial or advice (Humphreys et al, 2005). Even though SMEs are known lacking of financial capabilities, financial supports and marketing/management advice are not considered crucial for SMEs. Instead, government assistance

such as trainings, seminars, R&D supports and technical assistance are very important to SMEs. Human capital contributes more to innovation and organizational performance compared to structural and relational capital.

CONCLUSIONS

This preliminary study gives brief insights of SME in defining their understandings of intellectual capital and innovation. By refining their objectives in operating their business, SMEs must understand their own capabilities especially their internal strengths. Their people, their practices and their external supports are important in assisting SMEs to be innovative in order for them to be competitive. Innovation is happening in SME and most of innovation is related to products and service. Incremental innovation is more prevalent. As reported by United Nations Development Programme (UNDP) Malaysia (2007), SMEs in Malaysia used to concentrate domestically but with the elimination of trade sanctions, SMEs in are affected by globalization. Therefore, SMEs should find a way to be competitive globally. No more labor capital but knowledge capital. Innovation is still at infancy in Malaysia. However, the government is taking a big role in helping SMEs to be innovative by providing trainings, mentoring, subsidies and financial supports. Therefore, this study is looking into SMEs' intellectual capital and innovation that influencing organizational performance. This framework can be applied into SMEs scenario for their long-term competitive advantages. This framework too can assist SMEs in finding their ways in improving their internal resources, capitalizing their strengths and capturing opportunities with the support of authority.

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A Study on Ideal Knowledge Management System at Academia for Achievement of Academic Values

Key Words: Knowledge, Knowledge Management, Research, Knowledge Management System

INTRODUCTION

Information Technology has developed a significant impact in the last decade with regard to operational and knowledgeable approach. The contribution of IT in terms of accessibility of information has been revealed through rapid increase of computer competence in the sagacity of memory and promptness in processing data. The paradigm shift from information phase to knowledge phase gained momentum and terminologies such as knowledge, knowledge technology (KT) and knowledge management (KM) have become more popular in the recent years. Amidst the initiation of new technologies, such as data mining, video conferencing and agent technology, many technology vendors are offering solutions to business challenges concentrating on knowledge phase. However, few knowledge experts and scholastic intellectual have, observed that there is no direct association between IT investments and knowledge management system.

The new worlds of knowledge-based industries are renowned by its prominence on pre-recognition and adaptation. To the contrary traditional IT practices in terms of knowledge management emphasis on optimization based on prediction. This new business environment is characterized by fundamental,

irregular change and demands anticipatory responses from organization members who need to carry out the mandate of a faster cycle of knowledge creation and action based on (Malhotra Yogesh,1998) new aspects over knowledge management.

For instance, Bina Nusantara University as a leading IT school in Indonesia has used knowledge management, since last three years for efficient and effective communication within organization and improving its business process. This article will help to initiate our experience in escalating and implementing knowledge management in the university as a preparation for facing advancements with globalization.

KNOWLEDGE MANAGEMENT PERSPECTIVE

Knowledge Management could be acknowledged and often referred to as a systematic learning process, which provides a platform to increase the flexibility by focusing on an organization's need for knowledge. In the current context, KM is more associated with developing, implementing and maintaining suitable technological and managerial infrastructures, which facilitate enterprise's knowledge sharing and selection of specific contributing technologies over vendors to influence knowledge across the conglomerate. This is totally based on key aspects of flexibility, amalgamation, and adaptability and also on three primary areas of Knowledge Management like acquirement, representation and reprocess. Moreover it exhibits a strong correlation between Knowledge Management (KM) and Knowledge Engineering (KE). Knowledge Management defines the strategic objectives and long-term direction for knowledge integration. Furthermore, it encompasses investigation and modeling of an enterprise and its prospective development based on its organizational or corporate strategic objectives. Thus, knowledge engineering (KE) effectively propose the implementation framework and technologies to meet enterprise's knowledge management needs and supports integration of models of expertise from different core groups within an organizational framework in the form of logical corporate expertise model.

The legacy in new technology is yet an important and indispensable factor to improve competitive advantage, in today's technological environment where, movement of technological changes in economies occurs continually over shorter periods of time. In many cases, the university may be forced to minimize the response time to fully adopt new and emerging technology. KM practices needs to be understood as a long-term corporate business strategy by which the university need to find effective and prospective ways to maintain flexible underlying systems architecture that enable the creation of new knowledge through research. The KM approach assists to focus on development of entire university system architecture on acquiring, storing, distributing and make use of this knowledge in the form of data for dealing with regular activities like problem solving, re-use, strategic planning and decision making.

Overview of Knowledge Fabrication at Universities

The development and transmission of knowledge has traditionally been viewed as a central governance and responsibility of universities. It is to believed, that freedom to pursue and access knowledge is the fundamental principle of democracy that defines the existence of universities. The call for higher education has its relevance in terms of practical learning, which, arise out of various drivers and trends, associated in the transition towards a knowledge-based economy.

The evolution from the mature type of industrial society and its customary authority of manufacturing work with established industrial classes of information and knowledge-based society has provided the base for emergence of knowledge as a prime factor of production. Also it emphasized the prominent growth of knowledge management in accordance with time building relationships to other factors.

Gibbons et al. (1994) have suggested that the trend of knowledge being produced in multiple sites has seen diversification of knowledge production where knowledge is no longer produced solely in the university setting but is produced increasingly in many other institutions such as government

laboratories, industries and think tanks (Benjamin Loh, et al. 2003). In a study conducted by (Godin and Gingras 1999) on the growth of non-university research in Canada, the authors have found a visible trend in the diversification of the locus of science knowledge production between the years 1980 to 1995. While the rate of knowledge production of university research in the form of journal publications in those years has been stable, their study found a 68% growth of non-university contributions in relation to the total number of papers (Benjamin Loh, et al. 2003).

Knowledge has been acknowledged as one of the most crucial resources of the 21st century and has received substantial attention in the organization script (McFadyeb and Cannella 2004). (Szulanski 2003) that challenges the rise of the knowledge economy which has helped organizations to recognize that knowledge assets are rapidly becoming their most precious competitive advantage and that learning to manage those assets better has become a competitive needs. According to (Wiig 1994), the central premise behind organizational knowledge management is that all the factors that lead to superior performance. Organizational creativity, operational effectiveness, quality of products and services are improved when better knowledge is made available and used proficiently. Accordingly, the focus of Knowledge Management is to influence and reclaim knowledge possessions that previously manage to survive in the organization so that people will seek out best practices (Aroop .M & R. Ganesan , 2010).

Many researchers view that a vast amount of knowledge and technology generated by a wide range of academicians and support staff serving at different geographic locations. It is quite evident from the literature that these knowledge and technology are often detached from other practitioners. In other words, it is not configured and congregated properly to gain access by other fellow academicians and users across the world. Hence, there is a sheer necessity to facilitate this aspect effectively. The facilitative mechanism in a way will foster collaborative working helps and engage additional users to develop an integrated virtual support structure, which would enable university members to share pertinent and reliable information. This includes a comprehensive documentation, which could plausibly share reference materials, research reports, membership protocol and contact information available within the university. It is possible through an external data / Meta data search tools to facilitate distribution, exchange and use of materials, which requires a digital Knowledge Management infrastructure. The KM is therefore an explicit activity and systematic management of vital knowledge and requires a management system, which streamlines and involves creation, organization, dissemination, utilization and exploitation of resources for development. Thus, Knowledge Management System (KMS) could be defined as a prospective IT solution for managing knowledge in university by supporting such creation by capturing, storage and sharing of expertise and knowledge at large in an IT oriented pluralistic progressive society.

Knowledge Management Utility

Knowledge management is not just about technology, but technology can be used to enable knowledge management processes and practices. A Knowledge Management System (KMS) is an example of using technology to assist organizations to be more efficient and successful in their knowledge management efforts. The information technology system (ITS) helpdesk is an appropriate example of a Knowledge Management System, which acts like an information center, which interacts with the university community by telephone, e-mail about concerning problems or queries with technology on campus. Using a Knowledge Management System becomes more effective when faculty member and / or staff calls or send e-mails to the Help Desk stating about a particular problem or a question. In such cases, the Help Desk agent searches for the required information pertaining to the query in the knowledge base of previous occurrences of the same problem or question, resulting in either one of the states of affairs are possible:

1. If the problem has arisen in the past and was acknowledged in the knowledge base, the Help Desk agent can re-process the knowledge and efficiently answers the queries and resolve the client's problem.

2. If the problem is new or not occurred then the knowledge base agent can try to look for a possible solution to the problem until the client is contented with the total process and also acknowledges the same into the knowledge base for anticipating similar queries in future.

Knowledge Management at University Research Center (URC)

The emergence of new knowledge creation in the education sector has boomed up more and more universities to look into the opportunity of applying for research knowledge management systems. Knowledge management in these cases could be defined as the task of developing and exploiting university through substantial and vague knowledge resources. The substantial resources include the outputs of R&D teams, tactical information about faculty member, students, staff, suppliers etc. and vague resources include the competencies and knowledge resources of human capital within the university. KM here refers to the whole of university strategies that are intended to create an intelligent or learning university, which will be able to influence upon its substantial and vague resource and to learn from the instance. However, there are different levels of implication with respect to knowledge management services, at the employee level; it focuses on the prominence of competencies and learning abilities of individual level and at the university level, KM gains prominence on creation, utilization and development of university's group intelligence. In terms of technology, effective knowledge management requires a professionally controlled information infrastructure for appropriate communication.

University's improvement through university research centers varies from simple knowledge management activities resembling as capturing existing knowledge to more complicated and composite ones like the continuous creation and / or innovation of new knowledge. The core business of university is well determined through adapting itself to knowledge processes using knowledge management event chain which includes: (i) creating new-knowledge (ii) locating and capture knowledge (iii) sharing knowledge.

Universities are major players in the knowledge business (Goddard 1998) and stand to benefit from knowledge management practices and solutions (Benjamin Loh, et al. 2003) . The analysis of university mission statements shows that related aims and objectives are reliable with knowledge management principles: the detection, acquisition or creation of knowledge with research, the transmission or distribution of knowledge with teaching, the application of knowledge to human problems in the interests of public service; and the preservation of knowledge in libraries, museums and archives (Allen 1988, Benjamin Loh, et al. 2003).

A university seems to be well suited to the adoption of knowledge management /organizational learning practices as its environment that puts lot of importance on the exchange of ideas and knowledge sharing. The implementation of the scientific method of enquiry requires individuals within subject disciplines to be unconvinced about one another's approaches and findings. With the common adoption of fabrication as the leading methodology both in the sciences and in social sciences, we see a stable pursuit for new discoveries and advancement of knowledge (Franklin et. al. 1998). The sharing of this comprehension in conferences and academic journals is part of the knowledge culture of universities. The division of university research into disciplines creates, boundaries that are difficult to exceed. Though it is well known that new scientific discoveries are often made in areas between disciplines, interdisciplinary research is still difficult to institutionalize (Benjamin Loh, et al. 2003). University today prosper to stay relevant in a knowledge society distinguish by the emergence of new knowledge markets and the entrance of new market players, knowledge management in higher education is becoming a vital competitive weapon. Besides the application of knowledge management to intra-organizational processes and strategy (Pomchulee 2001, Benjamin Loh, et al. 2003), the university's research process represents a key area that can be enhanced through the application of knowledge management (Kidwell, Linde & Johnson 2000, Benjamin Loh, et al. 2003).

University knowledge

The university knowledge could be explained through discussing about its core strategies, wherein, one can instantaneously gauge the knowledge that the university possess and / or are capable of having it for wider applicability. (Patriotta 2003) emphasize that knowledge is located in plans and cognitive maps, resources and competencies, routines and procedures, practices and narratives, and organizational artifacts and technological implements. (Patriotta 2003) says that an organization is an appearance of a particular way of seeing the world, an inscription of human knowledge and agency, an assemblage of heterogeneous materials. Nonaka(1994) argues that a university cannot create knowledge independent of individuals. The university requires supports to create individuals or provides a context for such individuals to create knowledge base for its effectiveness in knowledge sharing. In addition to that, it also retrospect the past vision of data on teaching, research, and service activities and provides updated information according to faculty requirement. In doing so, the university systems also makes enormous attempt to aggregate and align meaningful data sets around core processes using enterprise resource planning (ERP). It has been found there is a lack of robust ERP, which is acting as the root for knowledge management system solutions, which are available to support workflow and data management of faculty activities. Thus, when faculty data are recorded in ERP, generating contextualized views to meet a host of institutional needs and outputs is often demanding.

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CONCLUSIONS

The paper emphasizes on many aspects out of which it signifies more on the process of knowledge workers in terms of communication and operation through the social processes of collaborating, sharing knowledge, and building on each other's ideas. This reveals that the information can be shared and accessed freely from any location. Thus, knowledge may be manufactured and reproduced everywhere also transported from anywhere cost-effectively. This research throws new vistas on knowledge management and likely to bear significant impacts on business, on the economic environment, as well as on social and cultural institutions. The knowledge-based organizations like universities will be able to source information globally, where the knowledge products should reach to the end user all over the world without truncation of plausible information. The extent to which companies respond to technological changes and use technology effectively thereby creating and reprocessing knowledge gives them a competitive advantage. Moreover, universities are looking for a flexible approach to develop and maintain a systematic knowledge management strategy to integrate all the research needs and IT into a conceptual enterprise architecture model. Knowledge management and knowledge processing will play a pivotal role in the global reengineering process for higher productivity, competitive performance, and quality service to attain end user satisfaction.

Universities are the part and platform of thriving knowledge business, which are the core activities of its business and are associated with knowledge creation, dissemination and learning. This is totally based on the differences that knowledge management concepts and tools can create within the knowledge technology indeed benefit and calibrate the potential to advance the cause of research within the university framework. The reason being, knowledge is rapidly increasing, the knowledge about what we do not know is increasing at an even faster pace. The social ability to co-operate and communicate with different kinds of people and experts is through sharing and creating knowledge through an informal learning process on mutual engagement. Thus, it becomes the base for emancipating knowledge-sharing culture in universities and organizations.

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The Euro Crisis is a Real Threat Not Only to the Regional Business in the EU but Also to the Global Businesses

Keywords: Euro, EMU, ECB, Maastricht Treaty, PIIGS, Eurozone

SOME KEY BACKGROUND INFORMATION ON THE REASONS WHY EURO HAS BEEN SO NEGATIVELY EFFECTED BY THE CURRENT GLOBAL CRISIS

In this respect it is important to realize that the entire process of preparation and implementation of Euro has been a long term process that has originally started as an integral part of the process of the development of the European Economic and Monetary Union (EMU). In view of this relatively complicated inception of Euro as a common EU currency it is important to take into account that the first initial steps towards future common currency have been laid down by the so-called Werner Plan yet in 1971 in order to overcome at that time threatening currency crisis that led to abolition of until that time existing a system of stable exchange rates among major world currencies. As a result, finally a ECU – European Currency Unit was introduced as a special currency unit that was not existing as a real currency but was serving as a kind of some financial and accounting and non-cash unit. However, only after 17 years in 1988 the European Council has adopted a strategy of gradual introduction of a true and real common European currency within the framework of the Economic and Monetary Union and on the basis of the Delors' Report in three relatively independent stages:

- 1) This first stage of 1 July 1990 – 31 December 1993 was marked by an abolition of any limitations on the free movement of capital within the EU. During this period on 7 February 1992 also the so-called Maastricht Treaty on the European Union has been signed that among others adopted also the famous Maastricht convergence criteria that are serving as the basic criteria for EU member states to become eligible for entering into the European common currency that at that time had not yet had its official name.
- 2) Again with some delay the second stage 1 January 1994 - 31 December 1998 has introduced some institutional provision for the future common currency viz. the EMI - European Monetary Institute. During this stage also the name of the future common currency i.e. Euro has been approved in December 1995. However, the most important outcome of this stage has been the decision made by the Council of the EU that on the 2nd May 1998 has - although unanimously - adopted for the fate of the future Euro a rather controversial decision that altogether 11 EU member states are “meeting” the Maastricht convergence criteria and thus they are eligible for adoption of Euro since 1 January 1999. With the effect of 1 June 1998 the EMI has been replaced by the ECB – European Central Bank as the central institution being responsible for Euro as the new EU common currency.
- 3) The third, last and the most important stage in Euro preparations and implementation started on 1 January 1999. Since that date, also the Euro has become the official “common” currency of the EU for 12 EU member states that adopted the new common currency Euro on 1 January 2002. On that date also again by a certain paradox - with the three years delay after the date when the Euro has become the official currency of the EU - also the new Euro banknotes and coins have been put into real circulation and practical utilization.

SUMMARY OF THE MAIN PROBLEMS AND WEAKNESSES OF THE EURO PREPARATION AND IMPLEMENTATION

In a brief summary, the main problems and weaknesses of Euro due to its complex and long

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preparation and many surrounding controversies have been as follows.

The entire process of preparation and implementation of Euro as a common currency has been too long lasting for more than 30 years since inception of the Werner Plan so the momentum of the new currency has been during those years to some extent lost especially as far as the citizens of the EU are concerned with a quite natural question – if it is so complex and complicated and with so many compromises what is it all good for?

In spite of such a long preparation, one of the biggest systems shortcomings of the new common currency has been the fact that due to above longevity and complexity of its inception, it has been prepared only as a special currency in the form of common banknotes and semi-common coins but without any harmonization in the fiscal and other related policies. So from the very beginning it was only a common currency in circulation but not in any of at least elementary fiscal especially taxation common policy.

Another important negative aspect of the new currency has been an unclear and confusing institutional provision and responsibility for the new currency. In addition to the ECB – European Central Bank as the main regulating and control authority for Euro it is also the shared responsibility of all central banks in all Euro-zone member states what in practice means that there is a natural space for a kind of irresponsibility in taking a due care for their common currency. This inconsistency has come up and been manifested in full only since the beginning of this crisis when all countries instead of their common approach to protect Euro started mainly to protect their own national interests through various national “initiatives” like e.g. a “scraping car bonus”, etc. And it has been so since the very beginning of Euro although not so much demonstrated as after the outbreak of the crisis. Otherwise it could not happen that the catastrophic situation with public finances in Greece has been “discovered” only after more than 10 years since introduction of the Euro as a common currency and after “permanent and systematic” monitoring of the Maastricht criteria strict observance. And this is not only the grave mistake and irresponsibility of the ECB but also all other institutions that are responsible and/or co-responsible for controlling macroeconomic performance and in particular Maastricht criteria like it is in case of the European Commission but also the Eurostat and to some extent also the European Parliament.

The Maastricht Treaty has had at least on “paper” very demanding, strict and obligatory so-called Treaty obligations i.e. criteria to be met not only by applicant countries in order they could become eligible for becoming the Euro club and/or the Euro Zone members but also by permanently by all Euro zone members. In failing to do so it has been possible to punish the particular country by adequate fines as applied towards violators of any part of the treaty or any other part of the EU legislation. But unfortunately from the very beginning the interpretation of the Maastricht criteria in practice and requirements for their permanent observation has been very controversial, full of double standards etc. What finally led to the current deep crisis of Euro not because the global crisis but mainly due its internal controversies we have just presented.

WHERE WAS THE EUROPEAN COMMISSION FOR A DECADE OF THE TOTAL DISRESPECT TO MAASTRICHT EURO CRITERIA

As mentioned in the end of the previous part, one of the main deficiencies of Euro as a new common currency of the EU has - in addition to some others as described above - been not a very systematic handling and application of the so-called Maastricht convergence criteria. As the key selection criteria on eligibility or non-eligibility of the applicant country for joining the Euro Zone they were supposed to play the key role in selecting future Euro Zone countries and also in achieving a permanent stability and strength of Euro. Basically, those criteria as the Treaty duties and obligations should not allow any different interpretation and/or derogations in case of the Euro zone applicant countries.

The following specific convergence criteria (in addition to some more general criteria on macroeconomic stability, etc.) have been adopted and have become a part of the Maastricht Treaty:

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- the price stability and/or inflation – not more than 1.5% above the level of three best performing EU member states
- the state budget and/or government deficit – not exceeding 3% of the GDP
- the ratio of total government debt to the GDP shall not exceed 60%
- the interest rate should not exceed by more than 2% those of three best performing countries in the above inflation for at least one year before the examination
- participation in the exchange-rate mechanism of the EMS for at least two years without any fluctuation above or below that mechanism.

As usual in the EU by a certain unwanted paradox, the biggest problems to meet these criteria had had those countries like Germany or France that were most demanding in their most tough and demanding formulation. In order to meet them, finally they had to resort to various (temporary) not-so-clear measures in order to pass through them and qualify themselves for becoming future Euro Zone members. Although it had to be clear for them that such their “successful finish” could not on a long term basis secure their non-problem participation in the Euro Zone as according to the Treaty terms all these criteria must be met on a permanent basis otherwise, the violating country will be severally punished by a high financial penalty to be paid for the entire period of non compliance.

Finally, in spite of all various measures often being on the threshold of unfairness, eleven EU member states “met” these criteria but the detailed analysis of their performance in the decisive period before the adoption of Euro shows that in full these criteria were met only by 3 (three!?) out of the “eligible” 11 EU member states and later on also Greece that also at that time has had enormous problems in meeting the Maastricht criteria. Those three were

- France (but it had also some big problems and needed some “innovative” solutions in re-valuation of their gold reserves in order to meet the criterion on the budget deficit but finally has not succeeded in their sustainability),
- Finland, and
- Luxemburg.

Again by a certain paradox we may see that among those three countries meeting the Maastricht criteria in full was missing also the country considered to be a main economic engine of the EU and the proponent of the most tough formulation of these criteria!

It is evident that such a composition of three only member states – moreover two of them too small for being considered even as a representative sample or prototype of any future common currency - could not represent the first group of the users of the future EU “common” currency. Hence, in interpretation of individual criteria were finally and again as usual in the EU adopted such various supporting clauses existing in the Treaty as the last resort that made them eligible in even cases that their total debt (on these criterion otherwise failed altogether 7 out of 12 “eligible” countries) exceeded the limit of 60% of the GDP by almost 100% and was hovering on the levels of 113-116 % like in case of Italy and Belgium! But could one imagine that the top representatives and thousands of well paid employees of the most important EU institutions stationed in Brussels would be paid in Belgian Franks instead in their “own” new common currency – Euro?! Hence, finally the selection of eligible countries was a process of various mostly politically and otherwise motivated compromises that enabled to choose those 12 “eligible” countries that “met” Maastricht criteria or as one of “saving” clauses stated “demonstrated that any exceeding above the reference level was only exceptional and temporary and the ratio remains close to the reference value...”.

With the difference of more than ten years since those “temporary... exceptional...close to be...” exceptions were used, we could state that most of them remain until now almost on the same high levels as when they were approved. What has changed it was the fact that some additional problems with other criteria have just appeared. Hence for some time there was the strong general tendency to soften some criteria within the Maastricht treaty but also the original Stability Pact as they are too tough, rigid and as such “breaking” any sustainable economic development in the Euro Zone member states. These tendencies have intensified especially when also France and Germany started to have

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serious problems with keeping their budget deficits within the required limit of 3% of the GDP. As it was already problem of two main engines of the EU it is not surprising that finally not those two “EU engines” were punished by the severe financial penalties but... the particular criterion was... somehow softened exceptionally for them but not e.g. for new applicants for Euro from the NMS – New member states?! They have to meet original Maastricht criteria in full and on permanent basis.

In order to finish this part on some different application of the Maastricht criteria – otherwise typical approach in the EU - we dare to add only that: only Greece originally was used as an example that the EU authorities concerned were very consequent in demanding the meeting of the Maastricht criteria. Thus in this only case, they clearly demonstrated that Maastricht criteria are not a rubber ones that could be somehow adjusted to any not properly performing countries.. Therefore, later on, Greece had to meet all criteria in full in order to become the 12th member of the first Euro group of states that introduced the “real” Euro on 1 January 2002, This Greece case is a difference to some other much bigger states that even until now have not managed to reduce their enormous exceeding of their total debts as it is in the case of Italy or Belgium, but...Also now during the critical situation with Euro mostly only Greece is singled out as an example of a country that has not been respecting its obligations towards Euro. As the only country that has been carelessly manipulating with the indicators on the Maastricht criteria and with other important macroeconomic indicators while some other countries not being much better than Greece like e.g. Italy, Spain, Portugal, but also Ireland are mostly mentioned only very marginally. Although for example according to the latest available statistics Italy has still and permanently almost double of its total debt than is the Maastricht limit as it stands at 115.8% of the GDP. It means that in ten years Italy has practically not managed to reduce its total debt at all. Although it has been accepted to the Euro zone on the basis that it has been showing a positive development in this respect?! But where has been that positive development is not clear even until now!

Hence there is an immediate question where have been all those already mentioned regulatory and control institutions of the EU like the ECB, EC, EURSTAT, EP that they in 10 years have been unable to discover violators of Maastricht criteria not only in case of Greece but also all other?! But unfortunately also in the EU it is true that we all are equal but some are just more equal especially if you are big and strong enough country.

These and various other criteria and “criteria” for Euro are on the other hand in some sharp contrast with the real situation in using Euro, that in addition to the EU member states has already been used instead of national currency in numerous states that are not EU members and have not met any Maastricht or other criteria as e.g. it is in case of Monaco, Andorra, San Marino, Vatican (even with a special privilege to mint its own coins?!) and also some other countries that are even not EU neighbours like Montenegro or Kosovo in order to mention just Euro “users” in Europe. All these and some other cases have of course nothing to do with any monetary or other common policy of the EU, it is just a political arrangement. If we realise that the set of Vatican coins with the face value of 3.88 Euro is possible to buy in the souvenir shop for only not less than 400-500 Euro (!) it seems quite a good business, isn't it? However, it is definitely unfair and discriminatory towards the EU's own especially new small members that have to meet, without any derogations, all Maastricht criteria and prove also their sustainability. This while some of the EU's larger member-states did not heed treaty criteria as also those external states-users of Euro like e.g. Kosovo or Montenegro. Although in some respects they are bigger than some of the smallest Euro zone member states like Malta, Cyprus but also Slovenia.

CURRENT SITUATION OF THE EURO CRISIS THAT COULD FINALLY LEAD TO THE DEMISE OF THE EU COMMON CURRENCY

After such a complicated and often controversial development, a careless regulatory and control mechanism from the side of the particular EU institutions led by the ECB and EC it is no surprise that the Euro has been so negatively effected by the ongoing global economic and financial crisis.

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At the outset of the crisis there was existing quite an indifferent and critical only approach towards the Euro crisis that has been most dangerously presented in Greece. On one side especially from the side of Germany there was originally no intention to help Greece to get out from the crisis under the slogan that German workers would be not working till the age of 65 in order the Greeks could retire as before at the age of 55 with many extra benefits, perks, etc. There was forced an opinion that the EU is a market economy with the rules also for bankruptcy that should be applied not only in the case of unsuccessful companies but also of states. But soon after when it has been finally discovered or at least publically admitted that Greece is not the only member state of the Euro zone on the verge of bankruptcy and that most of so-called “toxic” loans to Greece were quite logically from big German and French banks also the general strategy of the EU towards Greece has completely changed. The saving Greece and thus also Euro and Euro zone has become a case of the EU solidarity and mutual help as it has been enshrined in the basic Treaties. It is pity that it is applied only mostly in case when big members feel to be threatened and not also towards small new member states regarding e.g. a free movement of their citizens, CAP – Common Agricultural Policy subsidies, etc. And so forth.

Finally after many heated debates EU leaders have come with a plan to save and help to Greece and to prevent anything similar in the future by adopting to main instruments in this respect i.e.:

- A massive loans to Greece
- A so-called “Euro-wall 1” and also “Euro-Wall 2” - a large pool of funds that in the future could be used immediately in similar cases to help to any Euro member states in case of similar crisis. But it is clear they will never be sufficient for saving such countries like Italy or Spain, etc.

But again it would not be the EU if again also this plan would not be creating some controversies. The first is that the sources for both of them were sought not where the problems were made but under the false and often otherwise overlooked principle of “solidarity” it was sought within all members of the Euro zone and of course without any kind of direct accountability for this disastrous situation of Euro. Only in such a way could happen that e.g. for particular “Euro wall” the countries have to contribute by the following per cents of their GDP:

Slovakia 6.50%	Greece 5.16%	Belgium 4.44%
Italy 5.02%	Germany 4.78%	Luxemburg 2.80%
Spain 4.81%	France 4.60%	

What is on these figures interesting it is several facts. First, that Slovakia is by far the poorest country in the Euro zone with only the GDP per capita 21,245 USD, but has to contribute the highest percentage of the GDP and although it has been in the Euro zone only a little longer than three (!) years (and it is clear the country could not cause any damage in this respect).

By contrast, Luxemburg as the richest member with the GDP per capita 78,395 USD has allocation only 2.80% although it has been a founding member of the Euro zone and thus also directly co-responsible for the ignorance of the Maastricht criteria from the very start. Although it is also true that it is only one of 2-3 countries that really and fully met the Maastricht criteria from scratch.

Even more interesting are the cases of those who on the long-term basis and from screech have been and still violating the Maastricht criteria without any punishment so one would be expecting that at least in this case they would be allocated by a proportionally high contribution to this fund that to the large extent has to be created mainly due to their irresponsibility but... As we may see the contributions of Greece, Italy, Belgium, Spain as the main culprits in this respect but also France and Germany as the main architects of the Euro are only between 4.44 – 5.02%. By a certain paradox these limiting figures are of Belgium and Italy who for more than 10 years since inception of Euro have been violating the total debt within the Maastricht criteria by almost 100%! And of course they GDP per capita is between 29.109 in case of Italy to 35.422 USD in case of Belgium.

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What is even more interesting, it is the fact there was taken no action in this respect towards the EU institutions that are paid by EU citizens/tax payers like the EC, EP, ECB, EUROSTAT etc. as they have directly been responsible for controlling member states regarding their meeting of Treaties obligations and the EU legislation requirements in full and without any derogations. If this has been the case also regarding Euro and the Maastricht criteria there would not be needed any Euro wall and loans from the Euro zone member states! Such and really a huge Fund of collected fines from the violating member states would have been completely full after the ten years of irresponsible disrespect to the Maastricht criteria. But it could not be the case of the EU being infamous for its special interpretation of the Treaty duties, responsibilities, expected solidarity and generally applied “double standards”, etc.

As a result all above EU institutions have not been anyhow negatively effected by their irresponsible behaviour towards Euro. There have been taken no personal consequences towards e.g. the European Commission and it is still led by the same President whose first term in years 2004 – 2009 was the most important for successful implementation of Euro. And it is absolutely true that in this respect it has totally failed in protecting interests of the EU regarding its common currency what is its main Treaty obligation The same is regarding the ECB. What consequences have been taken against its top executives that they let Euro to slide into such a deep crisis threatening the very existence of the Euro. And of course there have been so far no financial cuts to the budgets of these and all other EU institutions for their complete failure towards protecting Euro from its current crisis that is still not over and it really could happen what has been predicted by many experts that sooner or later the Euro could really demise.

CONCLUSIONS

In conclusion we could state that Euro even after more than thirty years of its preparation and more than decade since its introduction as a “common” currency of the EU has not yet become for various reasons truly and fully a real common currency for all its current 27 member states and its citizens and now it is almost impossible to image any massive enlargement of the Euro zone at all. On the other hand as a consequence also of this its internal position, Euro has not yet become an international currency that would be on par with its main competitor on international markets i.e. the US\$. It will need many more years and mainly more systematic and consequent policies and not only monetary to make Euro what it has originally been intended i.e. a common EU and internationally highly recognized currency. It is a fact that so far only 25% of all financial transactions globally are carried out in Euro while the rest mostly in US\$. The current Euro crisis as we have at least partially presented it in the previous parts of this paper has definitely not contributed to the respect, prestige and confidence towards this very special “common” currency and it is really a question what will be its future development, “enlargement” and position in the world and its global business. It is more than clear that Greece, Portugal, Spain, Ireland, Italy, Cyprus, etc. are definitely not the last countries that have been so negatively effected by the current Euro crisis. There are many more EU countries as potential candidates to follow their problems and to extend the original PIGS (Portugal, Ireland, Greece, Spain) to current PIIGSC i.e. adding Italy and Cyprus. It will be very soon PIIGSCB and it is already very often mentioned in connection with its recently downgraded ranking also for France and other Euro Zone countries. Even more dangerous for a global business than Euro crisis itself is the position of EU member states banks that have had trillions of bad loans not only in the PIGS countries but also in many other Euro Zone countries. That definitely represents a very negative impact on their regional and global business and related financial operations and flows as there has been now a permanent shortage of cash for supporting investments, loans, credits, etc. and thus very negatively effecting the overall global and regional business!

