

Volume 9 Number 1
Spring 2013
ISSN: 1553-5495



Journal of Global Business and Technology



Journal of Global Business and Technology Volume 9, Number 1 Spring 2013

SELECTED CONTENTS

PROTECTION OF RADICAL INNOVATIONS – DIFFERENCES IN DOMESTIC AND INTERNATIONAL MARKETS

Pia Hurmelinna-Laukkanen, Paavo Ritala, and Liisa-Maija Sainio

EFFECTS OF INVESTMENT IN INFORMATION TECHNOLOGY ON INTERNATIONAL TRADE

Shouhong Wang and Hai Wang

ORGANISING THE HUMAN RESOURCES FUNCTION IN NEW ZEALAND TO HARNESS FUTURE OPPORTUNITIES: SURVEY RESULTS OF 2010 FORECASTED FOR 2020

Pieter Nel and Leon de Wet Fourie

TRANSFORMATION OF THE ZIMBABWEAN BANKING INDUSTRY: EVIDENCE FROM THE LIFECYCLE MODEL

Mabutho Sibanda and Richard Mhlanga

CORPORATE SOCIAL RESPONSIBILITY: TO YOURSELF BE TRUE

James Brusseau, Larry Chiagouris and Rocio Fernandez Brusseau

*In Cooperation with Global Business
and Technology Association*

The Journal of Global Business and Technology

Volume 9, Number 1, Spring 2013

Publication Details
Two issues per volume
ISSN: 1553-5495

© Copyright
The copyright of all material published in the journal is held by the Global Business and Technology Association, Inc.

Website
Further information, including subscription details, are available on the Global Business and Technology Association website at: www.GBATA.org

The Journal of Global Business and Technology, in cooperation with the Global Business and Technology Association and sponsored by Arcadia University, U.S.A., has been listed with [1] Cabell’s Directory, [2] EBSCO’s Academic Search, and [3] ProQuest’s ABI Form.

TABLE OF CONTENTS

Nejdet Delener	Editorial	iii
Nejdet Delener Chiang-nan Chao	Note from Editors	viii
	Editorial Board and Reviewers	ix

Pia Hurmelinna-Laukkanen Paavo Ritala Liisa-Maija Sainio	PROTECTION OF RADICAL INNOVATIONS – DIFFERENCES IN DOMESTIC AND INTERNATIONAL MARKETS	1
--	---	-------	---

Abstract: The increasingly tight connections between innovation and internationalization, and critical factors in this setting warrant more research. In this study, the focus is turned to protection different types of radical innovations in international and domestic markets. Our results based on literature review and empirical examination of data from 209 firms indicate that while protection mechanisms are typically stronger in internationalized firms than in domestic ones, there are differences with regard to the individual mechanisms that protect different types of innovations in both types of markets. Acknowledging this allows managers to prepare better for utilizing innovations and conducting innovation activities abroad, and helping their firms to grow internationally.

Shouhong Wang Hai Wang	EFFECTS OF INVESTMENT IN INFORMATION TECHNOLOGY ON INTERNATIONAL TRADE	17
---------------------------	---	-------	----

Abstract: There have been propositions in the information technology (IT) literature that IT stimulates international business. This paper describes the research framework that relates to IT investment and international trade. Based on a literature survey, five hypotheses are developed. The data of IT expenditures and international trade of forty-four large trading countries over the 1995-2009 period are collected through the World Bank and United Nation's databases. These data are used to test the five hypotheses. The research findings strongly suggest that IT investment has positive effects on international trade for all countries. Such positive effects are not significantly influenced by cultural factors such as geographical region and language, even are not influenced by the economy strength factor. Free trade can stimulate the effects of IT on international trade; however, such stimulus seems to be diluted when the trade association becomes large. The findings of this empirical test lead to conclusions and recommendations for the international trade communities to proactively make IT investments for international trade.

Pieter Nel Leon de Wet Fourie	ORGANISING THE HUMAN RESOURCES FUNCTION IN NEW ZEALAND TO HARNESS FUTURE OPPORTUNITIES: SURVEY RESULTS OF 2010 FORECASTED FOR 2020		30
----------------------------------	---	--	----

Abstract: The objective of the article is to identify particular functions and the organising thereof by human resource practitioners in 2010 forecasted for 2020 that would be critical as contributions to achieve an organisation's objectives. Without the focused application and practice of HR functions by HR practitioners, organisations in New Zealand would not be optimally competitive. A survey was executed via an e-questionnaire using Survey Monkey in 2010 with forecasts for 2020 to obtain longitudinal results. Responses totalled 119 from members of the Human Resource Institute of New Zealand, representing 15.4%. The most important findings and managerial implications are: HR should exhibit leadership in the functioning and organising of HR; focus on financial implications of HR activities, and external and internal changes in the organisation as perceived by HR. The implications are perhaps also applicable to organisations globally to add value to create future business opportunities.

TABLE OF CONTENTS

Mabutho Sibanda Richard Mhlanga	TRANSFORMATION OF THE ZIMBABWEAN BANKING INDUSTRY: EVIDENCE FROM THE LIFECYCLE MODEL 44
------------------------------------	--	----------

Abstract: The Zimbabwean economy has undergone economic and financial transformation over the past two decades which has been accompanied by multiple changes in the banking sector. The country embarked on financial reforms in the 1990s which subsequently led to a twofold growth in the number of banks in the system. However, the growth in the number of banks exacerbated competition in the sector which subsequently led to an unprecedented collapse of banks between 1998 and 2005. This study uses the lifecycle model to ascertain behavior of banks between the period 1990 and 2008. The results show that the majority of banks that collapsed in Zimbabwe between 1998 and 2008 were, on average, at their start-up phase. However, the collapse of these banks was propelled by different circumstances ranging from bank specific to general market factors. The study provides some policy recommendations regarding the licensing of banks in emerging markets economies.

James Brusseau Larry Chiagouris Rocio Fernandez Brusseau	CORPORATE SOCIAL RESPONSIBILITY: TO YOURSELF BE TRUE 53
--	---	----------

Abstract: Brand trust is an integral component of brand identity. Consumer suspicion may undermine the building of brand trust through attempts to incorporate corporate social responsibility (CSR) into brand identity. One cause is businesses conforming to a definition of CSR that does not fit their operation and culture. One response is to set authenticity at the center of CSR discussions by broadening the ethics used to conceive a business's role in society and international commerce. This paper uses philosophical tools to construct a model for authenticity-based corporate social responsibility.

Manuscript Guidelines 64
JGBAT Subscription Forms 67

EDITORIAL

Recent literature shows that internationalization and innovation are linked to each other to an increasing extent. These tight connections and critical factors in this setting warrant more research. As internationalization, radical innovation, and protection issues have not been systematically researched in the same setting, there is a need for more research that would examine the interplay of types of radical innovation and innovation protection in international context.

The first paper by Pia Hurmelinna-Laukkanen, Paavo Ritala and Liisa-Maija Sainio addresses this gap in the extant research and examine how different types of radical innovation can be effectively protected against imitation in firms operating in domestic and international markets with a set of protection mechanisms. In exploring this issue, the authors focus on three types of radical innovations, i.e., technology, market, and business-model innovations, and seven different types of protection and innovation appropriation mechanisms, i.e., intellectual property rights (IPRs), contracts, employment legislation, human resource management (HRM), secrecy, lead time, and tacitness of knowledge. Hurmelinna-Laukkanen, Ritala and Sainio start their examination with theoretical discussion on international innovation environment. Following this, they move on to explore empirically the strength of different appropriability mechanisms in firms that operate in domestic and international markets.

In their theoretical discussion highlighting the relationships between internationalization, type of innovations and appropriability mechanisms they arrive to three hypotheses formulated as follows:

- H₁: Internationalized firms reach higher levels of innovation radicalness than domestic firms.
- H₂: Internationalized firms reach higher strength of appropriability mechanisms than domestic firms.
- H₃: Both internationalized and domestic focused firms reach higher levels of innovation radicalness when the appropriability mechanisms are stronger.

The results based on literature review and empirical examination of data from 209 firms indicate that while protection mechanisms are typically stronger in internationalized firms than in domestic ones, there are differences with regard to the individual mechanisms that protect different types of innovations in both types of markets.

The findings concerning the relationship between internationalization and dimensions of innovation radicalness indicate that in international markets, access to different types of knowledge and varying technologies enhances the chances that radically new technologies emerge. Regarding market radicalness, internationalization does not seem to play a role, since this dimension is almost unchanged independent of domestic or international focus. In terms of business model radicalness, the internationalized firms seem to exhibit higher rates of newness. This result suggests that internationalized firms approach the business models differently or that international markets are utilized for trials and new operation modes, which increases the radicalness of business models for such firms. Second, they considered the linkages between internationalization and protection/appropriability mechanisms. They found that four out of seven mechanisms - IPR's, secrecy, tacitness and contracts - were clearly stronger in internationalized firms and that also the rest followed this pattern.

Third, the study illustrates notable differences between internationalized and domestic firms in terms of the combinations of different types of radical innovations and the strength of protection. In general, it seems that in domestic markets, the informal mechanisms dominate the appropriability regime over formal ones, while in international markets the variety is higher. There are differences regarding the strength of different mechanisms and dimensions of radical innovations in different markets, however. In general, IPRs may be more relevant for innovations containing high technological or market radicalness. Differences seem to emerge with respect the firm orientation towards domestic or international markets, however: IPRs are associated with market radicalness in domestic markets and with technological radicalness in internationalized firms. Somewhat surprisingly, the connection between the strength of appropriability mechanisms and radicalness of

innovations disappears to an extent in international markets. Stronger secrecy is associated only with higher technology radicalness, whereas lead time relates to technology and business model radicalness.

The managerial implications of the study point to two issues: first, as it seems that different appropriability mechanisms are related to different dimensions of innovation radicalness especially with regard to operating in domestic or international markets, appropriability should be sought from multiple mechanisms. This improves the chances that the firm has the right tools at its disposal when different innovations and related opportunities and threats emerge in different markets. Second, it is important to get employees from different functions of the firm involved in knowledge protection for radical innovations. As radicalness comes in different forms, they may emerge in different parts of the firm, meaning also that benefits might be lost if personnel have no idea on the protection issues. In general, if a firm seeks radical innovations, access to multiple sources of knowledge from various markets seems to be an essential precondition.

There have been propositions in the information technology (IT) literature that IT stimulates international business. The study by Shouhong Wang and Hai Wang evaluates the relationship between investment in IT and international trade. A literature survey indicates that geographical gap, cultural gap, IT and logistic infrastructure, and IT standard agreement influence the impact of IT investment on international trade. Accordingly, five hypotheses are developed in this study; they are: (1) a positive association exists between the IT investment and international trade; (2) geographical region does not have significant impact on the relationship between IT investment and international trade; (3) The relationship between IT investment and international trade in English speaking countries is significantly stronger than that in non-English speaking countries; (4) the relationship between IT investment and international trade in developed countries is significantly stronger than that in developing countries; and (5) world trade association has significant impact on the relationship between IT investment and international trade.

The data of IT expenditures and international trade of forty-four large trading countries over the 1995-2009 period are collected through the World Bank and United Nation's databases. These data are used to test the five hypotheses. The research findings strongly suggest that IT investment has positive effects on international trade for all countries. Such positive effects are not significantly influenced by cultural factors such as geographical region and language, even are not influenced by the economy strength factor. Free trade can stimulate the effects of IT on international trade; however, such stimulus seems to be diluted when the trade association becomes large.

The findings of Wang and Wang's study lead to the following recommendations for the international trade communities to proactively make IT investments for international trade:

1. The globalization of economy requires globalization of IT. The world must continue to invest on IT to exploit the advantages of IT for international trade.
2. The borderless international trade market must be aware of cross-cultural issues in IT. Social-cultural factors will influence the IT-based international market in a collective way. Countries and trade organizations must be able to draw IT resources cross-culturally to create long term, sustainable, and equal relations among international trade partners.
3. The interdependence between the globalization of IT and international trade has become a global issue rather than national. World trade organizations ought to learn from NAFTA how a free trade area can have significant use of IT for international trade through imposing IT standardization and specifying their agreements on the use of IT for trade.
4. Developed countries must help the developing countries to establish IT infrastructure and logistic infrastructure in order to fully develop IT-enabled international trade. The digital divide between the developed counties and developing countries will influence the IT-based international trade in a collective way. The disadvantages of under-developed IT infrastructure and logistic infrastructure in developing countries are actually shared by all counties in international trade. Without improving the global IT infrastructure and logistic infrastructure, the impact of IT on international trade would be restricted.

Human resources management plays a cardinal role in New Zealand in supporting the way business is conducted, in order to identify foci for the interaction between the organising role of HR and supporting

management to achieve strategic objectives. It is of paramount importance for management to create future business opportunities and resultant survival of an organisation. The study by Pieter Nel and Leon de Wet Fourie is based on longitudinal research entailing an HR survey executed in New Zealand 2010 and forecasts for 2020. The research questionnaire and methodology is based on identical previous research which originated in 1994 in Australia and which was repeated in 2000 in New Zealand. The results, therefore, have high level significance in providing the HR function and senior management with research evidence as to what and how it should do in order to remain current and competitive both locally and globally.

Due to limited reporting constraints, only results of the 2010 survey with forecasts for 2020 is presented, which entails only 1 aspect and section of the overall survey in this article. The response was 15.4% from the participating HR functionaries registered with the Human Resources Institute of New Zealand (HRINZ) during 2010. Responses were provided via an e-survey executed by the HRINZ regarding how the HR function's organising is approached and perceived in supporting management to enable organisations to have informed results to utilise to execute activities up to 2020.

The main conclusions and recommendations are based on the analysis of the results, after it was refined by applying various statistical techniques. It reflects what HR and management in an interdependent manner ought to be focused upon, as far as the perception of HR respondents are concerned for both 2010 and 2020. After further statistical analysis was applied using the Wilcoxon Signed Ranks Test, it was also confirmed that the following issues are significant and that human resource managers should:

- Exhibit leadership for the functioning and organisation of HR
- Anticipate the effect of internal and external changes on the organisation
- Focus on the quality of HR services
- Educate and influences line managers on HR issues
- Define and communicate HR vision of the future

A limitation of the Nel and Fourie's study was that when the survey was executed, the global financial crisis was still in full swing and this may have prompted respondents to have a more conservative outlook on their responses for both 2010 and 2020. It is therefore anticipated that a repeat study in 2015 may shed more light on the trends being identified by respondents. In conclusion it is critical to enhance competitiveness and creating opportunities for future success of businesses which both HR and management should take note of as was outlined in this study.

The study by Mabutho Sibanda and Richard Mhlanga seeks to determine whether the events in the Zimbabwean banking sector during the 1990s and the 2000s can be explained by the corporate lifecycle model. Zimbabwe was besieged by several challenges emanating from political to socioeconomic factors. During this period, the country embarked on financial sector reforms and Economic Structural Adjustment Programme sponsored by the International Monetary Fund. The financial sector reforms led to the mushrooming of several financial institutions in the mid-1990s which were further bolstered by income from advisory services in the privatization of state enterprises. In spite of the growth opportunities during this period, banks began to face stiff competition amid the country's perennial negative Gross Domestic Product growth rate and hyperinflation. Consequently, banks began collapsing in 1998 and the failures became more pronounced between 2003 and 2005. The country's central bank, the Reserve Bank of Zimbabwe blamed the failures on imprudent banking practices and mismanagement of banks. On the other hand, the banking sector executives blamed the failure of banks on the harsh economic environment that banks were subjected to during the period under review. Sibanda and Mhlanga's study therefore seeks to establish whether the failure of banks in Zimbabwe can be explained the corporate lifecycle model.

The corporate lifecycle has widely been used to ascertain whether firms sequentially move from launch-phase to growth phase to maturity phase and subsequently to the decline phase. Each phase is categorized by its unique business and financial parameters that incorporate both internal and external factors surrounding the firm. Based on existing literature, the authors use the proposition that banks that are six years or younger are in their start-up phase; banks that are within six years of listing or between six and 12 years of age are growth phase banks; banks that are between 12 and eighteen years of age are mature phase banks; and

finally those that are at least 18 years of age are either in their mature or decline phase depending on the characteristics of the model parameters. Sibanda and Mhlanga found that banks acquired listing on the Zimbabwe Stock Exchange (ZSE), the country's sole stock exchange, at an average of six years. This is in line with the averages postulated by existing literature that firms list on the exchange at an average age of six years. At this age, the banks move from start-up phase to growth phase. Of interest is 38 percent of the banks that failed were listed on the ZSE. Three banks listed on the stock exchange before turning six years of which two latter collapsed. In total, nine banks of the 21 banks established during the period under review had failed by 2008. The collapse of banks after the initial public offering is of major concern. It is expected that listed banks should access cheaper sources of finance when compared to their unlisted counterparts. Moreover, listing on the stock exchange enables the market to monitor the activities of the listed firm and hence avert failure or mismanagement. However, evidence shows acquiring a listing did not prevent the banks from failing. A possible cause for this could be the fact that most of these banks were owner-managed and lacked proper corporate governance controls and best practices.

The average age of banks that failed was found to be 5.2 years suggesting that on average banks collapsed during their start-up phase. During the start-up and growth phases, banks like any other firms, experience high operating costs in the form of research and development costs, information technology and marketing costs and infrastructure expenditures among other costs. As competition increases in the sector, some banks are in theory expected to face difficulties in attracting customers and increasing the deposit base. The collapse of banks at an average age of 5.2 years meets the priori expectations that new entrants in the sector should encounter market penetration difficulties. Despite the economic challenges that besieged the country, issues of imprudent banking practices could have resulted in the failure of these banks in that they may have sought other ways of survival due to stiff competition and lack of market acceptance.

Sibanda and Mhlanga further offer some policy implications and recommendations especially for small developing economies. The fact that banks collapsed at an average age of five years which suggests that they were in their start-up phase should be of major concern to bank regulators. This means that the establishment of these banks benefited the economy only in the short-run and later destroyed public confidence in the banking sector due to systemic failures. This should not have been allowed to happen as public confidence is central to the stability of the banking sector. Banking regulations should be such that speculative establishment of banks is minimized to stop affluent individuals from abusing the banking system. These regulations need to be harnessed with corporate governance practices to avert systemic failures in the sector. Furthermore, vetting the management of banks should be encouraged to eliminate chances of rogue owner-managers. Overall, the banking sector should not be treated like any other corporate sector by allowing market forces to determine survivors and losers. The banking sector is sensitive to systemic risk and any failures may harm public confidence in the sector. As such, ensuring that new entrants comply with high level of requirements which go beyond monetary capital requirements is essential to the stability of the financial system. Another important factor to consider when issuing banking licenses is the ability or capacity of the regulator and banking supervision in ensuring compliance. Central banks in small developing countries should ensure they have proportional supervision capacity when licensing new banks.

Conducting business on an international scale increasingly requires businesses to be clear about their obligations to society beyond simply making profit. Businesses are commonly expected to create mission and vision statements that are shared with employees, investors, customers and suppliers. A common element is language related to corporate citizenship and social responsibility.

Corporate social responsibility (CSR) is the ethical values defining a business' role in society. CSR branding incorporates the business' social values into the reputation of its goods and services. Like most branding initiatives, central goals include: brand differentiation, consumer loyalty, affinity and advocacy. As CSR branding has flowed toward the mainstream, a skeptical suspicion has emerged. Suspicion that at least some companies are branding themselves as something that they are not stains the project of incorporating the ethics of their role in society into brand identity. Given that brand trust is an integral component of brand identity, this suspicion must be addressed. One response to suspicion of CSR branding is to set authenticity at the endeavor's core. Instead of attempting to conform to an established definition of correct behavior, CSR branding works to discover and communicate the ethical values driving a particular business' role in society.