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Investigation on Zakat as an Indicator for Moslem Countries' Economic Growth

Keywords: Domestic Direct Investment, Economic Growth, Regression Model, Zakat.

INTRODUCTION

The presence of foreign direct investment (FDI) as a major catalyst for economic growth and modernization has been a focal point of developing countries, emerging economies, and countries in transition to develop competitive policies and attractive incentives that are able to attract foreign investments as much as possible. Given the appropriate host-country policies and a basic level of development, prior empirical findings show that FDI triggers technology spillovers, assists human capital formation, contributes to international trade integration, helps to create more competitive business environment and enhances enterprise development. Subsequently, these contribute to higher economic growth which is the most potent tool for alleviating poverty in developing countries. However, FDI has some drawbacks including a deterioration of the balance of payments as profits are repatriated (albeit often offset by incoming FDI), a lack of positive linkages with local communities, the potentially harmful environmental impact of FDI, especially in the extractive and heavy industries, social disruptions of accelerated commercialization in less-developed countries, and the effects on competition in national markets. Moreover, some host-country authorities perceive an increasing dependence on internationally operating enterprises as representing a loss of political sovereignty. Even some expected benefits might prove elusive if, for example, the host economy, in its current state of economic development, is not able to take advantage of the technologies or know-how transferred through FDI.

In most Moslem developing countries, the dependence on FDI has overshadowed the great potential of zakat as the source of economic development, income growth, and employment. Many Moslem scholars have argued and provided hypothetical evidence about the positive economic effect of zakat. Zakat may increase in the money supply and a consequent increase in the demand for goods and services (Siddiqi, 1979; Rahman, 2003; Kuran, 2006) as well as provides debt relief and enhances price stability. If accumulated in times of prosperity, zakat funds can aid society through times of depression. To the best of our knowledge, there is no studies have employed the hypothetical effect of zakat into an economic growth model. Existing studies have just discussed and only focused on the ideal and proposed hypothetical model of zakat and its impact on economic, banking, tax, and welfare governance in nature. Therefore, the question of whether zakat could be a real domestic source of the fund for economic growth has been doubt. Furthermore, the issue of whether zakat and FDI complement each other has been untouched. Lack of such study makes it impossible to find the best implementable policies that can maximize their beneficial effect.

This paper contributes to a new approach and gives some empirical findings in the growth of Islamic economics by examining the effect of zakat on economic growth in Moslem countries. Our study simulates and tests the competing sources of the fund in economic development, i.e. FDI and zakat, with the final aim at providing a new evidence of the real possibility of zakat as domestic direct investment in Moslem countries.

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EMPIRICAL RESULTS AND DISCUSSION

The 19 Moslem countries involved in this study comprises those at low, middle and high income with, in general, three type of states: Islamic, secular and none. Such information may create differences among the countries in term of wealth, asset and income which lead to heterogeneous estimation of zakat. As a result, construction of a single model to represent the 19 countries may be difficult. Therefore, a 2-way analysis of variance (ANOVA) was performed to identify whether the estimation of zakats between the investigated countries are different due to level of income and state of the country.

Table 1 reports the estimated average of zakat (US\$) according to level of income and state of the countries. The result of ANOVA is given at the bottom of Table 1 indicates that there is no statistical difference in amount of zakat estimated from the 19 Moslem countries. Therefore, we may proceed constructing a single regression model to evaluate zakat and FDI on the economic growth, GDP. (Table 1 omitted but would occur here)

Investigation on partial correlations between each exploratory variable and GDP indicate that most correlations are significant (see Table 2) except for the official development assistance (ODA). A correlation between zakat and GDP is much of interest where the correlation of these two variables is strong ($r = 0.809$) and significant. Such result gives us evidence that zakat has some influence on GDP at 81%.

(Table 2 omitted but would occur here)

Also, Table 2 indicates that FDI has a strong positive correlation with GDP but with much lower strength ($r = 0.768$) than the correlation between zakat and GDP. Meanwhile other variables' correlations, such as the positive correlation between public capital expenditure (public investment) and GDP is in line with the work of Barro (1990), and similar to some previous studies such as Grier and Tullock (1989), Aschauer (1989), Easterly and Rebelo (1993), and Gupta, Clements, Baldacci, and Mulas-Granados (2002). Private investment and secondary school enrollment are found to have a significant and positive correlation with GDP, which are consistent with the finding of Borensztein et al. (1998) and Lee and Suruga (2005).

Further investigation on the type of relationship between zakat-GDP and FDI-GDP is displayed in Figure 1. It is very interesting to show that the plot points that represent the relationship between zakat-GDP and FDI-GDP are similar. This evidence shows that zakat has a potential to be used as domestic direct investment and an alternative indicator to FDI in describing the economic growth. Meanwhile, the correlation between zakat-FDI is moderate ($r = 0.3482$) describing some overlapping information of the two variables. Thus, it is possible to replace FDI with zakat in measuring GDP.

(Figure 1 omitted but would occur here)

Figure 1, however, does not encounter the existing of other exploratory variables to investigate the behaviour of economic growth. Therefore, a regression model was performed on a proposed model given in Equation (1) and the summarization of results is tabulated in Table 3. The estimated model shows that zakat, ODA and Pubcap are significant to explain the behavior of GDP. The model is adequate as the adjusted R2 close to unity with significant result of F-value. The residual adequacy check as plotted gives a random behavior hence the estimated model can be accepted.

The fitted models explain that economic growth increases \$US13.704 for a dollar collection of zakat from population. Also, the economic growth at US\$0.043 for a dollar used in public capital expenditure. In contrast, economic growth will decrease US\$24.257 for a dollar spent for official development assistant. However, it does not mean that a country should not consider on investing their saving for development, but to spend the saving wisely ensuring good return in future. Here, the influence of FDI is not significant after zakat is included in the model. This scenario reveals that zakat is adequate to explain the behavior of GDP while the information from FDI is likely less important.

(Table 3 omitted but would occur here)

CONCLUSION AND IMPLICATION

This article contributes a new approach to the study of testing the potential of zakat as domestic direct investment on economic growth. Through regression model, our study shows that zakat has a great positive and potential impact on economic growth compared to the common accepted economic development determinant in developing countries, FDI. It suggests that Moslem countries' governments should seriously pay attention to optimize the usage of zakat as the source of investment funds for economic growth and development, which is mostly believed that zakat gives a more socio-economic justice and equitable distribution of wealth.

This suggestion takes the subsequent consequence related to the zakat management. Some recent studies in the context of a modern Muslim country such as Malaysia revealed many shortcomings of the zakat institutions, especially in terms of distributing the funds and a lack of proper governance mechanisms. Other related consequence is the lack of uniformity in the religious principles applied in Moslem countries; in particular, there is no globally accepted standard for Islamic financial instruments and economic policies among Moslem countries. Moreover, to the principles which are closely related to the Islamic law of making money out of money, and the wealth should accumulate from trade and ownership of the real assets. Therefore, one could say that it has slackened the optimization of zakat as a source of the investment fund and its usage for economic growth.

In addition, reflected from the current social and politic situation of Moslem countries in the Arab world, it is a big challenge of zakat implementation as the domestic direct investment alternative. The poor productivity and performance of any investment in the Moslem countries, including zakat as a source of funds, is determined by three interrelated factors: political and social instability, a deteriorated business environment due to excessive public intervention and over regulation, and low quality of human capital. Those variables are needed to be more explored in the future researches that contribute in creating more comprehensive and implementable zakat-economic growth models.

Figures, tables, references, or appendices from this paper may have been editorially omitted due to space considerations. For a copy of the complete paper, please contact the author(s).

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Challenges for Entrepreneurs in Micro Enterprise Sector: A Study of Selected Clusters of Western Uttar Pradesh, India

Keywords: Micro Enterprises, Small Scale industries, Leather Shoe Industry, Petha Sweet Industry, Silver ornaments Industry, Business Challenges.

INTRODUCTION

The role played by the small scale industry in the economic activity of advanced countries like Japan, Germany, Britain and also the USA is critical. Several Nations each developed and developing exteriorized that the small scale sector is definitely a very useful vehicle for growth, especially in the developing country for the creation of ample employment opportunities on a large scale within the shortest attainable time. Small and Medium enterprises account for roughly eighty percent of the non-public sector industrial employees and hence occupy a very important position within the industrial structure of Japan.

Micro enterprises are a part of the larger outlined section of Micro, small and medium Enterprises (MSME) or popularly referred to as Small Scale Industries (SSI) in India. These enterprises are largely run on sole proprietorship model of organisations, where the proprietor is one accountable for taking business Decisions. In several of the cases Micro enterprises are run in Joint Hindu Family mode of business operations where family participates in running of business activities however the regulatory power lies with Karta, the head of family. The MSME sector in India is extremely heterogeneous in terms of the scale of the enterprises, kind of products and services made, the degree of technology used etc.

In accordance with the regulations of Micro, Small & Medium Enterprises Development (MSMED) Act, 2006 the Micro, Small and Medium Enterprises (MSME) are classified in 2 types:

(a) Manufacturing Enterprises- The enterprises engaged within the manufacture or production of products relating any business laid out in the first schedule to the Industries (Development and regulation) Act, 1951. The Manufacturing Enterprise is outlined in terms of investment in Plant & Machinery.

(b) Service Enterprises: The enterprises engaged in providing or rendering of services and are outlined in terms of investment in equipment.

The limit for investment in plant and machinery / equipment for manufacturing / service enterprises as per the Act are given in Table 1.

Table 1 omitted but would occur here

The role of MSMEs within the economic and social development of India is well accepted. It's said to be the nursery for entrepreneurship, usually driven by the individual creativity and innovation. This section features a highly important input to the country's GDP, Manufacturing output, exports and employment creation. MSMEs also are higher dispersed in terms of varied demographic factors. In consideration of these factors, MSMEs are identified as vital for achieving national objectives of growth with equity and inclusion.

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As per estimates of Fourth All-India Census of MSMEs, the State-wise distribution of MSMEs show that over 55 % of those enterprises are in only Six States, that is, Uttar Pradesh, Maharashtra, Tamil Nadu, West Bengal, Andhra Pradesh and Karnataka. Further, meagerly seven percent of MSMEs in the country are owned by women and Ninety four percent of the MSMEs are proprietorships or partnerships.

Same census additionally highlights that, MSMEs within the country manufacture over six thousand products. Few of the most important subsectors in terms of producing output are food product (18.97%), textiles and readymade clothes (14.05%), basic metal (8.81%), chemical and chemical product (7.55%), metal product (7.52%), machinery and equipments (6.35%), transport equipments (4.5%), rubber and plastic product (3.9%), furniture (2.62%), paper and paper product (2.03%) and leather and leather product (1.98%).

In consideration of the MSME sector's role within the economic and social development of the country, Indian Government has stressed on its growth and development. The Government has taken numerous measures/initiatives from time to time that have facilitated the sector's ubiquitous growth. A number of the recent measures are enactment of the Micro, Small and Medium Enterprises Development Act, 2006, amendments to the Khadi and Village Industries Commission Act, announcement of a Package for Promotion of Micro and Small Enterprises (MSEs), launching of innovative schemes underneath National Manufacturing Competitiveness Programme (NMCP), launching of Prime Minister's Employment Generation Programme (PMEGP) to come up with employment generation opportunities, etc.

Uttar Pradesh is said to be a hub for MSMEs with majority of the clusters located in different areas of the state. The table 2 shows the small print of various kinds of MSMEs located in Uttar Pradesh, investment in them and employment in these units.

Table 2 omitted but would occur here

The location of MSMEs in Uttar Pradesh is distributed throughout the state with major concentration in Western Region of Uttar Pradesh. Table 3 shows the geographic distribution of MSMEs within the state.

Table 3 omitted but would occur here

It may be noted from Table 4 that the foremost vital MSME clusters within the state of Uttar Pradesh are Electronic goods, Sport goods, Brassware, Carpets, Glasswork, Hosiery, Leather Articles, Leather Shoes, Ceramic Works, Essential oils, Silver ornaments, Iron Foundries and Petha Sweets. It should even be clearly noted that out of the vital clusters in Uttar Pradesh, Majority of the clusters are located in Western Region of the state.

Table 4 omitted but would occur here

The present study is dedicated to different issues and challenges of entrepreneurs in Micro Enterprise Sector of Western Uttar Pradesh and specifically Leather Footwear and Petha Sweet Industries of Agra and Silver Ornaments business of Mathura.

Leather Footwear: Agra is a larger footwear manufacturing center, in India, having around 60,000 skilled workers and providing employment to around one lack persons in around mostly 5000 cottage, (home based) SMEs entrepreneurs producing about 90 million pairs of shoes and 110 million pairs of sandals and chappals annually, which satisfies approximately 53% of the domestic requirement of the footwear. Traditionally, this has also been a center of cottage industry production, based on family run production units operating from home, however as the production volume increased, these individual

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units converted into the organized units, thereby improving working standards and conditions. About 25% population of Agra city is directly or indirectly earning their lively hood through this industry.

Petha: The fruit 'Ash Gourd' is commonly known in India as Petha or termed as Kushmand in ancient ayurveda, is believed to have remarkable curative properties. Wholesome and nutritive, it is known to act like a blood coagulant and is used in treatment of peptic ulcers and obesity. The delicious sweet preparations made from it are used for the treatment of tuberculosis, weakness of the heart and anemia. The Petha has been an Indian favorite for centuries, not only for its medicinal properties but also for its sublime flavor. This innocuous pumpkin like vegetable has been transformed into a gourmet's fantasy in the famous crystalline and translucent form of sweet Petha.

The Petha cluster in Agra is more than a century old. Petha here refers to a form of sweet that is made from Ash-Pumpkins. The clustering of enterprises involved in production of Petha sweet occurred in Agra due to the availability of raw fruit here and the fondness of local people for sweets. It is estimated that there are as many as 500 units in this industry, each one employing on an average 6 persons thus leading to a direct employment of almost 3000 persons. Besides, another 1000 persons are dependent on the related enterprises and trading activities of the industry.

Silver Ornaments: Silver ornaments manufacturing and polishing industry in Mathura is pretty old and it dates back to the times of Kushana dynasty. In present times this industry caters to manufacturing of specialist silver ornaments like specialist anklet named Attha, silver chains and silver coins. These articles are manufactured and polished in Mathura and then sent to markets situated in various states of India. Researchers could not find any empirical study on this cluster.

Due to page limitations sections of text, tables, graphs, figures referred to in this article may have been omitted. Interested readers are referred to the authors for copies of the omitted portions of this article.

CONCLUSIONS

Apart from primary data collected from field, there were several encounters and discussion with these entrepreneurs in micro enterprises of Leather shoes, Petha and silver ornaments clusters. During different meeting with them researchers found following major issues and problems which are really escalating with time and changing market place. Following are the major problems in various facets of business:

Problems regarding Markets: First and foremost problem is of local industries losing ground in the domestic market due to mechanization and set up Mechanized units at different part of the country. Second problem faced by the industry is from imports started coming in from other countries in case of leather Shoes and silver ornaments. Last and most crucial seemed to be due to middlemen/traders enjoying most of the profits in the value chain.

Problems regarding Technology: In case of problems related to technology, they face this problem due to the basic fact that they are still using tradition method of production as there is low level of technological development. Due to this there are more manufacturing defects and to cover the cost many a times they also resort to use of substandard materials which in turn translates into problem with quality and productivity.

Problems regarding Inputs availability: In these industries, most of the raw materials are of indigenous nature which is not available in bulk to such small enterprises more over there is option of using imported materials especially in leather industry but it increases the cost.

Problems regarding Innovation capability: They have to very frequently changes in design, technology, process and marketing due to branded products as well as changing preferences of the end customers in the market especially in leather shoes and silver ornaments sector which in turn results

into need for regular innovation, making it almost impossible for these small clusters to respond to the market quickly. Problems regarding Skills: Skilled workers are available at a cheap rate but they are specialized in particular types of operation, which if changed then translates into low productivity and high defect rate, giving less net profit. On the top of it, there is no skill up gradation training for the workers.

Problems regarding Business Environment: Business Environment with its changing nature especially due to frequently changing government rules and regulations makes it difficult to cope with the changes and on the top of it increasing competition makes it more difficult scenario for these businesses.

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A Case Study Analysis of Nontechnical Game Theory on Laboratory Sales Trainees in Saudi Arabia

Keywords: Game theory; sales training; laboratory management; Saudi Arabia

INTRODUCTION

The development of training methodology has undergone intense study over many years. Numerous models of leadership and management strategy have been utilized in training sales employees. Strategic systems thinking play an important role in training employees in aligning their sales goals with corporate strategy. Stacey (2007) defined strategy as an organizational direction that changes in relation to time. The direction of the organization includes the activities and competencies required to create value based on the available resources. Sustainability is dependent on the creation of effective management strategy within the organization. The development of effective training within an organization requires analysis into techniques and implementation of organizational strategy into training sales employees.

Sales training requires implementation of skill and subject knowledge in order to improve effectiveness of the sales course. Several factors affect the effectiveness of sales training techniques (Attia, Honneycutt, & Leach, 2005). Clinical laboratory sales require further elements in the training equation. Laboratories are obliged to train their sales teams in their test menu and services. Additionally, the sales teams are required to learn how to explain technological advances in laboratory testing to clientele, and this requires experience in these fields. The development of medical technology requires sales teams to utilize technology during sales meetings with clients. The utilization of sales knowledge must be coupled with laboratory experience in order to ensure effective sales techniques.

This case study analysis was focused on a three-member sales team of a start-up laboratory in Saudi Arabia. Game theory was utilized in analyzing the training results of the sales team members. The effects of the game-theory training model were measured using the amount of business from the clientele obtained because of the strategies taught to the team. The purpose of the study was to analyze whether the sales team would implement a strategy that would create higher payoff for the organization or a higher personal payoff. The sales team was analyzed in a 6-month training period with actual clients. Training logs recorded during this period were used for the case study analysis.

Within the analysis period, training intervention was withheld to allow the trainees to make their own decisions based on their experiences and knowledge.

This case study analysis was focused on a three-member sales team of a start-up laboratory in Saudi Arabia. Game theory was utilized in analyzing the training results of the sales team members. The effects of the game-theory training model were measured using the amount of business from the clientele obtained because of the strategies taught to the team. The purpose of the study was to analyze whether the sales team would implement a strategy that would create higher payoff for the organization or a higher personal payoff. The sales team was analyzed in a 6-month training period with actual clients. Training logs recorded during this period were used for the case study analysis. Within the analysis period, training intervention was withheld to allow the trainees to make their own decisions based on their experiences and knowledge.

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RESULTS AND OUTCOMES

The first course of action for each sales trainee resulted in Nash equilibrium for the organization. The training manager described in log L1 that scenario N₃ was the decision undertaken by each sales trainee for the first month. Scenario N₃ resulted in the addition of three major clients and a high volume of special tests outsourced to the laboratory, routine tests were not outsourced. According to the log, L1, daily special tests were being sent to the laboratory from the three new clients. The Nash equilibrium benefitted the organization with three major clients, but left the trainees with a low payoff in the short-term:

$$(P_s (A_3) > P_{i,s} (A_2, E_1) > P_i (E_3)) > (P_i (E_3) > P_{i,s} (A_2, E_1) > P_s (A_3))$$

This scenario was short-lived and only lasted a month. After the first month, ST1 changed strategy to N₂ and joined partners with ST3 (L2). The least qualified and experienced trainee paired with the most qualified and experienced trainee leaving ST2 to work alone. The training manager described the change in strategy as a decision made by ST1 (L2). The decision to work with a single other trainee and leave the remaining trainee alone is based on:

$$P_{i,s} (A_2, E_1) > P_s (A_3) > P_i (E_3)$$

This strategy was not Nash equilibrium for the trainees and the organization. The training log noted that this course of action lasted for 2 months (L2, L3). The training manager observed that ST2 felt distrust for both ST1 and ST3 (L3). ST3 did not report any feelings of being used by ST1 or opposition from ST2. The semi-annual report by the training manager noted an addition of four clients with very low volume of outsourced tests (Training report, 2010). ST2 took control of one client from the initial three as per the mutual agreement of all players. The sales volume from this client increased during this period when the client began sending routine tests to the laboratory.

The low volumes of outsourced tests did not yield a high personal payoff for ST1 or ST3. During the second and third months, the organization reported low margins (Training report, 2010). The training manager recorded that ST1 and ST3 separated and began to work individually, following scenario N₁. In the last three months, the trainees followed the Nash equilibrium for the short-term personal payoffs:

$$(P_i (E_3) > P_{i,s} (A_2, E_1) > P_s (A_3)) > (P_s (A_3) > P_{i,s} (A_2, E_1) > P_i (E_3))$$

Data from the training report (2010) suggested that the sales trainees only became highly competitive between the second month and third months. The competitiveness of the sales trainees should have provided a rise in sales, however the opposite was seen when the trainees exhibited competitiveness between each other with clients. Although the clients continued to send test samples to the laboratory, the training report (2010) indicated that the samples rate dropped when the trainees were competing with each other for higher sales.

CONCLUSIONS

The final decision made by the trainees was to follow a short-term personal payoff. This decision was not in favor of the corporate strategy. A failure to align the corporate strategy with sales strategy can be assumed based on the final decision of the trainees. Moore and Seidner (1998) suggested that the organization's success is dependent on the ability of both organization and employees to learn and adapt. Training intervention is required in order to guide trainees to a strategy that would benefit the corporate strategy as well as the individual trainees.

Organizations must create strategic alignment training methods in order to convince trainees to make decisions that would benefit the organization as well as create a suitable payoff for the sales team. The trainees involved in this case study followed an egocentric strategy for the majority of the analysis. This was due to a lack of strategic alignment in their decisions.

Strategic alignment is an essential aspect of organizational success. Creating a training module solely related to strategic alignment would be a probable solution to the sales trainee dilemma. There is evidence that suggests that companies can create an effective sales force by strategic training (Attia, Honeycutt, & Leach, 2005). Organizations must prioritize their training agendas and consider the effects of strategic alignment on their sales trainees. Awareness is not sufficient to ensure that trainees would take a specific course of action. The actions of the sales trainees in this case study can testify to the need to prioritize strategic alignment in laboratory sales training.

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Why Developing Countries Should Adopt International Financial Reporting Standards (IFRS)

Key Words: IFRS, Capital Markets, Large Corporations, SMEs

INTRODUCTION

The objective of this paper is to explain why it is necessary for developing countries to establish well regulated capital markets and adopt IFRS as requisites to further accelerate their economic development initiatives. The paper presents a discussion of the lessons that developing countries should learn from countries with highly developed capital markets, such as the United States, that will help them avoid costly mistakes. The paper will present a discussion of the role of large corporations in economic development, and why it is necessary for such corporations to prepare their financial statements in accordance to IFRS. Given that the objective of financial statements issued by small and

medium-sized companies is different, the paper also provides a discussion of the need to adopt a simpler version of IFRS that is suitable for small and medium-sized companies.

THE ROLE OF LARGE CORPORATIONS IN ECONOMIC DEVELOPMENT

Developing countries need large corporations that will locally produce machinery, equipment, pharmaceutical products, and consumer goods they need for local consumption as well as for export purposes. Such countries cannot afford to continue to rely on importing their needs. Furthermore, large corporations, with the benefit of economy of scale, will be able to produce goods that can compete in world markets generating much needed foreign currency. Developing countries will also benefit from having large corporations that will provide employment opportunities for their citizens. The increasing number of their trained professionals and the large pool of unemployed work force can be gainfully employed in such large corporations. The corporations and the employees they hire will in turn become a good source of much needed tax revenue for developing countries.

THE NEED TO ESTABLISH WELL REGULATED CAPITAL MARKETS

Forming large corporations require huge amount of capital that can only be raised by selling shares and bonds to a large group of local and foreign investors. Establishing well regulated capital markets with rules and regulations that are designed to protect investors is a prerequisite to encourage investors to actively participate in the capital markets by channeling their savings to companies who sell shares and bonds to the public. In the absence of well-regulated capital markets, investors may not be willing to invest their hard earned savings in the stock market.

There are important lessons that developing countries can learn from countries with well-established capital market operations. For instance in the United States, until the 1929 stock market crash, there was no regulatory agency monitoring the stock exchanges. There was no formally established accounting standards setting body and there was no formal organization that established auditing standards either. The 1929 US stock market crash was primarily attributed to fraudulent financial reporting practices that were prevalent at that time. Many companies were guilty of issuing false and misleading financial statements. As a result, many millions of Americans lost their life time savings invested in the stock market. This was an alarming incident that scared the public from ever thinking of investing in stock again. The United States Congress in its wisdom realized that the economic development of the country will face serious setback unless measures are taken to restore public confidence in US capital markets. To this end, the US Congress passed the 1933 Securities Act and the 1934 Securities and Exchange Acts.

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THE NEED TO ADOPT INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS)

The need for establishing International Financial Reporting Standards (IFRS) came as a result of the rapid globalization of the world economy. Today, with the presence of well-regulated capital markets around the world and with the highly developed electronic communication systems, the world has opened wide opportunities for companies to raise capital by selling their shares and bonds to investors around the globe. This has also opened global opportunities for investors who seek profitable investment opportunities beyond their domestic boundaries. Developing countries can provide attractive investment opportunities for investors and lenders. To attract foreign and local investors, developing countries should develop well regulated capital markets that protect investors from fraudulent practices and should adopt international financial reporting standards to assist investors and lenders to make rational investment and lending decisions.

Why Developing Countries Should Adopt International Financial Reporting Standards (IFRS)

Given that the world has now become one global economy, investors have a wide choice of investment opportunities across the globe. The objective of investors and lenders are the same regardless of where in the world they are located. It is to make sound investment and lending decisions. Investors and their investment advisors need financial statements that can easily be read, understood, analyzed and interpreted to make investment and lending decisions. Investors and creditors need to make comparative analysis among a variety of global investment opportunities. To be able to make sound comparative analysis among a wide set of investment and lending decisions, investors and lenders need financial statements that are prepared using the same accounting standards. It is for these reasons that the International Accounting Standards Board (IASB) is established to be a source of developing high quality financial reporting standards to be used by all publicly traded companies anywhere in the world. In short, if all companies that sell their shares and bonds in world capital markets prepare their financial statements adhering to International Financial Reporting Standards, (IFRS), then they will make it easier for providers of capital to make investment decisions in global scale. This by itself should be a strong incentive for any developing country to adopt IFRS in order to attract much needed capital from a wide array of investors from all over the world in order to accelerate their economic development programs.

Developing countries will find it advantageous to adopt International Financial Reporting Standards and require all companies that sell their shares and bonds to prepare their financial statements adhering to IFRS. Financial statements that are prepared in accordance to IFRS will facilitate investment decision making by investors around the globe. In addition, in order to enhance the credibility, it is important that such financial statements be audited by an independent auditing firm that applies International auditing standards.

The Objective of Financial Reporting

According to the Conceptual Framework that has been developed as a result of a joint project between the FASB and IASB, the objective of financial reporting is “to provide financial information about the reporting entity that is useful to present and potential equity investors, lenders, and other creditors in making decisions in their capacity as capital providers. Information that is decision useful to capital providers may also be useful to other users of financial reporting who are not capital providers.”¹¹ In issuing IFRS the IASB is guided by the desire to provide relevant and verifiable information that faithfully represents the financial situation and the results of operating activities of a given entity on timely bases.

SUMMARY AND CONCLUSIONS

In conclusion, despite the challenges, we believe it is high time that developing countries seriously consider introducing well regulated capital market operation and adopt IFRS in preparing financial statements for use by investors, creditors and other external constituents to further accelerate their economic development. A well regulated capital markets will make it possible for large corporations to raise their capital needs from local and foreign investors. Developing countries do not have to reinvent the wheel. They have to capitalize on the lessons learned by countries with highly developed capital market operations. Corporations that prepared their financial statements in accordance to IFRS and certified by auditors that use international auditing standards, will find it easier to raise capital by actively trading their shares and bonds in international capital markets. Small and medium-sized companies will also find it to their advantage to adopt simplified version of IFRS to be used by lenders and other interested stakeholders.

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Determining the Growth Strategies in Small and Medium Enterprises in Saudi Arabia

Keywords: SME, Growth Strategies, Saudi Arabia, Firm performance

INTRODUCTION

Small and Medium Enterprises (SMEs) are considered to be one of the principal driving forces in a country economic development. Many nations have acknowledged the value of these firms. This is because SMEs stimulate private ownership and entrepreneurial skills. The benefits of SMEs to any economy are easily noticeable where they help to create jobs at relatively low capital cost, reduce income disparities, and a vehicle for the development of skilled and semi-skilled workers. In many countries, SMEs have played a crucial role in creating jobs and providing economic stability. SMEs are contributing to employment growth at a higher rate than larger firms (Chaudhuri, 2010).

Worldwide, SMEs control 95 per cent of the business sector, contributing between 35 to 45 per cent of the global GDP and 85 per cent of the world's labour force, according to A.T. Kearney estimates. Due to this importance, scholars have argued that promoting SMEs is considered as one of the best strategies for achieving national development goals such as economic and industrial growth (Kazem & Van der Heijden, 2006).

The pursuit of growth in firms has long been a key aspect of entrepreneurship (Gilbert et al., 2006). With regards to these SMEs, firm growth is often closely associated with firm overall success and survival (Johannisson, 1993; Phillips & Kirchoff, 1989). Growth has been used as a simple measure of success in business (Storey, 1994). In addition, as Brush and Vanderwerf (1992) suggest, growth is the most appropriate indicator of the performance for surviving small firms. Moreover, growth is also an important precondition for the achievement of other financial goals of business (Phillips & Kirchoff, 1989; Storey, 1994). In conclusion, firm growth is usually a critical precondition for its longevity (Storey, 1994). Based on the argument, this is an area that should be urgently explored to provide greater and better explanation. However, there is a gap between the expectations in SMEs and the lack of knowledge of the phenomenon of growth in SMEs (Davidsson, 2008). Despite the importance of SMEs and its economic contribution to the country economy, scholarly interest in SMEs and the relevant growth strategies indicators is limited. Although a great deal of research on SMEs and its success determinants has been conducted, these studies have been primarily conducted in the West. As a result, there has been paucity of research dealing with SMEs in the developing economies in general and in the gulf countries in particular.

SMEs in the Kingdom of Saudi Arabia

Saudi Arabia is the largest economy in the Gulf Cooperation Council (GCC) countries. During the last eight years, the country's budget has grown from US\$69 billion to US\$170 billion, a near threefold expansion. Despite this growth, SMEs contribute to only 25 percent of total employment and 33 percent to the country's GDP – in spite of SMEs represent almost 93 percent of total enterprises in the Kingdom. This is in stark contrast to most developed economies. For example, in Spain SMEs contribute to 64.3 percent of GDP, or even Austria where SMEs contribute 44 percent. Given the current gap, the size and growth of Saudi Arabia's economy and the nation's focus on economic diversification, SMEs should contribute to more than 50 percent of the country's GDP.

Nevertheless, SMEs are the key to unlocking the vast potential of the Saudi Arabian economy. A.T. Kearney for instance estimates that the GCC’s SME segment is likely to contribute an additional US\$100 billion to the region’s GDP and create up to two million jobs in the next coming years (Chaudhuri, 2010). The Kingdom has also included SMEs in its Ninth Economic Plan (2010-2014) where it recognizes the importance of SMEs in the development of the country. However, while the projection looks promising, the reality does not seem to be as the government has expected. Relatively, many Saudi SMEs failed to create new jobs. Although the country’s “Saudization program” was to fill the job market with Saudi nationals of 30% by the end of 2003 (Looney, 2004), many of these companies have managed only marginal progress—2% on average in the case of very small enterprises (Otsuki, 2002). In addition, it is said that the average life span of Saudi Arabia SMEs is only seven years old.

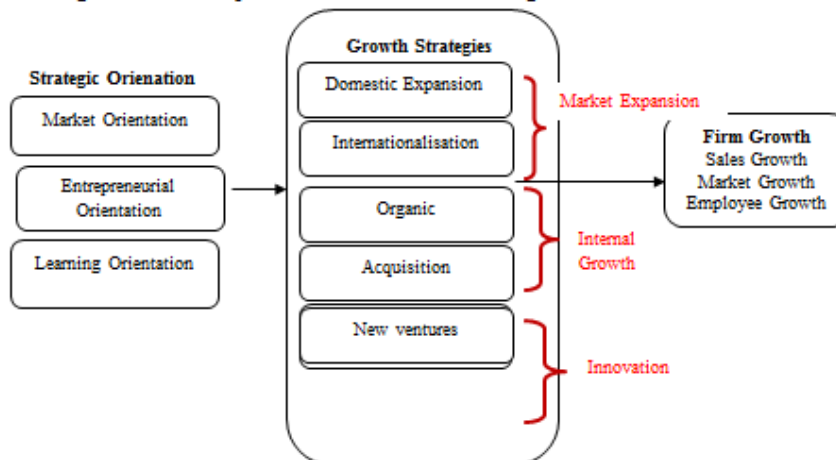
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IMPLICATIONS OF OUR PROPOSAL

Firm growth is a central focus area in strategy, SMEs and entrepreneurship research. Much research effort has been targeted particularly at investigating the factors affecting firm growth, but to date there is no comprehensive theory to explain which firms will grow or how they grow (e.g. Garnsey, 1996). It seems there are not strong explanatory factors that have been identified, though various explanatory approaches have been presented (Pasanen, 2008). Therefore, this model contributes to the SME and strategic research in three aspects. First, unlike the numerous studies, which place a major emphasis on explaining the complexity in the strategic orientation - performance link (Wiklund and Shepherd, 2005), this model focuses on three strategic orientations namely MO, EO and LO and its influence on the choices of the firm growth strategies. Consequently, this model links the relationship of these growth strategies on the firm growth rate. Such a focus follows the suggestion of Lumpkin and Dess (2001) to direct further empirical research at this important construct.

Second, this model focuses on SMEs. Despite the widely acknowledged importance of strategic orientation in small business research (Naman and Slevin, 1993; Wiklund and Shepherd, 2005), the literature lacks knowledge regarding the way SMEs are classified according to their strategic orientations and the relative performance (Vuttichat, 2008). This model may allow SMEs to become aware of the importance of the EO as it relates to their participation and success in the global marketplace. The model may also serve as a competitive blueprint for SMEs entering that marketplace since EO is an operational strategy that can be introduced to a firm, modified, and enhanced through

Figure 1: A Conceptualization of Growth Strategies of Saudi Arabia SMEs



training programs. Finally, the conceptual model that this paper proposes should be regarded as a basis for future research. The proposed model has to be tested, refined and improved.

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Systematic Risk And Accounting Determinants: New Perspective From an Emerging Market

Keyword: Systematic Risk, Accounting Determinants, Manufacturing Industry

JEL Codes: G32, M41, L6

INTRODUCTION

As the key driver of the Indonesian economy from the 1980s up until the end of the 2010s, manufacturing industry is the sector that contributes as a major source of employment for the country. By employing 14.4 million people as per the end of 2010, manufacturing industry becomes a centre point of Indonesian government in maintaining the level of economic growth, specifically to make it keep competitive. Indonesia now faces a transformed global trading environment from its heyday; faced with fierce competition from free trade agreements across the ASEAN and China. Such competition has served to highlight the inadequacies in areas, mainly the slow pace of reform in industry regulations to attract foreign investment. The emergence of lower-cost competitors in Indonesia's traditional export products and markets have led to lower international prices, particularly of textile, garments, and footwear.

Investors, whether domestic or foreign originated, are basically the rent-seekers, or looking for the lowest cost of capital, which are reflected from the lower systematic risk. We can say that a lower systematic risk also implies a lower cost of capital, and a higher net present value of the investment in flexible capacity. A systematic risk component itself refers to the variance that occurs due to economic factors. It can be measured by using the correlation coefficient of demand uncertainty with the return on a broad financial market index.

Financial approach of predicting risk has been a popular method in the manufacturing industry. Some researchers have studied the relationships between financial variables such as return on assets (ROA), debt to equity (DE), quick ratio (QR), and risk, and then tried to predict risk by analyzing the financial variables.

Although previous researchers have tried to determine relationships between risk and financial variables, yet a consensus has not been reached. Those empirical findings are divided into two mainstreams, on one side stand on a market under reaction story (Dichev, 1998; Lamont, Polk, and Saa-Requejo, 2001; Griffin and Lemmon, 2002; Ferguson and Shockley, 2003; Campbell, Hilscher, and Szilagyi, 2006) and the scholars on another side base their argument on the efficient market theory. The latter group believes systematic risk can be proxied by size and book-to-market factor. The same thing happened in the manufacturing industry (Bhat, 1980; Shanmugasundaram, 2008; Lev, 1974), where some researchers have sought to develop a theory of the real determinants of systematic risk (Hite 1977; Myers and Turnbull 1977; Turnbull 1977). Even in the hospitality industry, their findings were quite different (Borde, 1998; Gu and Kim, 1998; Gu and Kim, 2002; Kim, Gu, and Mattila, 2002; Kim, Ryan, and Ceschini, 2007; Lee and Jang, 2007). That is, those studies had mixed results, and there were still unclear conclusions about which specific financial variables were the determinants on risk.

In order to give a recent perspective on the determinants of systematic risk in the Indonesian manufacturing industry, it is important for manufacturing top managers and potential investors to determine the industry's risk from its financial characteristics and find out whether the investment is risky or not. As stated above, Indonesian manufacturing industry is considered continuously growing and booming, but it is also considered risky at the same time. Recent manufacturing industry is changing rapidly and becoming more competitive. Therefore, it is very important for all industry participants to predict risk in various ways. Gu (2002) mentioned that bankruptcy does not happen immediately and could be predicted in advance by analyzing financial ratios. Therefore, it is important to understand which financial variables are highly related to the firm's risk. In addition, this study should give more accurate-information to both manufacturing managers and investors in the changing industry by using the most recent financial data available, from 2005 through 2007.

The variables used as determinants of systematic risk in the previous study of the manufacturing industry (Gu and Kim, 1998; Elton, Gruber, Brown, and Goetzmann, 2003; Hartono, 2009; Sufiyati, 1997) were liquidity, leverage, profitability, size, and growth. This study will use the same variables as Hartono (2009) but will add one more financial variable, growth rate, which is widely used as an important financial determinant in the studies in the other industries. Since most of the information that can be obtained from accounting disclosures (like firm size, profitability, leverage, liquidity, etc.), the proposed determinants will be fully examined in this study. Our paper contributes to this literature by analyzing systematic risk, which plays a role in firms' operational and financial performance. The expected results provide a practical perspective of the importance of fundamental variables, and hence accounting disclosures in general, for determining investors' expectations about systematic risk.

To present the empirical findings, the paper is organized as follows. The literature review and prior studies on systematic risk and financial variables are briefly outlined in Section 2. The methodology and research model is described in Section 3, followed by the research results and discussion in Section 4. We provide some concluding remarks in Section 5.

Due to page limitations sections of text, tables, graphs, figures referred to in this article may have been omitted. Interested readers are referred to the authors for copies of the omitted portions of this article.

RESEARCH RESULTS AND DISCUSSION

Before using the obtained data to be entered in the analysis model, we did a serial basic tests of multiple regression analysis, i.e. outlier test and normality assumption tests. The detection of outliers is important to minimize the probability of having insignificant results from the proposed model due to the incorrect or irrelevant value of predictors. In this study we use the case-wise diagnostic the presence of outliers. The results showed to us that there are no any outliers in out two models, which are proved by the value of standard value of each variable is not in $-2 \leq SR \leq +2$ range (see Table 2). The next step, we did the normality test by using the Kolgomorov-Smirnov Z normality test and the results are presented in Table 3.

Table 2: Case-wise Diagnostics Test

Model 1					Model 2				
Case Number	Std. Residual	BETA	Predicted Value	Residual	Case Number	Std. Residual	BETA	Predicted Value	Residual
1	.067	1.58	1.5586	.02139	1	.140	1.58	1.5310	.04903
2	-.954	1.29	1.5940	-.30401	2	-.298	1.29	1.3945	-.10450
3	.840	1.46	1.1925	.26753	3	.745	1.46	1.1992	.26080
4	-.015	1.27	1.2747	-.00474	4	-.109	1.27	1.3081	-.03813
5	.767	1.67	1.4257	.24427	5	1.123	1.67	1.2769	.39314
6	-.487	1.10	1.2550	-.15504	6	-.616	1.10	1.3157	-.21574
7	.707	1.38	1.1548	.22524	7	.930	1.38	1.0543	.32566
8	-.602	.91	1.1017	-.19169	8	-.674	.91	1.1461	-.23608
9	.256	1.17	1.0885	.08151	9	.007	1.17	1.1677	.00229
10	-1.013	.89	1.2125	-.32253	10	-.899	.89	1.2046	-.31460
11	-.455	1.48	1.6248	-.14483	11	-.161	1.48	1.5365	-.05646
12	.938	1.39	1.0913	.29868	12	.434	1.39	1.2380	.15201
13	-1.526	.70	1.1861	-.48612	13	-1.846	.70	1.3461	-.64612
14	1.479	2.01	1.5391	.47095	14	1.382	2.01	1.5261	.48387
15	-.002	1.34	1.3406	-.00061	15	-.158	1.34	1.3952	-.05515

a. Dependent Variable: BETA

Table 3: The Kolmogorov-Smirnov Z Normality Test

Model 1			Model 2		
Unstandardized Residual			Unstandardized Residual		
N		15	N		15
Normal Parameters ^{a,b}	Mean	.0000000	Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.26920713		Std. Deviation	.29587636
Most Extreme Differences	Absolute	.132	Most Extreme Differences	Absolute	.101
	Positive	.105		Positive	.101
	Negative	-.132		Negative	-.095
Kolmogorov-Smirnov Z		.511	Kolmogorov-Smirnov Z		.391
Asymp. Sig. (2-tailed)		.956	Asymp. Sig. (2-tailed)		.998

a. Test distribution is Normal.

b. Calculated from data.

The K-S values of two proposed models revealed that all predictor variables are normally distributed. To get BLUE (Best Linear Unbiased Estimation) models, all predictor variables must be free from multicollinearity and heteroscedasticity problem. Therefore, we did Pearson-Correlation test for multicollinearity and Glejser test to detect heteroscedasticity. The results showed that the proposed independent variables are free from those problems, which are shown by the correlation values are less than 0.9 (Pearson-correlation test) and the significance values of Glejser test are more than 0.05 (see Table 4 and Table 5). Based on the preliminary test to get a valid model, we continued the hypothesis testing by running the multiple regression analysis of all predictor variables to systematic risk (beta).

Table 4: The Pearson Correlation Test

		Model 1				Model 2					
		CR	DE	SIZE	GROWTH	QR	LDTA	SIZE	GROWTH		
CR	Pearson Correlation	1	-.659**	-.199	-.258	QR	1	-.472	-.393	-.081	
	Sig. (2-tailed)		.007	.478	.354			.076	.147	.773	
	N	15	15	15	15			15	15	15	15
DE	Pearson Correlation	-.659**	1	.465	.128	LDTA	-.472	1	.312	.007	
	Sig. (2-tailed)	.007		.081	.650			.076	.258	.982	
	N	15	15	15	15			15	15	15	15
SIZE	Pearson Correlation	-.199	.465	1	-.225	SIZE	-.393	.312	1	-.225	
	Sig. (2-tailed)	.478	.081		.421			.147	.258		.421
	N	15	15	15	15			15	15	15	15
GROWTH	Pearson Correlation	-.258	.128	-.225	1	GROWTH	-.081	.007	-.225	1	
	Sig. (2-tailed)	.354	.650	.421				.773	.982	.421	
	N	15	15	15	15			15	15	15	15

** Correlation is significant at the 0.01 level (2-tailed).

Table 5: The Glejser Test

Model 1	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Model 2	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta					B	Std. Error	Beta			
(Constant)	1.224	.963			1.271	.232	(Constant)	1.003	1.227			.817	.433
CR	.003	.034	.033		.082	.936	QR	-.061	.063	-.345		-.971	.354
DR	.116	.352	.143		.328	.750	LDTA	-.077	.356	-.074		-.217	.832
SIZE	-.060	.060	-.350		-1.003	.339	SIZE	-.038	.071	-.180		-.532	.606
GROWTH	-.292	.269	-.344		-1.087	.302	GROWTH	-.278	.321	-.267		-.866	.407

a. Dependent Variable: ABSRES

The regression results for model 1 and model 2 revealed that Leverage and Size have a negative relationship with systematic risk (beta). Actually those results are so interesting due to it is different from the proposed hypotheses and prior empirical findings. However, our empirical findings are in line with some similar studies, such as the works of Elly (1998), Aruzzi and Bandi (2003), Borde (1998), and Gu and Kim (1998). Elly (1998) found that liquidity, financial leverage, growth, and size do not have any influence on systematic risk (beta). The same findings were also reported by Aruzzi and Bandi (2003) when they investigated the Indonesian shariah stocks' beta, which fundamental variables (financial variables) did not affect shariah stocks' systematic risk. On the other side, our findings do not support the work of Parmono (2001), which found a significant influence of financial leverage on beta in Indonesia stock market. The recent phenomenon of leverage's influence on systematic risk in Indonesian manufacturing industry is different from other industries as reported by Gu and Kim (2002), Kim, Gu, and Mattila (2002), Kim, Ryan, and Ceschini (2007), and Lee and Jang (2007).

The results of regression analysis are summarized and presented in Table 6 as follows:

Table 6: The Regression Results of Bank Performance Measurement

*Systematic Risk and Accounting Determinants:
New Perspective from an Emerging Market*

Model 1	Unstandardized Coefficients		Standardized Coefficients			Model 2	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.		B	Std. Error	Beta	t	Sig.
(Constant)	1.916	1.852		1.034	.325	(Constant)	2.862	2.089		1.370	.201
CR	.034	.066	.181	.512	.619	QR	-.000	.107	.000	-.001	.999
DR	-.603	.678	-.343	-.890	.394	LDTA	-.382	.605	-.205	-.631	.542
SIZE	-.032	.116	-.084	-.273	.790	SIZE	-.092	.122	-.244	-.753	.469
GROWTH	.618	.517	.335	1.197	.259	GROWTH	.387	.546	.209	.708	.495

a. Dependent Variable: BETA

Model 1	Sum of Squares	df	Mean Square	F	Sig.	Model 2	Sum of Squares	df	Mean Square	F	Sig.
Regression	.516	4	.129	1.271	.344	Regression	.305	4	.076	.622	.658
Residual	1.015	10	.101			Residual	1.226	10	.123		
Total	1.530	14				Total	1.530	14			

Model 1	R	R Square	Adjusted R Square	Std. Error of the Estimate	Model 2	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.581	.337	.072	.31853		.446	.199	-.121	.35009

The study also revealed a contradicting phenomenon. Liquidity and growth rate were found to have insignificant relationships with a firm's systematic risk according to the multiple regression analysis. The study does not support the work of Borde (1998), which mentioned high liquidity could be related to unwise use of available cash and short-term securities. Thus, manufacturing managers should know what is the cause that liquidity did not affect positively the systematic risk, whether it is driven by the industry characteristics or the firms' reputation that successfully gains a high trust from its supplier.

Related to the phenomenon of liquidity on systematic risk, one of the possible explanations is the investors assume the Indonesian manufacturing firms' liquidity risk is quite high, which the investors are afraid not be able to buy or sell investments quickly for a price that is close to the true underlying value of the asset. This liquidity risk is usually higher in over-the-counter markets and small-capitalization stocks, and those conditions are relevant for Indonesia stock market. Foreign investments can pose liquidity risks as well. The size of foreign markets, the number of companies listed, and hours of trading may limit the investor's ability to buy or sell a foreign investment.

Lastly, there was a positive relationship between growth opportunity and systematic risk. This result does supported the work of Lee and Jang's finding (2007). As Borde (1998) pointed out, firms with high growth rate could keep getting bids from investors with the expectation of higher future earnings. The investors themselves seem to accept the lemma "high return, high risk," and they apply this concept when investing their money in manufacturing firms' stock. Hence, manufacturing managers may need to use strategies to focus on more rapid growth by increasing their total assets to get more investors' attention and reduce risk at the same time. To achieve rapid growth rate, global investment could also be a good option.

In conclusion, manufacturing managers, especially the top manager, need to explore the different behavior of Indonesian investors on perceiving risks. It seems that Indonesian investors do not rely on mainly the firms' financial statements, and probably more on technical analysis in determining their investment decisions. We intuitively predict that Indonesian stock market's practitioners are more favor in trading decision (short-term investment decision) than long-term investment one, which the historical share price and trade volume play important role.

Therefore, we can summarize the study findings as follows:

Table 7: Summary of Multiple Regression Analysis

Hypotheses 1	Liquidity is positively related to systematic risk	Rejected
Hypotheses 2	Leverage is positively related to systematic risk	Rejected
Hypotheses 3	Size is positively related to systematic risk	Rejected
Hypotheses 4	Growth rate is negatively related to systematic risk	Rejected
Hypotheses 5	Liquidity, leverage, size, and growth simultaneously affect systematic risk	Not Significant

CONCLUSION

Our research has revealed some important findings related to the relationship between financial measurements and systematic risk, which specifically focus on the effects of leverage, liquidity, size, and growth on company's beta. In Indonesia, the recent situation informed us that not all financial measurement variables influence at all on systematic risk as predicted before. These contradicting findings, of course, have attracted more attention to explore the hidden drivers of this strange phenomenon. The most possible explanation on this case is the behavior of Indonesian investors itself. A more preference on trading transaction (short-term investment) oriented is assumed as the main reason why more investors do not pay attention to the firms' financial information. They are just more involved in technical analysis, which focus on the historical share price and trade volume. We assume that liquidity risk is the one of the investors' main considerations. The investors seemingly assume that the Indonesian's liquidity risk is quite high and the current situation of stock market is not preferable for the investor to put in long-term investment.

Besides the academic contribution provided in this paper, indeed, the methodology adopted here, the financial ratio method, is subject to some limits. Moreover, further research is needed on this topic not only to confirm these results but also to investigate the investors' perspectives of current systematic risk. Future researchers might be able to increase reliability by increasing sample sizes or by obtaining fully available financial data. Moreover, additional independent variables or appropriate ratios to measure each variable can be used to increase significance of the model. For example, firm size could be included as an independent variable. In addition, return on equity and return on assets could be used as a new variable and the proxies for profitability measure. Comparing methodologies to analyze the relationship between systematic risk and financial variables in order to find out what the best methodology for the risk analysis could be another possible research. Lastly, researches about regional market, such as ASEAN countries' markets, for the manufacturing industry could also be conducted.

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Banking Efficiency And Performance: A Test Of Banking Characteristics In An Emerging Market

Keyword: Bank Efficiency, Bank Characteristics, ROA, ROE, NPL

JEL Codes: E5, G21, L25

INTRODUCTION

The Asian Financial Crisis 1997-1998 has given an important lesson for the Indonesian banking industry, which previously enjoyed an open and expansive financial policy, on how to manage the credit growth and the prudential banking principles. After having a booming period before the crisis 1997-1998, the number of Indonesian private commercial banks in 2005 has decreased from 144 to 122 fully operating banks (Bank Indonesia, 2005). Bank Indonesia, as the central bank in Indonesia, carries a three-fold responsibility, i.e. as monetary authority, the regulatory, and supervisory authority for the banking system and payment system. As such, Bank Indonesia's most important task is not only to safeguard financial stability, but also economic system stability (Bank Indonesia, 2010). This task becomes the central point, especially, because Indonesian financial-services firms are facing a much tougher operating environment as a result of the various financial distress, including credit crisis. Higher funding costs, increased defaults, and limited opportunities for top line growth are all contributing to a more challenging situation for the industry. Combined with the likelihood of additional compliance obligations, financial institutions are facing a level of difficulty they have not seen for many years. As a result, many firms are being forced to place more emphasis on reducing costs. In the other words, they must become more efficient to get higher performance.

Improving efficiency has long been a challenge for the financial services industry, but cost management is not only about reducing expenses. It is about generating more revenue per unit of cost. Indonesian banks vary widely in their commitment to cost management, and their commitment tends to be more cyclical than sustaining. The behavior of those banks is intuitively also influenced by the increasing competition from nonbank institutions and from banks expanding into new markets. This situation is putting strong pressure on Indonesian banks to improve their earnings and to control costs. The critical factor in remaining survived and sustained is clearly, to be efficient. Prior studies have revealed that shown the most efficient banks have substantial cost and competitive advantages over those with average or below average efficiency (Berger, Hunter, and Timme, 1993).

The main stream of prior studies in banking efficiency measurement concentrates on loan management, bank size, growth level, and the ownership (private or government owned). Spong, Sullivan, and De Young (1995) found that cost management and the quality of the human resources (bank managers and personnel) appear to play the largest role in banking efficiency. They also reported that one of the notable characteristics of efficient banks is the active involvement by directors and a commitment to controlling bank risk exposure, particularly where ownership is concentrated and stockholders are likely to be less diversified.

Based on the analysis of the profit function of banks, other studies reported the tendency of profit efficiency as the increasing in bank size (Akhavein, Berger, and Humphrey, 1997). This might result from improved risk diversification with increases in the scale of the banks' operations. By mirroring the prior studies, it is interesting to investigate the identical idea of bank efficiency and performance measurement in the context of emerging markets, especially; those have passed through a difficult period, like financial distress. Have the same determinants influenced bank efficiency? Does Non Performing Loan determine bank performance? Different from the previous ones, in this study, we explored the Indonesian bank efficiency from loan management and bank characteristics in the most-stable considered period in Indonesia after the Asian Financial crisis. We tested the influence of those independent variables on bank performance measurements (ROA and ROE), and applied the equivalent variables on the bank efficiency measurement. The results would inform us whether the investigated determinants play the same role or not after the crisis. It would also explain to us how implicitly the Indonesian banks learn from the crisis.

To present the empirical findings, the paper is organized as follows. The literature review and prior studies on bank efficiency and performance are briefly outlined in Section 2. The methodology and research model is described in Section 3, followed by the research results and discussion in Section 4. We provide some concluding remarks in Section 5.

Due to page limitations sections of text, tables, graphs, figures referred to in this article may have been omitted. Interested readers are referred to the authors for copies of the omitted portions of this article.

RESEARCH RESULTS AND DISCUSSION

The descriptive data revealed that Net Interest Income to Total Asset (NIITA), as one of the proxies for bank performance measures has almost the same average number with ROE, i.e. 10.24%, but it has a smaller standard deviation value, compared to ROE that is equal to 2.06%. To remedy the un-normal distributed data of NPL, which is indicated by the KS-Z (Kolgomorov-Smirnov Z) significance value that is smaller than 0.05, we transform the NPL value into logarithmic value. The result of Kolgomorov-Smirnov Z normality test method is presented in Table 1.

Table 1: Summary Statistics of Sample Banks

Variable	N	Mean	Max	Min	Std. Dev	KS Z	Sig
ROA	75	0.0114	0.05	-0.03	0.0107	1.054	0.217
ROE	75	0.1052	0.38	-0.36	0.1013	1.247	0.089
NIITA	75	0.1024	0.15	0.07	0.0206	1.152	0.141
LOGNPL	75	-1.49	-2.46	-0.58	0.3532	0.560	0.912
SIZE	75	7.1933	8.50	5.87	0.7479	0.929	0.354
GROWTH	75	0.1627	0.82	-0.029	0.1534	0.872	0.432
PRIVATE	75	0.1600	1.00	0.00	0.3691	4.397	0.000

Source: Data processed

Bank Performance Measurement

In order to get a valid prediction and BLUE (Best Linear Unbiased Estimation) model, we applied classical assumption tests to all the data used, i.e. autocorrelation, heteroscedasticity, and multicollinearity tests (Gujarati, 2003). The available number of sample becomes 68, 70, and 70 banks, for ROA, ROE, and NIITA, respectively, after previously, we did some remedies for occurred-autocorrelation problem in LogNPL, Size, and Growth. Our test on bank performance revealed that loan management and size matter in generating a higher and better yield for banks, which are indicated by the significant estimated values of those predictors on ROA and ROE (t value: -3.818 and -4.302, for LogNPL; 5.052 and 5.093 for Size). These findings are in line with the work of Basu, Druck, Marston and Susmel (2004), which measured the Argentinean banks' performance. The

negative and significant value of NPL was seemingly common in the emerging markets that were previously suffered from the financial crisis.

A positive and insignificant value of Private, as the proxy for ownership structure, supported partially the work of Megginson, Nash, and van Randenborgh (1994) and Boubakri and Cosset (1998). They found that private financial institution improves the firms' performance. Their researches document strong performance improvements for their sample of privatized firms in developed and emerging countries respectively. The significant and positive influence of Size on bank performance (ROA and ROE) is in line with the empirical findings of Okazaki and Sawada (2006). It also supports the study of Laeven (2006), which studied the effect of competition, diversification, and ownership on the bank's performance in some Asian countries. Laeven (2006) concluded an important positive effect of the variable Size and Growth on bank performance. In our study, even though the Growth variable has the same sign as the work of Laeven (2006), the value is not statistically significant. We assumed this slight difference due to the proxy used, i.e. using asset growth, instead of operating income growth as done in the prior studies. The regression results for bank performance measurement are summarized and presented in Table 2 as follows:

Table 2 omitted but would occur here

Bank Efficiency Measurement

To measure bank efficiency, we regress to the bank efficiency measure on the bank characteristic variables, i.e. Size, Growth, and Private. The results revealed that only private-owned bank significantly influences bank efficiency (see Table 3). This finding is in line with the study of Berger, Bonime, Goldberg, and White (2004), which find private banks to have higher profit efficiency than the state-owned banks in a sample of 28 developing countries. Our study supported a similar finding of Altunbas, Lynne, and Molyneux (2001) that finds privately owned banks are more efficient than their mutual and public sector counterparts in the German-banking market. Private-owned banks all appear to benefit from the widespread economies of scale. This paper also supported the work of Micco, Panizza, and Yanez (2004). In their study, the state-owned banks operating in developing countries tend to have lower profitability than comparable private banks, and this inferior profitability is due to lower net interest margin, higher overhead costs (mostly due to the fact that state-owned banks tend to employ relatively more people), and higher non-performing loans.

The insignificant effects of Size and Growth on bank efficiency measure are quite interesting. Altunbas et al. (2001) found that the larger-size banks tend to realize greater economies. The size of public or state-owned banks that is commonly bigger than private-owned banks influence the efficiency measure in context of cost and profit advantages, which can possibly be explained by their lower cost of funds. We predicted that the cause of insignificant effect is the number of sample used. Most of the prior studies used more than 50 banks as the sample size, for instance, Alhadeff and Alhadeff (1964) used 200 banks; Tschoegl (1983) used 1000 banks; Scholtens (2000) used 100 banks.

Table 3 omitted but would occur here

CONCLUSIONS

Our research has revealed some important findings related to the banking efficiency and performance, which specifically focus on the effects of bank characteristics and loan management. In Indonesia, non-performing loan and the bank size played an important role in generating a high profit, or high performance. This finding implicitly informs us the management performance of Indonesian banks after having suffered terribly in 1997-1998, when the Asian Financial crisis surged and demolished a number of Indonesian banks. Indonesian banks' management has learned from the crisis and applied better corporate governance and prudential banking principles. It is indicated by the significant and negative value of NPL on bank profitability.

It also informs us how the Indonesian government through Bank Indonesia (the Indonesian central bank), as the monetary and economic regulator, has worked to form a solid financial stability to support the Indonesian banks to be more efficient. The awareness of banking efficiency as the essential factor for a well-functioning economy has encouraged Indonesian banks to merge and consolidate its size to achieve maximum efficiency. This effort is the pre-requisite condition for the Indonesian banks to operate efficiently by directing society's savings toward those enterprises with highest expected social returns and monitoring them carefully after lending, where society's scarce resources are allocated more efficiently. Our study also revealed that the Indonesian government's policy to liberalize banking industry and encourage more participation from private sector is a right policy. It is indicated by the significant and positive value of Private variable on loan management, which is proxied by NPL. Indonesian private-owned banks have been able to be more efficient in managing its business; especially, they have successfully applied effectively and efficiently cost management. This kind of efficiency, of course, will in turn promote economic growth. By contrast, banks that simply operate with waste and inefficiency will slow economic growth and reduce society's economic welfare.

Besides the academic contribution provided in this paper, indeed, the methodology adopted here, the financial ratio method, is subject to some limits. Moreover, further research is needed on this topic not only to confirm these results but also to investigate the origins of bank efficiency and performance measurement.

As the simple implementation of this research, there are some strategies could be utilized for Indonesian banks in order to keep efficient and profitable. There are: [1] Protect our existing customer base. It means we must be assured that we know exactly who our best customers are and keep them happy. [2] Increase our service and products per household, by conducting proper and sustained research, to answer the questions: Do we know how many of our customers only have savings' products and no checking products? How many are checking-customers that have no saving's products? How many are customers without debit cards or not using their debit card? What is about internet banking, bill pay, direct deposit, e-Statement status? All these products and services potentially add spread-income, non-interest fee income, reduce expense, and affect the customer lifetime value. In addition, [3] the Indonesian bank should focus on acquiring deposit rich customers. A simple segmentation strategy within small business and retail markets that focuses on high average non-interest deposits should be our focus.

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Relationship Between Risk Taking Propensity And Demographic Characteristics Among MSEs In Malaysia

Keywords: risk taking propensity, demographic characteristics, micro and small business owner.

INTRODUCTION

In Malaysia, Micro and Small Enterprises (MSEs) accounted for 99.2% of about 518,996 businesses that were registered in 2005 where almost 80% are categorised as micro-enterprises (SME Corps, 2005). The statistics showed that not many MSEs in the country graduated into becoming large corporations despite the increasing number of MSEs established each year. What could be the reasons? This phenomenon is probably due to the low risk taking propensity among MSE owners

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whereby they are afraid of expanding their business due to the risks and uncertainties they might face if they become a larger corporation. Though MSEs have increased in number from year to year, their contribution to the national economy in terms of output, added value and new net jobs are presumed to be stagnant if not diminishing.

This study examines the risk-taking propensity among the micro and small business owners in Malaysia. It is in the interest of the researcher to shed some insights on the behaviour of these micro entrepreneurs in terms of their awareness and perception about risk, their propensity to risk taking as well as their overall understanding on risk management or mitigation. Propensity to risk taking is generally defined as the tendency of the individual entrepreneur to assume a certain level of risk associated with their business operations particularly when making business decisions. The assumption is that different individuals might have different risk taking propensities; some may be high risk takers while some may be risk averse. It is envisaged that the research will be able to contribute to the body of knowledge in terms of understanding on the micro and small business owners' risk-taking propensity especially within the context of different cultures of Malaysia.

The purpose of this study is to assess the relationship between levels of risk taking propensity with demographic characteristics of Malaysian MSEs owners. The study would enhance the understanding of whether, and if so, how demographic characteristics give affect MSEs' risk taking propensity.

Due to page limitations sections of text, tables, graphs, figures referred to in this article may have been omitted. Interested readers are referred to the authors for copies of the omitted portions of this article.

CONCLUSIONS

Contributions of the Research

The study investigated the relationship between risk taking propensity and demographic MSE owners. A comprehensive review of seminal and contemporary academic literature on entrepreneurs' demographic with focus upon risk taking propensity has provided earlier insights to the expected outcomes of the research. The present research has made specific contributions to the field of entrepreneurship especially in the area of risk taking behaviour of MSE owners in Malaysia as well as in the area of risk management and its relation to MSEs demographic characteristics.

The first contribution lays in the discovery of the level of risk taking propensity of MSE owners in Malaysia. The literature review on the level of risk taking propensity among entrepreneurs were invariably biased towards classifying the risk taking propensity as low, medium and high. Scholars such as Brockhaus and Nord (1979), Sexton and Bowman (1983, 1984), and Carland, J.W., III, Carland, J.W., Carland, J.A & Pearce, J.W. (1995), in their respective studies, found that entrepreneurs risk taking propensity were generally influenced by their demographic. However, the findings of the study revealed that the risk taking propensity of Malaysian MSE was not influenced by their demographic and business characteristics. One possible explanation is that Malaysian MSE owners are generally risk averse; thus the level of risk taking propensity does not increase as the education level and business experience increase. This important observation might have its root in the culture of the Malaysian community in particular and the Asian community in general. Those who dare to take higher risk are considered as suicidal or equivalent to gamblers. In the Malay proverbs, statements such as "kalau kail panjang sejengkal, jangan lautan hendak diduga" and "rezeki secupak tak akan jadi segantang" clearly imply the risk averseness of the population, particularly among the ethnic Malays. The study has been able to shed additional insights that risk taking propensity in certain communities may not be influenced by its demographic but rather by its culture and domestic/societal environmental influences.