The paper by James Brusseau, Larry Chiagouris and Rocio Brusseau is about the transition from conformity with established models of CSR, to the construction of an authentic CSR profile for use in branding initiatives. An explanation of the transition takes two steps. First, the authors define the idea of authenticity. Second, the difference between conformity and authenticity in CSR branding is traced in concrete terms. Six ethical frameworks are described as the basis for assisting businesses in determining where their values fall on a spectrum from a focus driven entirely by marketplace profit making on the one hand to a focus on entirely on stakeholders within society.

Nejdet Delener, Ph.D.
Editor-in-Chief

NOTE FROM THE EDITORS

As an interdisciplinary journal, *The Journal of Global Business and Technology* (JGBAT) serves academicians and practitioners in the fields of global business and technology and their related areas. The JGBAT is also an appropriate outlet for manuscripts designed to be of interest, concern, and applied value to its audience of professionals and scholars.

Readers will note that our attempt to bridge the gap between theory and practice has been successful. We cannot thank our reviewers enough for having been so professional and effective in reiterating to contributors the need to provide managerial applications of their research. As is now obvious, the majority of the articles include a section on managerial implications of research. We wish to reiterate once again our sincere thanks to JGBAT reviewers for having induced contributors to answer the “so what?” question that every Journal of Global Business and Technology article is required to address.

Thank you for your interest in the journal and we are looking forward to receiving your submissions. For submissions guidelines and requirements, please refer to the Manuscript Guidelines at the end of this publication.

Nejdet Delener, Ph.D., Editor-in-Chief
Chiang-nan Chao, Ph.D., Managing Editor

REGIONAL EDITORS

Shaukat Ali, Ph.D.
Jeong-Gil Choi, Ph.D.
Pawan K. Chugan, Ph.D.
Leon de Wet Fourie, Ph.D.
Johan de Jager, Ph.D.
Dana Lascu, Ph.D.
Gerald Ledlow, Ph.D.
Auke Leen, Ph.D.

T. Diana L.v.A. de Macedo-Soares, Ph.D.
Bruno Mascitelli, Ph.D.
Pat Obi, Ph.D.
Anna Putnova, Ph.D.
Luis Eduardo Rivera Solis, Ph.D.
Susana Rodrigues, Ph.D.
Che-Jen Su, Ph.D.
Attila Yaprak, Ph.D.

Journal of Global Business and Technology

EDITORIAL BOARD

EDITOR-IN-CHIEF

Nejdet Delener, Ph.D.
Arcadia University, USA

MANAGING EDITOR

Chiang-nan Chao, Ph.D.
St. John's University, USA

REGIONAL EDITORS

AFRICA

Johan de Jager, Ph.D.
Tshwane University of Technology, South Africa

ASIA

Jeong-Gil Choi, Ph.D.
Kyung –Hee University, South Korea

Che-Jen Su, Ph.D.
Fu-Jen Catholic University, Taiwan R.O.C.

Pawan K. Chugan, Ph.D.
Nirma University of Science & Technology, India

AUSTRALIA/NEW ZEALAND

Leon de Wet Fourie, Ph.D.
Unitec, New Zealand

Bruno Mascitelli, Ph.D.
Swinburne University of Technology, Australia

NORTH AMERICA

Dana Lascu, Ph.D.
University of Richmond, USA

Gerald Ledlow, Ph.D.
Georgia Southern University, USA

Pat Obi, Ph.D.
Purdue University Calumet, USA

Luis Eduardo Rivera Solis, Ph.D.
Dowling College, USA

Attila Yaprak, Ph.D.
Wayne State University, USA

SOUTH AMERICA

T. Diana L.v.A. de Macedo-Soares, Ph.D.
Pontifical Catholic University of
Rio de Janeiro, Brazil

EUROPE

Shaukat Ali, Ph.D.
The University of Wolverhampton, Telford Campus, UK

Auke Leen, Ph.D.
Leiden University
The Netherlands

Anna Putnova, Ph.D.
University of Technology
Czech Republic

Susana Rodrigues, Ph.D.
Polytechnic Institute of Leiria, Portugal

REVIEWERS

<i>Dr. Davood Askarany</i>	The University of Auckland, New Zealand
<i>Dr. Erhan Alsanoglu</i>	Marmara University, Turkey
<i>Dr. Homer T. Bonitsis</i>	New Jersey Institute of Technology, USA
<i>Dr. Vida Lucia Botes</i>	University of Waikato, New Zealand
<i>Dr. Guy Callendar</i>	Curtin University, Australia
<i>Dr. Jui-Kuei Chen</i>	Tamkang University, Taiwan, R.O.C.
<i>Dr. Gerard Danford</i>	Haaga - Helia University of Applied Sciences, Finland
<i>Dr. Koen Dittich</i>	Erasmus University of Rotterdam, The Netherlands
<i>Dr. Oral Erdogan</i>	Istanbul Bilgi University, Turkey
<i>Dr. Nikolay Filinov</i>	National Research University– Higher School of Economics, Russia
<i>Dr. Leonora Fuxman</i>	St. John's University, USA
<i>Dr. Emanuel Gomes</i>	Sheffield University, UK
<i>Dr. Abdel Halabi</i>	Monash University, Australia
<i>Dr. Stephen J. Havlovic</i>	Alfred State College, USA
<i>Dr. Scott Hoenig</i>	University of Witwatersrand, South Africa
<i>Dr. Frederic Jallat</i>	ESCP Europe - European School of Management, France
<i>Dr. Ali Kara</i>	The Pennsylvania State University – York, USA
<i>Dr. Fahri Karakaya</i>	University of Massachusetts - Dartmouth, USA
<i>Dr. Halil Kiyamaz</i>	Rollins College, USA
<i>Dr. Stephen Ko</i>	The Hong Kong Polytechnic University, Hong Kong R.O.C.
<i>Dr. Samad Kolahi</i>	Unitec, New Zealand
<i>Dr. Daniel Koys</i>	DePaul University, USA
<i>Dr. Engin Kucukkaya</i>	Middle Eastern Technical University, Turkey
<i>Dr. Keun S. Lee</i>	Hofstra University, USA
<i>Dr. Tatiana Leonova</i>	State University of Management, Russia
<i>Dr. Grace TR Lin</i>	National Chiao Tung University, Taiwan, R.O.C.
<i>Dr. Victor Lu</i>	St. John's University, USA
<i>Dr. Ajay K. Manrai</i>	University of Delaware, USA
<i>Dr. Miguel Martins</i>	Grenoble Graduate School of Business, France
<i>Prof. Roger Mason</i>	Durban University of Technology, South Africa
<i>Dr. Boris Milner</i>	Russian Academy of Sciences, Russia
<i>Dr. Douglas McCabe</i>	Georgetown University, USA
<i>Dr. Samir R. Mousalli</i>	Huntingdon College, USA
<i>Dr. Juergen Muehlbacher</i>	WU Vienna University of Economics & Business, Austria
<i>Dr. Mathilda van Niekerk</i>	University of Central Florida, USA
<i>Dr. Marina Novelli</i>	University of Brighton, UK
<i>Dr. Wilson Ozuem</i>	London School of Commerce, UK
<i>Dr. Kathleen Park</i>	Massachusetts Institute of Technology, USA
<i>Dr. Ian Phau</i>	Curtin University, Australia
<i>Dr. Nathalie Prime</i>	ESCP Europe-European School of Management, France
<i>Dr. Tribhuvan N. Puri</i>	University of Massachusetts Dartmouth, USA
<i>Dr. Murali Raman</i>	Monash University, Malaysia
<i>Dr. Mornay Roberts - Lombard</i>	University of Johannesburg, South Africa
<i>Dr. Leonel Cezar Rodrigues</i>	University Nove de Julho, Brazil
<i>Dr. Gerald P.W. Simmons</i>	Grand Valley State University, USA
<i>Dr. Satyendra Singh</i>	University of Winnipeg, Canada
<i>Dr. Klaus Solberg Soilen</i>	Blekinge Institute of Technology, Sweden
<i>Prof. Christian L van Tonder</i>	University of Johannesburg, South Africa
<i>Dr. Gerry Urwin</i>	Coventry University, UK
<i>Dr. Jaan Vainu</i>	Tallinn University of Technology, Estonia
<i>Dr. Robert G. Vambery</i>	Pace University, USA
<i>Dr. K. Prakash Vel</i>	University of Wollongong in Dubai, UAE
<i>Dr. De la Rey Van der Waldt</i>	Tshwane University of Technology, South Africa
<i>Dr. Clare Weeden</i>	University of Brighton, UK
<i>Dr. Meng-Wen Wu</i>	Ming Chuan University, Taiwan, R.O.C
<i>Dr. Ayse Yuce</i>	Ryerson University, Canada
<i>Dr. Anna Zhilkina</i>	State University of Management, Russia

PROTECTION OF RADICAL INNOVATIONS – DIFFERENCES IN DOMESTIC AND INTERNATIONAL MARKETS

Pia Hurmelinna-Laukkanen, Paavo Ritala, and Liisa-Maija Sainio

ABSTRACT

The increasingly tight connections between innovation and internationalization, and critical factors in this setting warrant more research. In this study, the focus is turned to protection different types of radical innovations in international and domestic markets. Our results based on literature review and empirical examination of data from 209 firms indicate that while protection mechanisms are typically stronger in internationalized firms than in domestic ones, there are differences with regard to the individual mechanisms that protect different types of innovations in both types of markets. Acknowledging this allows managers to prepare better for utilizing innovations and conducting innovation activities abroad, and helping their firms to grow internationally.

Keywords: Radical innovation, Appropriability regime, Internationalization

INTRODUCTION

An overview of recent literature shows that internationalization and innovation are linked to each other to an increasing extent (e.g. Frenz et al. 2005, Pla-Barber and Alegre 2007, Salomon and Shaver 2005,

Pia Hurmelinna-Laukkanen is an Associate Professor of International Business at the Oulu Business School, University of Oulu and an Adjunct Professor at the Lappeenranta University of Technology, School of Business. She has published over 45 refereed articles in journals such as *R&D Management*, *Technovation*, *Service Industries Journal*, *Management Decision*, *Journal of Service Management*, and *Journal of Product Innovation Management*. She has also contributed to book chapters, some 90 conference papers, and several other scientific and managerial publications. Most of her research has involved innovation appropriability issues in varying contexts like internationalization and inter-organizational collaboration.

Paavo Ritala, D.Sc. (Econ. & Bus. Adm.) is a Professor at the School of Business at Lappeenranta University of Technology, and an Academic Director of Master's Programme in Strategy, Innovation and Sustainability. His research interests are in the areas of inter-organizational networks, coopetition, business models, and innovation. He has published on these topics in top-level academic journals such as *Journal of Product Innovation Management*, *British Journal of Management & Technovation*. He is also extensively involved in business practice with regard to these topics through research projects, executive and professional education programs, and in speaker and advisory roles.

Liisa-Maija Sainio, D.Sc. (Econ. & Bus. Adm.) is a Professor in International Marketing at Lappeenranta University of Technology, School of Business. Her research interests include different types of innovation and their effects on firm strategy, and customer knowledge processing. She has published in *R&D Management*, *Technological Forecasting and Social Change* and *Technovation* among others.

Zahra and George 2002). Innovative products and services have the potential to promote growth and expansion of firms to new markets, and innovation activities are conducted increasingly in foreign locations in order to improve learning and allow utilizing valuable, yet dispersed knowledge more efficiently (Filippetti et al. 2011). In fact, prior studies have suggested that internationalization yields more radical innovations (Frenz et al. 2005), which can in turn generate new revenue streams. However, considering that competition is likely to intensify in international markets, preserving uniqueness and differentiation for the internationally operating innovator needs to be paid attention to as well. Therefore, protection and innovation appropriation issues become highlighted (e.g. Feinberg and Gupta 2004, Hurmelinna-Laukkanen et al. 2012).

Research has been conducted on the relationship between internationalization and innovation (e.g. Cassiman et al. 2011, Golovko and Valentini 2011, Kafouros et al. 2008, Knigh and Cavusgil 2004), including also the types of innovation to some extent (e.g., Frenz et al. 2005). Likewise, the relationships between protection (or appropriation) of intellectual assets and internationalization (Delerue and Lejeune 2011, Jain 1996, McGaughey et al. 2000, McGaughey 2002), and innovation protection (and appropriability) and innovation performance in general (e.g., Cohen 1995, Jantunen and Hurmelinna 2005) have been examined, and there are few studies that have considered the effects of protection on different types of innovations as well (e.g., Hurmelinna-Laukkanen et al. 2008, Levin et al. 1987). However, as internationalization, radical innovation, and protection issues have not been systematically researched in the same setting, there is a need for more research that would examine the interplay of types of radical innovation and innovation protection in international context.

In this study, we aim to address this gap in the extant research and examine *how different types of radical innovation can be effectively protected against imitation in domestic and international firms with certain protection mechanisms*. In exploring this issue, we focus on three types of radical innovations, i.e., technology, market, and business-model innovations, and seven different types of protection and innovation appropriation, i.e., intellectual property rights (IPRs), contracts, employment legislation, human resource management (HRM), secrecy, lead time, and tacitness of knowledge. We start our examination with theoretical discussion on international innovation environment. Following this, we move on to explore empirically the strength of different appropriability mechanisms in firms that operate in domestic and international markets. This first stage of examination precedes examination of the match between the different forms of protection and different types of radical innovations. Discussion and conclusions with managerial implications, limitations of the study, and suggestions for future research close the paper.

INTERNATIONALIZATION OF INNOVATION

Aharoni (2011) notes that international business environment has recently faced relatively vast changes. Among these, R&D and innovation have become globally organized, with many innovations coming from multinational enterprises' subsidiaries located often in developing rather than developed countries (Govindarajan and Ramamurti 2011, Quintas et al. 2008). Gassmann et al. (2010, p. 219) note that firms internationalize their R&D and innovation activities for two main reasons: "to be closer to their markets and lead users and to access the best talents worldwide by increasing their absorptive capacity." Being networked internationally facilitates learning that promotes innovation, and decreases the risks related to uncertainty that causes financial concerns and subsequently limits incentives for innovation (Nambisan 2005).

This also shows in the innovation outcomes. While it has been established that internationalization promotes innovativeness (e.g., Filippetti et al. 2011, Nieto and Rodriguez 2011), it also has been shown that it plays a role in terms of the type of innovation that is generated. Incremental innovation building on existing knowledge (Anderson and Tushman 1986, Darroch and McNaughton 2002) is likely to emerge irrespective of the markets in which the firm operates, but radical innovation may be somewhat different. Radicalness, that is, the degree of newness or novelty of a product or service (e.g., Amara et al. 2008) is not straightforward to define. Novelty can get different meanings and reach quite different levels depending on whether the perspective taken is on the technology or the user of the technology, for example. An innovation can be radical in the eyes of its creator, the firm, country, or to the world (Linton 2009, Li and Vanhaverbeke 2009, Darroch

and McNaughton 2002). Nevertheless, issues related to high uncertainty and discontinuities with regard to markets and technology (Garcia and Calantone 2002), new market creation, cannibalization of current products and services, and the effects on a company's knowledge base are typically of concern (Hurmelinna-Laukkanen et al., 2008). Indeed, while the generation of incremental innovations can be explained in terms of responses to markets, dominant design, and other such issues, radical innovations are more likely explained in terms of chance or random scientific discoveries (Godoe 2000). In international markets, the firm gets in touch with more external sources of knowledge (Huston and Sakkab 2006), which means that there is higher likelihood of the new creations being notably different from earlier innovations (Frenz et al. 2005, Gassmann et al. 2010).

However, internationalization, and the related increase in connections to other actors, also means that the risk of unintended and unwanted knowledge leakages increases (Martin and Salomon 2003). Prior studies have suggested that using distinctive intangible knowledge-based assets is required for successful international activities (Martin and Salomon 2003, Zahra and George 2002). For preserving this uniqueness, firms need to pay attention to protection and appropriation issues. Different protection/appropriability mechanisms can be combined into an appropriability regime of a firm, that is, a structure that both allows deterring harmful imitation and improves the possibility to profit from innovations (Hurmelinna-Laukkanen et al. 2008). Intellectual property rights (IPRs) such as patents, copyrights and trademarks form the category of formal, institutional mechanisms together with contracts and employment legislation (Hurmelinna-Laukkanen et al. 2012). Informal mechanisms include e.g. tacitness of knowledge, practical/technical concealment and secrecy, lead time and human resource management (HRM) pursuing to prevent both knowledge leaving and leaking (Olander et al. 2011). The difference between the categories is that formal mechanisms build on institutionally established possibilities to enforce the rights, e.g., in courts (Neuhäusler, 2012). In international operating environment, it is likely that both types of mechanisms become relevant, and in fact, it has been shown previously that knowledge and innovation protection matters in relation to internationalization and that strength is needed from protection even more than in domestic markets (e.g., Gassmann and Keupp 2007, Hurmelinna-Laukkanen et al. 2012). Nowadays, the protection/appropriability mechanisms are needed not only to generate monopoly position for the firm through preventing copying, but also to enable knowledge exchange and transfer across borders through (cross-)licensing and other such mechanisms.

DIMENSIONS OF RADICAL INNOVATION

Radical innovation is usually treated as a counterpart to incremental innovation, and different dimensions of radical innovations are addressed much less often. Regarding different dimensions of radicalness, *technological radicalness* is easiest to capture and define (see, e.g., Garcia and Calantone 2002, Zhou et al. 2005). Such innovation exhibits a clear development in the state-of-the-art technology (Chandy and Tellis 2000), even to the extent of making prior technologies obsolete (Anderson and Tushman 1990). The benefits of the new technological innovation may come in the form of better functionality or performance. In international markets, technological radicalness is promoted by increased access to other technologies and learning opportunities (Frenz et al. 2005, Criscuolo et al 2010). Combining ideas and technologies in unique ways promotes such innovations that would not otherwise emerge.

Innovation may also be radical from the point-of-view of existing markets and customers (e.g., Garcia and Calantone 2002, Zhou et al. 2005). Innovations with high market uncertainty – i.e., high *market radicalness* provide new types of benefits and are typically designed for emerging or new customers and markets. Also, it is possible that the markets as such stay the same, but the benefits are radically different from previous ones, affecting the behavior of customers to a notable extent thus increasing market uncertainty (Benner and Tushman 2003, Zhou et al. 2005). Indeed, innovation can be perceived to be radical to different extents depending on how customers evaluate the innovation attributes, what kind of risk is associated to adopting the new innovation, and how much changes are needed in terms of using the innovative creation (Danneels and Kleinschmidt, 2001). In international markets, market radicalness could be seen to easily reach higher levels than in domestic markets as market knowledge may be lacking. In particular, the internationalized innovator needs to consider varying cultural and other such differences in addition to customer preferences in

relatively well know domestic markets. This may produce surprising results, especially considering that the process is typically facilitated by learning from local markets (Pla-Barber and Alegre 2007).

In addition to technology and market dimensions, innovation radicalness may also be examined from the viewpoint of the firm's existing business practices (see Green et al. 1995, Linton 2009). It has been shown that it is difficult to appropriate value from new technology and innovations without adequate changes in the business model (Kodama, 2004; Björkdahl 2009). Thus, depending on the competitive landscape, new innovations may require or enable the firm to develop a radically new business model, suggesting a third dimension – *business model radicalness*. Business model construct, in general, can be defined as the design or architecture of firm's value creation, delivery, and capture mechanisms within its networks (Teece 2010). We suggest that business model itself may be the focus of innovation, and in these cases business model innovation itself may become a vehicle for corporate transformation and renewal (see e.g. Zott et al. 2011, Pynnönen et al. 2012). However, achieving business model innovations is challenging, as organizations may contain barriers in the form of configurations of assets and processes or the lack of capability of managers to fully realize the potential of a new business model (Chesbrough 2010). International context may provide opportunities and incentives for radical business model experimentation: new operating models may be piloted in markets that are geographically distant from the firm's main markets to reduce the risk. Secondly, international context as such may require changes in the value architecture and operating model as the firm develops from a domestic to an international player. Summarizing the above discussion, it seems that internationalization and radicalness of innovation are linked to each other in each three dimensions of radicalness. Consequently, the following hypothesis is presented:

H₁: Internationalized firms reach higher levels of innovation radicalness than domestic firms.