Last but not least, the study has been able to contribute to the field of entrepreneur development strategies. Notwithstanding the low risk taking propensity among MSEs, the effort of government

agencies in promoting its healthy growth and development will have to be re-strategised. New strategies and approaches have to take into account not only the low risk taking propensity but also the long term strategy in inculcating a higher risk taking culture among the MSE entrepreneurs. This research has indirectly shown that culture plays an important role in influencing the entrepreneurs risk taking behaviour, thus acculturation of entrepreneurial risk taking behaviour must start very early within the family and community. Efforts to transform the Malaysian society towards entrepreneurialism must be intensified and it will be more effective if the country formulates a specific long term entrepreneurship policy to ensure the future supply of vibrant and resilient entrepreneurs as well as those who have a higher risk taking propensities. Once the risk taking propensity of MSE entrepreneurs is at a higher level, it could facilitate the many numbers of MSEs now to evolve into a stronger and bigger entrepreneurial entities that will spur the economic development of the country. In short, agencies involved in developing entrepreneurs such as SME Corp, the ministries, financial institutions, government economic planners in the country must formulate new approaches and strategies on developing and enhancing the entrepreneurs' risk taking propensities.

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Enhancing Strategic Marketing Knowledge of Local Partner: The PLS Approach

INTRODUCTION

Industrialization efforts in developing nations like Thailand are heavily dependent on foreign direct investment (FDI). Foreign companies are acknowledged to possess stocks of knowledge which make them competitive worldwide. In addition to attracting capital inflows, the policy makers are also interested in the spill over effects of managerial skills and competency, in particular marketing skills. To ensure the process of knowledge transfer takes place, the host nation would normally enforce a ruling that foreign investors form a joint venture with local companies. The ability of the local companies to acquire knowledge from their foreign counterparts would increase the human capital which is vital for national economic development and growth. This paper seeks to shed light on the acquisition of strategic marketing knowledge in the Thai international joint venture firms.

Keywords: Transfer of knowledge, marketing, joint venture, Thailand

Due to page limitations sections of text, tables, graphs, figures referred to in this article may have been omitted. Interested readers are referred to the authors for copies of the omitted portions of this article.

DISCUSSION

According to the knowledge-based theory of the firm (Grant, 1996; Nonaka & Takeuchi, 1995), knowledge is the most important strategic resource in building and sustaining competitive advantage. Knowledge acquisition in IJVs has attracted a lot of attention among researchers. Many studies attempted to link knowledge acquisition activities to performance (Dhanaraj et al., 2004; Lyles &

Salk, 1996). In this study, the focus is on the acquisition of strategic marketing knowledge as perceived by the local Thai partner in the IJVs operating in Southern Region of Thailand. The emphasis of this study is on the factors facilitating the acquisition of strategic marketing knowledge. Local partner capacity to learn or often referred to as absorptive capacity of local personnel has been established to have positive relationship with the acquisition of marketing knowledge. This concurs with Cohen and Levinthal (1990) proposition that absorptive capacity is an important determinant of knowledge acquisition.

The finding also demonstrated that capacity of foreign partners to transfer is also positively associated with the transfer of strategic marketing knowledge. Active participation by both parties in decision making and implementation promotes learning activities. Interpersonal interactions between local and foreign partner personnel enhance the exchange of knowledge. Given the assumption that foreign partner has superior management knowledge and skills, the desire of local partner to learn will undoubtedly resulted in knowledge acquisition. Experience as an indicator of local partner prior knowledge was found to have no influence on the acquisition of strategic marketing knowledge. This finding does not support the proposition by researchers in IJV learning that prior experience have the potential to affect on IJVs knowledge acquired (Lane et al, 2001). Intensity of efforts from both parties, local and foreign partner, is critical to the success of transfer and acquisition of knowledge (Inkpen 2000; Kim 2001). Such intensity can be gauged from the willingness to commit resources to overcome barriers that may inhibit activities related to the transfer and acquisition of knowledge (Simonim, 1999). Between the formal and informal transfer mechanisms, the former is found to be positively associated with the transfer of strategic marketing knowledge. Besides informal training, trust is another variable that does not contribute to the transfer of marketing knowledge. This could be attributed to the existing cordial relationship between the local and foreign partner that been build over the life of the IJV. As the formation of the IJV could have been attributed to the trust that has been developed prior to the formation of IJV could be the reason to explain why trust is a predictor of transfer of strategic marketing knowledge.

CONCLUDING REMARKS

Active engagement of both local and foreign personnel is a critical element in facilitating knowledge transfer and acquisition. The structures that encourage open communication between local and foreign partner personnel will create conducive environment for exchange of information and ideas. Absorptive capacity of the local personnel can be enhanced through investment in formal training so as to enable them to see new perspectives in management. Such investment will also convince the foreign on the seriousness of the local personnel wanting to be part of the complex organizational strategic marketing decisions.

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The Effectiveness Of Accreditation, Licensee And Other External Assessment Process As Tools For Quality Improvement In Healthcare: Malaysian Private Hospital Experience

Keywords: accreditation, quality, private hospital, PSI.

INTRODUCTION

KPJ Seremban Specialist Hospital is a private hospital in Malaysia. This hospital belong to KPJ Healthcare Berhad, the biggest private healthcare providers in Malaysia. KPJ Healthcare Berhad currently had 21 hospitals in Malaysia and 2 hospitals in Indonesia. KPJ Seremban Specialist Hospital was 134 bedded hospital excluding 3 bedded Cardiac Care Unit, 4 bedded Intensive Care Unit, 4 bedded High Dependent Care Unit and 7 bedded trauma and observation bay at the Emergency Services and it started business in January 2005. In year 2006, it has been certified with ISO 9001:2000 certification and recertified during the transition audit of ISO 9001:2008 in year 2009 by Moody International. To further enhance the quality and patient safety, in July 2009, it has been awarded with 3 years Hospital Accreditation by Malaysian Society For Quality in Health (MSQH), a certification body for hospital accreditation in Malaysia. MSQH is a member of International Society For Quality in Health (ISQUA)

Objectives of the study:

To monitor how certification by external bodies will enable the organization to increase the quality of the services provided to our customers. This study will enable the management to monitor the quality or services provided Using indicators and benchmarking will facilitate the organization to measure level of compliance to the clinical standards to ensure the services provided are safe and following international standards. The monitor how the external certification Enhance staff education.

Due to page limitations sections of text, tables, graphs, figures referred to in this article may have been omitted. Interested readers are referred to the authors for copies of the omitted portions of this article.

DISCUSSION

Refer to table 1, we can conclude that the Patient Safety Indicators (PSIs) are a set of indicators providing information on potential in hospital complications and adverse events following surgeries, procedures, and childbirth. The PSIs were developed after a comprehensive literature review, analysis of ICD-9-CM codes, review by a clinician panel, implementation of risk adjustment, and empirical analyses.

The PSIs can be used to help hospitals identify potential adverse events that might need further study; provide the opportunity to assess the incidence of adverse events and in hospital complications using administrative data found in the typical discharge record; include indicators for complications occurring in hospital that may represent patient safety events; and, indicators also have area level analogs designed to detect patient safety events on a regional level.

Many studies now demonstrate that patient safety is an international problem. For example, large studies in the United States, New Zealand, Australia, Canada, and the United Kingdom have all identified high rates of adverse events, and smaller studies in many other countries have found important safety issues.

In KPJ Seremban Specialist Hospital, For patient safety, four indicators were monitored and the comparison was made between year 2009 with year 2008. It was found that for year 2008 the rate of Length of Stay (LOS) > 5 days after elective caesarean section was 0.47% and 0% in year 2009. Both data are better compared to the standard of < 1%.

Based on the study conducted by Stytt Sjukrahuslega, in the Icelandic medical journal, 2011 it was found that Median hospital stay decreased significantly from 81 to 52 hours between 2007 and 2008-9. Readmissions were four in each period and outpatient visit rates similar. In 2008-9, 66% of all women were discharged within 48 hours. Women in the fast-track program were satisfied with early

discharge. Most healthy women can be discharged early after singleton birth by elective caesarean, without increasing readmissions.

Unplanned admission to ICU were higher for both years of 2008 and 2009 in KPJ Seremban Specialist Hospital compared to the standard of zero. Unplanned post-anaesthetic and surgical admission to the intensive care unit (ICU) can provide an insight into the standard of peri-operative management in operating theatres and ICU resource management, including quality of anaesthetic care.¹²

For KPJ Seremban, even though the rate of ICU admission was higher compared to the standard, most cases were post surgery admitted by anaesthetist for intensive monitoring of post surgery patients. However the rate of 2009 was lower compared to 2008. Rate of White Appendix was higher than the standard (5-20%) for year 2008 but it had dropped significantly for year 2009 after the implementation of Accreditation with recorded rate of only 12% which is within the standard rate.

Under pathological conditions, a thrombus can propagate into otherwise normal vessels. A thrombus that has propagated where it is not needed can obstruct flow in critical vessels. It can also obliterate valves and other structures that are essential to normal hemodynamic function. The principal clinical syndromes that result are acute myocardial infarction (AMI), deep vein thrombosis, pulmonary embolism, acute ischemic stroke, acute peripheral arterial occlusion, and occlusion of indwelling catheters. Therefore during acute Myocardial Infarction it is very important to administer Thrombolytic therapy within 1 hour of the onset.¹³

The standard rate for percentage of Myocardial Infarction patients receiving Thrombolytic therapy within 1 hour at the emergency department was > 70%. From the data collected in KPJ Seremban, it was found that for the year 2008 the rate was 75% and it was higher in year 2009 with the rate of 95% in year 2009 after the implementation of Accreditation.

More and more hospitals are finding that significant increases in patient satisfaction are an added benefit that results from improving patient flow and bed management performance. When a hospital establishes a solid foundation of effective patient flow processes and supporting tools, satisfaction with the overall care experience is enhanced. Given that consumers have more choice of where to receive services and are using data that are now widely available to inform their health care decisions, it is imperative that hospitals address patient satisfaction issues. And once a patient receives care, satisfaction plays a role in how likely he or she is to recommend a facility to others. Even High-Performing Organizations Struggle to Improve Patient Satisfaction

For several years the Hospital of the University of Pennsylvania (HUP), a member of the University of Pennsylvania Health System (UPHS) in Philadelphia, had not seen overall improvement in its patient satisfaction ratings. The organization focused on specific concerns, such as improving patient flow from the Emergency Department (ED) into the hospital, but did not address patient flow and bed management as a hospital-wide issue. Then, in October 2005, HUP began to take a comprehensive, end-to-end approach to improving patient flow.

The University Hospital (TUH) in Cincinnati, Ohio, a member of the Health Alliance, had not achieved its patient satisfaction goals for the three years prior to undertaking a comprehensive patient flow performance improvement initiative in June 2006. The hospital had established a committee to review patient satisfaction scores and outline activities to support improvement. However, the committee lacked meaningful data and analyses that could help pinpoint opportunities and assist in developing action plans for increasing patient satisfaction.

The Children's Hospital—Denver (TCH) began a comprehensive patient flow improvement effort in April 2007. For two years prior to the initiative TCH had seen a steady decline in its Press Ganey patient satisfaction scores. TCH attempted to improve patient satisfaction first focused on individual hospital departments taking responsibility for their own satisfaction scores. Then service excellence teams were developed that focused on areas such as the ED, inpatient units and surgical care.

However, patient satisfaction improvement efforts did not link flow processes organization-wide or provide data necessary to monitor performance.¹⁴ Therefore KPJ Seremban Specialist Hospital had embarked on benchmarking activities on admission time, discharge time and number of complaints. The standard for patient admission was 30 minutes. However for year 2008 it was 60 minutes but for year 2009 it was reduced to 30 minutes and meeting the set standard. For discharge the set standard was 54 minutes. In year 2008 it was 40 minutes and much better in 2009 with only 30 minutes after Accreditation being implemented.

The complaints had also improved from 75 cases in 2008 to 62 cases in 2009. Both were lower than the set standard of 137 complaints. However for year 2009, it was better than year 2008.

Reasons for complaints:

The main reasons for complaints were the poor attitude of the staff (15 cases in 2008, 12 cases in 2009), not giving enough information to patients (30 cases 2008, 25 cases 2009), professionalism of staff and doctors (15 cases in 2008, 12 cases in 2009) delay in getting treatment (10 cases in 2008, 8 cases in 2009), delay in admission and discharges (5 cases in 2008 and 5 cases in 2009).

Patient complaints are indications of their dissatisfaction with the service received. With increasing patient expectations, we need to address this issue for a more satisfying relationship between healthcare provider and user.

As a comparison, another study was conducted by HC Lim et al, Why do patient Complain which was published in Singapore Medical Journal, it was found that, the main reasons why patients in this study complained, were strikingly similar. Poor attitude/conduct, unprofessional conduct, mismanagement, poor communication and long waiting time were common causes of patients' unhappiness. The Medical Defence Union reported that breakdown in communication between doctor and patient constitutes a major component in complaints and claims. In this study, the main reasons for complaints were found to be related to attitude/conduct (28.8%), professional skills (17.8%), unmet patient expectations/requests (16.2%), waiting time (10.0%) and communication (7.8%). Awareness of these reasons for patient dissatisfaction is necessary as a first step in the prevention and management of complaints.

In this study, the top patient complaint was related to attitude/conduct. Patients seeking medical care expect to be treated by doctors and other healthcare personnel with kindness, concern and empathy. With increasing consumerism and the evolving medical scene into a more customer-orientated service, patients not only expect good medical care but also good service from the medical profession. Real or perceived poor attitudinal behaviour would cause dissatisfaction. Real conduct problems should be reduced to a minimum. It is also important for healthcare personnel to portray a professional and caring image so that patients do not misperceive them as being rude and uncaring. Healthcare personnel also need to match their professional styles according to different patients. A doctor's personal style is not always appropriate for all his patients and may sometimes be misinterpreted as hostile even when it is not.

The second main reason for complaints was related to professional skills. The complaints were mainly of cursory examination, incompetence and inadequate explanation. Patients expect doctors to be competent and skillful, thorough in their clinical examination and to provide adequate explanation regarding patients' illnesses. Competency and good professional skills are basic requirements expected of any healthcare professional. With rapid advances in medical science and technology and with an increasingly well-informed public, healthcare personnel need to involve themselves in continuing medical education and training to maintain their professional skills and knowledge. Continuing educational and service training for all categories of healthcare personnel should be emphasised and maintained. In a busy polyclinic with a heavy workload, consultation time is sometimes limited. Complaints about cursory examination and inadequate explanation are often the reflection of short consultation time. Measures taken to increase the consultation time would also increase patient satisfaction and decrease complaints arising from a rushed consultation.

Dissatisfaction also occurs when there is a mismatch between patients' expectations or demands and medical services received or offered. These unmet expectations were found to be mostly related to medical leave, medication or referral. It is crucial for healthcare personnel to provide clear and adequate explanation to address these unmet needs and expectations. In cases of unrealistically high expectations, a more tactful approach is necessary. The information provided by the mass media and the press may sometimes be misinterpreted by the public resulting in unrealistic expectations. Healthcare personnel and the mass media should work together to provide appropriate information to better inform and educate the public.

Waiting time was found to be an important cause of unhappiness. Waiting to consult a doctor and registration accounted for the majority of complaints on waiting time. Patient load, staff situation and flow of patients in the polyclinics are factors that would affect waiting time. Having an adequate staff complement appropriate for the patient load is important in reducing waiting time. Continuing efforts at workflow improvement in the polyclinics would also help increase efficiency.

Unnecessary comments and inadequate explanation accounted for the majority of complaints under the category of communications. Whilst it is necessary to provide patients with adequate information, healthcare providers should at the same time avoid making unnecessary remarks. Complaints often follow a conflict situation. Good listening, communication and negotiation skills are needed to resolve these unpleasant situations. These are skills that can be learnt and improved upon. Role playing complaint situations can help healthcare personnel develop better strategies in the management of such problems

From the data collected in KPJ Seremban, it was found that for clinical incidences the percentages had reduced from 0.2% in 2009 compared to 0.3% in 2008. Result for year 2009 was better compared to 2008 before Accreditation implementation. For both years it was better compared to the standard of 3.7% to 16%. The same trend can be seen in non-clinical incidences where 0.4 % was recorded in 2008 compared to only 0.2 in 2009.

For continuous human capital development, as part of the requirement of hospital Accreditation the number of staff attended training in KPJ Seremban had improved from 21 in year 2008 to 34 in year 2009. Corporations are recognizing the importance of investing in their employees now more than everbefore. Companies are beginning to understand that to stay on top in the global economy, they need to place more and more emphasis on developing and retaining their people. Organizations that appreciate the financial impact of their employees often refer to them as human capital.

Derek Stockley (2008), who works as a human resource trainer, defines human capital as "recognition that people in organizations and businesses are an important and essential asset who contribute to development and growth, in a similar way to physical assets such as machines and money. The collective attitudes, skills and abilities of people contribute to organizational performance and productivity. Any expenditure in training, development, health and support is an investment, not just an expense." He continues to say, "Competition is so fierce and change is so fast, that any competitive edge gained by the introduction of new processes or technology can be short-lived if competitors adopt the same technology. But to implement change, their people must have the same or better skills and abilities."¹⁵

For the audit conducted for ISO 9001: 2008 compliance there was no non-conformance recorded in year 2009. The result of final survey for MSQH Accreditation produced in July 2009 found that KPJ Seremban Specialist Hospital complied to the standard set by the accrediting body and the hospital was awarded 3 years accreditation until middle of 2012.

The figure on poor understanding of label was improved from 40% in 2008 to 32 % in 2009. Ineffective communication had also being improved from 30% in 2008 to 29% in year 2009

CONCLUSION

Based on the data collected we can see clearly how various clinical and non-clinical indicators, accreditation, licensee and external assessment process had improved quality services for KPJ Seremban Specialist Hospital. The data produced by this study was in line with the other literature reviews conducted by many researches. After the implementation of various external assessment such as ISO 9001:2008 and MSQH hospital accreditation, we can see that for indicators related to patient safety such as rate of Length of Stay > 5 days after elective caesarean section and percentage of Myocardial infarction receiving Thrombolytic therapy within 1 hour at the emergency department were better than 2008 and the standard after the implementation of the Accreditation.

Regarding the benchmarking indicators the admission time, discharge time and number of complaints had improved after the implementation of Accreditation. The complaints had also improved from 75 cases in 2008 to 62 cases in 2009

For both ISO 9001: 2008 and MSQH Accreditation, during the surveys that were conducted, there was no non-conformance recorded and in year 2009 the hospital was awarded 3 years accreditation until middle of 2012.

The figure on poor understanding of label was improved from 40% in 2008 to 32 % in 2009. Ineffective communication had also being improved from 30% in 2008 to 29% in year 2009

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The Adequacy of the Variation Clause in Construction Contract in Malaysia with Specific Reference to PWD 203A Standard Form of Contract

Keywords: Adequacy of Clause, Variation Clause, PWD 203A Standard Form of Contract

INTRODUCTION

The occurrence of variations is inevitable as the construction work progresses, due to unforeseen circumstances as in to conform to site conditions, to furnish any deficiencies in the design or changes required by the Client, to suit market conditions or even to suit technology developments (Arain & Low, 2005; Hashim Sikan, 2003). The inevitability of variations on construction projects insists adequate variation clauses to be made to minimise or control their impact on the overall operation of the project (Akinsola & Potts, 1998). Yet, the pervasiveness of variations as disclosed by many research studies (Sutrisna, Potts & Buckley, 2003; Doran & Bridgers, 2002; Jagboro, 2002; Elhag & Boussabaine, 2000; Akinsola & Potts, 1998; Yogeswaran and Kumaraswamy, 1997), has broached the adequacy of contractual provision for variations in the conditions of contract.

Even though certainties in price, time, and design are desirable in a construction project, the reality of design and construction development and the other issues apparently necessitate the provision for variations in construction contracts (Hashim Sikan 2003; Charlton, 2001). On account of the importance and the deliberate appropriateness of the contract conditions as a whole, many standard forms of contract have been developed over the years (Akinsola and Potts, 1998). In the Malaysian context, there are a number of standard forms of contracts which are applicable for construction projects, each incorporates express clauses for variation, (Martin, 2001; Hashim Sikan, 2003; Masamitsu Onishi, Khairuddin, Omoto, & Kobayashi, 2003). Some main standard forms are as tabulated respectively in Table 1:

Table 1: omitted but would occur here

The local standard forms of contract are expected to be adequate and convenient to the practice because achieving to the various existing standard forms of contract is quite a process, in which all sorts of consideration and potential risks should have been deliberated over in time (Harban Singh, 2006). But on the other hand, as a part of the standard forms of contract, the provision of clauses on variation is also suspected to hold a few drawbacks in its adequacy, particularly in terms of its clarity, completeness, fairness to contracting parties, and its consistency with other provisions or clauses (Harban Singh, 2006; Swiderski, 2006; Jagboro, 2002; Akinsola & Potts, 1998). Yet, it is almost impossible to expect the provisions composed in the standard forms of contract to be able to deal with all eventualities for the massive and diverse nature of construction contracts (Harban Singh, 2006).

Based on the background of the variation clauses in construction contracts as disclosed by the local and foreign researches, the study is prompted to assess the clauses' adequacy with specific reference to the PWD 203A (Rev. 10/83) i.e. Clause 24 and 25. The assessment can be helpful in perceiving the positive or negative aspects of the clause and more importantly so that appropriate measures can be taken in case the result emerged to be negative. The study also aimed to evaluate the adequacy of the variation clause in construction contracts with specific reference to the PWD 203A Standard Form of Contract (Rev. 10/83) in order to imply whether there is the need for its improvement or otherwise.

Two main objectives have been formulated for this study. The objectives are:

1. To assess the attributes of adequacy of Variation Clauses (Clause 24 and 25) with specific reference to 203A Standard Form of Contract
2. To imply whether there is a need for clause improvement or otherwise

Due to page limitations sections of text, tables, graphs, figures referred to in this article may have been omitted. Interested readers are referred to the authors for copies of the omitted portions of this article.

DATA ANALYSIS AND DISCUSSION

The adequacy of both variation clauses (Clause 24 and 25) under PWD 203A Standard Form of Contract are measured in terms of clause clarity, completeness, fairness and consistency. The summary of adequacy for both variation clauses is as listed in Table 2 below:

Figure 1: omitted but would occur here

Table 2: Summary of Adequacy for Variation Clauses in PWD 203A Standard Form of Contract

Clause	Clarity	Completeness	Fairness	Consistency
24	Adequate	Adequate	Adequate	Adequate
25	Adequate	Adequate	Adequate	Adequate

The Adequacy of Clause 24

The findings reflected that Clause 24 is adequately clear in conveying the definition of what constitutes a variation, rules and procedures, etc. In other words, the clause is considered as adequately well-defined in its direction with incorporation of comprehensible rules in ordering variation. Therefore, it is expected that the potential for the clause's clarity to be an area of disputes among the practitioners to be relatively lower. Consequently, it is summed up that Clause 24 is adequately complete in covering the contractual aspects of variations like the ordering for varied works.

The findings also perceived that Clause 24 is adequately fair to all the contracting parties. For example, in the procedures of ordering for varied works, the responsibilities and discretion of the S.O. in ordering variation on the Client's behalf are apparently to protect the Client's right when changes are necessary, yet not making the former contract agreements to be ineffective, i.e. the Contractor still has to complete the works, where 'in return' he will be paid for the variation as constituted in the clause's definition. Additionally, the findings also disclosed that Clause 24 has relatively low level or no discrepancies or conflict with Clause 25 and other clauses under the PWD 203A Standard Forms of Contract. This could have been lessening the possibilities for consequences of variations like lengthened disputes and costly claims to occur.

The Adequacy of Clause 25

It is perceived that the rules and procedures under Clause 25 are adequately clear and comprehensible to the practitioners. Therefore, in a way, this clause has the quality to lessen the possibilities of disputes regarding how to measure and value the varied works, etc. Clause 25 of the PWD 203A is also observed to be adequately complete as it covers the contractual aspects of variations such as the procedure, ordering, measurement, valuation and payment for varied works.

Based on the result, apparently, Clause 25 is adequately fair to all the contracting parties, particularly in the aspects of variations like the procedure, ordering, measurement, valuation and payment for the varied works. The rules and procedures under the clause are proven to incorporate the quality of treating the parties reasonably, if not equal. It is comprehended from the results that Clause 25 is adequately consistent with Clause 24 as well as with other clauses in the PWD 203A Standard Forms of Contract. Therefore the possibilities of conflict could be minimized if not totally eliminated and disruptive impacts on projects for instance, lengthened disputes and costly claims could also be lessened.

As a whole, there is a 72 percent frequency for 'Adequate' by the respondents when they were asked to rate the level of adequacy for the four attributes i.e. clarity, completeness, fairness, and consistency for both Clause 24 and Clause 25 (Figure 6.15). This is followed by a 13 percent frequency for 'Very Adequate'. Of all response, there is 12 percent frequency of 'No Idea' and 3 percent of 'Inadequate'. However, there is no response at all for 'Very Inadequate'.

What reflects from the above analysis is that, the variation clauses are adequate in overall, concluding 'Adequate' and 'Very Adequate'. The relatively small percentage of them who had no idea of the level of adequacy is believed to have come from the respondents with low level of experience in dealing with variations. The smallest percentage of them who thought that the variation clauses are inadequate must have their specific reasons and justification yet have not been indicated in the spaces provided in the questionnaire.

As already suggested by Harban Singh (2006), the variation clauses are drafted through a process of negotiation between the various sectors of the construction industry. Furthermore, over the years, the adoption of the PWD 203A Form has been proven as facilitating the conduct of trade as well as addressing the common problems and inadequacies. Therefore, Clause 24 and 25 is believed to be as optimally fair and complete. Furthermore, risks are allocated relatively fairly between the parties thus prevents contractors from adding risk allowances for a good business transaction between the parties, which is also applicable for the variation clauses (Harban Singh (2006). According to Harban Singh

(2006), as the variation clauses are time tested and the practitioners are aware of their workability, limitations and shortcomings, thus the clauses are expected to be clear and consistent with the other provisions as well over the time of their implementation of the clauses.

CONCLUSION & RECOMMENDATIONS

This research discusses the adequacy and sufficiency of the variation clause in the construction contract is, with specific reference to the PWD 203A Standard Form of Contract, i.e. Clause 24 and 25. The research objective is realized by conducting a postal questionnaire survey to acquire the construction industry practitioners' points of view on the adequacy of the variation clauses in respect of clarity, completeness, fairness to contracting parties and their consistency with other provisions or rules related with variations.

Based on the research findings, those potential areas of lacking in the variation clauses are unlikely to cause trouble or controversy to the practitioners. Although it is almost impossible to expect the provisions composed in the standard forms of contract to be able to deal with all eventualities for the massive and diverse nature of construction contracts, the variation clauses under the PWD 203A Form are proven to be adequately clear, complete or comprehensive, fair, and tally with other provisions or related rules, at any rate.

Therefore, it can be concluded that the variation clauses are sufficient in the quality of quantity to fulfil expectations, needs, or qualifications for the use or implementation in contract administration, in particular in dealing with variations. In other words, both Clause 24 and 25 incorporate the features of anticipating the potential trouble area of the relationship between the parties in order to achieve successful completion of construction projects in terms of cost, time, quality, and the satisfaction of the parties.

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Developing Consumer Brand Relationships Built to Last Brand Stress, Catastrophic Events and Negative Social Network Campaigns

Keywords: relationship strength, brand disruption, business continuity.

INTRODUCTION

The consequences of a disastrous corporate crisis on a firm's reputation can linger for decades. It is highly likely that how the brand relationship is developed or reinforced will affect whether it will withstand short term disruptions. Sheth (Sheth, J. and Patvatiyar, A, 2002) has argued that companies attempt to promote relationships with consumers to insulate them from market whims. Decisions concerning whether to maintain a brand relationship repurchase or switch brands may often, however, be a more emotional/behavioral than based on facts. We want to emphasize that it is often the loyal consumer-brand relationship bonds, not the crises themselves that can have the most severe consequences for a firm. In many cases what differentiates those firms that thrive following a crisis from those that do not is the loyal consumer-brand relationship displayed throughout the process. "Consider, for example, how most people continue to hold Johnson and Johnson (J & J) as the standard for how to effectively manage a crisis situation when cyanide-laced Tylenol capsules caused

numerous deaths in Chicago in the early 1980s. To this day, the popular press consistently rates J & J as one of America's top companies, despite a crisis situation that could have adversely affected consumer trust and firm performance. Contrast J & J's corporate image with the negative view that many people still harbor for Exxon 15 years after an accident where the oil tanker Valdez precipitated one of this nation's most extensive oil spills or BP oilrig platform explosion in the US Gulf.

Extensive research has investigated how consumers are different in perceiving brands through brand equity (Aaker, 1991; Keller, 1993) and brand extensions (Keller & Aaker, 1992; Reddy, Holak & Bhat, 1994). More recently, researchers have noted that consumers differ not only in how they perceive brands but also in how they relate to brands (Fournier, 1998; Muniz & O'Guinn, 2001). This line of research has suggested that relationship principles virtually replace short-term exchange notions in both marketing thought and practice (Fournier, 1998). In addition, sociologists remind us that business dealings are transacted within the broader realm of personal relations and structures or imbedded within the networks of such relations (Granovetter, 1985). As such, the use of a relational approach may provide a better, and broader, understanding of the bond that develops between customers and brands (Fournier, S. and Yao, J.L., 1996. Comfort in thinking about the brand not as a passive object of marketing transactions but as an active, contributing member of the relationship is a matter deserving of note. One way to legitimize the brand-as-partner is to highlight ways in which brands are animated, humanized or somehow personalized" (Fournier, 1998: 344). In 2004, Aaker, J., Fournier, S., and Brasel, S.A. (2004) building on the work of Fournier noted a research gap in the brand literature relating to the type of bonds different consumers establish with distinct brand personalities, as well as the relevant relationship patterns that can affect consumer-brand interactions. In response they developed a model to explain consumer-brand relationships based on the appreciation that acts of transgression and brand personality have a prominent role in the relationship strength formation. Investigations into brands by then had led to sufficient evidence to support that, when investigating the broader aspects of the consumer-brand relationship, it is necessary to adopt a more holistic and relational perspective (Keller, 2003).

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CONCLUSION

Recognition of the importance of brand relationships, how they are established and factors that might influence the bond during situations of brand disruption, to include catastrophic events and product recalls are of increasing importance. Fournier and Lee (Fournier, S. and Lee, L., 1995) point to the need to fashion a flexible brand relationship that allows individuals to adopt new roles as lives, ages and values change. The author's model would suggest that, while needing to be adaptable to life and company changes, for the consumer brand relationship to be maintained, the company must be vigilant to assure that both the consumer's personality and the brand's personality remain in equilibrium over during specific instances of brand disruption and longer time frames. One environmental threat to the equilibrium, which has not been adequately addressed by firms, relates to the new internet information age consisting of twittering, blogs and web ratings. These instant sources of communication have made it possible, due to widespread and low cost information, for rapid disruptions in a brand's image to occur for legitimate or irrational reasons. Reinforcing the importance of the consumer as a partner in the relationship, firms must have a comprehensive understanding of how the personalities of their consumer relate to partner quality and the consumer brand relationship. An aspect of the brand relationship was noted by Fullerton in his focus on brand commitment loyalty in what he describes as affective commitment and continuance commitment (Fullerton, 2005). Fullerton describes affective commitment as "rooted in shared values, identification and attachment" and continuance commitment as binding consumers to brands as a result of a difficulty "in getting out of a relationship or perceiving few alternatives outside the relationship" (2005: 99). Here we would note the importance in the difference in Intimacy- Loyalty and Passion driven relationships.

Consistent with Fullerton' findings, the authors found that Intimacy – Loyalty bonds served to maintain the relationship through developed partner quality while Passion bonds were to a much lesser extent associated with relationship strength.

One might argue that in an intimacy-loyalty brand relationship the brand adds value to the consumer through partner quality in a manner similar to the way that loyalty adds value to the personal relationship. It provides a type of psychological glue that secures the bond between partners. When difficulties arise it is this glue that serves to secure relationships, whether personal or brand. The results of this study support the authors finding that Intimacy-Loyalty bonds have a higher association with relationship strength than Passion bonds. It would seem that Passion bonds would create a heightened sense of excitement and “in the minute” product support. If, however, a disruption in that passion were to occur (due for example to product disappointment or a new passion was developed for another brand) that repurchase could be questionable. Under Intimacy –Loyalty, however, the nature of the bond could be considered more mature/stable and thus would be more secure under situational adverse brand conditions to a better extent than relationships which have focused on passion. What is important to recognize is that how a firm organizes the brand relationship prior to disruptive events will directly relate to how that brand image is positioned to withstand situational disruptions. One significant contribution of the study was to promote an understanding that while a brand relationship, such as passion, can stimulate sales a relationship such as Intimacy - Loyalty can serve to directly support on ongoing business continuity during times of firm or brand image uncertainty.

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Construction Supply Chain: The Influence of Procurement Process Coordination on Firm Performance

Key words: Procurement process coordination, firm performance, supply chain, supplier relationship, building construction

INTRODUCTION

Traditionally, managers concentrate their internal operations in improving their business performance with less or no coordination with other supply chain members. Conversely, supply chain management (SCM) calls for coordination in their operational activities with decisions and actions of their external business partners (Li & Wang, 2007). Such coordination may help to improve performance of various supply chain process (Arshinder et al., 2006). One of the critical processes in the supply chain is procurement.

As highlighted by Vrijhoef & Lauri (1999), construction supply chain is still of waste and problem due to interdependency largely interrelated with causes in other stages of supply chain. Problem in the accuracy of data, unplanned deliveries, wrong and defective deliveries between building material suppliers and contractor for instance, warrant for effective supply chain organisational relationship.

Such relationship is perceived would enhance the level of coordination which eventually lead to performance improvement.

With regard to the contribution of building materials, it accounts for about 50% - 60% of the total building costs while other costs such as labour contribute 30%; heavy equipment – 5% and construction management and supervision account for 15% (Bertelsen & Nielsen, 1997). Ironically, some studies in the construction industry reported that these resources (building materials) are not sufficiently managed as compared to what have been practiced in other industries such as manufacturing. This insufficiency leads to waste of bad material management. In order to address this problem it has been suggested that there should be a close cooperation or coordination between the supply chain members such as the contractor and building material supplier in managing the chain (Bertelsen & Nielsen, 1997; Bertelsen S. , 1993).

By conceptualising supply chain coordination as procurement process coordination, this study attempts to achieve these two objectives: (1) to investigate the relationship between procurement process coordination and firm performance (2) to determine the necessary procurement process coordination variables that are most important and relevant to firm performance. Such finding perhaps may assist in the development of SCM concept and managerial practices.

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CONCLUSIONS

As noted earlier, this research set out to achieve two main objectives: to ascertain the influence of procurement process coordination on performance and to identify the dimensions in procurement process coordination that are most important and relevant to firm performance. Hypotheses testing were used in order to achieve those objectives. The results provide empirical support for the central thesis of the study, that there are positive significant path coefficients between firm performance and two of the dimensions in the procurement process coordination (i.e. joint operation planning and supplier relationship development). Moreover, the findings also help to illustrate that supply chain coordination concept is also applicable to the building construction industry.

Apart from that, this study provides fresh insight into the multiple dimensions of procurement process coordination. With two of the dimensions showed significant relationships with firm performance, it provides support to the importance of supply chain coordination in the building construction industry, particularly in the procuring activities of building materials. It is incumbent on the firms to understand how they wish to leverage procurement process coordination capability that may affect firm performance.

Among four dimensions, joint decision planning demonstrates the strongest effect, on both operational and customer performance. Such result provides sign to the need of emphasising on collaboration (joint operation) and relationship building among channel members, mostly between the contractors and building material suppliers. More resources should be invested in this relationship building and collaboration aspects in order to enhance the impact on firm performance. While coordination is regarded as crucial in every activity of supply chain, specifically in the procurement process, only two dimensions supported the hypotheses. Such results warrant for further investigation. In other words, there is a need to understand this observable fact. As been explained in the earlier section, lack of IT adoption among construction industry players was observed to be a critical factor which perceived to hinder the effectiveness of supply chain coordination.

The results presented here represent a starting point in understanding the complexity the relationship between procurement process coordination and firm performance. Further research is required in order to examine issues such as what factors facilitate and impede procurement process coordination as a driver of value creation.

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Building an Innovation Culture at SABIC

Keywords: Corporate culture, Innovation, Innovation Program, Saudi Arabia.

INTRODUCTION

In this era of growing competition, innovation is considered one of the key factors in order to achieve sustainable competitive advantage (SCA) and success in business (Damanpour and Gopalakrishnan, 2001; Hitt et al., 1997; Kleinschmidt and Cooper, 1991; Subramanian and Nilakanta, 1996). The innovative organizations are considered to be more flexible and have a better tendency to adapt to changed environment. That means the innovation management capacitate the organization in the better way to achieve SCA. More and more of key executives of the corporations are recognizing this need and it has led to a situation with increased interest among researchers and businesses to gain a better understanding of how to improve the organizational capacity to innovate (Damanpour, 1996; Koc and Ceylan, 2007; Mayondo and Farrell, 2003). Literature highlights key determinants to create an innovation led environment which include the role of information technologies and communications, organizational design, Strategic thinking, leadership and change and organizational culture.

Organizational culture is considered one of the most important factors that can initiate innovative behavior among members of the corporation. The main reason is it stimulates a behavior in employees that may lead them to accept innovation as a valuable factor and pillar of the organization (Hartmann, 2006). Some there are some works which have focused on the theoretical explanations for the relationship between organizational culture and innovation (Ahmed, 1998; Martins and Terblanche, 2003; Mclean, 2005) and different studies argued that innovation should be embedded in organizational culture in order to become a source of sustainable competitive advantage for the company (Barney, 1986).

Successful business organizations have the ability to absorb innovation into the organizational culture (Tushman and O'Reilly, 1997) and they also emphasize on the fact that organization culture lies at the heart of innovation .many other believe that organizational culture has a strong impact on innovation and creativity .The literature provides a very strong link respecting the relationship between innovativeness and culture. Hurley and Hult, (1998) found that levels of Innovativeness is more in the organization with cultures that stress on learning development and collaborative decision making. O'Cass and Ngo (2007) indicated that market success can be derived from the organization's innovation culture.

Corporate visions, mission statements, leadership and innovation culture

Having a clear corporate vision and missions make it easy for members of the organization to carry out their activities in such a way that will help them to achieve common objectives (Ouchi, 1983).

Mission statements help to establish a culture of innovation. It is the responsibility of the key leadership to devise a vision and missions statement that can be actively followed and communicated throughout the organization. Leading organizations consistently innovate and this can be done without a firm support and commitment of top management. It is the task of leaders to develop the culture that promote and acknowledges innovation (Ahmad, 1998). There is no doubt that leadership is very important but only itself if not sufficient to develop a culture of innovation. There should be more team members and innovation champions who should participate in continuous process of building an innovation culture with the leaders. Top managements financial and emotional support to is necessary to create such environment so that and they can promote innovation through innovation champions. The top level management has to take every objective realistically by considering the current scenario and market conditions. More innovative organizations are those which are able to assess potential demand of their products and services in the market.

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Top level managers should ensure that innovative ideas get the required support at all levels of the organization. They should also devise the processes and procedures which are helpful to develop the innovation culture in the organizations

Findings: Creating an Innovation culture is everybody's job at SABIC.

The company is very clear in its concept that if it has to take innovation beyond the sphere of technology and to make it everybody's job so it should stress on the importance of innovation's role in converting knowledge in to money. It is acknowledged at SABIC that the course of creating business value should occur at every level of the organization. In the view of the company all these efforts does not replace or undermine the importance of traditional research and development approach but complements it .Company clearly recognizes that innovation does not mean a new invention, "Take Apple's I-Pod. Apple did not invent anything new around the I-Pod player but created an innovative business model for music-on-the go, using existing MP3 technology in a very appealing design" says Heimburg. In his words innovation is not something you can delegate so everybody must understand, support and contribute towards the development of innovation culture.

The company underlines that to develop a culture of innovation in which everyone should be able to deal with change and risk. The company has a clear philosophy which depicts its intention to develop the innovation culture, it involves but not restricted to:

Learn and become accustomed to change in such a way that increases business performance and profitability. The ability to manage risk as it cannot be avoided when change is being made. The capability to accept and learn from failures, but try to failing early on and economically in order to manage the cost of learning. With all of the efforts made by the leaders and supported by the employees of the company at every level the company has been successful in developing a culture that absorbs change and innovation. The results of some previous years are marvelous showing the fruit of such culture.

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The Importance And Satisfaction Level Of Perceived Key Factors, Competitiveness And Firm Growth For Special Economic Zone: A Study Of Electronics Clusters In Batam Of Riau Island (Indonesia)

Keywords: firm growth, human capital, corruption, electronics cluster, free trade zone, foreign direct investment, macroeconomics conditions, Batam, Indonesia.

INTRODUCTION

Electronics industry has been one of the most important sectors for manufacturing industry in Indonesia. It contributes significantly to nation's GDP, foreign direct investment, and helps reduce unemployment and poverty of the nation. The economic recession in the United States of America and the Europe recently have affected Indonesia economic growth. The growth in terms of sale and the number of firms operate in Batam has declined from 45 % in 1998 to 30 % in 2007 (Central Bureau of Statistics, 2008). What are the reasons behind this downturn? Does the crisis influences the firms growth in Batam? This paper will investigate and discuss some of the key issues that determine the growth of electronics industry in Indonesia especially in Batam.

We choose Batam as the central point of this study due to the strategic position of Batam which is closed to Singapore and the close business linkage between Singapore and Indonesia. Development of Batam island by Singapore has started since 1990s. A large number of Singaporean, Japanese, American, and European electric and electronics firms have started operation in Batam island, a bonded area which belongs to the Indonesian territory and lies approximately 20 km offshore to the southeast of Singapore. Many Singaporean, Japanese, American, and European manufacturers are located in the Batamindo Industrial Park (BIP) which began operation in 1991. It is a part of the economic cooperation agreement between Indonesia and Singapore to develop the province of Riau. There are also many cases in which factories operating in Singapore moved to Batam island to take advantage of the abundant and inexpensive labor. Singapore's wage increased and labor shortage made it unsuitable for manufacturing. In either case, all imports and exports are handled through Singapore. Singapore is still an important gate (harbor) between East and West parts of the world.

Furthermore, since Singapore is the hub of merchandise distribution in the ASEAN region, parts-maker producing in Batam island and exporting and importing through Singapore are able to respond quickly to the changing requirements of final assemblers as they relocate their production facilities within the region. As a result the cost is reduced and the efficiency is increased.

Besides the advantage of low cost labor force, electric and electronics companies came to Indonesia, attracted by Indonesia's potential large market as well. They have greatly contributed to the expansion of the country's electric and electronics industry. Singaporean companies, together with companies of other nationalities, have formed clusters in industrial parks of Batam. They have become supply centers not only for the ASEAN region but also for Europe and the United States of America.

Since the year of 2000, Singapore and Japanese manufacturing investment in Indonesia has declined. Investment in the electric and electronics sector was no exception (Wahyuni and Kwan Kee, 2011). This decline may be attributed to the domestic conditions in Indonesia such as political instability before the Megawati government came into power in 2001, rising labor costs and uncertain economic outlook. Subsequently, Singaporean and Japanese companies were trying to reduce costs due to intense competition in the domestic and foreign market, sluggish worldwide demand, and the prolonged recession in U.S and some regional countries of Indonesia.

To gain competitive advantage, Singapore and Indonesia have been working together to boost the growth of electronic industry in Batam which is recognized as the periphery of Singapore. This research is trying to investigate the key determinant factors that influence firm growth in Batam. We use qualitative and quantitative firm level data for fifty electronics firms in Batam to answer the following questions:

What are the perceived importance and satisfaction of the firms surveyed to certain factors such as governance, institutional, legal, human resources, and corruption obstacles they face?

Compared to large firms, are small and medium size enterprises (SMEs) affected by different obstacles?

What are the key factors that adversely affect firm growth in Batam?

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EMPIRICAL RESULTS AND DISCUSSION

The result of this study will be divided into three parts: macroeconomic condition of Batam, the strategic initiative of clusters, and microeconomic factors. At first, it is interesting to see the number of manufacturing firms in Batam throughout the years. We can see in Figure 2 (omitted to save space) and figure 3 (also omitted for space considerations) the percentage of electronics firms decreased from 45 % in 1998 to 30 % in 2007.

From our in-depth interviews it was revealed that this situation was triggered by at least two factors: the economic crisis in 1997 and the exodus of some electronics companies to China.

Figure 2: Number of Manufacturing firms i.e electronics and other sector in Batam, Indonesia in the year 1998 and 2007 (omitted but would occur here.)

This situation provides a lesson to us that we have to be alert with the macro-economic situation as well as the possibility of firm migration from our country to other countries. Providing a friendly policy of investment and strengthening cluster development might be a smart solution to prevent this painful migration.

Macroeconomic condition

From macroeconomic condition our respondent opinions towards several key factors in Batam can be explained as follows:

Governance factors

Table 1- Importance and satisfaction with BBK on composite factors (omitted but would occur here)

Aggregated mean scores for each dimension is the average of individual mean scores of all the items under each dimension. Overall, the respondent firms attached relatively higher importance to

governance (4.69). The overall level of satisfaction with governance factor is low (2.91), average score less than 3 (table 1)

Specifically, companies have shown relatively low satisfaction levels (dissatisfied) with governance factors such as consistent interpretation of regulations by government officials, and proper coordination between provincial & central government (mean scores: 2.6-2.7) and corruption free business environment.

On the policy side, the Indonesian government apparently has not clearly spelled out the position of the electric and electronics industry in the nation's overall industrial development.

“At present Indonesia does not have a comprehensive or clear master plan for the electronics industry” (Manager of Otorita Batam).

“Unclear status of Free Trade Zone (FTZ) regulations make us worried about our business” (Sekupang Makmur Abadi).

CONCLUSIONS

In this paper, we investigate several key factors affect the growth of electronics industry in Batam, Indonesia. This research focuses on the growth barriers. Discuss the macroeconomic conditions in Batam, the effect of strategic initiatives of clusters, and the micro-economic conditions in Batam. The macro-economic conditions looked at the perceived importance and satisfaction of firms surveyed in the areas of governance, institutions, human resources, and corruption. We endeavor to see that corruption affected firm performance and growth. We also see the respondent firms attached relatively higher importance to institutional, governance and infrastructure factors. The overall level of satisfaction with the various competitiveness factors is relatively low (3.16). The score has range 1 to 5. 1 is the least satisfied and 5 is the most satisfied.

The firms reported relatively higher satisfaction levels with infrastructure and business environment factors, and relatively lower satisfaction with labour and governance factors (both with average score of less than 3).

This paper also examines the effect of strategic initiatives of clusters; it helps reduce unemployment and poverty of the nation. And finally, we examine the microeconomics factors that influence the

growth of electronics industry in Batam. By making use of a comprehensive and detailed survey data of fifty electronics firms in Batam, we investigate the rich set of obstacles reported by the firms. The data also allows us to see the differences in firm size, since it has a good coverage of small and medium-sized enterprises in Batam, Human capital and innovation are regarded as very important but dissatisfied for the firms we surveyed. Batam, Indonesia has to employed engineers from Malaysia, India or other parts of the world. To solve the shortage of skilled employees or professionals, Indonesia can synergize with Singapore; Indonesia can send workers to be trained in Singapore polytechnic schools or Institute of Technical Institutions. Singapore definitely can help Indonesia to build capable human resources pools. Some of the big players' top executives are Indonesian who has been trained by the companies they are working for. Some even has their own Training centers. Electronics industry is an industry that needs innovation. Without innovations the products of the electronics firms will be outdated and loose in global competition. Realizing the importance of innovation, some of the big players of electronics companies in Batam have set up their own Research and Development centers.

We also have found that the better the business network is, the better the firms perform. Overall, "Business networks and contacts" is the most important form of business relationships, it is more important than physical linkages.

From the survey, we conclude there are three factors that we need to pay serious attentions to: labor issues and human capital issues, the need for transparent laws and their implementation, and good Corporate Governance practices.

Indonesia actually has the capability to be a good place for manufacturing base i.e. electronics industry, but Indonesian government has to have a clear vision, mission and grand strategy for the industry. If the key areas (that are regarded as the most important but dissatisfied) are not improved, very soon Indonesia will loose its competitiveness to its neighboring countries.

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Internationalization – Do They Know That They Don't Know?

Key Words: Internationalization, known and unknown knowledge, commitment, banks internationalization.

*One who knows and knows that he knows,
will keep on riding on wisdom horse.
One who knows and doesn't know that he knows,
must be awakened not to remain unwise.
One who doesn't know and knows that he doesn't know,
will get the goal moving slow.
One who doesn't know and doesn't know that he doesn't know,
will remain in ignorance forever and ever so.
(En e Yamin, 1280-1367)*

The poem above is more than 700 years old but highlights one of the crucial elements in the process of firms' internationalization i.e., knowledge. In the poem a certain state of One's knowledge is

related to specific outcomes and consequences. The gist of the poem is that different strains of knowledge foretell different future destinies for the One holding the knowledge. Interestingly, the poem also signifies the transition of One from either line to the another meaning that there are no set state of knowledge and no fixed destiny. The variety in the relations between knowledge and destiny outlined in the four lines of the poem says not only something about individuals in their daily life but also offers the possibility of new insights into how the firms' internationalization can be approached. The view on internationalization induced by the first line of the poem, i.e. 'having knowledge and knowing about it', relates to long experience of a stable market and a successful business future while the last line discloses an opposite business line with no knowledge and ignorance of market uncertainties. The lines of the poem also convey different levels of uncertainty. The low degree of uncertainty inherent in the first and second line of the poem further advances a successful development while the unknown uncertainty in the last line bode for crises. The third line of the poem sees awareness and incrementality in knowledge and predicts successive goal attainment. This view of knowledge and future destiny is imprinted in the internationalization process model (IP) (Johanson & Vahlne, 1977) in which inherent the step-by-step management of uncertainty is forming a path dependency of the future steps on the prior. The resemblance of the IP model with the third line of the poem is grounded in notion that firms in their internationalization are aware of not knowing and therefore seeks knowledge for foreign market commitment leading to incremental goal achievement. But, the incrementality and path dependency in firms' internationalization associated with line three is only one of the conditions depicted in the poem. In some other lines the knowing from the path dependency of a firm may suddenly be nullified and turned into unknowing due to crises developed somewhere in the world. Or, the firm thinks that it knows and acts accordingly in the internationalization but do in fact not know and do not even know about it, which may lead to unexpected outcomes of their actions and potentially critical conditions. In the business world of today critical conditions must be considered normal for most firms. The critical condition can abruptly move the firm from the incremental and manageable situation of line three to the stochastic and troublesome condition of line four of the poem.

The financial crises beginning in 2008 imposed loss of knowledge and commitments for all international firms. The crucial aspect in focus in this paper is the link between the two last lines of the poem. Firms may have made incremental commitment based on the condition reflected by line three, i.e., they are aware, search for knowledge, reduce uncertainty incrementally and increase commitments in foreseeable and often minor steps. This presumption, i.e. that what the firm knows in the present is also valid for the future, is though questioned if the situation in line four of the poem is taken into consideration. The 'known' unknown in line three can regarding, e.g. commitment very often become 'unknown' unknown as in line four. The unknown changes, following line four of the poem, could mean that the firm has to face ignorance due to the loss of knowledge and commitment.

This paper is founded on the assumption that the globalization of business has accelerated the level of interconnections between firms and thereby increased the diffusion of uncertainty among them. The aim is to examine the applicability of the IP model in this new business world by juxtaposing the situations following the sentence conveyed by the third and fourth line of the poem. This highlights the contrasts in the relation between knowledge and commitment, which in the IP model is seen as being constructed on smooth changes, with that of the rapid critical changes imposed on contemporary business life of firms. The study conceives the process of change as triggered not only by the close interacting foreign parties, but also by those 'unknown' and far from the firms' core business. In simple words, firms believe that they know about the future but in reality there are fundamental issues of which they do not know.

Acknowledging this simple statement means the situation of unknowing always exists in the firms' foreign business relationships. It may sometimes drive the firms to the goal but sometimes to ignorant behaviour. In the latter, earlier knowledge may erode and the unknown impose the loose of commitment. The paper will discuss and suggest some new understandings of the question of how the change between conditions of knowing and unknowing impacts on the internationalization process model. The internationalization of firms is described as standing on the edge of falling into either of

the two conditions. The one being the awareness of not knowing and stable pace of change as characterized in line three of the poem and the other the fate of unknowing and dramatic change pictured in the last line of the poem. The paper commences by presenting the IP model and some comments, a short case study of a Swedish bank followed by an analysis of the case aiming at elaborating novel thoughts on firms' behaviour and the compatibility of internationalization process model.

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ANALYTICAL DISCUSSIONS

The internationalization of Swedbank does not represent an extreme example. Often seemingly far from rational behavior, the daily news is full of discussions about firms' bankruptcy or losses in their foreign market commitments. Having the introductory poem in mind, the behavior of Swedbank can be considered through a combination of that a) they know that they do not know and b) they do not know that they do not know. In some occasions the managers were aware of their limitations in handling the knowledge and information while in other occasions they simply followed their vision and expectation not being aware of the consequences of their commitment decisions. Simply put, there was a gap between the uncertainty and what the firm expected. In regard to the empirical facts the discussions in the following concerns the three issues of; a) knowledge; b) incremental-chaotic foreign market commitment and; c) organizational behavior.

Knowledge. In the early 1990s the bank faced a critical crisis and was close to bankruptcy. Without governmental financial support the bank could have disappeared from the market. One fundamental presumption in the IP model is the role of earlier experience and path dependency. According to this view the experience in the 1990s, i.e. the uncertainty and risk in providing extensive credits, could have enforced managers not to fall into critical conditions again due to similar actions. The new CEO after the crisis in the 1990s understood the uncertainty lacking the knowledge of earlier CEOs. His idea of learning from the crisis corresponded with the IP model – as the bank began to restructure the organization, having a policy of being customer oriented and to put higher focus on the risk analyst group. Interestingly, in the period of stability (1995-2007) the bank followed the IP view in one respect. The development in the financial system was in accordance with the Swedbank's expectation and the bank's risk group, having the knowledge from the branches, could provide sound recommendations. The knowledge obtained was through the development of business networks achieved through mergers and acquisitions in different countries. With increasing knowledge about the merged partners Swedbank increased its investments towards the foreign firms. Through these partners the aim was to gain knowledge about local bank customers and to make further commitment. Resulting from increasing knowledge and higher integration with Hansabank, Swedbank after a period started to aggregate resources towards the Baltic States.

In the early 1990s the bank's internationalization commitment was low, unstructured and unfocused. The operations in U.S., Luxemburg and Great Britain were close in terms of cultural and financial systems but with increasing experience the bank had the vision of increasing commitment in some countries and decommitment in others. This incremental behavior can further be observed when the new CEO in the 1990s decided to focus on the Baltic States. Swedbank started by low levels of investment in Hansabank to later increasing by merging with other local banks in other countries.

If this study had simply focused on the behavior of the bank during the period of 1995-2007, we could easily provide evidence supporting the IP model and learn from the third line of the poem. The bank did know that they did not know and simply increased its commitment and expanded its network as a mean to increase the knowledge needed for expanding in the foreign markets. The CEOs were able to put forward their future expectation and further investments and the risk units could aid CEOs and

offices in how to behave. The crucial question is if they really knew the consequences of their decisions. And, if they knew that they did not know, why then make the commitments in the period of 1995-2007, and also during the 1980s, i.e. the period before the first crisis, which severely damaged the bank. It was to a certain extent the decisions during the stable period that affected the bank.

Recalling the first critical episode, it did not take so many years after the crisis until the new CEO, and also the following CEOs, to completely forget the experiences from the crisis of the 1990s. They started with extensive market commitments in different foreign countries to fulfill the expectation of increasing ROI and being best in the market. For the high economic loss in the 1990s, the new CEO explained the mistakes of the earlier commitment for the lack of CEOs' knowledge. It just took four years for the new CEO to proclaim for an extensive foreign market investment. The new CEO simply forgot what happened a few years ago and thought that they can easily manage the investments and increase the profit. The earlier and existing CEOs simply had a belief that the foreign market uncertainty will be managed. But they did not know that they lack knowledge about future uncertainties.

Connected to the IP model, a simple analysis concerns the connection between knowledge, uncertainty and commitment in the case. The bank had experienced the crisis in the 1990s and realized the connection between uncertainty and commitment. But shortly after the crisis in the mid 1990s foreign market commitment intensified with low impact from the past experience. Despite the warnings from different private and state organizations in the late 2000s, the bank continued its foreign market commitment. Information from these units was simply ignored. Thereby, the extent and types of foreign market commitments during the stable periods have been the sources of crises. Emphasizing this fact it can be stated that uncertainty is always embodied in commitment decisions even under stable incremental foreign market development. The future uncertainty is thus laden with both some known uncertainty and some unknown uncertainty. The future dimension, although obscured in the IP model, contaminates every commitment with some unknown. The unknown gains strength and materializes itself during conditions of turmoil in foreign markets. It belongs to a zone of unrealized uncertainty far from the uncertainty that can be managed by past and present knowledge. In the Swedbank case it is manifested that, the unknown, i.e. not knowing to not know due to the unrealized uncertainty, was part in the whole commitment process even though the commitment in the period of 1995-2007 was stable and increasing. This exposes the parallel existence of conditions resembling line three and four in poem in firms' foreign market commitment. Stability and instability only depicts the degree in the combinations of the two.

Incremental-chaotic market commitment. As the case manifested, Swedbank's foreign market commitment was incremental. During the 1990s and the 2000s the bank increased its foreign market investments rapidly. The bank also changed its foreign investments from focusing on households to the medium and large firms. The empirical facts also illuminate a number of sudden and rapid investments and also sudden deinvestments and the withdrawal from specific markets. As elevated, the banks at several occasions entered into Poland and Denmark but suddenly withdrew from these markets. The incremental logic in the IP model is not adept to provide an explanation for such behavior. Such behavior may be caused by the expectation of the firms on the short-term gains in each market. Instead of long-term incremental behavior the driving force of the firm was opportunistic behaviour with short-term profit in focus. Swedbank displayed this behaviour, e.g. when the CEO realized a profit by, they sold their holdings and withdrew from Denmark and Poland to instead invest in the Baltic States. In several countries the bank first extended its commitment and later decreased its commitment. The driving force behind leaving markets was not the lack of knowledge or experience. The bank simply saw new opportunities in other markets paying no considerations to the future uncertainty. Such a behavior was a holder of commitments increasing in some markets and de-commitments in other. Sometimes firms, as the case on Swedbank discloses, at one point in time increase their operations in a foreign market, then decrease them and then suddenly decide to increase them again. This provides a picture of market involvements far from the stability in the incremental logic of the IP-model, rather the case shows examples of chaotic market involvements.

Organizational behavior: An interesting fact revealed in this case is Swedbank's managers, almost disconnected from the earlier strategic experiences of the organization, made decisions based on their visions and expectations. Dissimilar to the incremental role of the knowledge in foreign market commitment in the IP-model, the case elevates facts on the CEOs role for increasing or decreasing the investments. While the CEO prior to the earlier crisis aimed for expansion, the CEO after the crisis declared new directions. Apparently forgetting the reasons for falling into the crisis of the 1990s, the next CEO, just four years after the crisis, started an extensive increase in credits and merging activities with foreign firms. As illustrated in the case, each time a new CEO took the responsibility new directions, unrelated to the prior commitment and knowledge, became the guidance for the bank's operations. New CEOs blamed earlier CEOs while presenting new visions. The common direction for the CEOs' prior to the crisis in 2008 was expansion in Baltic countries. The CEOs stated these countries were "gold mines", despite the knowledge that most of the benefit of the Swedbank came from the domestic market. Despite of this knowledge, the CEOs decided to decrease the number of employees and branches in Sweden. At the same time they increased the number of the employees, the number of branches and the credits to the customers in foreign countries. The CEO after the 2008 crisis clearly explained that the critical situation in the bank is not only due to the international market. It is also the cause of severe mistakes and ill conceived strategic decisions of the earlier CEOs.

The above described behavior of Swedbank opens for another facet in connection to the IP-model. While the model clearly stress on and incrementality in knowledge and commitment, the case on Swedbank direct the attention to the organization's and the managers' expectation and visions. Almost disconnected from the information and recommendations in the market, the board of directors step by step follow what they perceive of how the market will behave. Since the present and the past knowledge is unable to prognosticate the future unknown and uncertainty increasingly gain strength from incremental commitment, the organization's expectations and the role of experiential knowledge will be diminished. Rather than the past and the present knowledge, the expressions in the case highlights what the CEO and the board in the organization perceives as the future. The extraction of the time dimension reveals the connection between commitment and organizational expectation and affirms the view that commitment is driven by knowledge and expectation. Commitment with a weak connection between knowledge and expectation, as in cases like Swedbank, strengthens the function of unknown knowledge in likeness of the last line of the poem. Commitment with a strong connection between knowledge and expectation, on the other hand, weakens the function of unknown knowledge. Referring to the earlier discussions, no matter the type of organizations or market stability/instability, the state of knowledge is composed of partly both not knowing and being aware of it and not knowing and not even knowing about it.

CONCLUDING REMARKS

Did Swedbank know the consequences of their decisions? Of course not, but according to the IP-model is the logic of incremental knowledge decisive for incremental commitment decisions as the firms know that they do not know and uncertainty is reduced by knowledge. In this setting rationality means to use the available incremental knowledge for making the commitment decisions. Swedbank possessed prior knowledge on how incremental commitments even under favourable market conditions could endanger the whole business. Neglecting the uncertainty associated with each commitment, Swedbank accelerated its commitment in a period of stability. This inspires several interesting conclusions on the connections between knowledge, uncertainty and commitment.

The first relies on the uncertainty in the existing knowledge and the uncertainty in the unknown future. While commitment has a strong future dimension, knowledge is founded on the present and the past. The unknown in the past which is left unknown follows the present known. In other words, commitment based on what is known holds the undisclosed uncertainty in the past and the uncertainty of the future. Thus, commitment can be seen as a vessel carries the uncertainties of the past and the future. In a hypothetical business world wherein stability and growth is dominating the past and

future, the unknown and uncertainty carried in commitment is low. The logic of rationality make the uncertainty in foreign business a calculative issue. Commitment incrementally gains strength from experiential and present knowledge. As the case manifests, in real foreign business wherein firms seek new opportunities and/or where the environment is un predictable, the carried past and present unknown grow stronger which might jeopardize the commitment. The earlier knowledge aiding commitment loose its value and the unknown enforces decommitment and exit from the foreign market.

Exploring the time dimension in this case guides to another conclusion. Firms' international growth is embodied with the unknown future. While past and present are 'known', the future is unknown and is different from past or present. Knowledge on past and present uncertainties is aiding future anticipations steering commitments. While expectation is built on existing knowledge, the future itself is unknown. Available business knowledge can aid only if the future is like the past and present. Incrementality in knowledge and commitment in the IP-model implicitly means the reduction of 'future uncertainty'. But it also means a rational behavior of the foreign firms in dealing with the earlier knowledge used for commitment decisions. As far as the present knowledge is about earlier uncertainties, the gradual commitment can only aid the firms if the available knowledge can be evoked and the future is only marginally different than the present. Cautious and calculative commitments may reduce future uncertainty but put chains on new ventures and opportunity seeking.

As the case manifested, all the CEOs, similar to any other MNCs, were driven by visions and expectation. Somehow disconnected from the past experiences, the commitments were driven by their expectation for future development. The entire foreign market commitment was incremental and extensive. But, far from the IP-model's logic, market commitments in specific countries had a chaotic and disperse nature. Apart from the stable period, commitments were not focused toward specific foreign market. Following the financial analysis in the bank, the short-term future gains drived the bank's foreign market commitment. The expectation for higher gains in another country enforced dissolution of earlier commitments. Far from the logic of long-term relationships of the IPmodel, firms seek for new expectations on short-term relationship opportunities. As far as the market is stable and the uncertainty in the carried unknown is low, the expectation is attainable. When commitments are bounded with the future and not easily made impermanent, expectations are followed by a strong unknown.