APPROPRIABILITY IN INTERNATIONAL CONTEXT

As discussed earlier, the appropriability regime of the firm can be defined as a structure that both allows deterring harmful imitation and improves the possibility to profit from innovations. In fact, prior studies have suggested that the strength of the appropriability regime is positively related to the innovativeness of firms (Cohen 1995, Jantunen and Hurmelinna-Laukkanen 2005, Teece 1986). Surely, the framework itself does not tell much about the final outcomes, as also appropriability strategies that determine how the mechanisms are used or if they are used at all may play a role - consider, e.g., appropriability strategies that build more on ownership of complementary assets than on strong appropriability (see, e.g., Milesi et al. 2013, Pisano 2006). Nevertheless, the appropriability regime and its strength provide the starting point for different strategic moves, and therefore, it is an important factor considering innovativeness. In particular, the strength of the appropriability regime both provides the possibilities to transfer and exchange knowledge safely, thereby directly contributing to innovation, and it also has incentive effects when the companies expect to profit from their innovation activities.

Knowledge Protection/Appropriation and Internationalization

When discussing the relevant appropriability mechanisms in international settings, IPRs emerge frequently. For example, Sanyal (2004) notes that the scope of patent law is a key factor in multinational firm's decisions with regard R&D investments, but it is not always straightforward in which direction it takes the firm (see also Kumar 1996). Weak protection possibilities might limit the willingness to locate in a country, but on the other hand, the possibilities to utilize the resulting spillovers also are relevant (Kafourous et al. 2012). With regard IPRs, it has also been noticed that patent and other such decisions become much more complicated when multiple countries and jurisdictions are considered. It needs to be considered how the legal environment affects dependability and usability of protection, whether the cultural environment and attitudes towards protection of intellectual property is favorable, and if business environment exhibits a strong market for intellectual property and innovations. (Polzcynski 2005). Nevertheless, IPRs are recognized as important tools

in the international markets for innovation, especially considering that they are not only providing firms with temporary monopoly benefits, but also allow safer knowledge transfer and exchange, and enable avoiding harmful effects of infringement claims, litigations and the related limitations to freedom of operation (e.g. Cohen et al. 2002, Guellec et al. 2012). For example Hurmelinna-Laukkanen et al. (2012) found that IPRs are among the most decisive appropriability mechanisms in relation to internationalization likelihood. Contracting is also likely to be of relevance (Contractor and Ra 2002, Narula and Hagedoorn 1999), as it complements IPRs in many cases (for example, by blocking the potential holes in the IPR protection) or creates exclusive arrangements that are similar to the protection provided by IPRs. Also, contracting comes quite naturally as practically any form of entry and any type of business is typically conducted through legally binding contracts. However, there are also challenges in international markets as complexity arises, similarly to IPRs. Employment legislation can also be utilized to improve inimitability, but as an appropriability mechanism, it may be quite limited in terms of gaining other benefit than avoiding imitation, and it also suffers from the uncertainty related to legal differences in varying countries (Hurmelinna-Laukkanen et al. 2012).

Informal forms of protection and appropriability could be as pronounced or even more relevant. In fact, the international operations environment could strengthen many of these mechanisms, especially bearing in mind that informal mechanisms are often related to controlling knowledge flows for knowledge protection. Knowledge spillovers have been noticed to be geographically localized (e.g. Almeida and Kogut 1999, Jaffe et al. 1993), which means that the informal mechanisms can become quite relevant in relation to internationalization. For example, Almeida and Kogut (1993) have noticed that the flow of knowledge within a region depends on mobility of engineers. This means, that in order to preserve the core intellectual assets, attention needs to be paid to HRM as an appropriability mechanism (Olander et al. 2011). The challenge surely is that dealing with HRM issues across multiple cultures and nations is not straightforward (Briscoe 1995, Monks et al. 2001). Tacitness, lead time, and secrecy, if they are relied on as appropriability mechanisms, are inherently strengthened by international operations environment: cultural and language issues easily form additional barriers to transfer of knowledge and make it harder to overcome any causal ambiguities related to the innovation. This increases their value as protection mechanisms. Indeed, it has already been established in prior studies that strong lead time and tacitness are related to the likelihood of the firm to become internationalized (Hurmelinna-Laukkanen et al. 2012). Based on the above discussion, it can be expected that internationalization and strength of protection/appropriability mechanisms are related to each other. In line with this, we hypothesize the following:

H₂: Internationalized firms reach higher strength of appropriability mechanisms than domestic firms.

Knowledge Protection/Appropriation for Radical Innovation

Prior research suggests that strong protection may be more easily associated with radical innovation than with incremental innovation (Levin et al. 1987, Hurmelinna-Laukkanen et al. 2008): when the creation to be protected is notably different from earlier ones, lead time, secrecy, or tacitness, for instance, are effective forms of protection since it takes more time for others to overcome causal ambiguities related to the innovation. Likewise, it is easier to meet the novelty requirements for gaining IPR protection, and in case of infringement claims, show how the innovation deviates from others (Levin et al. 1987, Hall 2005). Subsequently, following the earlier logic of innovation being facilitated and incentivized by strong appropriability, a positive connection can be found between the strength of knowledge protection and radicalness. This should show both in domestic and international markets. However, as discussed above, there are different dimensions of innovation radicalness, and internationalization may both pose challenges and provide additional benefits with regard to innovation protection. This may have an effect on the found relationships. For instance, while IPRs are likely to be highly relevant with respect to technological radicalness (considering patent protection, for example), and they also may show significance with regard to market radicalness through trademark and trade name protection, they may not be as easily usable for covering new, radical business models. Lead time or tacitness might be much less 'selective' in the sense that they could be easily linked to different types of innovations both in domestic and international markets. Secrecy might pose

some challenges, e.g., in relation to market or business-model dimensions of radical innovations of internationalized firms as not distributing enough information on these aspects might discourage their implementation in practice (see, e.g. Hannah 2005). Considering applying it in home markets where the risk of misunderstandings regarding the role of secrecy may be smaller it may be more useful – like in relation to technologically radical innovation, where secrecy may not be such an issue since not everyone in the firm needs (or even wants) to know about the technical specificities. In line with the discussion thus far, we hypothesize:

H₃: Both internationalized and domestic focused firms reach higher levels of innovation radicalness when the appropriability mechanisms are stronger.

EMPIRICAL STUDY

The data for this study is acquired from a structured web-based survey, which was conducted in Finnish markets during 2008 and 2009. The sample involved firms operating in many types of industries, the inclusion criteria being having at least 100 employees, and an independent R&D/Innovation strategy. Initially, Finnish firms with at least 100 employees at the end of 2007 were included in the search, comprising a total of 1764 firms taken from the publicly available Amadeus database. After this screening process, 762 firms were qualified (a large part of the firms were disqualified at this point because they were sub-branches or alternative brand names for the primary firms). Of these firms, 570 were reached after several contact attempts, and 455 of those were willing to participate, while 115 refused on the phone or after receiving the questionnaire. Finally, 213 responses were received, resulting in a response rate of 37.4 per cent. Four of the responses were subsequently dropped since these firms did not meet the 100 employee minimum criteria. In order to assess the possibility of non-response bias (e.g., Armstrong & Overton, 1977), an ANOVA (analysis of variance) test was conducted with several key variables of the survey to compare early and late respondents. The results of the test suggested that non-response bias is not a concern here.

Internationalization tendency was measured with a dummy variable, indicating whether or not the respondent firm was involved in internationalization activities. The question was formulated as “Does your company have international activities (e.g., sales, R&D and/or production abroad? “, and the respondent had to choose between “yes” (coded as 1) or “no” (coded as 0) alternatives. In order to measure the strength of each firms’ *appropriability regime*, the survey included a broad range of knowledge protection and appropriability mechanisms – following the examples of the Yale (Levin et al., 1987) and Carnegie Mellon (Cohen et al., 2000) surveys, as well as more recent augmentations (e.g., Hurmelinna-Laukkanen and Puimalainen, 2007). In examining these mechanisms, we conducted a principal component analysis with Varimax rotation on the dataset. The items loaded on seven theoretically consistent factors, each representing different appropriability mechanisms. The Cronbach’s alpha (see, e.g., Nunnally, 1978) was above the level of 0.70 for each factor. In order to measure the strength of the overall appropriability regime of a firm, we then aggregated the mean scores of the seven factors into a single score for the measure. In addition, to enable additional analysis that distinguishes formal and informal appropriability mechanisms, two separate measures were calculated. The measure for formal mechanisms includes three factors: IPRs, contracts and labour legislation. The informal mechanisms include the remaining four factors: human resource management, secrecy, lead time, as well as tacitness of knowledge. Both sets of measures are also calculated as overall mean scores for the underlying factor means.

The three dimensions of innovation radicalness were measured with self-developed multi-item constructs. Respondents were asked to reflect the firm’s latest significant product or service launch while responding. We consider radicalness to be a continuous variable that is firm-specific and subjective by nature. The respondents in the firms were asked to make subjective interpretations regarding the degree of newness of innovations related to the company’s technological knowledge base, market offerings, and ways of operating. The goal was to capture *technological radicalness* on items related to technological difference, knowledge, and performance, with regard to competitors. The items related to this dimension were the following: “The performance of our product/service is technologically higher than that of other options in the market”, “we

have more technological knowledge than our competitors” and “compared to our competitors, our product/service is based on a remarkably different technological solution. *Market radicalness* covered issues such as required amount of learning from customers, and the understandability of benefits of the developed concept. It was measured with three items, namely “Customers realize the benefits of the new product/service only over a longer period”, “ordinary customers may find it hard to understand all the features of the product or service” and “to use the product the customer needs to learn something new”. *Business model radicalness* was measured with respect to potential significant changes in production processes and company practices in general. Principal component analysis with Varimax rotation was applied in measure development. Three of the eleven original items were left out from the final constructs because of low factor loadings. The remaining eight items loaded onto three components, accounting for 69.5 percent of the variance. Based on this, composite measures for each dimension were computed. Considering the exploratory nature of the composite measures, the Cronbach’s alphas could be considered acceptable for newly developed scales.

We first compared the innovation radicalness measures (see Table 1), as well as strength of appropriability mechanisms (see Table 2) in domestically and internationally oriented firms with a series of independent samples’ t-tests.

Table 1. Internationalization and innovation radicalness

		Technological radicalness	Market radicalness	Business model radicalness
Domestic focused firms	Mean	3.54	4.46	3.43
	N	52	52	52
	Std. Dev.	1.35	1.41	1.40
Internationalized firms	Mean	4.62	4.40	3.79
	N	145	145	144
	Std. Dev.	1.41	1.55	1.49
	Mean diff.	1.07	-.06	.36
	Sig. (2-tailed)	.00	.79	.14

With respect to innovation radicalness, there are notable differences between internationalized and domestic focused firms only with respect technological radicalness, with internationalized firms showing higher values. Market and business model radicalness do not show statistically significant differences (although business model radicalness is higher in internationalized firms, and comes close to being significant at 10 percent level).

Table 2. Internationalization and appropriability mechanisms

		IPRs	Contracts	Empl. Legislation	HRM	Secrecy	Lead time	Tacitness
Dom. firms	Mean	2.05	4.40	2.87	4.49	3.70	4.70	3.23
	N	49	49	49	48	49	49	49
	Std. Dev.	1.25	1.59	1.37	1.63	1.64	1.37	1.15
Int. firms	Mean	3.40	4.83	3.22	4.63	4.28	4.96	3.76
	N	134	137	133	139	132	136	139
	Std. Dev.	1.59	1.49	1.58	1.39	1.63	1.20	1.47
	Mean diff.	1.35	.43	.35	.14	.58	.25	.53
	Sig. (2-tailed)	.000	.084	.175	.576	.036	.225	.012

In terms of Table 2, taking a look at the mean values of appropriability strength, internationalized companies are shown to exhibit higher values throughout the appropriability mechanisms. IPRs, secrecy and tacitness reach statistical significance, and also contracts are marginally significant. Other forms of protection also show higher means for internationalized firms even if they are not statistically significant. We then moved on to examining the fit between type of radicalness and protection in domestic and internationalized firms, where equally divided sub-groups of high and low protection in terms of different appropriability mechanisms

were compared with t-tests. Table 3 below summarizes the significant findings in terms of different types of radicalness for domestic-focused and internationalized firms (See tables A and B in the Appendix 1 for more detailed statistical information).

Table 3. Appropriability mechanisms that promote types of radicalness for domestic-focused and internationalized firms (based on Independent Samples T-tests)

	IPR	Contracts	Employment legislation	HRM	Secrecy	Lead time	Tacitness
Dom. firms	MarketRad - -	- - -	- - -	TechRad (MarketRad) -	TechRad MarketRad BusModRad	TechRad MarketRad BusModRad	TechRad BusModRad -
Int. firms	TechRad - -	TechRad BusModRad -	- - -	TechRad MarketRad -	TechRad - -	TechRad BusModRad -	MarketRad BusModRad -

Intellectual property rights seem to be more relevant for technological radicalness in international markets, whereas in domestic markets, they are associated with market radicalness. Contracts may not play a relevant role for innovation radicalness in domestic markets, but in international environment strength of protection is related to both technological and business model dimensions of radical innovations. Employment legislation and HRM are quite similar for both domestic and internationalized firms, and also lead time varies only with respect to market radicalness – the connection between protection and innovation being more visible in domestic markets. Secrecy seems to play a role in both markets with respect technological radicalness, but it also is related to business and market radicalness in domestic markets. Tacitness also shows in both domestically and internationally oriented firms when business radicalness is of concern, but differences emerge also as tacitness is associated to technological radicalness in domestic firms and market radicalness in internationalized firms.

DISCUSSION AND CONCLUSIONS

Our findings concerning the relationship between *internationalization and dimensions of innovation radicalness* indicate that in international markets, access to different types of knowledge and varying technologies enhances the chances that *radically new technologies* emerge (see Kafourous et al. 2012). Regarding *market radicalness*, internationalization does not seem to play a role, since this dimension is almost unchanged independent of domestic or international focus. In terms of *business model radicalness*, the internationalized firms seem to exhibit higher rates of newness (although this connection is only close to being statistically significant). This result suggest that internationalized firms approach the business models differently or that international markets are utilized for trials and new operation modes, which increase the radicalness of business models for such firms. Overall, our hypothesis H1 is partially supported, as only one dimension of radicalness clearly shows higher levels in internationalized firms compared to domestic ones.

Second, we considered the linkages between *internationalization and protection/appropriability mechanisms*. We found that four out of seven mechanisms were clearly stronger in internationalized firms. This provides relatively strong support for the hypothesis H2. *IPRs* are highly important in international markets as they not only create obstacles to unwanted imitation, but also facilitate freedom of operation (through mitigating the risk of infringement claims and litigation) and enable safe knowledge transfer and exchange (Cohen 1995, Hurmelinna-Laukkanen and Puumalainen 2007). Likewise, *secrecy* is needed to preserve the competitive edge, and also, it can be stronger (and therefore more useful) in international markets due to cultural and language barriers, for example (Mäkelä et al. 2007). *Tacitness* is similar to secrecy in prevention of imitation and additional strength provided by international environment. *Contracts* are also more relevant in knowledge protection in internationalized markets. Other forms of protection are not statistically significant with respect differences in domestic and internationalized firms. It may be that the complexity

related to international operations environment comes into play, lowering slightly the *strength of employment legislation, HRM, and lead time*. This issue calls for future examination, however.

Finally, our study illustrates notable differences between internationalized and domestic firms in terms of the combinations of different types of radical innovations and the strength of protection. In general, it seems that in domestic markets, the informal mechanisms dominate the appropriability regime over formal ones, while in international markets there is a wider variety. There are differences regarding the strength of different mechanisms and dimensions of radical innovations in different markets, however. As suggested above, IPRs may be more relevant for innovations containing high technological or market radicalness. Differences seem to emerge with respect the firm orientation towards domestic or international markets, however: IPRs are associated with market radicalness in domestic markets and with technological radicalness in internationalized firms. Indeed, technological radicalness may be promoted in international markets when the firm can protect its existing technologies and transfer them more safely (see, e.g., Criscuolo et al 2010, Hurmelinna-Laukkanen et al. 2012), and technologically radical innovations may be easier, and important, to cover with IPRs. Regarding market radicalness, operating in domestic markets seems to be particularly prone to show connection to IPRs protection. It may be that in domestic markets, there are needs to differentiate the firm with respect to the competitors, and with the familiarity with the local IPR system, the protection mechanisms can be utilized in relation to innovation with high market radicalness. Surely, the differences may also indicate that the mechanisms are linked to each other within the appropriability regime: for example, it was shown that in international markets, IPRs and contracts may replace secrecy to an extent (see, e.g., Arundel 2001). Therefore, it pays off to have variety in the appropriability regime, as this enables strategic moves.

The importance of *contracts* in international setting (see Narula and Hagedoorn 1999) is confirmed as technological and business model radical innovations are associated with stronger contractual protection. The need for contractual protection to these dimensions of radicalness is quite understandable, since contractual protection is mostly needed when new technologies are developed with other organizations, and when business models incorporate new ways of distribution, for example. Considering *employment legislation*, no statistical differences between domestic and international firms were found. As discussed above, this form of protection may be a double-edged sword, with complexity and uncertainty limiting its effects in international markets, and limited understanding of this mechanism as a relevant form of protection in domestic firms (see, e.g., Autio et al. 2000). On the other hand, *HRM practices* seem to be quite relevant for both domestically and internationally operating firms, especially with regard to technology and market radicalness. Paying attention to knowledge leaving and leaking (Olander et al. 2011) enhances the possibilities not to lose such knowledge in collaboration to the other parties that form the most distinctive advantage for the firm. After all, the contact persons in collaboration for technology exchange or market development are important gatekeepers and receptors of the knowledge (Baughn et al 1997). *Secrecy* and *lead time* behave in quite a similar manner in domestic markets, both of them promoting all dimensions of innovation radicalness.

Somewhat surprisingly, the connection between the strength of these mechanisms and radicalness of innovations disappears to an extent in international markets. Stronger secrecy is associated only with higher technology radicalness, whereas lead time relates to technology and business model radicalness. It may be, as suggested above, that in domestic markets it is easier to get the message of secrecy through without facing the adverse effects of organizations and individuals feeling themselves not trusted (Hannah 2005). Finally, *tacitness* also plays slightly different roles when comparing internationally and domestically operating firms, and with respect to different dimensions of innovation radicalness. While tacitness is associated with high business model radicalness in both domestic and international contexts, tacitness is further associated with technological radicalness in domestic markets and with market radicalness in international markets. This suggests that tacitness may be quite effective in protecting business model innovation compared to other mechanisms. Indeed, when an innovative business model is based on the complex social phenomenon and tacit knowledge within the firm, it is likely to be quite difficult to imitate.

It can be concluded that in international markets, being innovative and having intellectual assets at the firm's disposal is a starting point for competitive advantage, but it may not be enough in a highly competitive environment. In addition, efforts have to be directed to preserving the distinctive intellectual assets and innovations. While these aspects have been recognized in previous studies (e.g., Autio et al. 2000, Frenz et al.

2005, Gassmann et al. 2010), our contribution lays in combining them into one study, and in a more detailed examination of relationships between different dimensions of radical innovations and varying protection/appropriability mechanisms in international and domestic markets.

The managerial implications of the study point to two issues: first, as it seems that different appropriability mechanisms are related to different dimensions of innovation radicalness especially with regard to operating in domestic or international markets, appropriability should be sought from multiple mechanisms. Second, and related to this, it is important to get employees from different functions of the firm involved in knowledge protection for radical innovations. As radicalness comes in different forms, they may emerge in different parts of the firm, meaning also that benefits might be lost if personnel have no idea on the protection issues. In general, if a firm seeks radical innovations, access to multiple sources of knowledge from various markets seems to be an essential precondition.