One crucial driving force for the third line of the poem, knowing that they do not know, is also related to the organizational ability of MNCs. The ability to evoke the past and the present knowledge, distribute it and exploit it in time is built on rationality in behavior. This can be conceived if the change of organization members does not hamper the flow of knowledge. Distribution of knowledge from the operative level to the CEOs is necessary to maintain and keep the logic in function. In this concern the case of Swedbank allows for another conclusion. The logical function of down-up distribution of the gained knowledge can hold back the top managers' new opportunity seeking and visions. Knowledge can be available somewhere in the organization, but top managers disregard it or observe it and regard it to hamper the visions. Specifically, as revealed in the case, CEOs are often highly excited by the prospect short-term profits and computable financial outcomes for the near future. The unknown in such excitements means gaining more assets to drive the foreign firm to an uncertain destiny.

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Assessing Investors' Abilities To Assimilate International Financial Reporting Standards (IFRS) Earnings Announcements

Key Word: International Financial Reporting Standards (IFRS) versus US GAAP, Trading and price responses, Information content.

INTRODUCTION

The global recognition of IFRS have altered radically and increased the complexity of multinational corporations (MNCs) financial reporting process. This research examines and interprets the security market response around mandatory IFRS-based earnings release dates of UK cross-listed firms that trade as American Depository Receipts (ADRs) using US GAAP earnings announcements as a benchmark. From a research perspective, it is important to benchmark the performance of accounting-based performance model before using such model to assess the implications of changes in accounting standards (Holthausen and Watts 2000).¹ Specifically, this paper examines the impact of two financial reporting events by cross-listed non-US and US firms on their share prices and volume of shares traded in the US equity markets. These events are (1) the announcements of US GAAP earnings in the US by US firms and (2) the announcement of IFRS-based earnings by UK firms, and assess the claim that US and IFRS accounting principles differences impair the ability of US investors to assess the information contained in IFRS process. This is an important issue because rational investors discount informational signals when the signal is associated with greater uncertainty (Verrecchia 2001).

Several studies investigate whether differences between IFRS and domestic GAAP are a source of information useful to financial report users. Several key findings have emerged: US GAAP is more conservative than UK GAAP, 32 other foreign GAAPs, and Swedish GAAP (Hellman 1993); US GAAP is less conservative than Japanese GAAP and Swedish GAAP, respectively (Weetman and Gray 1991); information content of earnings announcements increased in countries that mandated adoption of IFRS relative to those that maintained domestic accounting standards (Landsman et al. 2011); US GAAP earnings are more efficient in predicting future firm performance than IFRS earnings (Meulen, Gaeremynck and Wiekens 2006); no significant difference in the equity quality of UK financial and non-financial firms adopting IFRS mandatorily (Aisbitt 2006); IFRS reconciliation to US GAAP in Form 20- fillings add value (Harris and Muller 1999), and no significant difference between US GAAP and IFRS in terms quality of information (Leuz 2003).

While previous research has provided evidence on the differences that exit between domestic GAAP and IFRS (Gaeremynck et al. 2006; Hellman 1993; Landsman et al. 2011; Aisbitt 2006) the evidence on volume of shares traded and price changes in the US equity markets is weak. This paper test whether IFRS-based earnings announcements, per se, causes investors to revise their cash flow expectations as revealed by security price changes measured over a short-time period. IFRS earnings announcement is hypothesized to stimulate price and trading volume reactions in the US equity markets. I expect this to be the case because accounting earnings capture information about firms' underlying economic fundamentals and about their earnings management actions. That is, IFRS earnings should be informative about price and volume since it reflects previous managerial decisions and activities.

The returns/earnings relation is investigated using either an "events" study or an "association" study. The event studies infer the earnings announcement, per se, causes investors to revise their cash flow expectations as revealed by security price changes measured over a short time period (typically, 2-3

days) around the earnings announcements period. Examples include (Landsman et al. 2011; Ball and Kothari 1991; Morse 1981). In essence, the focus is on whether earnings announcements convey information about future cash flows of the firm. In an association study, returns over relatively long period are regressed on unexpected earnings (Meulen, Gaeremynck and Wiekens 2006; Leuz 2003) estimated over a forecast horizon that corresponds with the fiscal period of interest. Association studies recognize that market agents learn about earnings and valuation-relevant events from many nonaccounting information sources throughout the period. These studies test whether accounting earnings measurements are consistent with the underlying events and information set reflected in stock prices. Typically, causality is not inferred. Instead, the focus is on whether the earnings determination process captures in a meaningful and timely manner the valuation relevant events. Regardless of the approach used, these studies provide vital insights into factors that explain variation in price around earnings announcement.

This study focuses on UK firms because of high degree of cross-border share ownership between the UK and the US investors. The value of UK holdings of US equity and debt as of June 30, 2004, was US\$488 billion, an increase of \$98 billion from 2003. United States investors' holding of UK equity and debt, as of December 31, 2004 amounted to US\$738 billion, by far the largest amount invested in any country outside the US (Institute of Chartered Accountants in England and Wales, 2009). As Frost and Pownall (1994) note, restricting the sample to one equity market controls for market institutional features that can otherwise influence price and volume formation, as well as inferences drawn from the analysis. Limiting the sample to one equity market also allows one to provide insights into the valuation implications of permitting a dual reporting system for foreign registrants in common equity markets. Analyzing UK and US firms' earnings announcements is justified given the jurisdictional homogeneity and cultural closeness between the UK and US. The argument that IFRS confuse US investors because of the technical differences between US GAAP and IFRS further motivates this study. The disadvantage of limiting the sample to firms trading on NYSE/AMEX is that this yields a relatively small sample, potentially limiting the strength of my conclusions.

Moreover, these disclosures of differences between accounting measurement techniques provide an opportunity to assess the informativeness of alternative accounting methods and the information provided to investors by these methods. 2 As global business activities have increased, the comparability of financial information between firms from different countries has become an important issue for the investment community and regulators. Investors can compare and assess the financial health and risk of different corporations more readily and, thus, they will demand a lower rate of return due to reduced risk. 3 Standard setters and regulators from many countries have become involved in initiatives to converge reporting requirements, such as the development of global standards and regulations through the IASB and the International Organization of Securities Commission (IOSCO). How US market participants react to IFRS earnings disclosures is important to regulators (e.g., IASC, SEC and FASB) in their task to improve comparability and reliability of financial reporting. Reliable and comparable financial reporting is important as it allows shareholders to exercise their ownership rights on informed basis. Assessing comparability of financial reporting responds to IASB major goal of developing high quality global financial reporting standards.

In this paper, I estimate conditional market models for US returns and for UK returns for the sample firms. Unexpected trading volume is estimated via market model regression. Volume and return are complementary measures that capture different aspects of investor reaction to public information events.4 Bamber and Cheon (1995) suggest that the relation between volume and return responses to earnings announcements is closer to independence than it is to a "strong positive relation." Kandel and Pearson (1995) report that earnings announcements that do not lead to price change nonetheless stimulate trading. If trading volume and returns are "sufficiently complementary, then tests of market response based on both metrics should be more precise than tests based on either metric alone." The inherent noisiness of return metrics suggests including volume in the analysis. As Cready and Hurtt (2002) point out, when sample size is limited or return reactions are small, volume-based response metrics are more likely to detect the presence of an investor response than return-based metrics.

The results of the analyses are for the most part consistent with the price and volume hypotheses, I find, for IFRS a significant price and volume reaction on day $t = 0$, whereas for US GAAP earnings releases, a significant price response occurred around the days before and immediately after the earnings disclosure with a corresponding increase in trading activity. In comparing IFRS vs. US GAAP earnings informativeness, I provide descriptive evidence that price reaction is more extended following US GAAP, and predominantly negative than IFRS-earnings announcements. These anomalous results may be driven by a general pattern of high market volatility in the US equity markets. I find evidence that US GAAP earnings disclosures stimulate greater price response than IFRS-based earnings announcements, indicating investors familiarity with US GAAP relative to IFRS accounting process.

Turning to the issue of whether volume is more easily detected than price, the results seem to suggest that trading volume metrics are detected more often than price metrics, at least for US earnings, a proposition that is theoretically consistent with Cready and Hurtt (2002) and Kandel and Pearson (1995). That is, trading response is a more-wide-spread phenomenon than price response. For IFRS, volume metrics appear to give similar results as price metrics. The unusually small levels of return variation in the US earnings release period suggests that returns become more stable in the pre-event period, a proposition that is theoretically meaningful in the context of some models of pre-disclosure return behavior. By documenting that IFRS earnings announcements stimulate significant price and volume, the results suggest that non-US GAAP can significantly affect price and trading activity in the US equity markets. In other words, US investors do not appear to be confused by US/IFRS differences, and in fact use information about IFRS earnings in their valuation of UK firms.

The rest of the paper is structured as follows. Section II is background information, prior research and US GAAP and IFRS differences. Section III delineates trading and price as measures of information content. Research design and data source are in IV, while section V presents empirical results. Concluding remarks appear in section VI.

Due to page limitations sections of text, tables, graphs, figures referred to in this article may have been omitted. Interested readers are referred to the authors for copies of the omitted portions of this article.

CONCLUSION

This paper examines the market's reaction (price and volume) to IFRS-based earnings announcements of UK cross-listed firms in the US equity markets following mandatory IFRS adoption in the UK, and investigates the claim that US and IFRS accounting principles differences impair the ability of US investors to assess the information contained in IFRS accounting system output. Specifically, this paper tests whether US investors are able to interpret and use IFRS accounting reports in making trading and investment decisions. I hypothesize that IFRS-base earnings announcements stimulate price and volume responses in the US equity markets. This analysis predicts that both IFRS and US GAAP earnings disclosures lead to significant volume and price reactions. The results provide evidence that (1) unexpected returns and volume of shares traded increased during IFRS and US GAAP-based earnings release dates. The stock price and volume analysis indicate that US investors use information about IFRS earnings in valuation.

I provide descriptive evidence that price reaction is more extended following US GAAP than IFRS-earnings based announcements. Thus, US market participants do not appear to be confused by US/IFRS GAAP differences, and in fact use IFRS earnings in their valuation of UK firms. I interpret this as evidence that (1) US investors are not having difficulties interpreting international accounting standards, and (2) IFRS earnings announcements appear to provide informative data to investors, and (3) the processing of IFRS performance results in the US markets seem not to persist longer relative to US GAAP-based earnings. The trading response period for US GAAP earnings releases appear relatively long, extending to $t = +6$ for scaled trading measure, and day $t = 9$ for unscaled trading

measures relative to IFRS-based earnings disclosure dates. I find little support for the argument that US investors are confused by IFRS/US GAAP differences.

The trading response period to US GAAP earnings appears relatively long, extending to day +9 relative to the earnings announcement period, and suggests a rather lengthy information processing and assimilation on the part of investors. On the other hand, the trading response period to IFRS-based earnings announcements appears relatively short, only extending day +3 relative to non-US GAAP earnings disclosures. The heaviest portion of the response appears to occur in the multiday periods and the more typical day = 0.

This study contributes to the literature in several ways. First, I provide empirical evidence on whether and how IFRS-based earnings announcements affect price and volume of shares traded. I find that IFRS earnings announcements by UK firms are capitalized into ADR prices. This is a new and important finding, adding to both the literature on international cross-listings (e.g., Karoyi 1998, 2006) and the literature on the informativeness of non-US GAAP earnings announcements (see Grace and Pownall 1994; Olibe 2006;-----, among others). The second contribution is to the literature studying the information content of IFRS earnings. At a descriptive level, I extend prior findings confined to local firms within a country (e.g.,-----). The paired security and volume approach enables this study to effectively assess investors' valuation of two distinct accounting standards. The research setting allows for the examination of price and volume reactions for two different securities—ADR and direct listings by US firms. I provide evidence that IFRS-based earnings disclosures stimulate both price and volume of shares traded in the US equity markets. These findings suggest that US investors are capable of processing IFRS earnings disclosure, even though the accounting system differs systematically from the US GAAP. Although prior studies have documented the existence of price response to IFRS earnings data, albeit in foreign markets, I believe this is the first study that provides evidence suggesting that IFRS-based earnings announcements plays an important role in US investors' investment decision. I add to recent studies that attempt to disentangle the equilibrium pricing effects of IFRS earnings.

Third, this study further contributes to the ongoing discussion on whether the mandatory adoption of IFRS enhances the quality of financial reporting by improving the comparability and transparency of accounting numbers. Specifically, it provides evidence of improved comparability in a setting where institutional market factors appear to converge. Assessing investors' abilities to assimilate non-US GAAP accounting data responds to the IASB major goal of developing high quality global accounting standards. Financial reporting comparability was an important driver in the European Union's (EU)'s decision to mandate IFRS adoption and in its important objective of integrating global capital markets. Finally, this investigation provides important insights to US policymakers and standard setters concerning expected relevance of IFRS. The results have direct implications on the discussion related to the adoption of IFRS by US policymakers and standard setters. Diamond (1985) argues in favor of the welfare role of public disclosure because it obviates the need for each individual investor to expend resources on costly information search and acquisition. In other words, disclosure essentially turns private information into public information..

A limitation of this study is that I focused on one equity market. This implies that the results are not generalizable in other equity markets. As Cready and Mynatt (1991) point out, earnings announcement-induced "trading may be limited to only certain types of investors." It may be instructive to find which investor group (i.e., individual vs. Institution) on IFRS accounting data.

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The Internationalization Intensity of Malaysian Firms

INTRODUCTION

Since 1980s, firm's internationalization has become an exciting study avenue. Outward foreign direct investment (OFDI) is an essential way of firms' internationalization to strengthen the competitiveness in developing countries. The rise in OFDI from developing countries and economies, - in transition, it is an interesting phenomenon. These firms are investing abroad for various economic and corporate-specific reasons, which could be differed by nationality of firms, industry (manufacturing vs. services), size (large vs. SMEs), and types of OFDI (market seeking vs. resource seeking). Increasing cost, rivalry and saturated markets in developing countries are among the key drivers of OFDI. Malaysia is among the developing countries that are involved in investment abroad. Malaysia adopted an import substitution industrialization strategy in 1960s with the aim to fulfil domestic market demand. This policy had contributed to influx of FDI into Malaysia as a means to gain advanced technologies. Hence, since 1971, Malaysian firms' shifted towards export-oriented policy and this has gradually contributed to economic growth coupled with favourable investment environment. Malaysia investment abroad started to expand enormously from 2001 onwards. However, the contribution of Malaysia towards the FDI outflows was inconsistent as there has been a sudden decline in 2001 due to the Asian financial crisis and economic recession. In 2004, a few Malaysian companies expanded vigorously by investing abroad and were included in the Top 100 non-Financial Transnational Corporations such as PETRONAS which was ranked 2nd, followed by YTL Corporation Limited and MISC Limited ranked 32nd and 45th, respectively (UNCTAD, 2006).

Pertaining to the outward foreign direct investment performance index in World Investment Report 2006 by UNCTAD the Malaysia economic significance of outward foreign direct investment is increasing; Malaysia was at 32nd position for the periods of 2003-2005. For the periods of 2007-2008, Malaysia was at 11th position among the 128 economies worldwide (UNCTAD, 2009). The trend of globalization these days has caused many companies to internationalize themselves and to do this, it is very important for these companies to penetrate foreign markets if they want to be accepted and remain successful. The success depends on the selection of the correct process for internationalization and various other steps must be taken in order to ensure that the internationalization initiative of the company is success. During these highly competitive moments, the international business environment is one that is normally characterized by immense uncertainty, volatility, as well as high rate of failure when it comes to international expansion. The root cause of this low rate of success can be attributable to the selection of the wrong process for internationalization by a firm that intends to capitalize on the myriad of opportunities that are present in the market abroad. Poor internationalization process choices can lead to "sinking the boat" or "missing the boat" (Dickson & Giglierano, 1986). Very often, these firms are unable to effectively capitalize on the opportunities and the main reason for this is that they have selected the wrong process for internationalizing themselves. There are many barriers and hindrances within the foreign market that could very easily cause these companies to achieve little or no success at all in the internationalization.

According to Lam (2003), numbers of Malaysian firms closed down within four years of foreign operations due to wrong choice of internationalization process strategy which resulted failure in generating profits and caused huge loses. With increasing changes in the global business environment, firms that are suffering from limited information, financial stability, time management and experience are vulnerable to environmental changes (Kitchen & Ahmad, 2007). All these limitations restrict companies' internationalization efforts. Compared with the MNCs from the developed countries, the

weaknesses of MNCs from the developing countries can include; limited knowledge of overseas markets and limited marketing capability, weakness in research and development; lack of international brands or trade names, lack of strategic focus, lack of experience in coordinating overseas operations, currency fluctuation difficulties and the collapse of log prices in international markets (Warner, Ng, & Xu, 2004). Thus, this study intends to find out the extent of internationalization process of Malaysian firms. This study will investigate in what ways do the internationalization advantage comprising of comparative advantage and competitive advantage shape the internationalization intensity which includes entry mode and market selection as part of the process of Malaysian firms' internationalization. The interest of this study is therefore to examine how internationalization advantages separately affects the internationalization process of Malaysian firms.

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DISCUSSION

Summary of Research Objectives, Questions and Hypotheses		
	SECTION 1	
RObj.1	To determine the relationship between internationalization advantage and internationalization intensity.	
RQues. 1	To what extent does internationalization advantage influence Malaysian firms' foreign operations?	
H1a	There is a relationship between internationalization advantage and internationalization intensity	Supported
RQues.2	Which internationalization advantage dimension is significant as part of firms to go abroad?	
H1.1a	There is a significant impact of comparative advantages on the Malaysian firm international operations.	Supported
H1.2a	There is a significant impact of competitive advantages on the Malaysian firm international operations.	Supported

The first objective was to investigate the relationship between internationalization advantage and internationalization intensity. This was achieved through correlation test between internationalization advantage dimensions which comprised of comparative advantage and competitive advantage, and internationalization intensity dimensions which comprised of mode of entry and foreign market. The significant relationship exists between internationalization advantage and internationalization intensity. Both internationalization advantage dimensions, which are comparative advantage and competitive advantage showed a similar relationship with internationalization intensity. Between the dimensions, competitive advantage is more significant than comparative advantage for Malaysian firms to go abroad. However, the strength of their relationship is weak, with r between -20% and -23%, with negative relationship (Arkkelin, 1992). This finding does not support previous study by Condo (2000) that states internationalization advantage, which comprised of comparative advantage and competitive advantage, increases firms' ability to identify and evaluate international expansion strategy as there is a positive relationship among them.

As highlighted in previous section, the findings reveal the situation of the relationship between Malaysian firms' advantages and their intensity for international expansion. One possible explanation for these results is that the inverse relationship is perhaps caused by differences in Malaysia business perspective, where comparative advantage and competitive advantage are seen as not the only criteria to stimulate the Malaysian firms to go abroad. Instead, their investments abroad could be attributed to several factors, such as late mover position, strong presence of global rivals in their backyard, quick changes in technological and product development, and domestic institutional constraints.

Furthermore, these firms are also possibly exposed to other stimuli factors that may trigger an impulse for foreign market expansion such as the desire by decision-makers to achieve corporate goals, proactive risk control to deal with stagnation and decline, higher competitiveness in the marketplace, government support, and competitive pressures in the domestic market. This provides support for explanation based on push, pull and strategic theory (Ariff& Lopez, 2007; Tham, 2006; Kitchen & Ahmad, 2008).

According to the previous studies, the internationalization advantage factors of Malaysian firms include high domestic savings, the rising cost of labour in Malaysia relative to its regional neighbours, limits of domestic markets, domestic deregulation in strategic sectors such as health, education, telecommunications and utilities, promotion of internationalization by the government and of south-south trade, and trade liberalization in general especially in the ASEAN region. Therefore, the key of Malaysian firm's internationalization had been the structural changes to the Malaysian economy due to Malaysia's impressive economic growth (Sim, 2005). Other possible reason is the saturation and competition in the manufacturing and service sectors in the domestic market which is possibly the prime initiator for Malaysian firms' to invest overseas. As noted earlier, government policies in support of internationalization changed dramatically in favor of internationalization since 1991 in response to the structural bottlenecks and recession of 1985 (Ariff& Lopez, 2007). Support for internationalization was further strengthened after the East Asian financial crisis and has become an official strategy of the government to ensure continued growth. Since 1991, the Malaysian government has increased the support for internationalization especially in the form of tax exemption, tax incentives, and special funds (Tham, 2006). In 2003, an additional incentive was introduced for acquiring foreign owned companies abroad for high technology production within the country or to gain new exports for local products (MASSA, 2005). The Malaysian Budget 2007 also outlined measures to help create Malaysian-owned multinational firms. These included an increase in the paid – up capital of EXIM Bank by MYR2 billion to enhance the bank's role in providing financing for domestic companies internationalizing abroad and the setting up of a MYR100 million Overseas Investment Fund to finance start-up costs of domestic companies doing business overseas (Bank Negara, 2005) as part of the efforts to encourage domestic firms to engage in international business. Various financing facilities were introduced, including buyer credit, overseas project financing, guarantees, supplier credit and export of services financing (Exim Bank, 2007). In addition, Bank Negara Malaysia has set-up a MYR1 billion fund to assist and stimulate local entrepreneurs to venture abroad (Tham, 2006). Exim Bank has approved loans and guarantees for exports and investments projects in more than 54 countries, with a total value of MYR 4,374,138 million and MYR 2,504,917 million in 2008 and 2007 respectively, compared to MYR 2,598,000 million in 2000 (Exim Bank, 2008). Overall, Malaysian government has played a very active and direct role for the local companies to invest overseas with the objective of creating Malaysian-owned MNCs with large international operations.

Furthermore, other factors possibly that attracted Malaysian firms' internationalization were supply of cheap labor, abundance of raw materials, large and growing domestic markets, geographic proximity, special taxes, and other incentives, and the development of export markets through preferential treatment. Beginning in the 1990s, there were signs that Malaysia was facing infrastructural bottlenecks and increasing shortage of labour especially skilled labour. The rising costs of wages lead to overall increase in cost of production (Tham, 2006). Facing these situations, Malaysian firms' may require circumventing them through internationalization. Hence, only having comparative and competitive advantages are inadequate to stimulate Malaysian firms' readiness into the international market relative to other business pressures in the local and global market.

CONCLUSIONS AND FUTURE RESEARCH

Further investigation would be valuable in order to confirm the external validity of this framework. First, other industries should be studied, in particular information technology based firms, in order to assess whether or not the same principles apply to their internationalization. Other specific industries,

such as construction, hotel and food industries, can also exhibit different interactions and could be the object of further study. Second, the study of firms from larger developing countries in the region, specifically ASEAN, is also of interest, since the dynamics of internationalization may differ from Malaysia which represented in this sample due to firms' access to larger markets. Third, there is also a need for future research to extend the investigation of comparison of the internationalization process between government linked companies and non-government linked companies, as well as between service and manufacturing industries. Future research should examine these comparisons in various contexts to gain effectiveness of companies from related sectors in their international expansions. In addition, more research is needed in order to understand the effect of regional market on the evolution of emerging clusters and to discover how these processes will influence the shape of international industries in the region. Future research should also focus on a subset of multinational firms and follow them overtime to see whether the Internationalization Advantage and internationalization intensity relationships hold, degrade, or improve. All these areas should be explored which gain from empirical and longitudinal methods.

This study revealed that the relationship between internationalization advantage and internationalization intensity is significant but in inverse manner. Consequently, comparative advantage and competitive advantage were not the major factors of readiness for Malaysian firms to internationalize, unless both factors integrate with other factors such as late mover position, strong presence of global rivals in their backyard, quick changes in technological and product development, and domestic institutional constraints. The findings have contributed to existing knowledge by providing a new element to research in firm's internationalization advantage particularly in Malaysia. Internationalization has become an important strategy for firms, which at the most basic level involves the use of external market-based modes of exchange. The preference for internationalization among firms in recent decades has been highlighted in the literature (Buckley & Ghauri, 1999; Dunning, 2006). The concept of internationalization advantage offers firms the ability to better understand their level of preparedness for an international commitment besides providing firms a guide to better understand where they stand in their internationalization process phase and where they can improve their capabilities. It is important to recognize that this is fundamentally an exploratory study. An important contribution made by this thesis is the establishment of framework based on findings. The framework can be helpful for the study of issues related to the internationalization of firms from Malaysia and other developing countries. Surveys about the main aspects of this framework have provided confirmation to the relationships embedded in it, mainly the interaction between the internationalization advantage and internationalization intensity which provides a measure of internationalization advantage affects and influences on the internationalization intensity of firms.

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Developing Risk Assessment For Safety And Health Related Risks

Keywords: Risk assessment, Safety risks, financial risks, potential losses, health losses, financial losses

INTRODUCTION

Risk is a uncertain event which may happen in future and has a severity or lead to a loss as an undesirable outcome. The Oxford English Dictionary cites the earliest use of the word in English (in the spelling of *risque*) as from 1621, and the spelling as *risk* from 1655. It defines risk as: (Exposure to) the possibility of loss, injury, or other adverse or unwelcome circumstance; a chance or situation involving such a possibility. (Oxford English Dictionary)

The history of risk may be traced to around 3200 BC in the Tigris Euphrates valley where a group known as Asipu are said to have served as risk analysis consultants for people involved in making difficult, uncertain or risky decisions. (Heinrich, 1959)

Insurance one of the oldest strategies for handling risks. Began about 4,000 years ago in Mesopotamia when the code of Hamorabi formulized bottomry contracts containing a risk premium for the chance of losing ships and their cargo (NIOSH, 2002). Around 750BC ancient Greeks also practiced bottomry to a certain degree. In the 4th century BC and 1st century BC, the Greeks and Romans successfully observed casual relationships between disease and exposure. In 1792, Pierre Laplace developed the basis of modern quantitative analysis by calculating the probability of death with and without smallpox vaccination. (B.S.Dhillon, 2003)It appears that the modern term risk management was first used in the early 1950s (Hammer, 2001). one of the earliest publication specifically concerned with risk management appeared in Harvard Business Review in 1956 (Dhillon, 1986).

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Definition of risk

The ISO 31000 (2009) /ISO Guide 73 definition of risk is the 'effect of uncertainty on objectives'. In this definition, uncertainties include events (which may or not happen) and uncertainties caused by a lack of information or ambiguity. It also includes both negative and positive impacts on objectives. Many definitions of risk exist in common usage, however this definition was developed by an international committee representing over 30 countries and is based on the input of several thousand subject matter experts.

The many inconsistent and ambiguous meanings attached to "risk" lead to widespread confusion and also mean that very different approaches to risk management are taken in different fields. (Hubbard, 2009) For example: Risk can be seen as relating to the Probability of uncertain future events. ("An Introduction to Factor Analysis of Information Risk (FAIR)", Risk Management Insight LLC, November 2006) For example, according to Factor Analysis of Information Risk, risk is: the probable frequency and probable magnitude of future loss. In computer science this definition is used by The Open Group. (Technical Standard Risk Taxonomy ISBN 1-931624-77-1, 2009)

OHSAS (Occupational Health & Safety Advisory Services) defines risk as the product of the probability of a hazard resulting in an adverse event, times the severity of the event. In information security risk is defined as "the potential that a given threat will exploit vulnerabilities of an asset or group of assets and thereby cause harm to the organization". (ISO/IEC 27005:2008) Financial risk is often defined as the unexpected variability or volatility of returns and thus includes both potential worse-than-expected as well as better-than-expected returns. References to negative risk below should be read as applying to positive impacts or opportunity (e.g., for "loss" read "loss or gain") unless the context precludes this interpretation.

The related terms "threat" and "hazard" are often used to mean something that could cause harm. All types of risks which has been mentioned above could be divided in two main category based on the target of potential losses. All of risks mentioned can threaten the financial assets or health assets thus each risks can have financial losses or health losses.

Risk management process

Tummala (Tummala, 1994) have proposed a comprehensive and systematic approach consisting of five core elements as shown in Figure 2 and referred to as the risk management process (RMP). The RMP begins with identifying the potential risk of a organization of a project together with the associated project mission, aims, and objectives; these will of course form an integral part of the business strategy. The resulting strategy arising from the integration of all these elements, overall corporate, would constitute the driver of the RMP methodology. Risk identification, risk

measurement, and risk assessment together constitute the basic set of tools required to facilitate the identification of potential risk factors, enumeration of the associated consequences and their severity, and the assessment of the likelihood of occurrence of these consequences, as a step towards developing the corresponding risk profiles that are necessary for the accomplishment of project objectives. In the risk evaluation phase, the project managers/decision makers should be able to evaluate several decision alternatives based on the risk profiles generated by using risk identification, risk measurement and risk assessment phases and choose the most appropriate course of action to contain and control the identified risks. The final phase – risk control and monitoring – serves to enhance a review of project progress; also to facilitate a periodic communication of pertinent information on project accomplishment status to senior management and other personnel who are involved with the project execution. Furthermore, if any deviations relative to established targets are found, corrective actions can be considered in this phase. Thus the RMP approach as shown in Figure 2 provides a comprehensive and coherent approach for managing risks and uncertainties associated with a given project. Furthermore, it is a practitioner-oriented methodology which can be integrated into the risk management modeling process to evaluate projects. (Tummala, 1994)

Financial assets versus health assets

Risk types indicate that all risks have potential losses and these potential losses could be divided in two main categories; financial losses or health losses. Therefore the main purpose of risk management process is prevention of such losses, but how? The risk responses should be cost effective, means the cost of preventive actions should be less than cost of happening losses and for this purpose Risk assessment is needed. Risk assessment measures the probability of happening losses and then determining the severity of happening cost according to formula that has shown below:

$$\text{Risk} = \text{Probability} * \text{Consequence}$$

In other words we always ask ourselves what is the possibility of a bad event happening, and if the probability is high we go to find a suitable solution for avoiding of its consequences, otherwise our risk management is not cost-effective enough. But the big question is whether this procedure is still valid in case of safety risks in which a health asset is in danger?

Tummala (1995) proposed a pattern to determine the magnitude of safety risks which has indicated in table 1 (omitted as are the other ref'd tables and figures for space considerations).

SOME SAMPLES OF MANMADE CATASTROPHE

As indicated in the table of previous part, even one death in an event can cause a catastrophic consequences, here some of predictable manmade catastrophe has presented in fields of; aviation, Coal mines, explosions and industrial safety problems around the world.

Aviation accidents

This table (omitted) shows the aviation accidents from 1974 until 2003 in the world and their casualties that reach even to 538 deaths in Tenerife in 1977. If one death in an incident makes it a catastrophe, what about 538 deaths in an event?! (wikipedia)

Is this sort of incident absolutely unpredictable? Or the low percentage of likelihood causes ignorance the severity of happening only because doing preventive action is not cost-effective with such a low probability? Is it fair that judging on probability more than consequence?

Coal mine Accidents

The statistics of worst coal mine accidents during last century around the world indicates that the number of casualties in this sort of events even reach to 1569 lives losses in China 1942. (Shangbao, 2010)

Explosion accidents

The Lagos armoury explosion was the accidental detonation of a large stock of military high explosives at a storage facility in the city of Lagos, Nigeria on 27 January 2002. The fires created by the debris from this explosion burnt down a large section of Northern Lagos, and created a panic that spread to other areas. As people fled the flames, many stumbled into a concealed canal and were

drowned. The explosion and its aftermath are believed to have killed at least 1,100 people and displaced over 20,000, with many thousands injured or homeless. The government of Nigeria launched an enquiry, which blamed the Nigerian Army for failing to properly maintain the base, or to decommission it when instructed to do so in 2001. (BBC world, 2002). Now the big question is : Should the large stock of military high explosives store inside city? Similar cases have presented below .

Industrial accidents

The Deepwater Horizon drilling rig explosion refers to the April 20, 2010 explosion and subsequent fire on the Deepwater Horizon semi-submersible Mobile Offshore Drilling Unit (MODU), which was owned and operated by Transocean and drilling for BP in the Macondo Prospect oil field about 40 miles (60 km) southeast of the Louisiana coast. The explosion killed 11 workers and injured 16 others; another 99 people survived without serious physical injury. It caused the Deepwater Horizon to burn and sink, and started a massive offshore oil spill in the Gulf of Mexico; this environmental disaster is now considered the second largest in U.S. history, behind the Dust Bowl. (New York times, 2010)

Gas and oil leakage, explosion in refinery or petrochemical complex, and many other cases that are indicated below tell us the magnitude of those risks which directly dealing with human heaths are extremely more important that those risks which have a merely financial losses.