There are limitations in this study that can be referred to when considering future research arenas. For example, we have delimited our study in that we have taken no definite position with regard causality issues, and we have not considered the international markets in terms of host country features, for example. Such issues could be considered in future studies. Furthermore, while we have tried to provide an overview of the above described connections, more detailed discussion on the reasons and contingencies related to the found linkages is still needed. For example, business model innovation and radicalness is still a relatively new area of research, and therefore calls for more examination.

APPENDIX 1.

Results of empirical examination on strength of appropriability mechanisms of different types of innovations in domestic and internationalized firms

Table A. Appropriability mechanisms and innovation radicalness – domestic focused firms

IPRs		Technological radicalness	Market radicalness	Business model radicalness
Low IPR protection	Mean	3.58	4.21	3.42
	N	38	38	38
	Std. Dev.	1.36	1.43	1.38
High IPR protection	Mean	3.76	5.05	3.73
	N	11	11	11
	Std. Dev.	1.28	1.19	1.47
Mean diff.		.18	.84	.31
Sig. (2-tailed)		.700	.084	.527
Contracts		Technological radicalness	Market radicalness	Business model radicalness
Low contract-based protection	Mean	3.73	4.37	3.51
	N	34	34	34
	Std. Dev.	1.38	1.41	1.32
High contract-based protection	Mean	3.38	4.73	3.43
	N	15	15	15
	Std. Dev.	1.24	1.24	1.59
Mean diff.		-.36	.37	-.08
Sig. (2-tailed)		.406	.389	.853

Employment legislation

		Technological radicalness	Market radicalness	Business model radicalness
Low employment legislation-based protection	Mean	3.62	4.21	3.36
	N	28	28	28
	Std. Dev.	1.41	1.41	1.12
High employment legislation-based protection	Mean	3.62	4.64	3.67
	N	21	21	21
	Std. Dev.	1.25	1.41	1.71
	Mean diff.	.00	.43	.31
	Sig. (2-tailed)	1.000	.297	.475

Human resource management

			Technological radicalness	Market radicalness	Business model radicalness
Low protection	HRM	Mean	2.95	4.05	3.30
		N	22	22	22
		Std. Dev.	1.29	1.49	1.15
High protection	HRM	Mean	4.03	4.73	3.44
		N	26	26	26
		Std. Dev.	1.24	1.33	1.56
		Mean diff.	1.07	.69	.17
		Sig. (2-tailed)	.005	.099	.717

Secrecy

			Technological radicalness	Market radicalness	Business model radicalness
Low secrecy-based protection		Mean	3.27	4.13	3.10
		N	30	30	30
		Std. Dev.	1.32	1.62	1.18
High secrecy-based protection		Mean	3.96	4.84	3.94
		N	19	19	19
		Std. Dev.	1.31	.88	1.62
		Mean diff.	.69	.71	.84
		Sig. (2-tailed)	.077	.054	.040

Lead time

			Technological radicalness	Market radicalness	Business model radicalness
Low lead time – based protection		Mean	3.14	4.06	3.02
		N	31	31	31
		Std. Dev.	1.21	1.44	1.21
High lead time – based protection		Mean	4.22	5.00	4.14
		N	18	18	18
		Std. Dev.	1.33	1.20	1.48
		Mean diff.	1.08	.94	1.12
		Sig. (2-tailed)	.005	.024	.006

Knowledge tacitness

			Technological radicalness	Market radicalness	Business model radicalness
Low knowledge tacitness –based protection		Mean	3.18	4.26	3.06
		N	31	31	31
		Std. Dev.	1.24	1.59	1.23
High knowledge tacitness –based protection		Mean	4.15	4.67	4.06
		N	18	18	18
		Std. Dev.	1.34	1.04	1.52
		Mean diff.	.97	.41	.99
		Sig. (2-tailed)	.014	.284	.016

Table B. Appropriability mechanisms and innovation radicalness – internationalized firms

IPRs					
			Technological radicalness	Market radicalness	Business model radicalness
Low protection	IPR	Mean	4.33	4.36	3.61
		N	55	55	54
		Std. Dev.	1.37	1.69	1.53
High protection	IPR	Mean	4.87	4.36	3.97
		N	77	77	77
		Std. Dev.	1.63	1.42	1.50
		Mean diff.	.54	.00	.36
		Sig. (2-tailed)	.026	1.00	.179
Contracts					
			Technological radicalness	Market radicalness	Business model radicalness
Low contract-based protection		Mean	4.40	4.38	3.51
		N	67	67	66
		Std. Dev.	1.35	1.60	1.44
High contract-based protection		Mean	4.87	4.36	4.10
		N	68	68	68
		Std. Dev.	1.42	1.53	1.56
		Mean diff.	.46	.58	-.02
		Sig. (2-tailed)	.053	.027	.940
Employment legislation					
			Technological radicalness	Market radicalness	Business model radicalness
Low employment legislation-based protection		Mean	4.45	4.33	3.57
		N	60	60	59
		Std. Dev.	1.54	1.62	1.50
High employment legislation-based protection		Mean	4.81	4.47	3.99
		N	72	72	72
		Std. Dev.	1.27	1.50	1.52
		Mean diff.	.36	.43	.14
		Sig. (2-tailed)	.156	.111	.610
Human resource management					
			Technological radicalness	Market radicalness	Business model radicalness
Low protection	HRM	Mean	4.30	4.11	3.68
		N	66	66	66
		Std. Dev.	1.47	1.37	1.45
High protection	HRM	Mean	4.94	4.63	3.89
		N	72	72	71
		Std. Dev.	1.25	1.66	1.58
		Mean diff.	.64	.52	.21
		Sig. (2-tailed)	.006	.047	.430

Secrecy			Technological radicalness	Market radicalness	Business model radicalness
Low secrecy-based protection	Mean		4.35	4.34	3.59
	N		60	60	59
	Std. Dev.		1.50	1.55	1.59
High secrecy-based protection	Mean		4.95	4.45	3.99
	N		70	70	70
	Std. Dev.		1.24	1.55	1.47
			Mean diff.	.60	.11
			Sig. (2-tailed)	.015	.692
Lead time			Technological radicalness	Market radicalness	Business model radicalness
Low lead time – based protection	Mean		4.32	4.29	3.48
	N		64	64	64
	Std. Dev.		1.39	1.65	1.37
High lead time – based protection	Mean		4.89	4.43	4.00
	N		70	70	69
	Std. Dev.		1.37	1.47	1.60
			Mean diff.	.57	.14
			Sig. (2-tailed)	.019	.606
Knowledge tacitness			Technological radicalness	Market radicalness	Business model radicalness
Low knowledge tacitness –based protection	Mean		4.38	3.90	3.27
	N		60	60	59
	Std. Dev.		1.48	1.43	1.43
High knowledge tacitness –based protection	Mean		4.77	4.76	4.18
	N		77	77	77
	Std. Dev.		1.37	1.55	1.47
			Mean diff.	.39	.86
			Sig. (2-tailed)	.110	.001

REFERENCES

- Aharoni, Y. (2011). Insights into the future of International Business. *AIB Insights*, 11, 2, 3-7.
- Almeida, P. & Kogut, B. (1999). Localization of knowledge and the mobility of engineers in regional networks, *Management Science*, 45, 7, 905-917.
- Amara, N., Landry, R., Becheikh, N. & Ouimet, M., 2008. Learning and novelty of innovation in established manufacturing SMEs, *Technovation* 28, 450–463.
- Anderson, P. & Tushman, M.L. (1990), Technological discontinuities and dominant de-signs: a cyclical model of technological change, *Administrative Science Quarterly*, 35, 604-633.
- Armstrong, S. J., & Overton, T. S., (1977) Estimating non- response in mailed surveys, *Journal of Marketing Research*, 18, 263 - 264
- Arundel, A. (2001). The relative effectiveness of patents and secrecy for appropriation. *Research Policy*, 30, 4, 611-624
- Autio, E., Sapienza, H. & Almeida, J. (2000) Effects of age at entry, knowledge intensity and imitability of international growth, *Academy of Management Journal*, 43, 5, 909 - 924
- Benner, M. & Tushman, M. (2003). Exploitation, exploration, and process management: the productivity dilemma revisited, *Academy of Management Review*, 28, 238–256.

- Björkdahl, J. (2009). Technology cross-fertilization and the business model: The case of integrating ICTs in mechanical engineering products, *Research Policy*, 38, 1468-1477.
- Briscoe, D. (1995). International Human Resource Management, Prentice-Hall, Englewood Cliffs, NJ.
- Cassiman, B. & Golovko, E. (2011). Innovation and internationalization through exports. *Journal of International Business Studies*, 42, 56-75.
- Chandy, R. & Tellis, G., (2000). The incumbent's curse? Incumbency, size, and radical product innovation. *Journal of Marketing*, 64, 1-17.
- Chesbrough, H. (2010). Business model innovation: Opportunities and barriers, *Long Range Planning*, 43, 354-363.
- Cohen, W. (1995). Empirical studies of innovative activity: In: Handbook of the Economics of Innovation and Technology Change, Stoneman, P. (ed.), Wiley-Blackwell, Cambridge and Oxford, 182-264.
- Cohen, W.M., Goto, A., Nagata, A., Nelson, R.R., & Walsh, J.P. (2002). R&D spillovers, patents and the incentives to innovate in Japan and United States, *Research Policy*, 31, 1349-1367.
- Cohen, W.M., Nelson, R.R. & Walsh, J.P. (2000) Protecting their intellectual assets: appropriability conditions and why U.S. manufacturing firms patent (or not), Working Paper 7552, National Bureau of Economic Research, Inc.
- Contractor, F.J. & Ra, W. (2002) How knowledge attributes influence alliance governance choices: A theory development note, *Journal of International Management*, 8, 1, 11-27.
- Criscuolo, C., Haskel, J.E. & Slaughter, M.J. (2010). Global engagement and the innovation activities of firms, *International Journal of Industrial Organization*, 28, 191-202.
- Danneels, E. & Kleinschmidt, E. (2001). Product innovativeness from the firm's perspective: its dimensions and their relation with project selection and performance, *The Journal of Product Innovation Management*, 18, 357-373.
- Darroch, J. & McNaughton, R. (2002). Examining the link between knowledge management practices and types of innovation, *Journal of Intellectual Capital*, 3, 3, 210-222.
- Delerue H. & Lejeune, A. (2011). Managerial secrecy and intellectual asset protection in SMEs: The role of institutional environment, *Journal of International Management*, 17, 2, 130-142.
- Feinberg, S.E. & Gupta, A.K. (2004) Knowledge spillovers and the assignment of R&D responsibilities to foreign subsidiaries, *Strategic Management Journal*, 25, 823-845.
- Filippetti, A., Frenz, M. & Ietto-Gillies, G. (2011). Are innovation and internationalization related? An analysis of European countries, *Industry & Innovation*, 18, 5, 437-459.
- Frenz, M., C. Girardone & Ietto-Gillies, G. (2005). Multinationality matters in innovation: The case of the UK financial services. *Industry and Innovation*. 12, 1, 65-92.
- Garcia, R. & Calantone, R. (2002). A critical look at technological innovation typology and innovativeness terminology: a literature review. *The Journal of Product Innovation Management*, 19, 110-132.
- Gassmann, O., Enkel, E. & Chesbrough, H. (2010). The future of open innovation. *R&D Management*, 40, 3, 213-221.
- Gassmann, O. & Keupp, M.M. (2007). The Early and Rapid Internationalization of the Firm, *Journal of World Business*, 42, 3, 350-366.
- Godoe, H. (2000). Innovation regimes, R&D and radical innovations in telecommunications, *Research Policy*, 29, 9, 1033-1046.
- Golovko, E. & Valentini, G. (2011) Exploring the complementarity between innovation and export for SMEs' growth. *Journal of International Business Studies*, 42, 362-380.
- Govindarajan, V. & Ramamurti, R. (2011). Reverse innovation, emerging markets, and global strategy, *Global Strategy Journal*, 1, 3/4, 191-205.
- Green, S.G., Gavin, M.B. & Aiman-Smith, L. (1995). Assessing a multidimensional measure of radical technological innovation, *IEEE Transactions of Engineering Management*, 32, 3, 203-214.
- Guellec, D. Martinez, C. and & Zuniga, P. (2012) Pre-emptive patenting: securing market exclusion and freedom of operation, *Economics of Innovation and New Technology*, 21, 1, 1-29.
- Hall, B.H. (2005). Exploring the patent explosion, *Journal of Technology Transfer*, 30, 1/2, 35-48.
- Hannah, D.R. (2005). Should I keep a secret? The effects of trade secret protection procedures on employees obligations to protect trade secrets, *Organization Science*, 16, 1, 71 - 84.
- Hurmelinna-Laukkanen, P. & Puumalainen, K. (2007) Nature and Dynamics of Appropriability – Strategies for Appropriating Returns on Innovation, *R&D Management*, 37, 2, 95 - 112

- Hurmelinna-Laukkanen, P., Puumalainen, K. & Saarenketo, S. (2012). Appropriability Mechanisms in Internationalization – Possibilities to Safeguard Innovations, *International Journal of Business and Globalisation*, 8, 3, 364-387.
- Huston, L. & Sakrab, N. (2006). Inside Procter & Gamble's new model for innovation, *Harvard Business Review*, 84, 3, 58-66.
- Jaffe, A.B., Trajtenberg, M. & Henderson, R. (1993), Geographic localization of knowledge spillovers as evidenced by patent citations. *The Quarterly Journal of Economics*, 108, 3, 577-598.
- Jain, S. (1996). Problems in international protection of intellectual property rights, *Journal of International Marketing*, 4, 1, 9-32.
- Jantunen, A. & Hurmelinna, P. (2006). Entrepreneurial orientation, appropriability regimes and innovation performance, *International Journal of Learning and Intellectual Capital*, 3, 2, 153-166.
- Kafourous, M.I., Buckley, P.J. & Clegg, J. (2012). The effects of global knowledge reservoirs on the productivity of multinational enterprises: The role of international depth and breadth. *Research Policy*, 41, 848-861.
- Knight, G.A. & Cavusgil, S.T. (2004). Innovation, organizational capabilities, and the born global firm. *Journal of International Business Studies*, 35, 124-141.
- Kodama, F. (2004). Measuring emerging categories of innovation: modularity and business model. *Technological Forecasting and Social Change*, 71, 623-633.
- Kumar, N. (1996). Intellectual property protection, market orientation and location of overseas R&D activities by multinational enterprises, *World Development*, 24, 4, 673 - 688
- Levin, R.C., Klevorick, A.K., Nelson, R.R. & Winter, S.G. (1987). Appropriating the returns from industrial research and development, *Brookings Papers on Economic Activity*, 3, 783-831.
- Li, Y. & Vanhaverbeke, W. (2009). The effects of inter-industry and country difference in supplier relationships on pioneering innovations, *Technovation*, 29, 843-858.
- Linton, J. (2009). De-babelizing the language of innovation. *Technovation*, 29, 729-737.
- McGaughey, S.L., Liesch, P.W. & Poulson, D. (2000). An unconventional approach to intellectual property protection: the case of an Australian firm transferring shipbuilding technologies to China. *Journal of World Business*, 35, 1, 1-20.
- McGaughey, S.L. (2002). Strategic Interventions in Intellectual Asset Flows, *The Academy of Management Review*, 27, 2, 248-274
- Milesi, D., Petelski, N. & Verre, V. (2013), Innovation and appropriation mechanisms: Evidence from Argentine microdata, *Technovation*, 33, 2-3, 78 - 87.
- Monks, K., Scullion, H. & Creaner, J. (2001). HRM in international firms: Evidence from Ireland, *Personnel Review*, 30, 5, 536 - 553
- Mäkelä, K., Kalla, H. & Piekkari, R. (2007). Interpersonal similarity as a driver of knowledge sharing within multinational corporations, *International Business Review*, 16 (1), 1-22.
- Nambisan, S. (2005) How to prepare tomorrow's technologists for global networks of innovation, *Communications of the ACM*, 48, 5, 29 - 31
- Narula, R. & Hagedoorn, J. (1999). Innovating through strategic alliances: moving towards international partnerships and contractual agreements, *Technovation*, 19, 283-94.
- Neuhäusler, P. (2012). The use of patents and informal appropriation mechanisms – Differences between sectors and among companies, *Technovation*, 32, 681 - 693
- Nieto, M. & Rodríguez, A. (2011) Offshoring of R&D: Looking abroad to improve innovation performance, *Journal of International Business Studies*, 42, 345-361
- Nunnally, J.C. (1978). Psychometric Theory. McGraw-Hill: New York.
- Olander, H., Hurmelinna-Laukkanen, P. & Heilmann, P. (2011). Do SMEs benefit from HRM-related knowledge protection in innovation management? *International Journal of Innovation Management*, 15, 3, 593-616.
- Pisano, G.P. (2006). Profiting from Innovation and the Intellectual Property Revolution. *Research Policy*, 35, 8, 1122-1130.
- Pla-Barber, J. & Alegre, J. (2007). Analysing the link between export intensity, innovation and firm size in a science-based industry, *International Business Review*, 16, 3, 275-293
- Pynnönen, M., Hallikas, J. & Ritala, P. (2012). Managing customer-driven business model innovation. *International Journal of Innovation Management*, 16, 4, 1250022: 1-18.

- Quintás, M.A. Vázquez, X. H., García, J.M. & Caballero, G. (2008). Geographical amplitude in the international generation of technology: Present situation and business determinants, *Research Policy*, 37, 8, 1371–1381.
- Salomon, R.M. & Shaver, J.M. (2005). Learning by exporting: New insights from examining firm innovation. *Journal of Economics & Management Strategy*, 14, 2, 431–460.
- Sanyal, P. (2004). Intellectual property rights protection and location of R&D by multinational enterprises, *Journal of Intellectual Capital*, 5, 1, 59 - 76
- Teece, D.J. (1986). Profiting from technological innovation: Implications for integration, collaboration, licensing and public policy. *Research Policy*, 15, 285-305.
- Teece, D. (2010). Business models, business strategy and innovation, *Long Range Planning*, 43, 172–194.
- Zhou, K., Yim, C. & Tse, D. (2005). The effects of strategic orientations on technology and market-based breakthrough innovations. *Journal of Marketing*, 69, 42–60.
- Zott, C., Amit, R. & Massa, L. (2011). The business model: Recent developments and future research, *Journal of Management*, 37, 4, 1019-1042.

EFFECTS OF INVESTMENT IN INFORMATION TECHNOLOGY ON INTERNATIONAL TRADE

Shouhong Wang and Hai Wang

ABSTRACT

There have been propositions in the information technology (IT) literature that IT stimulates international business. This paper describes the research framework that relates to IT investment and international trade. Based on a literature survey, five hypotheses are developed. The data of IT expenditures and international trade of forty-four large trading countries over the 1995-2009 period are collected through the World Bank and United Nation's databases. These data are used to test the five hypotheses. The research findings strongly suggest that IT investment has positive effects on international trade for all countries. Such positive effects are not significantly influenced by cultural factors such as geographical region and language, even are not influenced by the economy strength factor. Free trade can stimulate the effects of IT on international trade; however, such stimulus seems to be diluted when the trade association becomes large. The findings of this empirical test lead to conclusions and recommendations for the international trade communities to proactively make IT investments for international trade.

Keywords: Information technology investments, international trade, global e-commerce, impacts of information technology.

INTRODUCTION

Over the past several years, information technology (IT) has become the most important catalyst in international business (Barovick, 2004). The Internet-based e-commerce tends not to be perceived as just another example of the alliance of business and the new IT; instead, the cross-countries dimension of e-commerce gives it a distinctive character in contrast to other applications of technology to international business (Kucuk, 2002; Mayer & Vambéry, 2008). Specifically, the Internet provides the impetus for IT enabled international business process reengineering, and this in turn, improves international trade (Tang, 2006). In conjunction with streamlining trade processes, the Internet provides a rich media of information about government regulations, duty rates, market studies, and sources of suppliers and consumers.