Monetary value of death impacts

The National Safety Council makes estimates of the average costs of fatal and nonfatal unintentional injuries to illustrate their impact on the nation's economy. The costs are a measure of the dollars spent and income not received due to accidents, injuries, and fatalities. It is another way to measure the importance of prevention work. (National Safety Council)

Average Economic Cost per Death, Injury, or Crash, 2009

Death	\$1,290,000
Nonfatal Disabling Injury	\$68,100
Property Damage Crash (including nondisabling injuries)	\$8,20

In cost estimation of each accident categories has assumed that all accidents just had death toll and has been avoided of considering any other consequences. The figures (omitted) indicate that the cost of safety accident are the range of \$ 3,870,000 to \$33,540,000,000.

CONCLUSIONS

All risks have a potential loss and this potential loss can be divided in two main groups; financial losses or health losses regarding financial assets and health assets. After dividing risks in two main categories we conclude the way of assessing of each category must be different with another. If in dealing with financial risk we ask the probability of happening first and then the consequence of risks, in case of safety risks we just only ask ourselves is such an event possible or not? And if the answer was YES, we must take the preventive actions because as it mentioned just 1 death in an event can cause a catastrophe.

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The Road To Rio & The UAE Sustainability Question An Initial Assessment of the Green Sheikh's Message

INTRODUCTION

With mounting concerns over global warming and exploding urban populations, the race to design and build the model 'green city of the future' has been on full throttle (Madichie, 2011). Indeed only recently, the United Arab Emirates (UAE) was awarded head quarter status for the International Renewable Energy Agency (IRENA), which was officially established in Bonn (Germany) on 26 January 2009 as an intergovernmental organisation for promoting the adoption of renewable energy worldwide (see Madichie, 2011). To date 139 countries have signed up to the Statute of the Agency – dominated by emerging markets - a collaboration between 48 African, 37 European, 34 Asian, 15 American and nine Pacific states (Fielding, 2010; Madichie, 2011) with the UAE playing a lead role.

There is hardly any more topical issue of discourse, policy, planning, research and even advocacy today than the environment and its various dimensions. Each of the dimensions has ardent advocates, whose motives generally revolve around influencing public policy and citizen action. In the UAE, renowned for its egregious use of environmental resources, a vocal and passionate environmental advocate, known as the Green Sheikh, has emerged with a message. What precisely is the message? How does the message resonate in the region? To what extent does it gel with other global environmental initiatives? In this paper, we examine these questions and propose some measures by which the message of the Green Sheikh can achieve its intended impact on public policy and citizen action. Following this section we try to profile the Messenger – i.e. The Green Sheikh. Following this, we go on to analyze the message in section 2. In our section 3, an attempt is made to situate the message within the framework of the discourse – i.e. sustainable development (or SD). Our discussion and conclusions are presented in section and this is closely followed by our policy and/ or practical implications in our final section 5.

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THE WAY FORWARD – DISCUSSION & CONCLUSIONS

The aspiration to live within ecological limits and still improve the quality of people's lives is undoubtedly the cornerstone for sustainable development. As clearly pointed out in a recent conference call for papers on the subject of sustainable development (see WASD 2009):
[...] the deterioration of the environment in the Middle East and North Africa [constitutes] a major challenge for all countries in the region with nearly 90% of the region [being] desert,' which will ultimately 'lead to serious water shortage problems in many countries across the region and the rest of the world.

Consequently, by highlighting the efforts made in the UAE, in addition to securing headquarter status for IRENA and the rapid development of Masdar City, this paper concurs with the remark that 'it is

also a time now to learn lessons from the successful communities and emulate the ideas and innovations of these communities by the backward and not so successful nations and regions.' Be that as it may, developments at Masdar City would require further monitoring and of course academic and policy research into how it feeds into (as well as feeds off) the international support enjoyed by this emerging market. Indeed the 'genius' of Masdar, as Heap (2010) put it, lies in its aspiration to combine 21st Century engineering with traditional desert architecture to deliver zero-carbon comfort. To what extent this effort would be sustainable remains a future area of research. In the mean time, however, the stage has been set for developing alternative forms of renewable and/ or clean energy.

The deterioration of the environment in the Middle East and North Africa (MENA), for example, is a major challenge for all countries in the region with nearly 90% of the region's surface being desert (WASD, 2009). Architects are beginning to turn the desert's greatest threat - the sun - into their greatest asset. Just to highlight the internationalisation aspect of this innovation:

The international team of engineers have real pride in their work. This is more than building to them, it is a lab bench with the freedom to get it wrong, and Masdar's chief architect Gerard Evenden loves the concentration of expertise[...] 'What Abu Dhabi is beginning to generate is the Silicon Valley of renewable energy'...

It was also reported that the richer countries in the region did not perform particularly with suggestions that economic status did not always correspond with the environmental sustainability index (ESI) performance of markets (WASD, 2009). Moreover the deteriorating environmental conditions are bound to pose serious water shortage problems in many emerging markets including the MENA region and the rest of the world. This paper consequently highlights one response in the hope that it will engender academic and policy interest on how to tackle this growing threat in the MENA region and by extension the rest of the world. Overall we opine that there is a need for deeper moral suasion strategies and formalized approach including engagement with UAE schools and universities as well as embedding these into the curriculum. There should also be a more robust schools challenge on the issue of water conservation, recycling and competitions in these areas as further incentives not just for individuals and groups but also institutions including government.

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Logistics Capabilities in Malaysian Supply Chain: A Study of Freight Forwarders Practices

INTRODUCTION

The study of logistics firm has a rich history and is grounded in several disciplines mostly in the economics and to a lesser degree the behaviour approach focussing on psychological and sociological aspects (Mentzer and Khan 1995; Lynch 1998; Sachan and Datta 2005). Over the years, many researchers have attempted to explain why certain logistics firms perform better than others by linking different elements of capabilities in the organisation with performance (for e.g., Stock 1997; Murphy and Poist 2000; Stank, Keller and Daugherty 2001; Zhao, Droge and Stank 2001). Well-planned operational excellence (also called supply-management capabilities by Mentzer et al., (2004)) and customer closeness (also called demand-management capabilities by Mentzer et al. (2004) are assumed to lead to corporate success (Morash 2001; Zhao et al., 2001). Customer-closeness capabilities through high levels of value added service, proactive quality, and collaborative

communications and interaction with customer have been empirically linked to firm performance, but results vary. Within the relationship marketing theory, customer closeness (sometimes referred to as customer focused by Zhao et al. (2001)) that creates and manages customer commitment and trust are needed to develop and maintain long-term relationships with customers. Operational-excellence capabilities such as low logistics cost and standardization of operations are also significantly, albeit marginally, related to firm performance (Morash, 2001). In essence, firms must possess certain resources or capabilities to be successful. The resource-based theory and the relationship marketing theory are expected to emerge independently, and neither has been controlled for the effects of the other when attempting to link capability to firm performance. Previous researchers (e.g., Knemeyer and Murphy 2005, Morgam and Hunt 1995) who support the connection between trust and firm performance have not incorporated firm resources (logistics capabilities); while those who have attempted to link logistics capabilities and firm performance have not incorporated trust (e.g., Zhao, Droge, and Stank (2001); Morash (2001); Lynch, Keller, and Ozment (2001).

This research is important based on the various propositions about logistics capabilities and trust, where trust among business partners is most effective if pursued with resources (logistic capabilities) that customers deem “fit” and “satisfied” (Fawcett, Magnan, and McCarter 2008; Knemeyer and Murphy 2005; Lynch, Keller, and Ozment 2001). Given the strong foundation in and continued emphasis on previous studies, the research here proposed Malaysian logistics firm to consider logistics capabilities and trust as sources of competitive advantage in order to remain strong to take up opportunities in the industry rapid growth.

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DISCUSSION

The primary focus of this research is to test the relationship between logistics capabilities and firm performance within the Malaysian logistics industry. More specifically, this research aims to identify the effect of trust on the relationship between logistic capabilities and firm performance. In order to understand these relationships, the five main research questions of this study are fulfilled. They are discussed and were answered in the following. Four specific research questions are posed in order to gain greater understanding of these relationships:

The first research question try to obtain an answer is there a significant relationship between logistics capabilities and firm’s performance? Results show that direct effects of supply-based logistics capabilities are positive and significant. The findings provide empirical validation of other research findings obtained in traditional developing market of logistics environments (Lynch, et al., 2000; Morash, 2001). However, this study suggests that demand-based logistics capabilities do not relate to better performance in the developing Malaysian logistics environments. The association between demand-based and supply-based logistics capabilities is significant among all the variables affecting with firm performance.

This study also provides a rigorous examination of the synergistic relationships between the two constructs of logistics capabilities, and identifies five logistics capability measures to help measure logistics challenges specific to the Malaysian logistics environment. These five measures - post-sale customer service, responsiveness to unique customer request, information communication systems on shipment notification, web-based order handling, and the ability to attain lowest logistics cost - are identified to have practical significance, and can serve as a basis to handle the anticipated incoming logistics challenges. The inclusion of these items emphasises the importance of logistics capabilities which are perceived as a firm’s critical capability to compete and perform well in the present and future Malaysian logistics market environment.

The second research question probe if there is a significant relationship between trust-characteristics and firm performance. The effect of trust characteristics as moderators of the relationship between

logistics capabilities and firm performance is mixed. Trust characteristics, defined using five constructs (1) investment,(2) reputation,(3) communication,(4) satisfaction with previous outcomes, and (5) dependency are found to have significant and indirect relationship to firm performance. That is, the relationship between logistics capabilities and firm performance is stronger for firms that are satisfied with investment and communication in the logistics relationship. In Model 4, after the direct effects variables of logistics capabilities were entered together with trust variables, there was a significant increase of 0.34 in R², which is an indication of 3.4% more variance explained. The two trust factors (TI and TC) were significant and indirectly effects (i.e., both positive) the achievement of firm performance. The findings support the importance of establishing strong relationships with customers to gain the insights needed to tailor services to enhance both operational effectiveness and cost efficiency (Stank et al. 2003; Morash 2001). While there is a positive indirect effect for investment and communication, the interaction effect with logistics capabilities for both are negative. Reputation, satisfaction with previous outcome and dependency are not found to be indirectly related firm performance.

The third research question probes an answer if trust-characteristics moderate the relationship between logistics capabilities and firm's performance. This study views trust as a multidimensional relationship concept, and investigates the moderating role of five different types of trust characteristics. Only the interaction between supply-based capabilities and satisfaction with previous outcome is significant but negative. This indicates that the direct effect of supply-based capabilities is absorbed by the satisfaction with previous outcome (Cohen &Cohen, 1983). The other nine interaction relationships are not significant.

The fourth research question probes which of the factors in logistics capabilities and trust-characteristics have the most influence on firm performance. Empirical results did not support the positive effect of demand-based logistics capabilities to be related to firm performance. Supply-based logistics capabilities, however, have been found to have positive influence on firm performance consistent with previous research findings. This study found that supply-based capabilities are key sources of competitive advantage for Malaysian logistics firms and ultimately firm performance.

With regard to trust, the resulting analysis confirms that the indirect and moderating effects of trust factors on the relationships between logistics capabilities and firm performance are partially supported. Rather, its echo that of many previous research studies in finding the impact of trust, the results in this study is mixed and unclear. Different results between the logistics capabilities and firm performance were observed for each of the trust-characteristics. The indirect effect of moderating factors of trust-investment and trust-communication are confirmed to contribute to performance of firm. However, the influence of trust-investment seems to be more obvious and stronger. The study also found that trust-characteristics have not only an indirect effect the relationship between logistics capabilities and firm performance, but also an interaction effect. Trust-satisfaction interacted significantly with supply-based logistics capabilities while trust-reputation interacted marginally significant with demand-based logistics capabilities. The interaction effect of others trust-characteristics (reputation, satisfaction, and dependency) with demand and supply-based capabilities were found not to be significantly reflected in logistics capabilities - firm performance relationship. Empirically, the results revealed that not all moderating factors of trust-characteristics indirectly influence firm performance and interact with logistics capabilities accordingly as hypothesized. Therefore, the results provide only partial support for the works of Ng et al. (2007), Knemeyer and Murphy (2005), Thomson and Martin (2005), Morris and Carter (2005), Coyle et al (2003), and Zeithaml (2000).

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Supply Chain Relationship: A Study of Supplier-Buyer Trust in Malaysian Industries

INTRODUCTION

One important resource that firms can rely on is its relationships with partners in their supply chain. Prior research has highlighted the importance of managing relationship in supply chain in the downstream context, i.e. with buyers (Anderson and Narus, 1990; Anderson Weitz, 1992). However the benefit to organisations from strengthening and leveraging their relationships in the upstream context, i.e. with their suppliers has not received academic attention. Therefore this study seeks to explore the influence of organisations relationship in the upstream channel provider (with their suppliers) in gaining competitive edge.

One aspect that influences relationships is the bargaining power in the dyad (Porter, 1985; Dowlatshahi, 1999). While bargaining power influences on down-stream channel relationships has been investigated, the influence of bargaining power in the upstream channel relationships has not been investigated in depth. Therefore the moderating effect that bargaining power of the organisation may have in the relationship between organization and its suppliers is also investigated.

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DISCUSSION

The Impact of Trust on Supplier Performance

Through surveys it was found that the level of trust between buyer and supplier has significant positive impact on supplier performance. The responses indicated by research interviews provided a clue for the importance of trust in an everyday dealing between organization and supplier. Organizations found that without trust they find it hard to improve normal operation and performance to the optimum level. A smooth and efficient operation relies on the timely, accuracy and reliability of information. When there is low trust or distrust important information cannot be shared. As a result time and money have to be spent on checking the validity of information and the activities of supplier. Furthermore when there is distrust, the organization is hesitant to invest in specific assets critical for both organisation and its suppliers/sellers. That may represent a hindrance to the advancement of and upgrading of specific operation as some endeavours may require specific assets to be present that are in certain cases can be quite crucial to the success of their operation.

The important of trust is consistent with the findings of Doney (2000), Morgan and Hunt (1994) and Sivadas and Dwyer (2000). Trust is an important factor because of the reliance that some of the suppliers may have on buyer. A certain level of trust will instill confidence, which can be considered as an indication of commitment. Therefore supplier is willing to commit resources and effort at lowering the price of their products without compromising the quality. They will make every effort at ensuring the products reach the buyer at the promised delivery date, at the right place and with the right quantity (Doney, 2000). Moreover in a supply chain environment every partner has to be capable

of adding value before the total product reaches the final consumers (Sivadas and Dwyer, 2000). This is critical for the survival and existence of buyer as well as supplier. One party must be certain the other is willing to do everything that it can for the mutual benefit of both and not just the individual.

The finding also concurs with the study by Nielsen (1998), which found that trust and commitment and cooperative behaviours, sharing and joint working, ultimately generate the benefits that accrue to the supplier-partner. Trust is also able to influence supplier performance because it is a measure of the confidence of the buyer in supplier's reliability and integrity. In essence trust is a process that prohibits behaviours that may harm the other partner (John, 1984). Since supplier performance must have stability in the buyer-supplier relationship to improve, trust provides that stability and also a notion of predictability. Supplier must be able to rely that buyer is willing to make sacrifices for mutual benefits. Trust provides that guarantee. Therefore trust is a positive influencing factor on supplier performance.

The Impact Communication on Supplier Performance

For the communication variable, data collected from surveys cannot be confirmed to have positive significant impact on supplier performance. However literatures have vastly indicated that there should be significant positive relationship. Further analysis were carried out through research interviews to understand whether the literatures were justified. From the responses provided by the organizations, most of the organizations believed that communication is essential for trust building. The organizations think that performance is jeopardized when the communication level is low and full and accurate is not provided, thus their trust in the supplier is affected. This is because with open and, honest and high level of communication, information can be transferred faster making early identification of problems possible and the effort at problem solving that much faster. The organisations found that low communication and even its failure can have disastrous result. The ability to avoid problems is compromised and can even delay attempts at solving problems. Performance is jeopardized when time, money and energy have to be spent on problems that could have been avoided or minimized if the communication level between them and the suppliers were better. Usually the problems that could have been addressed have a considerable and critical impact on the cost of operation and cost of providing the products which in the end leads to compromising the competitive level of the organizations, and the whole supply chain. Low communication can also affect the quality of decision making as well as becoming a hurdle in sharing needs, goal and objectives. Failure in all these aspects can result in both parties to be unable to provide the needed understanding and commitment level, thus affecting the trustworthiness between one another and the performance of both organizations and its related suppliers.

Nevertheless the importance of communication cannot be underestimated. Social sciences studies of human relations stresses on communication as the intervening factor in order to facilitate better understanding between one or more individuals. Better communication helps to improve the understanding of the needs of one another. This will simplify the steps in achieving common objectives. That is why it is important not to ignore the role of communication in a buyer-supplier relationship. Management of buying firms is actually the impetus that sets the tone for open communication. This is also the prerequisite for the environment of trust. Therefore communication is an important influencer of supplier performance.

The Impact of Cooperation on Supplier Performance

It was found through surveys that cooperation has significant positive relationship with supplier performance. Further data from interview corroborated the importance of cooperation in a relationship with supplier hence its ability to affect and improve performance. The organisations informed that they placed critical importance on cooperation. Without cooperation the ability to provide added value to materials and products cannot be realized. When there is lack of cooperation both parties and particularly suppliers will act in a self-serving and opportunistic manner. These can lead to conflict in problem solving, higher defect rates, uncompetitive pricing, unreliability of delivery promises and capabilities, the availability of needed parts and materials and also higher operating from the delay in operation. That is why the organizations believe that if there are no cooperative actions and spirits

among them and the suppliers, the supplier will be unable to provide competitive materials which will then affect their own competitiveness.

Morgan and Hunt (1994), Sivadas and Dwyer (2000) studies are consistent with the findings. A dyadic relationship as the one between the organisations as buyers and suppliers as sellers are often based on mutual needs and expectation. There are dependencies issue because both parties may lack resources in the form of structural, fixed assets or financial. One party may have strengths that complement the weaknesses in others. In facing competition that are grounded in efficient supply chain environment, buyer and supplier must have close cooperation in order to ensure the transfer of products between them are smooth, less costly, on-time, reliable and at a competitively better quality.

Supplier performance requires cooperative behaviours because it precedes the need to achieve end objectives. The end objective especially for those involved in a dyadic or interorganisational relationship is usually the attainment of goals that will not be realised by each party independently. Cooperation influence on the performance of supplier is also apparent because cooperation signals the willingness of committing to the relationship because they want to do so and are not coerced into it. If trust and commitment have been set as a strong foundation between buyer and supplier, it will result in cooperative and innovative effort that can go beyond the gain from a simple contract or agreement. This study and other studies had suggested there be a link between cooperation and performance.

This finding is in line with other research that finds cooperative behaviours to influence relationship outcomes such as extendedness (Heide and Miner, 1992) and satisfaction (Mohr and Spekman, 1994). This study is also in agreement with the IMP Group approach which proposed that cooperative behaviours greatly influences interaction process and in the end crucial to partnering success. This is because a high quality performance on the part of the supplier and a better quality of product can be transferred to customers by the manufacturers. Kalwani and Narayandas (1995) suggested profitability is the ultimate expression of relationship success. Therefore cooperation is important in influencing supplier performance.

The Impact of Bargaining Power of Organisation Between Trust, Communication and Cooperation and Supplier Performance Result from surveys highlight the following, organisation's bargaining power have a positive moderating effect on the supplier's trust in the organization and supplier's performance. Organisation's bargaining power also has a positive moderating effect between communication and supplier performance. The same is true for cooperation where organisation's bargaining power has a positive moderating effect between cooperation and supplier performance. Even when organisation has bargaining power suppliers is still agreeable to organisation's initiatives at improving performance stemming from their confidence in the relationship because of the trust they have, the communication extent and cooperation level that exist.

Further corroboration is provided by responses from interviews with organizations. The organizations believe that bargaining power among them and their suppliers do play a role in the relationship. Even if the organizations has the power to dictate terms and conditions and the fact they are a crucial purchaser of the suppliers result, the existence of trust, communication and cooperation is also important. The existence of these factors will still make the suppliers to make every effort at providing as per the specifications and requirements agreed regardless of the level of bargaining power.

The existence of trust is important to improve suppliers performance even when organisation has bargaining power. This is because trust is a bond that allows for sharing of confidential information that can lead to problem solving. Trust increases the willingness to invest into the relationship and thus creates the need to protect that investments. Trust also reduces risk and increases confidence between organizations and suppliers.

The existence of communication is also important to improve suppliers performance even in the situation where organization has bargaining power. This is because communication leads to sharing of

information about the movement in the market, thus allowing organisations and suppliers to be prepared for any changes and early detection of problems. Communication also allows for sharing of mutual objectives thus enabling the synergising of strategies and lastly communication also allows for joint and fast problem solving.

Cooperation is also important for improving supplier performances even when organisation has bargaining power. This is because cooperation lead to joint generation of ideas, joint problem solving and complementing each others' strengths and weaknesses.

CONCLUSIONS AND RECOMMENDATION

The research were initially undertaken to seek aspects of competitive advantage that organisations can explore to equip themselves with competitive edge over other organizations. Throughout the process it was identified that relationship with external partners is one aspect that organisations can focused on to obtain competitive advantages. The relevant partners that should be the main focus are those representing the upstream channel for the organization. Suppliers were identified as the upstream channel member, and they are important to competitiveness, due to their distinct advantages provided into the relationship. In order to manage the relationships and transforms the suppliers into performance contributing partners; trust, communication and cooperation is needed in the relationship. The suppliers capabilities in the form of pricing, quality and delivery have been identified as the aspects important for competitive enhancement for the organisations. The importance of trust, communication and cooperation have been shown to be crucial in a relationships even in a situation where organization has the bargaining power. The three factors drive the relationship due to their ability to cement and strengthen the interaction between organisation and suppliers into a productive, stable and long-term interaction.

Empirical research in the area of supply chain relationships has primarily sought to explain the nature of relationship processes rather than their effect on manufacturing or business performance (Styles and Ambler, 2000). As a result there is a considerable body of work focusing on the interaction between the various dimensions of supply chain relationships such as trust, commitment, adaptation, communication and collaboration, but far less on the impact of supply chain relationship dimensions on firms and manufacturing performance. This research sought to provide empirical evidence on the need for organisation to consider managing relationship factors such as trust, communication and cooperation to improve suppliers performance.

The analysis of the resulting information shows that trust, and cooperation are detrimental in supplier performance in varying degrees. However the organisations seem to feel that communication is a part of instilling trust in the relationships. This is different than previous researches that consider communication as a separate aspect. Although a relationship may be affected by the bargaining power one party may have on another such as an organization may have on its suppliers, it was found that the existence of trust, communication and cooperation are still essential and forms the basis for the relationships to prosper and performance to improve.

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Antecedents of Customer's Loyalty: An Empirical Study of Internet Service Provider in Malaysia

Keywords: customer loyalty; customer satisfaction; perceived service quality; perceived value; corporate image; switching costs

INTRODUCTION

The Malaysia broadband market faced stiff competition due to the overcrowded internet access market. There are a wide number of Internet Service Providers, such as the wireless internet providers, Maxis Broadband Sdn Bhd , Digi, Celcom (Malaysia) Berhad, and PI Wimax offering broadband internet access to compete and complement the incumbent TM fixed-line internet service provider in Malaysia. As a result, Malaysians are now exposed to a wide number of accessibility choices based on price, technology, and speed for various broadband services. Consequently, it has been a challenging time for TM Streamyx to maintain its foothold in the internet access service market. Streamyx experience growth slowdown due to high-churn or exit rates as subscribers reacted strongly against the inconsistent quality of service they received (IDC Malaysia, 2009). Similarly, TM also highlight that Streamyx regularly faces customers' dissatisfaction concerning poor service quality such as slow connection, slow speed and frequent disconnections, moreover, it also received numerous complaints concerning technological support, poor customer service management, service downtime and difficult to log on to network (TM, 2009).

This study aims to find out whether perceived service quality, customer satisfaction, switching cost, corporate image and perceived value antecedents to customer loyalty in the Malaysian ISP market; to explore the relationships between perceived service quality and customer loyalty; to determine which antecedent exerts the most influence to customer loyalty; and to determine which antecedent exerts least influence to customer loyalty.

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FINDINGS AND CONCLUSIONS

All the variables have strong relationship & significant influence on customer loyalty, thus H1, H2, H3, H4 and H5 is supported. It is proven that perceived service quality also have direct strong relationship & significant influence on customer loyalty, thus H2 is supported. Customer satisfaction has the most influence on customer loyalty, thus H1 is supported. Perceived Service quality has the least influence on customer loyalty.

Table 4.14b : Summary of Beta Value

Variable	Standardized Beta Coefficients	T	Sig.
(Constant)		-3.875	0.000
Perceived Service Quality	0.109	2.289	0.023
Corporate Image	0.131	3.263	0.001
Customer Satisfaction	0.390	8.393	0.000
Switching Cost	0.132	3.313	0.001
Perceived Value	0.259	6.981	0.000

Table 1.1: Summary of Hypotheses and Its Findings

	Hypotheses	Result
H _{1o}	There is no relationship between customer satisfaction and customer loyalty to ISP	Accept H _{1a}
H _{1a}	There is a relationship between customer satisfaction and customer loyalty to ISP	Do not Accept H _{1o}
H _{2o}	There is no relationship between perceived service quality and customer loyalty to ISP	Accept H _{2a}
H _{2a}	There is a relationship between perceived service quality and customer loyalty to ISP	Do not Accept H _{2o}
H _{3o}	There is no relationship between switching cost and customer loyalty to ISP.	Accept H _{3a}
H _{3a}	There is a relationship between switching cost and customer loyalty to ISP	Do not Accept H _{3o}
H _{4o}	There is no relationship between corporate image and customer loyalty to ISP	Accept H _{4a}
H _{4a}	There is a relationship between corporate image and customer loyalty to ISP	Do not Accept H _{4o}
H _{5o}	There is no relationship between perceived value and customer loyalty to ISP	Accept H _{5a}
H _{5a}	There is a relationship between perceived value and customer loyalty to ISP	Do not Accept H _{5o}

The findings show that customer satisfaction exerts the most significant impact on customer loyalty towards ISP, explained by beta value of 0.39. This result is consistent with the conclusion found in the previous study on the antecedents of customer loyalty towards internet service providers in Taiwan and Hong Kong by Cheng et. al (2008), which concluded that customer satisfaction have significant effects on customer loyalty. Moreover, the finding is supported by well known study; (Cronin & Taylor, 2000) that found significant positive relationship between customer satisfaction and customer loyalty (repurchase intention). Additionally, this study findings is supported by customer loyalty studies within the telecommunication industry, satisfaction has emerged as a strong predictor of loyalty to wireless service providers (Gerpott, Rams, & Schindler, 2001; Kim & Yoon, 2004). Eshghi.et.al, (2007) also support this study finding, as the study identifies customer satisfaction as a strong determinant of customer's propensity to switch mobile service providers

The study found perceived value exerts significant impact to customer loyalty toward ISP, being explained by beta value 0.259. The result is consistent with previous studies between perceived value and customer loyalty by Chiou, (2004) on internet service providers in Taiwan. It was proven that perceived value is crucial in generating overall customer satisfaction and loyalty intention toward an

ISP. Findings is also supported by study of Cronin et al.(2000), that found perceived value had direct and positive impacts on overall satisfaction and behavioral intention.

Similarly, Bolton & Drew (1991) also found that value is an important determinant of consumers' loyalty intention toward telephone services. Chang & Wildt (1994) also found that value drives loyalty in the context of personal computers and apartments. Ranaweera & Neely (2003) showed that perceived value has a direct linear relationship with customer loyalty in the telecommunications sector.

The study found switching costs has significant impact to customer loyalty toward ISP, being explained by beta value 0.132. This result is particularly true in the telecommunication industry, as service providers will impose high switching costs (i.e contractual period of up to 12 to 24 months), will eventually force customers to stay with the current service providers. The result is consistent with Burnham et al. 2003, who found direct relationship between switching cost and customer intentions to stay. Likewise, this result are also supported by Bansal & Taylor (1999); Lee et al. (2001) that tested and confirmed the positive effect of switching barriers on customer loyalty. Studies by Colgate & Lang, (2001); Lee & Cunningham, (2001) however, found switching cost only play as moderating role in the relationship between customer satisfaction and customer loyalty.

The study found corporate image has significant impact to customer loyalty toward ISP, being explained by beta value 0.131. The result is consistent with the widely accepted findings (Nguyen & LeBlanc, 1998; Zins, 2001) that suggests corporate image has the ability to instill loyalty in customers. Nguyen & Leblanc (2001) demonstrate that corporate image relates positively with customer loyalty in three sectors (telecommunication, retailing and education). Similarly, corporate image found to further establish and affect customer loyalty (Andreassen & Lindestad, 1998; Kandampully & Suhartanto, 2000; Nguyen & Leblanc, 2001).

Study found perceived service quality has significant direct relationship (beta value 0.109) to customer loyalty on Internet service provider. Based on the smallest beta value, this study suggests that perceived service quality exerts the least impact on customer loyalty towards internet service provider relative to other antecedents. The significance relationship of perceived service quality to customer loyalty is consistent with previous findings by (Boulding et al., 1993; Parasuraman et al., 1988, 1991; Taylor & Baker, 1994; Zeithaml et al., 1994). They found direct effect of perceived service quality on customer loyalty. Additionally, finding also consistent with study by (Bleomer & Ruyter, 1998; Ranaweera & Neely, 2003) that found perceptions of service quality had a direct linear relationship with customer retention.

Study finding found to be inconsistent with the findings by Cheng et al., (2008), which concluded no direct relationship between perceived service quality and customer loyalty. They found indirect relationship between service quality and customer loyalty with customer satisfaction exists in the relationship as mediating variable. Their results go along with Cronin & Taylor (1992) that concluded perceived service quality to positively affects behavioral intention through customer satisfaction. In other word, service quality is an antecedent of consumer satisfaction and has less effect on customer loyalty than does consumer satisfaction.

DISCUSSION

The findings of this study have important implication to the Internet service providers in Malaysia. Examining the factors that influence consumer loyalty intention is helpful for companies to design more effective customer loyalty strategies. For Streamyx, as rising broadband competition appears to be halting its net growth, TM needs to move forward by addressing challenges faced, particularly in term of broadband service quality that might impact customers' satisfaction towards the overall delivery of the service.

The result suggests the Malaysian ISP is better off improving customer satisfaction in order to minimize customer defection. This would mean shifting scarce resources to customer loyalty through improved service, saving costs of expensive customer acquisition campaigns. In term of perceived value, Malaysian ISP is better off in promoting reasonable price packages with economical and value for money offering. This would mean offering more economical internet service packages, i.e bundling with internet devices (wireless devices such as notebook, handphone). Significant affects of switching cost to customer loyalty means that Malaysian customers are value sensitive and switching cost is a substantial barrier to ISP users to consider switching. Unlike the case in Hong Kong and Taiwan from the previous studies findings (Cheng et al., 2008; Chiou, 2004) Malaysian internet users are value and cost sensitive when it comes to selecting an ISP. Significant relationship between corporate image and customer loyalty shows that advertising and image building campaign by ISP provides significant influence to Malaysian internet users. This suggests that it is advisable for ISPs to channel substantial resources to establishing their corporate images with view to retaining customers. Significant perceived service quality and customer loyalty link, suggests that Malaysian ISP should improve their service responsiveness and improve their overall service offerings. Lower mean scores is seen in term of service responsiveness and customer service empathy. Service quality in this context is measured using SERVQUAL 22-instruments that measures internet service quality in five dimensions namely service tangibility, reliability, empathy, responsiveness and assurance.

This study identifies that customer satisfaction and perceived value are the most significant predictors to customer loyalty intention towards internet service providers. The relation is a direct linear relationship. Yet, switching cost, perceived value and perceived service quality also gives significant affects to determine customer loyalty. The study findings can provide as a guideline for the Internet Service Providers to improve their overall service performance in order to maintain their market share, and at the same time, supports the national broadband industry. An improved overall customer satisfaction and providing better customer value will consequently helped to achieve the National Broadband Initiative in increasing Malaysia's Broadband penetration rate to 50% by end of 2010.

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Corporate Social Responsibility Awareness: An Exploratory Study of the Saudi Arabian Market

Keywords: CSR, Factor analysis, Saudi Arabia

INTRODUCTION

In the world of globalization, environment pollution, and shortage of resources, corporations are undergoing massive pressure to accomplish business in more socially responsible manner. Corporate social responsibility (CSR) is internal to a corporation; it dictates the way in which it has to plan about the courses of action it has to carry out with respect to the civil society. According to Carroll "the social responsibility of business includes the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time" (Carroll, 1979, p. 500). This term basically deals with the organization's set of operations that it carries out for the benefit of the society.

Although social issues have been debated for centuries, contemporary business thought has influence the area of study to become the mainstream management literature as a legitimate area of inquiry.

Levy (1999) supports the belief that corporate philanthropy and social initiatives are the heart and soul of business. He highlights the fact that social endeavours must be consistent with business objectives for earning profit (which is the heart) and must express the values of serving society (which is the soul). CSR helps the humanity in more than one ways, to train and educate them and to consider upon issues of CSR and its implementation, which can really change the fate of coming civil society (World Business Council for Sustainable Development, 2000).

However, there is no agreed definition of CSR so this move up the question as to what accurately can be considered to be corporate social responsibility. According to the EU Commission “CSR is a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis.” (2001, p. 347).

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CSR in Saudi Arabia

In Saudi Arabia the practice of corporate social responsibility (CSR) is quickly gaining ground among Saudi Arabian businesses very much. CSR a western expression of corporate behavior as well as CSR is a novelty mostly in terminology. Companies indeed tend to have long traditions of investing in socially responsible activities, but have only started labeling and planning these as CSR activities in recent years.

In the past few years, CSR has become an important aspect in Saudi Arabia’s corporate field. The Government also playing its role in harnessing the skills attached with the corporate sector in finding out the better means in which it can benefit the society. This issue is of much importance for Saudi Arabia as the Saudi economy is opening up and government is trying to diversify its investment and reduce its reliance on the petroleum sector. The country has invested in various sectors like food, telecommunications and financial institutions to change the situation from being major importer to self sufficient or even an exporter of many products. Moreover the Saudi companies are expanding their activities and business around the region and globe.

Internationally published material about Saudi Arabia in the context of CSR is limited and what is found provides an inconsistent picture. In 2006, a stakeholder satisfaction survey by GlobalScan CSR monitor, places Saudi Arabia among the top category of satisfied markets (GlobalScan – CSR Monitor 2006). According to a report namely “The Evolution of CSR in Saudi Arabia – The Changing Landscape” (Tamkeen Sustainability Advisors, 2010), surveyed by Saudi companies and they identified that the 85 percent of Saudi leaders have recognized the government/ regulatory framework as the main challenge in implementing CSR. There are one more important finding that the three main areas of CSR that have gained recognition in the Saudi corporate world, that are employee, community and environment.

The key issue of CSR in Saudi Arabia, such as a better workplace, health and safety standards, environment and good governance are being recognized as areas of common interest to development, government and private sector partners. Many Saudi companies are also beginning to see the merits of engaging in responsible business practices and not just charity. Although the social/religious context in the Kingdom is the basis for performing good deeds, more and more corporate players are recognizing and appreciating the significance of integrating CSR in all aspects of the business operations.

This in turn encourages them to bring about meaningful outcomes of concerted efforts in the country. Saudi Arabia's development challenges are many. The long-term strategy outlined the key ones to be overcome for achieving Vision 2025 (Saudi Arabia Long-Term Strategy 2025). Among these are employment generation, poverty reduction, improving the quality of life, reducing imbalances in

regional development and rationalizing water use, just to mention a few. The Saudi political leadership has made it clear that it wants to involve the private sector in development more and more.

The purpose of this study to explores the awareness level of CSR among employees which are working in different Saudi Arabia firms. Saudi Arabia has completely different culture and political economy from the West. The CSR in Saudi Arabia may be quite different from its Western counterparts. This study will be a valuable contribution on the topic of CSR in Saudi Arabia as there is not much literature available regarding the issue in local context. The regulations are still in the developmental phase and the environment for implementing these regulations is premature.

CONCLUSION AND RECOMMENDATION

In this study, we adapted the Carroll's (1979) instrument. Based on the findings of this study, we found that Carroll's (1979) model can be a helpful tool in measuring the awareness level of CSR. On the basis of the study, we conclude that there is a clear differentiation in employees' preferences in almost all the dimensions which shows a good level of understanding and awareness about the CSR. This study also found the significance differences between gender, working experience and position and CSR dimensions which supported our hypothesis.

There is a strong need to develop country specific indicator for assessing the impact of CSR initiatives. For businesses, it is very important to have performance measures such as Economic Value Added (EVA) and Return on Investment (ROI) that can be determine the return from their CSR investments, to judge how well they are doing and to enable them to set the future direction.

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A Study of Consumer Individual Characteristics in Selecting Mobile Cell

Key Words: Marketing Management, Consumer Behaviour, Individual Characteristics, Cell Phone, Women

INTRODUCTION

The competition is inevitable in the trade arena. Business institutions use many instruments to be successful in this competition. All strategies and marketing methods are based on explicit and implicit beliefs of consumer's behavior. Consumers are the main factors and parts of products and services. So knowing their thoughts, beliefs, values, looking, cultures, costumes and needs is necessary. According to this, it is not possible to predict and react toward customers' needs and tendencies without having correct understanding of the knowledge of consumer's behavior. Producing good's, the rate of demand, and the features of consumer's goods and at last, crating many demands for consumers will be possible by achieving this knowledge.

Corporations should continuously research about consumers' behavior and survey the reasons of consumers' behavior. Consumers' behavior means: the study of how people do shopping, what thing or things they buy and why they buy? (KhajehNasiri, 2008,1). The key point for being successful in marketing strategy is, understanding of consumers' behavior both from local and universal viewpoints (Hawkins, 1992, 5). The understanding of consumers' behavior and his /her buying is very important from marketing viewpoint. Choosing goods is one part of the consumers' decision making process. It is necessary for marketer and producer to identify factors, when a consumer buys goods such as a cell phone supplying to the market accompanied by features and different technological model and intensive competition with multi intentional uses. (Ranjbar, 2006, 9). A corporation can design the demographic profile of consumer after investigation of different demographic features. By designing such a profile a corporation can specify the attractive situation and also the situation of reducing markets. (samadi, 2007, 23). An individual characteristic of consumer is one of the demographic factors including age, life cycle, profession, economic condition, life style, personality and personal imagination. These features influence the decision making of a person (kotler, 2003, 214). So, investigation of these characteristics and their effects on consumers' behavior, help corporations to design the demographic profile.

Nowadays technology is continuously and rapidly changing. New technologies in two recent decades have had a lot of effects on people's lives and largely caused to change their life styles. When analog systems were changed to digital in industry of communications, an extensive evolution took place in the marketing of new digital goods. So, with regard to this point that different corporations put the expansive facilities in means of digital, an intensive competition has been existence among these products, such as cell phones.(Karin & et al, 2005). It can be said that, the marketing of cell phone is one of the rough environments because of intensive competition and also expansive change in it. In this marketing, products are manufactured based on knowing consumer's probable needs in the future. (Grestheimer & lupp, 2004). Communications are not the only main need of wanting a cell phone. The marketing of cell phone is rapidly moving toward means granting more needs of vocal simple means. In fact the producers of cell phones provide new fields for increment of demand and perpetuate the marketing growth by encouraging consumers to by again during their life cycle. (kerin & et al,2005). Both aspects of applied and hedonistic are considered in cell phone. Buying the cell phone is affected by symbolic values related to the brand. (karjaluo, 2004).

This research aims at identifying the role of individual characteristics of female consumer in choosing the features of cell phone.

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CONCLUSIONS AND SUGGESTIONS

The results of this study are as following:

1. There is meaningful difference among the stage of life cycle, the type of women's profession and women's economic condition with the cell phone's feature.
2. There is meaningful direct correlation among life style, personality and personal imagination with the cell phone's feature.

Since there is meaningful difference among the stage of life cycle, the type of women's profession and women's economic condition with the cell phone's feature, and also there is meaningful direct correlation among life style, personality and personal imagination with the cell phone's feature, it has been suggested that corporations producing cell phones design and produce different types of cell phones for each different groups of life cycle, women's profession and women's economic condition, life style, personality and personal imagination.

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Self-Assessment of the Company Based on Organizational EFQM Excellence Model - Case Study

Key Words: Excellence Model, EFQM Model, Performance, Self-assessment

INTRODUCTION

In the present fast growing world, in which the humans are sounded by electronic waves and information transference, there many events happen that realizing the correct from incorrect and paying a balanced attention to the stockholders of the organization would be difficult. In any moment, because of rivalry, the industry world witnesses the appearance of technologies and new management philosophies. Especially, this trend was fantastic in the past 20 years. Reviewing the literature of the production condition in the mentioned period shows that new productive concepts and philosophies has been grown up from 1980. In spite of the existence of all these philosophies, the most important philosophy that could be observed in all of the productive systems as a dominant one is the Total Quality Management. Although many models and methods have been created to affect the TQM, it seems that the producer has profited by these new systems less (Muruges& et al 1997). On the other hand, the leaders of the organizations must have a continuous self-assessment concerning their own strong and weak points, threats and organization's environmental opportunities and the strong and weak points of the rivals to have a hope for overcoming the rivals in global rivalry. By challenging the organizations, these leaders, continuously try to reach the organizational excellence. To gain such a place the leaders need an excellent model.

The excellent models of business, in fact are combinations of knowledge and beliefs of theorists in relation to the excellence of the economic and industrial agencies with whatsoever has happened. In other words, all the excellent models of business, combines the beliefs of some outstanding persons and takes them to industrial and economic environments, then it has been questioned from these successful environments how their business has been successful? This has been tested in environment and has been raised as an excellent model. Since, in these models, the work regulations are present, then they are called business models. In other words, the group of regulations, which determines, when an organization tries to be the excellent, what decisions it must make and what results it must achieve. The organizational excellent models with an inclusive approach, quality and linear strategy illustrates the excellence of the agencies.

The excellent model of the European Foundation for Quality Management (EFQM) has been designed in order to help the big and small organizations, to establish a method for its goals and practical tools for assessing and illustrating the present places in the method. Evaluation of the way towards the goal is like a light for the method and a kind of motive for finding the solutions. The excellent model of EFQM is committed to search and update the model using the data received from thousands of the

users around the world. The goal is to activate the EFQM excellent model, and to coordinate the managing considerations in the line of development (PGMM Group, 2003).

There are more than 70 organizational excellence group in the world among which Deming, Baldrige, and EFQM has been selected as a source for designing the organizational excellent models and national awards. In very of countries, the excellent model of EFQM has been selected as the bases for designing the national award of quality and productivity. Thus, the mentioned model has been selected as the conceptual model of the present research. This study attempts that the company to recognize and improve its own weak and strong points using the results produced by EFQM excellent model and to compare it with the results of the other branches and by performing the internal and external optimizing programs, it would be able to pass the excellence way better.

In the present research, in order to determine the gap between the present condition and company's favorite state, we have used the EFQM excellent model from among the variety of organizational excellence models in the world as the source and bases for designing the national quality and productivity award and also the company's performance regarding the excellence condition and credit level has been evaluated. The stages according to the Figure 1 achieve the organizational excellence and determining the company's gap with the ideal condition, the EFQM excellence model has been used. In order to evaluate using the excellence model of EFQM instead of the traditional evaluation, the self-assessment has been used which enhances the learning and innovation in the company, causes the self-flourishing among the personnel, and includes evaluation that is more precise. Thus, an educational course for being acquainted with the excellent model and a course of educating the evaluators has been held according to the mentioned model. According to five different self-assessment models which are as below: questionnaire, matrix, workshop, performance and award simulation, the self-assessment by questionnaire has been used which is the best way for organizations that start for the first time.

In the questionnaire method, the company's performance has been evaluated in every 9 criterion of EFQM excellence model. In the present self-assessment each of the 9 criterion of EFQM excellence model has been considered as 9 dependant variable and using 50 standard questions edited by EFQM excellence model in 2003 which has been regarded as 50 independent variable, they have been self-assessed. According to the offered questions for each measure, company's performance has been assessed on the bases of EFQM excellence model measures. In order to make the research practical and scientific, some hypotheses have been formulated. The research hypothesis has claimed the company's performance level 40 percent less than each of the measures for recognized levels for excellence at credit (as the bases). Then according to the mentioned issues it has under gone statistic analyses.

The results have been offered as figure 1. Then the score of the company has been compared for excellence in each of the measures according to the hypothesized level. Consequently, the strong and weak points of the company have been given along with some solutions and suggestions considering the recognized levels for the determined excellence and improvement of the measures.

The model of business excellence has been used as a strong tool for measuring the amount of the systems deployment in different organizations. While an organization could evaluate its own success in performing the improvement programs in different time courses, using these models it would be able to compare its performance with other organization especially the best ones. These models teach that the superiority of an organization is not a theoretical understanding, but also obtaining and offering concrete results are based on documents that are consistent. An organization could achieve the superiority only when considers all the aspects (Najmi & Hosseini, 2004). In the present research the nine measures of EFQM excellence model has been used. These measures, which are presented in figure 2, are as below: (Dommartin, 2003).

EFQM excellence model has been formed by results and empowering elements. The first five measures of this model show the scope of empowering elements and the next four elements illustrates

the scope of the results. The empowering scope illustrates the constituent elements and their interaction with each other and the scope of the results introduces the favorite performances produced by the empowering elements. Their relations are of cause-effect type (Amiran, 2004).

The EFQM Excellence Model that is a high level system. The arrows above and below the boxes in the figure are an integral part of the model, and start to introduce its systemic nature. At their simplest form, the top arrows illustrate that the enablers (the way the work is done) influence the model from left to right, ultimately determining the results that are achieved. Within the results themselves, those relating to customers, people and society influence the key performance results. The arrow pointing from right to left along the base shows that the results achieved must be used to assess the effectiveness of how things are done.

In effect the model is an organizational version of Deming's Plan-Do-Study-Act cycle. It starts to show that the model is not just a framework of 9 totally unrelated boxes, but there are relationships between them that could be used to link issues. Understanding and acting on these linkages helps to strengthen the firm. A simplified example might be the way that in which complaints are handled by an organization, as in the following comments and figure 3. (Medhurst& Richards, 2003):a. There should ideally be some form of customer complaint handling process (relevant in the processes criterion);b. Staff should be trained in how to use it (People);c. The organization should typically have a specific policy about customer complaints (Policy & Strategy);d. The firm's technology could make it easy for staff to handle complaints (Partnerships& Resources);e. Leaders should demonstrate appropriate positive attitudes about complaints (Leadership);f. If there are sound and appropriate answers to these issues (and probably more) and they all align and tell the same story that are likely to be significant in terms of benefits in most or all of the results criteria.

And of course hopefully the data from the complaints themselves are used to understand and remove the things that giving rise to customer dissatisfaction. This example is only an illustration and there will be other aspects than those mentioned, but it should give a flavor of how the model can help understanding.

In the present research, the company has been assessed in any measure of the EFQM excellence model in proportion to the excellent condition and the amount of the balance and considering the stockholders of the organization such as shareholders, costumers, personnel, suppliers, distributors and finally the society. In addition, according to the obtained scores from the mentioned models, the organizational performance has been determined to obtain the national award of quality and productivity.

In Iran and according to the approval of the one hundred and second session of the standard high council dated in 8 Oct every year which coincides with the Quality Day, awards are given to the excellent Iranian organizations which deserve in the filed of excellence and quality improvement by the president (Amiran, 2004).

In the present study, the company's performance is self-assessed according to the EFQM excellence model, and the score of the company is compared for any of the measures in proportion to the credit level. Moreover, some pictures will be offered concerning the strong and weak points of the company.

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DISCUSSION AND RESULTS

To analyze the data of the research, the central indexes and the distribution of the operation of the company has been calculated in any of the EFQM excellence model separately. Then the hypothesis'

statistical tests in any measures of the EFQM excellence model has been evaluated by the one sample T-tests.

The Central Indexes and the Distribution

- a. The table of performance according to the EFQM excellence model. According to the data obtained from table 1 it is observed that according to the ideas of the personnel the average of performances are as below: leadership 31 which is measured with standard deviance of 5.06, policies and strategy 33.67 with standard deviance of 5.56, people 32.27 with standard deviance of 6.51, partnerships and resources 38.40 with standard deviance of 5.93, processes 39.90 with standard deviance of 4.52, costumer results 37.03 with standard deviance of 5.2, people results 31.27 with standard deviance of 8.72, society results 42.44 with the standard deviance of 7.92 and key performance results 35.67 with standard deviance of 5.
- b. The box diagram of company's performance based on the EFQM excellence model. The box diagram shows the quarters, minimums and the maximum observances. Thus, the box includes the difference of the first and the third quarter. In this diagram, the first part of the box is the first quarter and the last part is the third quarter. (Down to up) the line that divides the box to two parts is the middle of the observations. From the sides of the box there is a line equal as the boundary of the observations (minimum and maximum), which sometimes is called the root (Azar, 2000).

Figure4 shows the minimum and maximum of the observations or in other words the distribution of the data from the average in terms of "companies and resources", "costumer results", "society results", "important performance results" which is more balanced and exact.

- c. Spider diagram of company's performance in any of the measures of the EFQM excellence model. Figure4 illustrates that from among the 9 measures of EFQM excellence model, the measure of "society results" are more than the credit level and the credits of the "companies and resources" and "processes" are located in the neighborhood. Except the mentioned three measures, all the other measures of the EFQM excellence model are lower than the credit limit. This diagram shows that the head managers of the statistical society of the research must pay attention to balance the 9 measures.

The Test for Statistical Hypothesis

In this part of the research, any of the 9 hypotheses of the research turned to the correspondent statistical hypothesis which are along with the definition of the H0 and H1 and have been offered along the test stages as below:

- a. The test of dependent difference of company's performance evaluation in any measures of the EFQM excellence model patterns. Table 2 shows the statistical amount of the test for any of the 9 measures of the EFQM excellence model. Columns 4, 5 and 6 repeatedly show the amount of freedom, meaningfulness level, and the average. According to the information in the column 4, since the meaningfulness level of the measures "partnerships and resources", "processes" and the "society results" are more than the meaning level of 5 percent, therefore, the performance amount of the company in the mentioned measures is more than the credit level and the rest six measures (Leadership, Policy & Strategy, People, Customer Results, People Results and Key Performance Results) are lower than the credit level.
- b. The test of dependent difference of company's performance evaluation in any measures of the EFQM excellence model. According to the information of the table 3, it is clear that the average of company's performance evaluation is 35.74 with the standard deviance of 3.19. Moreover, according to the data from table 4, it is observed that based on the dependent average difference test, the amount of $t=7.31$ and the meaningfulness level is $p=0.000$, and since this measure is 40 percent in the society (in credit level and the meaningfulness level is less than 5 percent), therefore the amount of the company's performance is lower than the credit limit.

CONCLUSIONS AND SUGGESTIONS

The EFQM excellence model is highly regarded as an organizational management framework, and is used not only within Europe but also around the globe, either as it is or with the approach applied in very similar frameworks. The EFQM excellence model is formerly known as the business excellence model. The present research after completion of the questionnaire by the selected patterns from the statistical society was analyzed. At the end, the performance of the company based on the 9 measures of the EFQM excellence model was obtained. These scores show the amount of the company's performance in the excellence way and the research results are as below:

1. The performance of the company based on the "leadership" criterion of EFQM excellence model is less than the 40 percent of the excellent score.
2. The performance of the company based on the "Policy & Strategy" criterion of EFQM excellence model is less than the 40 percent of the excellent score.
3. The performance of the company based on the "People" criterion of EFQM excellence model is less than the 40 percent of the excellent score.
4. The performance of the company based on the "Partnerships & Resources" criterion of EFQM excellence model is high than the 40 percent of the excellent score.
5. The performance of the company based on the "Processes" criterion of EFQM excellence model is high than the 40 percent of the excellent score.
6. The performance of the company based on the "Customer Result" criterion of EFQM excellence model is less than the 40 percent of the excellent score.
7. The performance of the company based on the "People Result" criterion of EFQM excellence model is less than the 40 percent of the excellent score.
8. The performance of the company based on the "Society Results" criterion of EFQM excellence model is high than the 40 percent of the excellent score.
9. The performance of the company based on the "Key Performance Result" criterion of EFQM excellence model is less than the 40 percent of the excellent score.
10. The performance of the company based on the all criteria of EFQM excellence model is less than the 40 percent of the excellent score.

Considering that, the hypothetical measure of the company's performance evaluation in any of the measures was to obtain the recognized level for excellence (obtaining 40 percent of the score of the credit excellence level) and the performance of the company in 6 measures of the 9 measure of EFQM excellence model is lower than 40 percent of the scores in the excellent limit except in "companies and resources", "processes", and "society's results", hereby it is suggested that the company must continue the movements in "companies and resources", "processes", and "society's results" and to consider some acclamations for those teams which were effective in the mentioned measures considering the necessity of enhancing the improved parts in the measures of "leadership", "policies and strategies", "personnel", "customer results", "personnel results" and "key performance results".

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Investigation on Relation between Personnel Organizational Commitment and Banking Services Quality

ABSTRACT

Studying and determining relation between personnel organizational commitment and quality of banking services at EN Bank (Eqtesad-e Novin) Bank of East Azerbaijan Province branch is the main objective of the present study. The validity of the questionnaire is in conceptual form. Reliability of the questionnaire has been approved by Cronbach's Alpha Test for questions of organizational commitment and banking services quality of questionnaire with credit 0.875 and 0.911 respectively. Pearson and Freedman Test has been used for testing hypothesis of study. The obtained results indicate that there is a relation between personnel organizational commitment and its dimensions with the quality of banking services in the studied bank.

Key Words: Organizational Commitment, Sentimental Commitment, Rational Commitment, Normality Commitment, Quality of Services

INTRODUCTION

Demands, needs and requirements of customers of banks were not paid due attention in previous due to various reasons like high demand on supply and also limitation of competition, based on which, individuals had to receive their required services with any type of quality. Today, services are considered as integral or inseparable part of life. Quality of services can help one organization to differentiate itself from other organizations in line with attaining a sustainable competitive advantage. Generally speaking, quality of services plays a leading role in success of any organization. In the same direction, organizations can obtain competitive advantages in terms of status with offering high-quality services. The quality-orientation organizations can be developed in two aspects of internal culture and external fame. In other words, those organizations which pay due attention to boost quality of services can attain noticeable successes both in terms of internal culture and external fame in such a way that imitating them by rival companies is a hard task. Therefore, today, role of those individuals, who take services' management training into consideration, is of paramount importance in compilation and promotion of this science. We should bear in mind that any type of improvement and progress at banks is carried by committed manpower. Hence, competent manpower plays a leading role in success of banks particularly. As a matter of fact, the committed manpower will cause materialization of competitive advantage at banks coupled with gaining satisfaction of bank customers. The managers should share their personnel in progressing organizational affairs thanks to their eligibility, qualification and efficiencies. Moreover, managers should respect constructive viewpoints of their personnel with regard to the organizational issues, based on which, managers can boost commitment of personnel to the organization. The committed manpower considers himself or herself as a part of organization and make utmost effort for materialization of objectives of the organization. Bear in mind that objectives of the organization is considered as his or her objectives.

Generally, manpower considers self as dependant on the organization and will boost their identity in that organization. Therefore, committed manpower is considered as a major differentiation criteria of superiority of organization with each other. This indicator will boost efficacy and efficiency of the organization to a great extent. Generally speaking, studying relation of personnel organizational commitment and its dimensions with the quality of banking services at EN Bank of East Azerbaijan Province branch is the main aim of present study.

Due to page limitations sections of text, tables, graphs, figures referred to in this article may have been omitted. Interested readers are referred to the authors for copies of the omitted portions of this article.

RESULTS AND DISCUSSION

The results obtained from studying and testing each of hypotheses of research, thanks to the results obtained from Pearson and Freedman Test, include as follows:

3. There is a correlation between organizational commitment and quality of banking services. According to the formula 2, thanks to the obtained determination coefficient, independent variable of personnel organizational commitment clarifies 39.5 percent of dependant variable variance of quality of banking services. Namely, 39.5 percent of changes at quality of banking services depend on the personnel organizational commitment. Generally speaking, the results obtained from this study show that boosting personnel organizational commitment will cause improvement of quality of banking services.
4. There is correlation between sentimental commitment and quality of banking services. Thanks to the obtained determination coefficient, personnel sentimental commitment clarifies 31.9 percent of dependant variable variance of quality of banking services. Namely, 31.9 percent of changes at the quality of banking services depend on personnel sentimental commitment.
5. There is correlation between rational commitment and quality of banking services. Thanks to the obtained determination coefficient, rational commitment of personnel clarifies 32.3 percent of dependant variable variance of quality of banking services. Namely, 32.3 percent of changes at the quality of banking services depend on the rational commitment of personnel.
6. There is correlation between normality commitment and quality of banking services. Thanks to the obtained determination coefficient, normality commitment of personnel clarifies 21.7 percent of dependant variable variance of quality of banking services. Namely, 21.7 percent of changes at the quality of banking services depend on the normality commitment of personnel.
7. There is a significant difference between correlations of organizational commitment dimensions with the quality of banking services. The correlation ranking of organizational commitment dimensions with the quality of banking services, according to Table 7, will be as follows: 1. Sentimental Commitment; 2. normality Commitment; and 3. Rational Commitment

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Investigating the Relationship between Brand Equity Dimensions and Customers' Different Associations of Brand

Key Words: Customers' different associations of brand, Brand salience, Brand performance, Mental picture of brand, Brand judgement, Brand feeling, Brand resonance, Women

INTRODUCTION

Brands are the main capital of many businesses. The real value of a corporation exists out of it. It means it exists in the mind of potential buyers. A brand is an important guide for a potential customer (Kapferer, 2006, 19). Keeping and developing brand's equity is often challenging and difficult activity. Implementing of managing brand equity needs to take an extensive outlook of different perspectives toward brand equity (Keller, 2010, 57). From the customer's view point, brand's equity means: different effects of brand knowledge on customers' reactions toward marketing activities about that brand. Each brand equity creates a strategic bridge between past activities and the future of marketing and also creates a suitable field for marketing experts to do activity in this stage (Ibid, 76). Marketing experts analyze consumers' behavior carefully for choosing unique and suitable associations of brand in order to be able to identify the best position for their brand. They create pleasant and desirable associations of brand by convincing consumers toward the point that their brand possesses related features and a lot of advantages. Offering a stable competitive advantage is the quiddity of making position for brand. This advantage gives customers an interesting reason and makes them convinced to buy this brand. Marketers can show this unique excellence to their customers by direct comparison with their competitors or create in their mind in an implicit and covert way. Unique and colored associations of mind have an important role in brand success. However, mind associations of competitors' brands are the same in many cases. These similar associations can help to compile a view of competition with other products and services (Ibid, 91). Creating loyal customer is in the heart of every business. The value of corporation will be created through the value customers bring. The mentioned values are now and will be in the future. Business will be successful by attracting, keeping, increasing and growing customers. No business can continue without customer. Today's customers are more aware and trained than ever (Kotler, 2008, 257).

This research aims at identifying the relationship of brand's equity and its dimensions with customers' different associations of brand.

Due to page limitations sections of text, tables, graphs, figures referred to in this article may have been omitted. Interested readers are referred to the authors for copies of the omitted portions of this article.

CONCLUSION AND SUGGESTION

The results of this study are as following: 1. The customers' different associations of brand is not meaningfully different based on marriage status, level of education, job position, monthly income,

cell phone ownership and women's cell phone buyer. 2. There is no direct correlation among brand equity dimensions including brand salience, brand performance, mental picture of brand, brand judgment, brand feeling and brand resonance and women's age. Since the customers' different associations of brand is not meaningfully different based on marriage status, level of education, job position, monthly income, cell phone ownership and women's cell phone buyer and also since there is meaningful correlation among brand equity dimensions and women's age so it has been suggested that corporations producing cell phones do not need different programming based on mentioned factors in order to affect the customers' different associations of brand and they can have a unique program for different groups of customers. Meanwhile, there is meaningful and direct correlation between the customers' different associations of brand and dimensions of brand equity so corporations producing cell phones should program for improving dimensions of brand equity in order to improve the customers' different associations of brand.

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The Relationship between the Performance of Industrial Clusters and Renovation of Small Industries

Key Words: Industrial Clusters, Small Industries, auto-parts cluster, Renovation of Small Industries.

INTRODUCTION

In recent decades, many content and qualitative changes in global marketing have taken place, and movement toward the globalization of markets has just begun. Along this process, the era of production-centeredness has just reached its end and customer-centeredness is still rising. Industrial producers with the aim of ensuring the optimal use of available facilities and preventing the waste of valuable resources have resorted to some measures resulting in the changes in industrial structure. The main feature of the structural change is the promotion of small industries. In recent years, more attention has been paid to downsizing, and the development of SMEs (small and medium enterprises) has sharply increased. These enterprises have many advantages as compared with large industries such as the value added, innovation, creation of job opportunities and more flexibility. Therefore, paying more attention to this aspect of economy is necessary. On the other hand, the small size of enterprises and the little available resources have created some limitations for these enterprises, namely financial, development and research, marketing restrictions and so on etc.

Small industries represent a significant proportion of each country's economy. This sector provides the necessary basis needed for economic development. These industries provide job opportunities in each country and strengthen the foundations of economy, eventually causing an increase in national revenue of that country. Because modern small industries can play an important role in strengthening and diversifying the industrial structure and accelerating industrialization, almost all developing countries and governments seek to promote them in their developing programs and policies. In most of the countries, a significant of economic activities is done by SMEs. These industries can locate their own specific problems in entering the arena of global competition. Governments always try to support these companies logically using different strategies in order to enhance their competitiveness in a way that they can compete in competitive world markets. Developments and changes in

competitive ability over the time have turned into the main research topics on industrial clusters one of the basic strategies in organizing SMEs is integrating and organizing these enterprises in industrial clusters.

Concentration, of a number of SMEs in one geographical area can create advantages for within-cluster enterprises. In other words, by integrating the companies which operate in similar or related fields, these Companies may enjoy advantages such as savings resulting from scale and diversity, knowledge and technology transfer, increasing competitiveness resulting from collective efficiency.

The importance of industrial development in developing countries has led many countries to considering the formation and strengthening of cluster SMEs in industrial areas as a regional industrial development strategy. The countries try to exploit small industries as an employment strategy which, meanwhile, is able to exploit the competitive ability of companies and increase their exports. In the past two decades, in order to accelerate economic growth and creation of job opportunities, the study of industrial clusters has gained a special importance (Rabeloti, 2004, 9). One of the methods for industrial development which, in recent years, has proved to be appealing for developing and developed countries is their inclination toward downsizing the industries, reliance on development and expansion of these industries. With the dramatic changes in the world particularly the changes in different industries, small industrials are increasingly growing and flourishing. Small industries create nearly 30% of industrial output, but in terms of the creation of job opportunities, they have an important contribution. Since supporting dispersed and small industrial units is both hard and costly for the governments, encouraging and pursuing these units to aggregate in clusters and industrial networks can be considered as a successfully experienced strategy by policy makers and executives in many countries (Schmits & Nadavi, 2002, 17).

The main purpose of this research is investigating the relationship between the performance of the industrial clusters and its dimensions including supporting institutions, communication sectors, and production–business sectors with renovation of small industries in the society under study.

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RESULTS AND DISCUSSION

The results corresponding to the research hypotheses based on the information and analysis in tables 4 and 5 include: 1. There is a correlation between the performance of industrial clusters and renovation of small industries. The obtained coefficient of determination shows that industrial clusters' performance indicates 7.45 percent of variance of small industries' renovation. It means 7.45 percent of changes in the renovation of small industries depend on the performance of industrial clusters.

2. There is correlation between the performance of industrial clusters' supporting institutions and renovation of small industries. The obtained coefficient of determination shows that supporting institutions' performance indicates 2.89 percent of variance of small industries' renovation. It means 2.89 percent of changes in the renovation of small industries depend on the performance of supporting institutions. 3. There is correlation between the performance of industrial clusters' communicative sectors and renovation of small industries. The obtained coefficient of determination shows that communicative sectors' performance indicates 5.56 percent of variance of small industries' renovation. It means 5.56 percent of changes in the renovation of small industries depend on the performance of communicative sectors. 4. There is correlation between the performance of industrial clusters' production – business sector and renovation of small industries. The obtained coefficient of determination shows that, production – business sector' performance indicates 5.56 percent of variance of small industries' renovation. It means 5.56 percent of changes in the renovation of small industries depend on the performance of production – trade sectors. 5. There is a difference between

The Relationship between the Performance of Industrial Clusters and Renovation of Small Industries

the correlations of industrial clusters' performance dimensions and renovation of small industries. The correlations of industrial clusters' performance dimensions and renovation of small industries can be ranked as follows: 1. Performance of communicative sectors, 2. Performance of production – trade sectors, 3. Performance of supporting institutions.