The global spending in the year 2013 on information and communications technology (ICT) will reach \$3.8 trillion (IDC, 2012). Despite the huge amount of IT investment worldwide, little research into theoretical frameworks of the IT impact on the global economy in a general global context has been reported.

Shouhong Wang is a Professor of Management Information Systems at University of Massachusetts Dartmouth. He received his Ph.D. in Information Systems from McMaster University. His teaching and research interests include IT in business and global knowledge management. He has published over 100 papers in academic journals and several books.

Hai Wang is an Associate Professor at the Sobey School of Business at Saint Mary's University. He received his Ph.D. in Computer Science from the University of Toronto. His research interests are in the areas of data mining and global knowledge management. He has published over 30 papers in academic journals.

Much of the literature on the relationships between IT investment and international trade has a macroeconomics orientation rather than global IT management orientation. Consequently, strategic issues of IT enabled international trade have yet to be fully investigated (Javalgi and Ramsey, 2001).

To understand more about the impact of IT on international trade, this research study empirically tested the correlation between IT expenditure and international trade. The test provided more information about how investment in IT has an impact on international trade and raised issues about how global IT utilization can improve international trade.

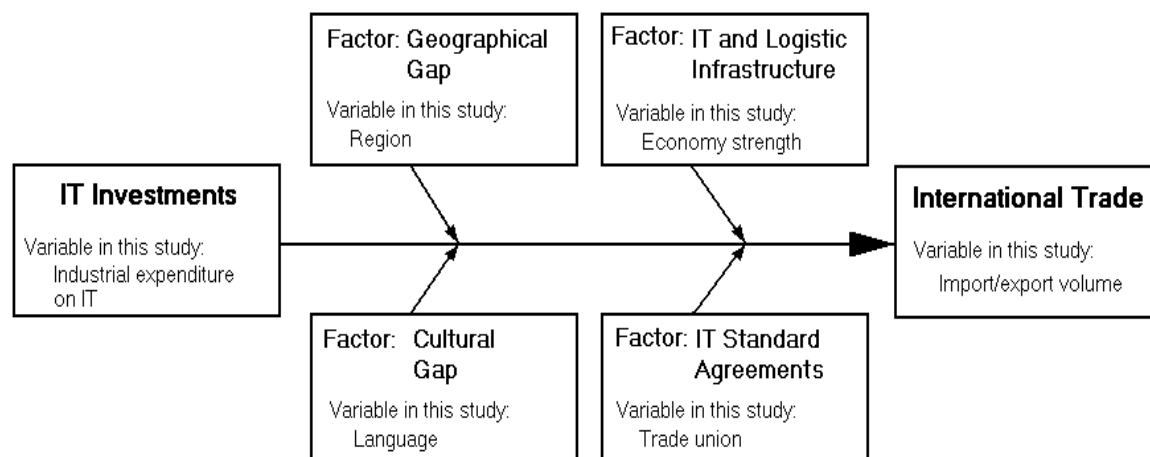
This paper describes the research framework that relates to IT investment and international trade, and tests five research hypotheses related to the framework. The study also describes the methodology used to test the hypothesis. Based on the empirical test results, the paper draws conclusions and makes recommendations on the need for proactive investment in IT by the international trade community to improve international trade.

THE RESEARCH FRAMEWORK

In this study IT investment of a country is referred to as all expenditures on IT spent by businesses, households, governments, and education institutions of the country. The expenditures includes spending on IT projects, equipment, telecommunications purchased from vendors or organizations outside the purchasing entity, as well as spending on internally customized software and capital depreciation. International trade of a country is referred to as the total dollar value of import and export of the country.

In the literature few underlying structures and theoretical models for the relationships between IT investment and international trade are available. We propose a conceptual model for this study as shown in Figure 1. The model is based on the attitude literature. Specifically, we recognize that IT adoption for international trade is determined by many cultural, political, and regional characteristics of the countries (Slamecka, 1985). Language is one of the major cultural aspects in the Internet environment for international trade (Haveman, 1998; Law & Perez, 2005). The IT infrastructures and logistic infrastructures are critical for the success of IT in international trade. World large trade associations, such as European Union (EU), play significant roles in using IT for international trade (Myers, 1997), and have adopted their own IT standards, agreements, policies in their domains (Monahan, 1998). Accordingly, four factors (geographical gap, cultural gap, IT and logistic infrastructure, and IT standard agreement) represented by four variables (region, language, economy strength, and trade association) are used in this study to examine how these factors influence the impact of IT investment on international trade. Next, we develop hypotheses and specify these variables.

Figure 1. The Research Framework of the Study



RESEARCH HYPOTHESES

Relationship between IT and International Trade

Research (Dou *et al.*, 2002) suggests that the Internet provides a widely-reaching and economic medium for export marketing. IT helps to reduce the incessant document work in international business, and shortens the time needed for carrying out various processes in word trade by using online procurement and funds transfer. It provides the environment of accelerate international information flows beyond the physical boundaries (Johnston & Gregor, 2000). The Internet-based IT replaces the "inflated" processes based on mail, telephone, and faxes with more efficient online procedures such as trade Web portals (Croom, 2000). In fact, IT supports international supply chains through e-commerce (White *et al.* 2005). It makes it easier than ever for the import and export enterprises to search for new partners and customers. Likewise, IT supports international links not only in the actual import and export processes, but also in sharing information relevant to international trade. IT allows international trade organizations to maintain centralized data resource but prompt decentralized actions made by individual enterprises (IT06, 2013). Accordingly, the following hypothesis was formulated.

Hypothesis 1: A positive association exists between the IT investment and international trade.

Geographical Differences in IT Enabled International Trade

Modern IT has created bridges over the geographical gaps between regions of the world. Nevertheless, the global IT diffusion does not wipe out the cultural differences between the Internet user segments (Tian & Emery, 2002). The relationship between cultural context and the use of IT remains complicated (Buragga, 2002; Afriyie *et al.*, 2012). On the other hand, the literature survey found few research reports that systematically assess the differences of productivity of IT in international trade between the geographical regions of the entire world. Hence, the following neutral hypothesis was suggested.

Hypothesis 2: Geographical region does not have significant impact on the relationship between IT investment and international trade.

Influence of Languages Used for the Internet

The commonality of language among international trading partners has significant effects on the trade volumes (Hutchinson, 2002). Among many cultural factors that influence e-commerce (Hickey, 2000a; Chau *et al.*, 2002), language is perceived to be one of the most important issues (Cottrill, 2000). Since the Internet was first developed in the US, English has been and will continue to be the dominant language on the Internet (Ulfelder; 2000). Although many non-English speaking countries promote their own languages and cultures on the Internet, English is still the first business language on the Internet for international trade (Hickey, 2000b). On the other hand, non-English speaking citizens want to view Web sites in their own indigenous language and culture which has caused a digital divide (Cuneo, 2003).

Hypothesis 3: The relationship between IT investment and international trade in English speaking countries is significantly stronger than that in non-English speaking countries.

IT Infrastructure and Logistic Infrastructure for International Trade

Research (Wang, 1997) has pointed out that IT does not assure success of business. The impact of IT on international business highly relies on the socio-technical design of IT in the country (Kao & Wang, 2003). The maturity of IT infrastructure and logistic infrastructure is the determinant of the profitable use of IT for international trade (Leitao & Faustino, 2009; Haughton, 2006). Research (Kurlantzick, 2002; Coates, 2002) indicates that developing countries have IT infrastructure and logistics disadvantages in implementing e-commerce for international trade.

Hypothesis 4: The relationship between IT investment and international trade in developed countries is significantly stronger than that in developing countries.

World Trade Associations Promote the Use of IT in International Trade

International participation in Free Trade Areas (FTA) grew rapidly in the past several decades. FTA expand regional economic integration and promote world free trade (GLOBAL-ECO, 2013). The largest and most successful world free trade associations are the European Union (EU) which involves 25 member European countries (EUROPA, 2013) and accounts for over 40% of world exports, and the North American Free Trade Agreement (NAFTA) which combines the United States, Canada, and Mexico and accounts for about 18% of the world's exports. There have been other international trade organizations towards FTA, such as The Asia-Pacific Economic Cooperation (APEC) which involves more than twenty countries spanning four continents, Southeast Asian Nations (ASEAN), and Southern Cone Free Trade Area (MERCOSUR) in South America.

Research (Mitchell, 2001; Monahan, 1998) indicates that the impact of IT-based e-commerce on international trade highly depends upon the technological agreements among the trade partners. World trade associations, such as EU and NAFTA, are harmonizing information regulations and standards across nations (Kumar & van Hillegersberg, 2004). A free trade association can have advantages in using IT for international trade. The duty-free treatment of electric information transmissions within a free trade association would further advance IT in international trade (Feinschreiber & Kent, 2001).

Hypothesis 5: World trade association has significant impact on the relationship between IT investment and international trade.

DATA AND SAMPLE

The Investigation Scope and Sampling

Forty four counties (see Appendix A), each of which has relatively large IT investments and import/export volumes, were examined in this study. The data of IT expenditures, import/export of these trading countries over the 1995-2009 period, as well as other background information related to this study are collected through the World Bank (WorldBank, 2013) and United Nation's (UNStats, 2013) databases. Given the prestigious status of the two organizations of the data sources, we consider that data are dependable. As this study is to investigate the relationship between IT investment and international trade as well as the effects of relevant factors, the time dimension is not a concern of this study although aggregated panel data are used for the investigation.

Variables, Factors and Their Definitions

This study applies regression techniques to test the above five hypotheses. The variables and the data sources used for the tests are described as follows.

Dependent Variable (y) - International trade volume

The average annual increase in percentage of the total dollar value of import and export of the country over the 1995-2009 period.

Independent Variable (x) – IT investment

The average annual increase in percentage of total expenditures on IT of the country over the 1995-2009 period. IT expenditures include external spending on information technology (tangible spending on information technology products purchased by businesses, households, governments, and education institutions from vendors or organizations outside the purchasing entity), internal spending on information technology (intangible spending on internally customized software, capital depreciation, and the like), and spending on telecommunications and other office equipment.

Factor A - Geographical Gap: Region

For this study, the world is divided into six geographical regions: North America, Latin America, Pacific, West Europe, East Europe, and Middle East/Africa. Each country is classified to be in a particular region.

Factor B - Cultural Gap: Language

Each country is classified to be English speaking and non-English speaking depending upon the official language used in the country. Commonwealth countries such as India and South Africa are classified to be English speaking countries. Special cases in the classification are also given special considerations. For instance, Canada has two official languages: English and French. However, the majority of Canadians use English. Hence, Canada is classified to be an English speaking country.

Factor C - IT and logistic infrastructure: Development degree

Each country is classified to be developed country or developing country depending upon the economy strength measured by the GNI per capita. In this study, \$10,000 of GNI per capita (Atlas method) in 2004 is used for the classification boundary.

Factor D - IT standard agreements: World trade association

This study investigates the effects of two influencing free trade associations of international trade: EU and NAFTA. Each country is classified to be a member/non-member of each of these trade associations.

The coding of the four factors for the investigated countries is shown in Appendix A.

TEST OF THE HYPOTHESES AND FINDINGS

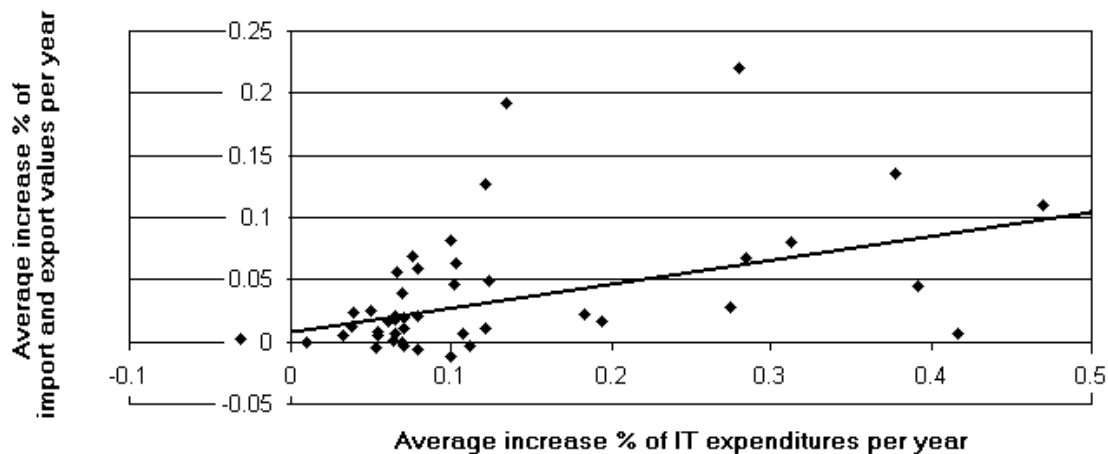
1. Hypothesis 1 - A positive association exists between the IT investment and international trade

The data related to this hypothesis is plotted in Figure 2. A regression analysis, which included x (IT investment),

$$y = \alpha + \beta x + \varepsilon$$

was conducted. The regression analysis indicates that a positive association exists between the IT investment and international trade. The regression result ($t=3.42$, $p=0.0013$) shows that the positive relationship between the IT expenditures and the import and export trade of a country is statistically significant.

Figure 2. The relationship between IT investment and International Trade



Clearly, the statistical relationship between IT investment and international trade does not reveal any causality. The objective of this study is to investigate the effects of global organizational, cultural, and social factors on the relationships of IT investment and international trade, as discussed next.

2. Hypothesis 2: Geographical region does not have significant impact on the relationship between IT investment and international trade

To investigate an impact of a factor on the relationship between IT investment and international trade, we applied factor ANOVA analysis (see Appendix B for all ANOVA tables). The population mean is the ratio of international trade volume over IT investment of each country. In testing Hypothesis 2, the factor is region that has six levels as shown in Appendix A. The ANOVA shows that the overall impact of the region factor on the relationship between IT investment and international trade is significant ($F=5.40$, $p=0.0008$). Accordingly, Hypothesis 2 is rejected. However, we excluded the North America region from the six global regions for the test. The ANOVA shows that the impact of factor region on the relationship between IT investment and international trade is not significant ($F=1.51$, $p=0.22$). Accordingly, Hypothesis 2 is not rejected if the North America region is excluded. We conclude that the North America region does have significant impact on the relationship between IT investment and international trade, but the region factor in other five regions does not have significant impact on the relationship between IT investment and international trade.

3. Hypothesis 3 - The relationship between IT investment and international trade in English speaking countries is significantly stronger than that in non-English speaking countries

A single factor ANOVA analysis on the impact of the language factor on the relationship between IT investment and international trade was conducted. The ANOVA shows that the impact of the language factor on the relationship between IT investment and international trade is not significant ($F = 1.31$, $p=0.26$). Accordingly, Hypothesis 3 is rejected. We conclude that languages do not have significant impact on the relationship between IT and international trade, even though the volume of IT tools and information on the Internet in English language is significantly greater than that in other languages.

4. Hypothesis 4: The relationship between IT investment and international trade in developed countries is significantly stronger than that in developing countries

A single factor ANOVA analysis on the impact of IT and logistic infrastructures on the relationship between IT investment and international trade was conducted. The ANOVA shows that the impact of IT and logistic infrastructure on the relationship between IT investment and international trade is not significant ($F = 0.0004$, $p=0.98$). Accordingly, Hypothesis 4 is rejected. We conclude that developing countries do not have significant disadvantages in using IT for international trade.

5. Hypothesis 5: World trade association has significant impact on the relationship between IT investment and international trade

To further investigate the utilization of IT investments for international trade, we examined large world trade associations. We found that Mexico, the US, and Canada were among the top ten countries with the highest ratio of annual increase of trade volume versus annual increase of IT investment. The three countries are the NAFTA international trade network. To further examine whether NAFTA was effectively applying IT for trade, a single factor ANOVA analysis on the impact of NAFTA on the relationship between IT investment and international trade was conducted. The ANOVA shows NAFTA has a significant impact on the relationship between IT investment and international trade ($F = 20.3$, $p=0.00005$). We conclude that NAFTA is a small winners' circle, in terms utilization of IT for word trade.

The next top tier with a high ratio of annual increase of trade volume versus annual increase of IT investment is the counties of EU. To further examine whether EU was effectively applying IT for international trade, a single factor ANOVA analysis with the factor EU-Member was conducted. The ANOVA shows that the impact of EU-Member on the relationship between IT investment and international trade is insignificant ($F=0.92$, $p=0.34$). We conclude that EU is not a winners' circle in terms utilization of IT for word trade. Overall, the mixed conclusion for this hypothesis indicates that the factor free trade association does not necessarily advance the impact of IT on international trade.

DISCUSSION AND RESEARCH IMPLICATIONS

Limitation of the Study

Although this empirical study is factual, it has several limitations. First, statistically, the sample size is relatively moderate. Second, the time period investigated (1995-2009) is relatively short. Furthermore, definitions of IT investment and import/export are relatively general. More studies are needed to verify and extend our findings. Thus, extensive generalization of the research results could become speculative.

The further research into IT investment and international trade in the context of global business and technology could be developed. In the management direction, more managerial factors that influence the

correlations between IT and global trade could be further identified and tested. In the economics direction, it worth pursuing to apply econometrical tools to a set of high frequency time series data to reveal interesting dynamic relationships between IT and global trade.

Discussion

The impact of IT investment on international trade is a complicated issue involving many other factors we have not explored in this study. Nevertheless, this study has revealed interesting facts besides these hypothesis tests results, as discussed below.

The significant positive relationship between IT investment and international trade indicates that Internet-based e-commerce plays great roles in the global economy. Surprisingly, on an average, within the past several years developing countries invested equally heavily on IT as developed countries did, in terms of the ratio of the increase of IT investment over the increase of trade volume (i.e., 3.34 for developed countries, and 3.32 for developing countries). We are convinced that the cross-countries dimension of the modern IT has provided powerful leverage to international business for all countries.

This study has verified that one of the main requirements for business relations in international trade is the establishment of communication channel. Although English is the most popular language on the Internet, non-English speaking countries do not have significant disadvantages in using IT for international trade. Nevertheless, non-English speaking countries have made more investment in IT than English speaking countries do in terms of the ratio of the increase of IT investment over the increase of trade volume (i.e., on an average, 3.85 for non-English speaking counties, and 2.44 for English speaking counties).

Our data set shows that NAFTA uses IT for international trade much more effectively than other countries (i.e., the ratios of the increase of IT investment over the increase of trade volume are 0.98 and 4.04, respectively). There are feature articles (e.g., (JoC (2000))) about the policies of information technology adopted by the three NAFTA countries for international trade; yet, few academic research reports on the information architecture of NAFTA have been found in the literature.

Research Implications

Currently, in the literature of global IT management emphases have been placed on comparative analysis of IT practices and facts in different counties. On the other hand, the literature of economics on IT and international trade has more of a macroeconomics orientation. People have no doubt that IT increases the interconnectivities of world trade partners leading to increased interactions of international trade; however, the effects of global organizational, cultural, and social factors on the relationships of IT investment and international trade are rather under exposed. This study makes contributions by adding the results of the investigation on these cultural and global social factors to the global IT management field. Its implications in several aspects are discussed below. Its implications in several aspects are discussed below.

- (1) There are many other factors that might be critical for the effects of IT on international trade, such as IT education, knowledge level of the use of IT for trade, and government's IT policies. However, data for those factors are unavailable. This makes research difficult to get into IT management in the global context beyond comparative analyses. A global research infrastructure that can help accumulate those data for global IT management is imperative.
- (2) The IT diffusion in international trade is rapid. To better understand the role of IT in international trade, more research frameworks in this field are expected in the near future. Periodical longitudinal studies would be particularly useful for global IT management.

- (3) At the time being, the roles of world trade organizations such as WTO (WTO, 2013) have not extended into the establishment of a global alliance for IT and international trade. One of the major tasks for the global IT management community is to create such a global alliance that would facilitate the inter-linkage of networks for international trade to meet regional and national needs, and catalyze innovative and multi-stakeholder partnerships across the IT policies in international trade.

CONCLUSIONS AND RECOMMENDATIONS

The research findings strongly suggest that IT investment has positive effects on international trade for all countries. Such positive effects are not significantly influenced by cultural factors such as geographical region and language, even are not influenced by the economy strength factor. Free trade can stimulate the effects of IT on international trade; however, such stimulus seems to be diluted when the trade association becomes large.

As indicated by the results of this study, the growing international trade calls for radical changes in business processes for import, export and negotiation. The e-commerce enabled international trade makes the association between IT and international trade stronger. In international trade, cultural factors and economy strength may contribute to the usage of IT in a country, but such contributions (positive or negative) will be transferred to its international trade partners. The overall effects of these factors on the usage of IT for international trade will be about equally distributed to the world, regardless there exist small winners' circles such as NAFTA.

The results support the following recommendations.

- (1) The globalization of economy requires globalization of IT. The world must continue to invest on IT to exploit the advantages of IT for international trade.
- (2) The borderless international trade market must be aware of cross-cultural issues in IT. Social-cultural factors will influence the IT-based international market in a collective way. The social-cultural impacts on the use of IT in international trade follow the same rules as the trade itself does that no party gains unless all partners are beneficial. Countries and trade organizations must be able to draw IT resources cross-culturally to create long term, sustainable, and equal relations among international trade partners.
- (3) The interdependence between the globalization of IT and international trade has become a global issue rather than national. World trade organizations ought to learn from NAFTA how a free trade area can have significant use of IT for international trade through imposing IT standardization and specifying their agreements on the use of IT for trade.
- (4) Developed countries must help the developing countries to establish IT infrastructure and logistic infrastructure in order to fully develop IT-enabled international trade. The digital divide between the developed counties and developing countries will influence the IT-based international trade in a collective way. The disadvantages of under-developed IT infrastructure and logistic infrastructure in developing countries are actually shared by all counties in international trade. Without improving the global IT infrastructure and logistic infrastructure, the impact of IT on international trade will be restricted.

Acknowledgement: The comments of three anonymous reviewers have contributed significantly to the revision of the paper.

REFERENCES

- Afriyie, K., Torres-Baumgarten, G., & Yucetepe, V. (2012). Internationalization and value-creation performance of Latin American multinationals: the case of outbound foreign direct investment, *Journal of Global Business and Technology*, 8(1): 36-45.
- Barovick, R. (2004). The Internet keeps on revolutionizing trade finance, *World Trade*, 17(2): 40-41.
- Buragga, K. A. (2002). An investigation of the relationship between cultural context and the user of computer-based information systems, *Proceedings of 2002 Conference of Cultural Attitudes Towards Communication and Technology*, Montreal, Canada, 467-482.
- Chau, P. Y. K., Cole, M., Massey, A. P., & Montoya-Weiss, M. (2002). Cultural difference in the online behavior of consumers, *Communications of the ACM*, 45(10): 138-143.
- Coates, J. D. (2002). Global trading and logistics strategy, *World Trade*, 15(8): 34.
- Cottrill, K. (2000). Watch your language, *Journal of Commerce*, August 14, 21.
- Croom, S. R. (2000). The impact of Web-based procurement on the management of operating resources supply, *Journal of Supply Chain Management*, 36(1): 4-13.
- Cuneo, C. (2003). Book review: Digital divide: civic engagement, information poverty, and the internet worldwide, *Labour*, 52: 339.
- Dou, W., Nielsen, U., & Tan, C. M. (2002). Using corporate websites for export marketing, *Journal of Advertising Research*, 42(5): 105-115.
- EUROPA (2013) Portal to EU, http://europa.eu.int/abc/index_en.htm# [accessed January 2, 2013].
- Feinschreiber, R., & Kent, M. (2001). GIIC, WTO, and the "as free as possible" goal, *Internet Tax Advisor*, 2(5): 7-13.
- GLOBAL-ECO (2013). World Economics News: Free Trade Areas, <http://www.globaleconomicsgame.com/FreeTradeAreas.htm> [accessed January 2, 2013].
- Haughton, M. A. (2006). Information projects by international logistics services providers: The case of Canada's small customs brokers, *Canadian Journal of Administrative Sciences*, 23(1): 17-33.
- Haveman, J. (1998). What's on the net for international economics? *Journal of International Economics*, 46(2): 367-377.
- Hickey, K. (2000a). Doing business in Europe, *Traffic World*, 264(1): 32-33.
- Hickey, K. (2000b). The Winners' circle? *Journal of Commerce*, June 12, 39.
- Hutchinson, W. K. (2002). Does ease of communication increase trade? Commonality of language and bilateral trade, *Scottish Journal of Political Economy*, 49(5): 544-554.
- IDC (2012). Worldwide Black Book Query Tool, Version 2, 2012 (Doc #236347), <http://www.idc.com/getdoc.jsp?containerId=236347> [accessed January 2, 2013].
- IT06 (2013). Information Technology Initiative Number Six, <http://www.itds.treas.gov/concpts.html> [accessed January 2, 2013].
- Javalgi, R., & Ramsey, R. (2001). Strategic issues of e-commerce as an alternative global distribution system, *International Marketing Review*, 18(4): 376-391.
- JoC (2000). Getting technology to do the work (JoC Online Edition), *Journal of Commerce*, June 19, <http://www.joc.com/> [accessed January 2, 2013].
- Johnston, R. B., & Gregor, S. (2000). A theory of industry-level activity for understanding the adoption of interorganizational systems, *European Journal of Information Systems*, 9(4): 243-251.
- Kao, D., & Wang, S. (2003). Socio-technical design of the Internet in China: A cognitive map, *Communication of the ICISA*, 5(2): 3-11.
- Katos, A. V., (2009). The Impact of Information and Communication Technologies on National Competitiveness: A Test of a Mediating Model in the European Union Countries Context, *Journal of Information Technology Impact*, 9(2): 115-124.
- Kucuk, S. U. (2002). The changing consumerism with the Internet: A global perspective, *Journal of Euro-Marketing*, 12(1): 41-50.
- Kumar, K., & van Hilleberg, J. (2004). New architectures for financial services, *Communications of the ACM*, 47(5): 27-31.
- Kurlantzick, J. (2002). Turnaround on top for Asian shipping, *World Trade*, 15(6): 30-32.
- Law, W. K., & Perez, K. (2005). Cross-cultural implementation of information systems, *Journal of Cases on Information Technology*, 7(2): 121-130.

- Leitao, N. C., & Faustino, H. C. (2009). Intra-industry trade in the automobile components industry: an empirical analysis, *Journal of Global Business and Technology*, 5(1): 32-41.
- Mayer, P., & Vambery, R. G. (2008). Aligning global business strategy planning models with accelerating change, *Journal of Global Business and Technology*, 4(1): 31-48.
- Myers, J. M. (1997). Creating data protection legislation in the United States: An examination of current legislation in the European Union, Spain, and the United States, *Case Western Reserve Journal of International Law*, 29(1): 109-147.
- Mitchell, A. D. (2001). Towards compatibility: The future of electronic commerce within the global trading system, *Journal of International Economic Law*, 4(4): 683-723.
- Monahan, P. A. (1998). Deconstructing information walls: The impact of the European data directive on U.S. businesses, *Law and Policy in International Business*, 29(2): 275-296.
- Slamecka, V. (1985). Information technology and the third world, *Journal of the American Society for Information Science*, 36(3): 178-183.
- Tang, L. (2006). Communication costs and trade of differentiated goods, *Review of International Economics*, 14(1): 54-63.
- Tian, R. G., & Emery, C. (2002). Cross-cultural issues in Internet marketing, *Journal of American Academy of Business*, 1(2): 217-224.
- Ulfelder, S. (2000). All the Web's a stage, *CIO*, 14(1): 133-138.
- UNStats (2013). UN Commodity Trade Statistics Database (UN Comtrade), <http://unstats.un.org/unsd/comtrade/> [accessed January 2, 2013].
- Wang, S. (1997). Impact of information technology on organizations, *Human Systems Management*, 16(2): 83-90.
- White, A., Daniel, E. M., & Mohdzain, M. (2005). The role of emergent information technologies and systems in enabling supply chain agility, *International Journal of Information Management*, 25(5): 396-410.
- WorldBank (2013). World Bank Data and statistics, <http://www.worldbank.org/> [accessed January 2, 2013].
- WTO (2013). World Trade Organization, <http://www.wto.org> [accessed January 2, 2013].

APPENDIX A: COUNTRIES INVESTIGATED IN THIS STUDY

Country	Language: English (1); Non-English (2)	Region/Member of Trade Associations: North America(1); Latin America (2); Pacific (3); West Europe (4); East Europe (5); Middle East or Africa(6)	GNI: (per capita \$10,000): Developed (1); Developing (2)	Rank: of the ratio $\Delta\text{Trade}/\Delta\text{IT}$
Argentina	2	2	2	9
Australia	1	3	1	17
Austria	2	4 /EU	1	31
Belgium	2	4 /EU	1	11
Brazil	2	2	2	30
Bulgaria	2	5	2	13
Canada	1	1 /NAFTA	1	7
Chile	2	2	2	27
China	2	3	2	14
Hong Kong China	2	3	1	33
Colombia	2	2	2	35
Czech Republic	2	5 /EU	2	5
Denmark	2	4 /EU	1	29
Egypt, Arab Rep.	2	6	2	32
Finland	2	4 /EU	1	18
France	2	4 /EU	1	25
Germany	2	4 /EU	1	15
Greece	2	4 /EU	1	34
Hungary	2	5 /EU	2	6
India	1	3	2	23
Indonesia	2	3	2	42
Ireland	1	4 /EU	1	2
Italy	2	4 /EU	1	19
Japan	2	3	1	41
Korea, Rep.	2	3	2	16
Malaysia	2	3	2	24
Mexico	2	1 /NAFTA	2	1
Netherlands	2	4 /EU	1	38
New Zealand	1	3	1	40
Norway	2	4 /EU	1	10
Philippines	1	3	2	8
Poland	2	5 /EU	2	22
Portugal	2	4 /EU	1	21
Romania	2	5	2	20
Russian Federation	2	5	2	44
Singapore	1	3	1	39
South Africa	1	6	2	43
Spain	2	4 /EU	1	4
Sweden	2	4 /EU	1	36
Switzerland	2	4	1	26
Thailand	2	3	2	37
Turkey	2	6	2	28
United Kingdom	1	4 /EU	1	12
United States	1	1 /NAFTA	1	3

APPENDIX B. ANOVA TABLES OF HYPOTHESIS TESTS**ANOVA (Hypothesis 2 –All 6 regions)**

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	2.12438481	5	0.424877	5.402839	0.000754	2.462549
Within Groups	2.98830411	38	0.07864			
Total	5.11268892	43				

Groups: 6 geographic regions

ANOVA (Hypothesis 2 – Regions without North America)

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	0.45744449	4	0.114361	1.506087	0.220981	2.633534
Within Groups	2.7335735	36	0.075933			
Total	3.191018	40				

Groups: Global regions without North America

ANOVA (Hypothesis 3)

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	0.154725	1	0.154725	1.310708	0.258749	4.07266
Within Groups	4.957964	42	0.118047			
Total	5.112689	43				

Groups: English Speaking, Non-English Speaking

ANOVA (Hypothesis 4)

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	4.2775E-05	1	4.28E-05	0.000351	0.985133	4.07266
Within Groups	5.11264614	42	0.12173			
Total	5.11268892	43				

Groups: Developed Countries and Developing Countries

ANOVA (Hypothesis 5 –NAFTA vs. Others)

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	1.666940312	1	1.66694031	20.31822	5.17E-05	4.07266
Within Groups	3.445748603	42	0.08204163			
Total	5.112688915	43				

Groups: NAFTA, Non-NAFTA

ANOVA (Hypothesis 5 –EU vs. Non-EU)

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	0.109547335	1	0.10954733	0.91962	0.343063	4.07266
Within Groups	5.00314158	42	0.11912242			
Total	5.112688915	43				

Groups: EU and Non-EU

ORGANISING THE HUMAN RESOURCES FUNCTION IN NEW ZEALAND TO HARNESS FUTURE OPPORTUNITIES: SURVEY RESULTS OF 2010 FORECASTED FOR 2020

Pieter Nel and Leon de Wet Fourie

ABSTRACT

The objective of the article is to identify particular functions and the organising thereof by human resource practitioners in 2010 forecasted for 2020 that would be critical as contributions to achieve an organisation's objectives. Without the focused application and practice of HR functions by HR practitioners, organisations in New Zealand would not be optimally competitive. A survey was executed via an e-questionnaire using Survey Monkey in 2010 with forecasts for 2020 to obtain longitudinal results. Responses totalled 119 from members of the Human Resource Institute of New Zealand, representing 15.4%. The most important findings and managerial implications are: HR should exhibit leadership in the functioning and organising of HR; focus on financial implications of HR activities, and external and internal changes in the organisation as perceived by HR. The implications are perhaps also applicable to organisations globally to add value to create future business opportunities.

Keywords: Personnel trends, HR functions, organising, HR profession, change

INTRODUCTION

Based on global research by prominent HR researchers (Boxall & Purcell, 2011; Snell & Bohlander, 2013; Stone, 2010; Ulrich et al. 2012; Wright, 2008) it is clear that contemporary senior management in organisations need to pay high level attention to the functions executed by HR practitioners. The critical functions, amongst others, include strategic HRM, exhibiting high level HR leadership, manage knowledge as well as intellectual capital and being able to be high level change agents. Recognising and utilising the

Pieter S. Nel was formerly the Head of School Management and Entrepreneurship at Unitec Institute of Technology in Auckland in New Zealand and currently holds the position of professor of Human Resource Management in the same institution. He has published numerous refereed articles in accredited journals and text books as well as research reports. He has also consulted in human resource and management development as well as cross cultural management for more than 35 years in various countries. His research interest is mainly in HRM, Organisational Change and Behaviour, Training and Development, Cultural Diversity and HR in general.

Leon de W. Fourie is the Executive Dean for the Faculty of Creative Industries and Business at Unitec Institute of Technology in Auckland, New Zealand. He has held senior education leadership positions for the past 18 years and was formerly the Exthe Faculty of Management Sciences at Vaal University in South Africa. Leon achieved the rank of Major in the military, headed up private training institutions, and operated as senior training consultant. He is an accomplished, rated researcher with more than 100 accredited research publications to his name.

aforementioned to the advantage of organisations would enhance competitiveness and a subsequent significant improvement of the bottom-line.

The current research project was executed via the analysis of the organising of the HR function in New Zealand to obtain results and to identify management implications. The research was executed via a national survey of New Zealand HR practitioners who identified current as well as future critical HR functions which, if executed effectively, would contribute to the improved performance of organisations over time. The identification of the critical HR functions and the organising thereof would enable organisations to gear themselves in anticipation to utilise identified critical HR management functions optimally in future. Such awareness and subsequent activities by senior management would probably improve an organisation's achievement of its strategic objectives in New Zealand with applications elsewhere in the world as well.

The importance of the findings reported in the analysis of the HR's functions provide valuable insights into current HRM practices, particularly HR functioning and staffing in New Zealand.

The organising of the paper is to review the relevant literature first, followed by the outlining of the research focus and methodology used to obtain the research results and report on the findings. In the final section the conclusions and the managerial implications of the research are presented.

LITERATURE REVIEW

The literature review takes cognizance of the work of various researchers (Härtel & Fujimoto, 2010; Nel et al. 2012; Strack et al., 2008; Ulrich et al. 2012; Wilson, 2010) to identify HR functions. The value of their research could, for instance, provide indications for the future regarding New Zealand HR managers' organising of the HR function and staffing to be effective, add value, and harness future opportunities for organisations.

The general functions of HR managers are not dissimilar in most market driven economies around the world (Compton, 2009; Galang, 2008; Pare & Tremblay, 2007; Pretorius, 2010; Rudman, 2010; Wright, 2008). The communication of HR's strategic vision for the future is a critical contemporary HR function. Furthermore, the functions of HR managers in particular are interdependent with those of line management regarding activities such as strategy formulation. Attempts to either practise only HR or line management would result in organisations being in danger of becoming dysfunctional. HR personnel, particularly HR managers, should therefore utilise their expertise to benefit organisations and enable it to remain competitive in the current and future business world. Snell & Bohlander (2013) state that "Successful organizations combine the experience of line managers with the expertise of HR managers to develop and utilize the talents of employees to their greatest potential" (p.30). Ignoring the particular relationships between various HR and business functions can, therefore, result in serious negative consequences for an organisation.

HR practitioners in New Zealand (NZ) have been exposed to increasing global competition pressures on the organisations they work for. These include: Globalisation; developments in technology and telecommunications; the shift towards a knowledge-based workforce; changed employment legislation; and intensifying competition for skilled labour. The HR function, therefore, needs to go beyond the delivery of cost effective administrative services and provide expertise on how to leverage human capital and be strategic in the execution of the functions they provide to the organisation. HR also needs to demonstrate the financial impact of HR activities on the organisation. The role of HR practitioners as strategic business partners and leaders of change has also received considerable attention globally by various researchers (Boxall & Purchell, 2011; du Plessis, Beaver & Nel, 2006; Haggerty & Wright, 2009; Strack et al., 2008; Ulrich et al., 2012; Wilson, 2010).

HR practitioners must also expect to meet the raft of new challenges posed by the continuing evolution of their role and function. According to Ulrich & Brockbank (2005:134), HR should therefore not be defined by 'what it does' but by 'it's contribution to achieve organisational excellence'. In the post Global Financial Crisis (GFC) environment, businesses in all parts of the world are facing more challenges than ever

before to stay in business. These challenges require diligent HR and general management. The HR function, according to Ulrich et al. (2012: 52-53), is also being compelled to undertake introspection of its main competencies for the future and it has been suggested that they are as follows: Credible activist, capacity builder, technology proponent, HR innovator and integrator, change champion and strategic positioner. To gain and maintain a competitive advantage, management must, therefore recognise and treasure its human resources to execute a strategic function. To sustain competitive advantage, businesses should not only rely on technology, patents or strategic position, but also on how they manage and utilise the skills of their human resource management practitioners (Mthembu, 2010; Snell & Bohlander, 2013).

HR practitioners are compelled to play an increasingly vital role in maximising the efficiency of an organisation's human resources, because HR practices support the employee behaviour that is critical for accomplishing key organisational processes and adding to the bottom line (Bryson & Ryan, 2012; Hawkins 2010; McDonnell, Stanton & Burgess, 2011). It is evident that individual HR practitioners must execute appropriate HR functions and be equipped with distinct competencies that enable them to execute the functions that would support organisations appropriately to achieve their objectives to remain competitive (Rasmussen, Haworth & Andersen, 2010).

METHODOLOGY

Background to the Collection of the Empirical Data

The main research question is: To what extent have human resources functions in organisations as well as staffing changed to add value to the bottom line between 2010 and forecast for 2020 in New Zealand, and to what extent are these changes significant for the practice of HRM?

A very comprehensive questionnaire covering 358 items to identify HRM and management trends was jointly compiled in New Zealand (NZ) and Australia in 1994. The questionnaire was used in a survey to identify the possible future competencies and roles of HRM in those countries for the year 2000 and was used by the then Institute of Personnel Management, now known as the Human Resource Institute of New Zealand (IPMNZ, 1994). The results of that study formed the basis for subsequent research study in 2001 with forecasts for 2010 in NZ (Burchell, 2001; Burchell, 2002). Minor modifications involved updating and reducing the questionnaire, which at that time was paper based, and refining the questions for clarity. The final section of the said questionnaire sought to obtain demographic information from respondents. The 2001 survey covered all registered HRINZ members and the response rate was 10%.

Study Covering HR Practice in New Zealand in 2010 and Forecasted for 2020

The NZ study of 2001 was again used with minor modifications in 2010 to obtain responses from NZ HR practitioners. For the 2010 repeat study, the questionnaire was shortened, although some sections were expanded to include contemporary aspects such as social media in the HRIS section. The reporting format was also changed to an e-survey using Survey Monkey. A 5-point Likert scale was also used which ranged from 1 = "unimportant" to 5 = "critical to success". The target population was again limited to HRINZ members, and to those who had registered to participate in HR research requests. The HRINZ provided links to the total number of HRINZ members in this category which totalled 635. A total of 119 members responded but only 98 questionnaires were fully completed and usable, resulting in a 15.4% response rate. As pointed out earlier in the methodology, the 2010 survey participants obtained from the HRINZ database only included members who were registered and who had requested to participate in HR research from HRINZ. The overall positive implication is perhaps a higher quality and more focused response from participants in 2010.

The results of the e-survey were subject to verification first and a SPSS analysis was undertaken. Parametric and non-parametric tests were applied using the Wilcoxon Signed Ranks Test as well. Significance testing at the $p < 0.01$ level was undertaken and the results were recorded. This approach enhances the 2010 comparisons with the 2020 forecasts for analysis purposes, and identifies significant differences between the two sets of data as well. It must be noted that due to the magnitude of the research projects and their longitudinal nature, only the 2010 study with forecasts for 2010 are addressed in this paper. As a further narrowing down of the research focus, only those results focusing on HR organisation and staffing are reported on. Consequently only a very small section of the overall survey is reported on and presented in this paper.

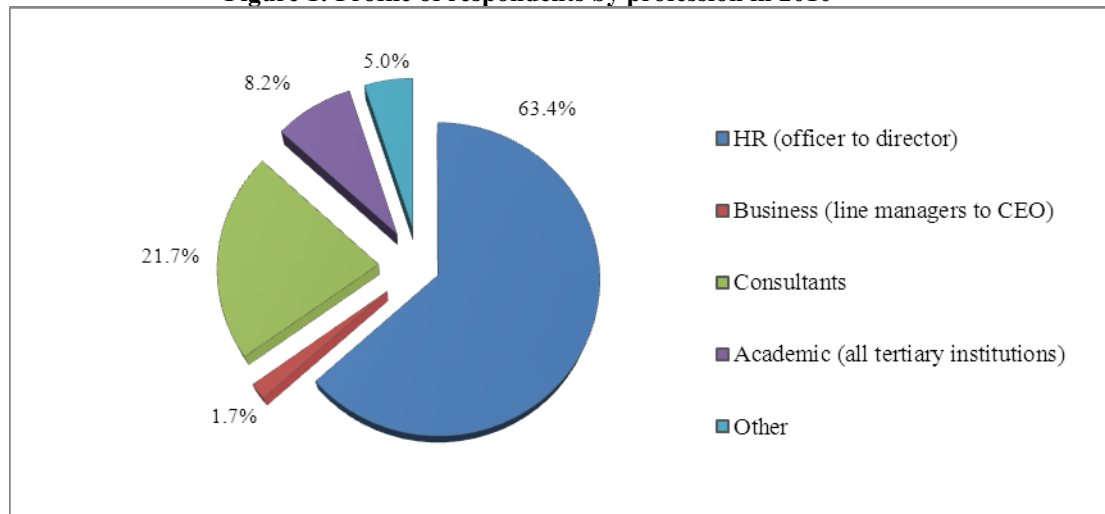
DEMOGRAPHIC PROFILE OF RESPONDENTS

In this section the various demographic responses are presented. These include the profession, gender, organisation size and industry sector.

Profession Representativeness

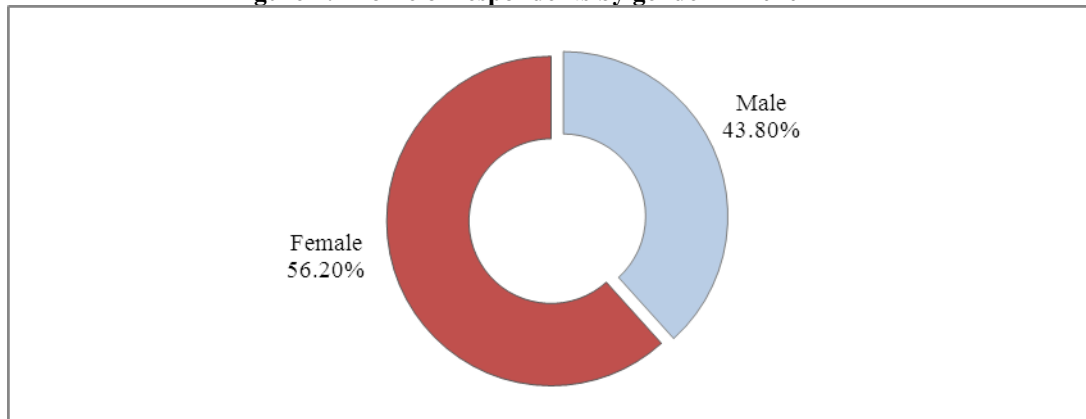
The response is a representative sample of the HRINZ members who participated in sharing the research data, and this provides confidence in the responses which were provided. See figure 1. In the current study in NZ (2010) the most frequent title was HR Manager (46.7%) and the next most common title was HR non-management (16.7%). Those two titles accounted for 63.4% of the reported titles.

Figure 1: Profile of respondents by profession in 2010



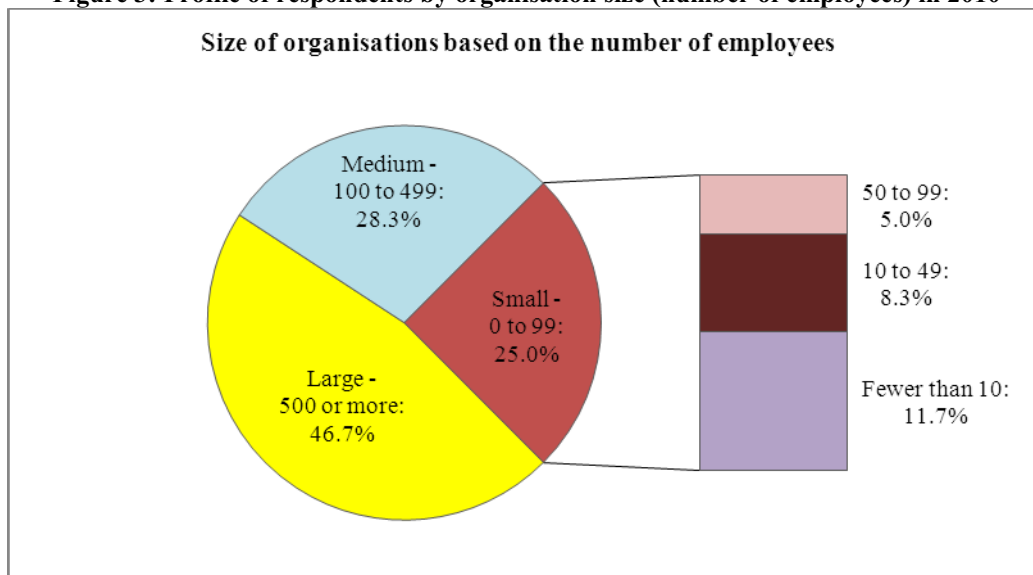
Gender of Respondents

This response is also a representative sample of HRINZ members who are in the HR profession and sharing research data. This also provides confidence in the survey responses which were provided. See Figure 2.

Figure 2: Profile of respondents by gender in 2010

Organisation Size

It should be noted that NZ is predominantly a country of small businesses, with 93.3% of enterprises employing 19 or fewer people (Ministry of Economic Development, 2006). The respondents consisted of participants from different sized organisations. See Figure 3. For the purposes of analysis, however, small organisations were grouped as organisations with less than a 100 employees (0-99 with a result of 25%); medium organisations consisted of 100 to 499 (with a result of 28.3%); employees and large organisations consisted of 500 or more employees (with a result of 46.7 %). For international comparative purposes this categorisation provides a better fit, but caution should be exercised by readers about the NZ context concerning the characteristics and size of a small enterprise.

Figure 3: Profile of respondents by organisation size (number of employees) in 2010

Industry Sector

Table 1 outlines the types of organisations and the size of the respondents' organisation for the various industry sectors which are represented in the survey. This result is also a representative sample of NZ Industry which provides confidence in the survey responses.

Table 1. Profile of the respondents by industry sector and response size 2010

Sector	NZ response profile, 2010
Agriculture, hunting, forestry and fishing	4.3%
Mining and quarrying	1.5%
Manufacturing	6.9%
Electricity, gas and water	8.3%
Wholesale and retail trade, restaurants and hotels	6.2%
Transport, storage and communication	4.1%
Business, insurance and financial services	12.5%
Community, social and personal service	11.1%
Education	20.8%
Other	24.3%
TOTAL	100%

FINDINGS

This paper highlights the findings of the 2010 survey together with the respondents' forecasts for 2020. A discussion and comparison of aspects of each category for 2010 as well as forecasts for 2020 is undertaken.

The rationale for the research was, via the interpretation of the data to identify the contents and those characteristics of the HR function that would make it effective in providing HR practitioners with the necessary knowledge to enable management's efforts to become or remain competitive in the business environment. The research is executed within the context of a longitudinal study to identify trends for management practice.

As previously outlined, the findings and discussions are only focused on the HR organisation and staffing that adds value to the bottom line, representing data from section 4 of the 2010 survey only. Section 4 comprised 18 questions but for analysis purposes and only those which returned high results are reported on. The 18 questions contained in the survey are present in Table 2.

Respondents were required to apply the 5-point Likert Scale ranging from 1 being "unimportant" to 5 being "critical to success" for both 2010 and 2020 to provide their responses. This analysis, however, only focuses on the last 2 combined responses of respondents, namely, "Very Important" and "Critical to Success". Only the results of the 18 questions in the survey which attracted a combined response of more than 50% are analysed. Lastly, as a further refinement, parametric and non-parametric tests were applied, in particular the Wilcoxon Signed Ranks Test to obtain a focussed picture of the results.

The results which attracted a response of more than 50% are shown in Table 3 and are listed from the highest response to the lowest. Results below 50% are not listed or analysed, although their possible applicability to the functions of HR are noted.

Table 2. Questions contained in Section 4 of the survey only

Question number	Question detail
1	Foreign language capability
2	Knowledge and use of HR information systems
3	Line management experience
4	International experiences
5	Broad knowledge of most HR functions
6	Highly specialised knowledge of a few HR functions
7	The need to be a registered member of a professional HR association in New Zealand
8	Knowledgeable of competitors' HR practices
9	Educates and influences line managers on HR issues
10	Defines and communicates HR vision of the future
11	Anticipates the effect of internal and external changes on the organisation
12	Demonstrates the financial impact of all HR activities
13	Focuses on the quality of HR services
14	Exhibits leadership for the functioning and organisation of HR
15	Influences peers in other organisations
16	Managing knowledge and intellectual capital
17	Knowledge of e-Commerce and HR implications thereof
18	Knowledge of the impact of globalisation on HR practices

Table 3. Paired responses by question for 2010 and 2020 above 50%

Question number	Question detail	Position of response	Response by year
14	Exhibits leadership for the functioning and organisation of HR	1 3*	2010 – 1.3% 2020 – 0.0%
13	Focuses on the quality of HR services	2 2	2010 – 2.6% 2020 – 0.0%
11	Anticipates the effect of internal and external changes on the organisation	3 1	2010 – 0.0% 2020 – 0.0%
9	Educates and influences line managers on HR issues	4 4	2010 – 1.3% 2020 – 0.0%
10	Defines and communicates HR vision of the future	5 5	2010 – 1.3% 2020 – 1.3%

*It must be noted that the result of the 2020 forecast is also listed in rank order from highest to lowest

It must be noted that all responses which did not attract a response above 50% for either 2010 or 2020 are not addressed for the rest of the analysis in this article. No further discussion is undertaken of these issues as they are either unimportant or of no concern, as they are not on the radar screen in organisations in NZ as far as the respondents are concerned in their efforts to become or remain competitive. The questions which are not further discussed are presented in Table 4.

Table 4. Questions failing to reach thresholds and omitted from further analysis

Question number	Question detail
1	Foreign language capability
3	Line management experience
4	International experiences
6	Highly specialised knowledge of a few HR functions
7	The need to be a registered member of a professional HR association in New Zealand
8	Knowledgeable of competitors' HR practices
15	Influences peers in other organisations

In Table 5 responses are ranked for 2020 which were not part of the 50% plus threshold for both 2010 and 2020 questions, but singularly above the threshold. Results are again listed from highest to lowest.

From the responses it is clear that the perception of respondents regarding 2020 has shifted measurably as to what is regarded as “Very Important” and “Critical to Success” since 2010. These results are noteworthy and need to be explored in more detail.

Table 5. Results by question for 2020 which attracted more than a 50% response in descending order

Question number	Question detail	Response by year
12	Demonstrates the financial impact of all HR activities	2020 – 79.5%
16	Managing knowledge and intellectual capital	2020 – 65.0%
5	Broad knowledge of most HR Functions	2020 - 62.8 %
2	Knowledge and use of HR information systems	2020 – 61.5%
18	Knowledge of the impact of globalisation on HR practices	2020 – 56.4%
17	Knowledge of e-Commerce and HR implications thereof	2020 – 53.8%

A further refinement of the results are presented in Table 6 where the questions for either 2010 or/and 2020 which attracted more than 50% responses are listed after further statistical analysis. It is indicated in Table 4 under the heading “Question and year” in terms of the applicable categories and in brackets reflecting the year in which the result was obtained.

Table 6. Paired comparisons and significance of results

Paired Q number	Question and year	Mean 2010	Mean 2020	Significance
2	Knowledge and use of HR information systems (only 2020 above threshold)	2.88	3.70	.000* /.000**
5	Broad knowledge of most HR functions (only 2020 above threshold)	3.37	3.77	.000* /.000**
9	Educates and influences line managers on HR issues (2010 & 2020 above threshold)	3.67	4.20	.000* /.000**
10	Defines and communicates HR vision of the future (2010 & 2020 above threshold)	3.55	4.07	.000* /.000**
11	Anticipates the effect of internal and external changes on the organisation (2010 & 2020 above threshold)	3.75	4.45	.000* /.000**
12	Demonstrates the financial impact of all HR activities (2020 above threshold)	3.30	4.15	.000* /.000**
13	Focuses on the quality of HR services. (2010 & 2020 above threshold)	3.52	4.05	.000* /.000**
14	Exhibits leadership for the functioning and organisation of HR. (2010 & 2020 above threshold)	3.78	4.07	.000* /.001**
16	Managing knowledge and intellectual capital (only 2020 above threshold)	3.22	3.82	.000* /.000**
17	Knowledge of e-Commerce and HR implications thereof (only 2020 above threshold)	2.60	3.53	.000* /.000**
18	Knowledge of the impact of globalisation on HR practices (only 2020 above threshold)	2.65	3.63	.000* /.000**

*p<0.01 (Note: Scale used was: 1-Unimportant, 5- Critical to success)

** Wilcoxon Signed Ranks Test

In the next section the findings are presented and analysed, bearing in mind the significance of each as shown in Table 6 as well as the literature survey which was undertaken to determine the context of the results. The analysis is initiated for both 2010 and 2020 results of the same question above the threshold of 50% and

proceeds from highest to lowest. The discussion of the 2020 only results which were above the threshold and were significant as well, as shown in Table 6, are analysed and discussed.

MAJOR FINDINGS

The findings are discussed from highest to lowest while observing the statistical significance for the relevant questions for both 2010 and 2020 as being shown in Table 3 and significance shown in Table 6.

Major Findings re: Leadership, Functioning and Organisation of HR

For 2010 this was the highest response (66.3%), but it slipped to 3rd position (81.6%) in the 2020 response. It can be deduced that the need for leadership capabilities with regard to HR's functioning and organising has exceeded the previous importance measurably, but must be viewed in the context of the 2020 results. The result is also identified as being significant. The reasons for the increase of this question is perhaps that current and future HR practitioners in New Zealand need to focus more on their abilities, skills and attributes to become outstanding leaders. It is also increasingly vital for the HR practitioners in New Zealand to exhibit leadership skills within the organisation, as was pointed out in the literature review (Buller & McEvoy, 2012; Ulrich et al. 2012; Rudman, 2010).

It is noteworthy that Q11 - "Anticipates the effect of internal and external changes on the organisation" (86.4%) became a top priority and Q13 - "Focuses on the quality of HR services" (83.3%) was a second priority for 2020. These were preferred above leadership of the function, as was shown in the 2020 priority list. This result may perhaps be ascribed to the notion that by 2020 the leadership function of HR will have been consolidated and accepted by line management and those new issues such as effect of change and quality of service may then take centre stage.

Major Findings re: Quality of HR Services

For 2010 this was the second highest response (60.3%) and maintained the same position for the 2020 response (83.3%). This could perhaps be explained in the context of comments made by Macky & Johnson (2007) who state that only half of New Zealand organizations report assessing what they do and much of this is likely to be informal, ad hoc and piecemeal. Marchington & Wilkinson (2012) also state that HR specialists are often critical of their actual contribution to HR goals and the quality of the service being provided. The reasons for this could be that firstly, HR often finds itself in an ambiguous position, and its presence is being questioned on cost grounds, and secondly, that the contribution of HR is hard to quantify as practitioners work closely with line managers and depend on them to put policies into effect. Also, while it may be possible to identify the impact of HR decisions, one cannot always be sure that the HR specialists contributed to them (Snell & Bohlander, 2013). The concerns identified in the literature may perhaps be the reasons for the heightened focus on service as second priority by the respondents for both 2010 and 2020.

Major Findings re: Effect of Internal and External Changes on the Organisation

For 2010 this was the third highest response (57.7%), albeit being on par with Q9 regarding "education and influence on line managers on HR issues". It gained first position (86.4%) in the 2020 response. It is clear that respondents ascribe high importance to internal and external changes in the years to

come, which is in line with the literature survey (Strack et al., 2008; Ulrich et al., 2012; Wilson, 2010). Change is expected to become a way of life as New Zealand business organizations strive to keep pace in an increasingly competitive world market place, according to Bryson & Ryan (2012). Respondents certainly regard the nature and impact of change on organisations and the HR function and staffing as critically important for the next decade in NZ. It may also be that the fallout from the GFC is still fresh in terms of the changes that had to be made to survive in the minds of the respondents. The results were also supported by being significant at $p < 0.01$ and being 0.000 level as well, as was shown in Table 4.

Major Findings re: Educating and Influencing Line Managers on HR Issues

For 2010 this was the fourth highest response (57.7%) although it was on par with Q11 regarding change. It did maintain the same position for the 2020 response (being 80.7%). Educating and influencing line managers regarding HR issues thus saw a significant increase for 2020 which was significant at $p < 0.01$ and 0.000 level as well, as was shown in Table 4.

This finding could perhaps be justified by various researchers stating that line departments are those that are directly involved in activities that are central to the organisation. Furthermore, as the traditional work of HR managers diminishes, line managers are stepping up and performing some duties that are typically done by human resource professionals, ably assisted in the process by modern automation (Erasmus et al., 2013). Furthermore Macky (2008) claims that in New Zealand, the majority of the businesses are small and as such, HR issues are dealt with by line managers who play a critical role in HRD efforts. They act as a link with employees and support the successful implementation of systems and processes in their management areas in the organisation. Line managers therefore need education assistance in identifying areas of need to managing HR interventions. Such education could of course also be executed by HR consultants where organisations do not employ HR personnel or managers. It is clear from the results that education is viewed as becoming increasingly important as part of the function of HR and for staffing the organisation to add value to the bottom-line.

Major Findings re: Defining and Communicating HR Vision of the Future

For 2010 this was the fifth highest response (52.5%) and maintained the same position for the 2020 response (74.3%), whilst significant at $p < 0.01$ and at the 0.000 level. This could perhaps be ascribed to views such as that by Marchington & Wilkinson (2012) that strategy is about winning. An organisation's chosen strategic vision has clear implications for HR policy and practice, as well as for the workforce, and it should be clearly communicated to all relevant stakeholders in the organisation.

According to Bratton & Gold (2012), the organisation's commitment to its HR processes forms a part of its evolving value system and lies at the heart of the organisational framework, which should be communicated to all stake holders. The HR vision is also a determinant of the principles on which management decisions are based, and it should be embedded in corporate culture as well (Nel et al., 2009). HR practitioners thus act as a middle person for communication between employee and management.

Major Findings re: Responses above 50% only in 2020

The findings presented in Table 4 are analysed in this section. It must be noted that all results are significant at $p < 0.01$ and are at the 0.000 level as well for the Wilcoxon Signed Ranks Test. New opportunities

or realities for 2020 which were not high on the HR agenda in 2010 (below the 50% threshold) have now come to the forefront. These are addressed below and management implications are deduced from it.

“Demonstrates the financial impact of all HR activities” (79.5% response). The result is the most important and is perhaps due to the close proximity of the GFC global effect when the respondents completed the survey. Their perception of the future is therefore acute regarding the consequences and effects of financial issues on HR activities and businesses. Senior management should nevertheless be prepared to embrace inputs from HR practitioners regarding the effect of financial issues of HR activities, as it could perhaps influence business performance.

“Managing knowledge and intellectual capital” (65.4% response). It has been a key feature of the modern world that the knowledge revolution has become exponential. It is therefore not surprising that respondents regard the management of knowledge and intellectual capital (also known as human capital) as a primary HR source to manage in future (Erasmus et. al., 2013). The respondents anticipate it to be far more important by the end of this decade than the value ascribed to it in 2010. Many researchers have focused on the knowledge wave and the intellectual capital of human resources as a major competitive advantage for organisations in future, and this includes appropriate talent management (Snell & Bohlander, 2013). It is deduced that senior management should take particular note of the ever increasing influence of this HR asset on business performance to create future opportunities as well.

“Broad knowledge of most HR functions” (62.8% response). It is often the case in organisations that HR practitioners are accused of being over specialised or not knowledgeable enough about the business. This result can perhaps be viewed in the New Zealand context and ascribed to the characteristic of being mainly small sized enterprises, according to the Ministry of Economic Development (2006). Many organisations avoid employing full time high level HR practitioners due to their small size. HR clerks or officers often have to shoulder the burden of the work and it is implied that they should have a broad knowledge of HR functions (Nel et al., 2012). This situation is regarded as becoming more acute for the future and has therefore increased in the estimation of the respondents for the 2020 forecast.

“Knowledge and use of HR information systems” (61.5% response). The evolutionary process of the electronic age has increased exponentially since the start of the new millennium. A simultaneous development is the knowledge about and the use of human resource information systems (HRIS) in organisations at all levels on a global scale (Snell & Bohlander, 2013). Organisations are increasingly aware of the issue that “information is power” and that it provides a competitive edge which is critical for survival and being successful in the future. It also creates opportunities for the future. It is therefore not surprising that respondents have highlighted their opinion of the future in terms of the ever increasing importance of HRIS to HR practitioners in particular and the need to be knowledgeable about them.

Since the start of the new millennium the speed with which electronic commerce and all related business aspects such as e-recruitment and e-HR management has evolved is astounding. Senior management should consequently take note of the wave of electronic evolution and high speed availability of information which is in fact only in its infancy. A major management implication is that the future of this development is for all intents and purposes a major unknown in the area of all business and HR, which makes it extremely difficult to manage up to 2020 and beyond.

“Knowledge of the impact of globalisation on HR practices” (56.4% response). Although New Zealand is a small country and at the bottom of the world, it does not escape the globalisation of businesses, and this will only escalate during the next century. Multi-national companies (MNC) also operate in and from New Zealand, one of the most noteworthy being home-grown MNCs, namely Fonterra which has a multi-billion dollar global turnover. The role of HR practitioners in this context is critical to operate as innovators and integrators and to be a strategic positioner to cope with the global impact on organisations’ performance (Ulrich et al., 2012). Senior managers ought to take note that in 2020 this facet of HR organising and staffing is regarded as critical to accommodate the ever increasing globalisation of businesses and to develop contemporary approaches to harness future opportunities for New Zealand businesses in particular.

“Knowledge of e-Commerce and HR implications thereof” (53.8% response). Developments such as the internet and e-commerce has revolutionised business globally and are an inescapable reality. More and more organisations are therefore conducting their business on-line and also have to adapt to the ever increasing competitive demands of this channel of doing business (Bryson & Ryan, 2012). It is not surprising that it has raised awareness and has become a priority above the 50% threshold as well. This will increase in importance in future and HR need to provide the appropriate service to management to cope with this contemporary demand (Erasmus et al., 2013).

MANAGEMENT IMPLICATIONS

In the research survey that was executed in 2010 and forecasted for 2020 a comparison of the highest and lowest results above the 50% threshold revealed significant changes in some HR functions and staffing.

The most significant management implication is that the leadership function of the HR practitioner entails taking cognizance of the effect of change by the aligning of HR and business strategies in order to enable the HR function to be better organized both internally and externally. A new kind of HR practitioner with high level leadership skills can therefore be expected to organize the HR function in future successful organisations in order to add value to the bottom line for the 21st century.

The major managerial implications for senior management for the next decade in particular are as follows: It is abundantly clear that issues relating to the electronic era and use thereof are of paramount importance to the organising and staffing of the HR function to provide optimal service to organisations. Equally important is the issue of knowledge management and the use of intellectual capital by organisations, since this would enhance being competitive and enable the harnessing of opportunities for organisations in the next century.

Concrete recommendations are that the organisation of the functions of HR practitioners needs to be intensively reassessed to cope with future demands on them. Furthermore, organisations need to link human resources goals to business strategy, attract and retain highly skilled staff, and enhance productivity, quality and customer satisfaction to serve organisations effectively and to harness future business opportunities. HR also needs to be diligent in defining and continuously communicating HRs vision of the future to senior management.

It is acknowledged that it is perhaps a limitation of the study that it was executed in 2010 while New Zealand was still in the grips of the economic downturn due to the global financial crisis. Respondents' responses could perhaps have been more conservative for 2010 as well as their forecasts for 2020, which may have an impact on the overall results.

The implications for senior management are that although HR may be a key management role, the answer to achieving this lies to an extent in each individual human resource managers' functions. HR practitioners should be a strategic business partner, advisor and assistant to the front line manager as well as a people manager, which in turn is influenced by the organization's perception of the nature and scope of HR staffing. This is particularly important, as the organisation and staffing of the HR function continues to shift from that of a functional expert to that of a business partner to harness future opportunities for an organisation. Lastly senior management clearly need to take note of the impact of, for example, financial decisions on the HR function, which in turn would impact on the leadership of HR regarding the overall competitiveness of an organisation for the next century in the aftermath of the global financial crisis.

REFERENCES

- Boxall, P. & Purcell, J. (2011). *Strategy and human resource management*. (3rd ed.). Hampshire: Palgrave MacMillan.
- Bratton, J. & Gold, J. (2012). *Human Resource Management theory & practice*. (5th ed.). UK: Palgrave Macmillan.
- Bryson, J. & Ryan, R. (2012). *Human Resource Management in the Workplace*. Australia: Pearson.
- Buller, P.F. & McEvoy, G.M. (2012). 'Strategy, human resource management and performance: Sharpening line of sight' *Human Resource Management Review*, 22, 43-56. doi:10.1016/j.hrmr.2011.11.002508. doi:10.1108/00483480910978018
- Burchell, N. (2001). 2000 to 2010. 'Future directions for HR in New Zealand', *Presentation to the annual conference of the Human Resources Institute of New Zealand*, Wellington, HRINZ, New Zealand, September.
- Burchell, N. (2002). '1994 to 2010 Future directions for HR in New Zealand', Unitec, New Zealand, viewed 10 November 2011, http://www.hrinz.org.nz/info/hot_stuff/conference/noel_burchell.asp.
- Compton, R. (2009). Towards an Integrated Model of Strategic Human Resource Management – An Australian Case Study, *Research and Practice in Human Resource Management*, 17(2), 81-93.
- Du Plessis, A.J., Beaver, B., & Nel, P.S. (2006). Closing the gap between current capabilities and future requirements in human resource management in New Zealand: Some empirical evidence. *Journal of Global Business and Technology*, 2(1): 33-47.
- Erasmus, B.J., Loedolff, P. van Z, Mda, M., & Nel, P.S. (2013). *Managing Training and Development*. (6th Edn) Oxford University Press: Cape Town.
- Galang, M.C. (2008). Best practices in HRM: Convergence in beliefs across nine countries. *International Journal of Organisational Behaviour*, 13(1), 1-15.
- Haggerty, J. & Wright, P. (2009). Strong situations and firm performance: A proposed re-conceptualisation of the role of the HR function. In A. Wilkinson, N. Bacon, T. Redman, and S. Snell, eds. *The Sage Handbook of Human Resource Management*. London: Sage.
- Härtel, C.E.J. & Fujimoto, Y. (2010). *Human resource management: Transforming theory into innovative practice*. 2nd ed. Australia: Pearson Education.
- Hawkins, R. (2010). What the future holds for New Zealand organisations from a human resource perspective. *Interdisciplinary Journal of Contemporary Research in Business*, 2(8), 10-22.
- Institute of Personnel Management New Zealand (IPMNZ). (1994). *Human resources priorities for competitive advantage 1994-2000, The IPM survey report*. Institute of Personnel Management New Zealand, Auckland, New Zealand.
- Marchington, M. & Wilkinson, A. (2012). *Human Resource Management at work*. (5th ed.). London: The Chartered Institute of Personnel and Development.
- Macky, K. & Johnson, G. (2007). *Managing Human Resources in New Zealand*. (2nd ed.). New Zealand: McGraw-Hill Book Company.
- Macky, K. (2008). *Managing Human Resources, Contemporary perspectives in New Zealand*. Australia: McGraw-Hill.
- Mthembu, M.D. (2010) Responding to 21st century dynamics. *People Dynamics*, June, 28(6):4-5.
- Nel, P. S., Werner, A., Du Plessis, A.J., Fazey, M., Erwee, R., Pilay, S., Hearn Mackinnon, B., Millett, B., & Wordsworth, R. (2012). *Human resource management in Australia and New Zealand*. Australia: Oxford University Press Melbourne.
- Nel, L., Nel, P.S., & Du Plessis, A.J. (2009). *Ethics and Organisational Culture*. Integrating ethics into organizations. Germany: Lambert Academic Publishing.
- Ministry of Economic Development, (2006). *SMEs in New Zealand: Structure and Dynamics 2006*, Viewed 10 September 2011, <http://www.med.govt.nz/>
- Pare, G. & Tremblay, M. (2007). The influence of high-involvement human resources practices, procedural justice, organizational commitment and citizenship behaviors on information technology professionals' turnover intentions. *Group & Organization Management*. June, 32(3), 326-357.
- Pretorius, O. (2010). No HR people allowed. *People Dynamics*, 6-7, January.
- Rudman, R. (2010). *Human resources management in New Zealand* (4th ed.). New Zealand: Prentice Hall.

- Rasmussen, E., Haworth, N., & Andersen, T. (2010). Has the strategic role and professional status of human resource management peaked in New Zealand? *Journal of Industrial Relations*, 52(1), 103-118.
- Snell, S. & Bohlander, G. (2013). *Managing Human Resources*. (16th ed.) South-Western, Australia, Cengage Learning.
- Stroker, J. & Hallam, G. (2009). The right person, in the right job, with the right skills, at the right time: A workforce planning model that goes beyond matrix[®], *Library Management*, 39(8), 561-571.
- Strack, R., Dyer, A., Caye, J. M., Minto, A., Leicht, M., Francouer, F., Ang, D., Bohm, H., & McDonnell, M. (2008). *Creating People Advantage. How to address HR challenges worldwide through to 2015*. The Boston Consulting Group. World Federation of Institute of Personnel Management Associations.
- Ulrich, D. & Brockbank, W. (2005). *The HR value proposition*. USA: Harvard Business School Press.
- Ulrich, D., Younger, J., Brockbank, W., & Ulrich, M. (2012). *HR from the outside in*. New York, McGraw-Hill.
- Wilson, P. (2010). *People@work/2020: Challenges and issues for Australian HR practitioners*, Australian Human Resources Institute, Australia.
- Wright, C. (2008). Reinventing human resource management: Business partners, internal consultants and the limits to professionalisation. *Human Relations Journal*, 61(8), 1063-1086.

TRANSFORMATION OF THE ZIMBABWEAN BANKING INDUSTRY: EVIDENCE FROM THE LIFECYCLE MODEL

Mabutho Sibanda and Richard Mhlanga

ABSTRACT

The Zimbabwean economy has undergone economic and financial transformation over the past two decades which has been accompanied by multiple changes in the banking sector. The country embarked on financial reforms in the 1990s which subsequently led to a twofold growth in the number of banks in the system. However, the growth in the number of banks exacerbated competition in the sector which subsequently led to an unprecedented collapse of banks between 1998 and 2005. This study uses the lifecycle model to ascertain behavior of banks between the period 1990 and 2008. The results show that the majority of banks that collapsed in Zimbabwe between 1998 and 2008 were, on average, at their start-up phase. However, the collapse of these banks was propelled by different circumstances ranging from bank specific to general market factors. The study provides some policy recommendations regarding the licensing of banks in emerging markets economies.

Key words: Zimbabwe, corporate lifecycle, start-up phase, growth phase, banking sector

INTRODUCTION

This paper employs the lifecycle model to investigate the lifecycle behavior of banks in Zimbabwe between 1990 and 2008. The lifecycle model refers to the way in which “products move from launch to growth to a mature and ultimately to a decline phase” (Bender and Ward, 2002:30). This model may be used to explain the behavior of firms or products during their life. Zimbabwe went through some rough times between 1990 and 2008 that were mainly driven by socio-political and economic challenges. These challenges subsequently had adverse effects on the performance and behavior of the financial sector. The financial sector in Zimbabwe comprises the banking industry, non-bank financial intermediaries and the stock market. From

***Mabutho Sibanda** is a blended academic with six years investment banking experience and eight years university lecturing experience. Mabutho holds an MSc in Finance and Investment from the National University of Science and Technology, Zimbabwe and a PhD in Finance from the University of KwaZulu-Natal, South Africa. He is a Member of the Investment Analysts Society South Africa, an Associate Member of the Institute of Risk Management South Africa and Associate Member of the Institute of Bankers Zimbabwe. Mabutho is currently a lecturer of Finance at the University of KwaZulu-Natal in South Africa.*

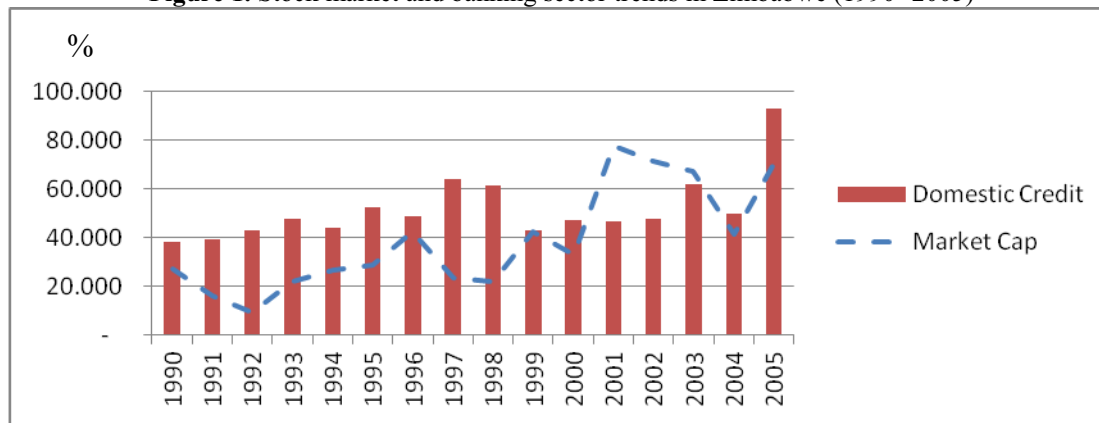
***Richard Mhlanga** worked for Barclays Stockbrokers in London before returning to Zimbabwe in 2005. Prior to joining academia, Richard worked for Premier Finance Group as Head of Premier Capital Management Limited and later as Head of Investment Banking. Richard holds an MSc in Investment Analysis obtained at Sterling University in Scotland and Doctorate in Finance from the University of Newcastle upon Tyne Business School in England. He is an Associate Member of United Kingdom Society for Investment Professionals (ASIP). Richard is currently Director of Graduate School of Business at the National University of Science & Technology, in Bulawayo, Zimbabwe.*

1990 to early 2000, the country's banking sector seemed to outperform other economic sectors. However, in spite of the gains realized by the banking sector during this period, the country was subsequently characterized by numerous economic, political, humanitarian and financial crises (Moss, 2007; Ncube, Richards, & Yau, 2009). During this period, inflation skyrocketed from 18 percent in 1990 to 133 percent in 2005 leading to speculative practices in the banking sector (RBZ, 2005). Some of the challenges included: first, the one size fits all Economic Structural Adjustment Programme (ESAP) of 1991 led to company closures and the beginning of perennial socio-political and economic problems (Ranga, 2004); and second, the accumulation by dispossession through privatization of state enterprises led to the mushrooming of numerous financial institutions which resulted in sophisticated but volatile financial markets (Njanike, 2010). The resultant structural changes in the political economy led to rapid privatization of state owned enterprises like the agricultural marketing boards and financial institutions (Godana & Hlatshayo, 1998). The banking industry on the other hand benefited from these economic activities through the provision of advisory services to the privatization processes (Tambudzai, 2003). Moreover, financial liberalization in the 1990s, exacerbated by increased foreign exchange and stock markets volatility, ensured increased profitability in the banking sector as banks realized foreign exchange gains from offshore investments. Consequently, the banking sector whose history dates back to the early 1890s experienced a revolution as competition increased. Competition was mainly driven by the profitability in the banking sector amid the country's declining Gross Domestic Product (GDP). Increased competition led to the collapse of some newly established banks in the late 1990s. Some banks were later closed due to insolvency and financial mismanagement in mid 2000s (RBZ, 2006). The crises that plagued the country over a period of two decades subsided in 2009 when a new political platform was initiated and the country adopted a multiple currency system which stabilized prices. This study uses descriptive statistics to ascertain how the Zimbabwean banking sector fits into the lifecycle model. The study tests the following two null hypotheses about the country's banking sector: (i) Zimbabwe's banking industry does not follow the lifecycle model; and (ii) the collapse of banks in Zimbabwe was not as a result of expected events in the lifecycle stages.

BACKGROUND OF ZIMBABWE'S BANKING SECTOR

The economy and financial development in Zimbabwe

The country's financial sector grew robustly in the early 1990s despite negative economic growth (International Monetary Fund, 2004). The country experienced negative GDP growth since 1999 which remained negative up to the end of 2008. GDP growth peaked at 10.4 percent in 1996 and reached a trough of negative 10.4 percent in 2003 (World Bank, 2009). Despite this perennial slowdown in the economy, the country's stock market capitalization as a proportion of GDP increased from 27.3 percent in 1990 to 70.3 percent in 2005 (World Bank, 2009). Market capitalization is generally used as a country's economic barometer although in this case it is misleading as the stock market moved against economic fundamentals. Furthermore, the banking sector development benchmark, domestic credit to private sector to GDP ratio increased from 38 percent in 1990 to 93 percent in 2005. The larger the two ratios mean that the country has a higher level of financial development. These two financial sector indicators show that the country's financial sector flourished during the period under study. Figure 1 below shows the trend in the country's domestic credit to private sector and market capitalization to GDP ratios.

Figure 1. Stock market and banking sector trends in Zimbabwe (1990 -2005)

Source: World Bank – World Economic Indicators

On 1 August 2006, the country redenominated the “first dollar” by revaluing the currency (Ncube et al., 2009). Due to this redenomination, financial data from 2006 may not be relied upon (International Monetary Fund, 2004; Ncube et al., 2009), hence the trend in figure 1 goes up to 2005. The graph shows that between 1990 and 1999, domestic credit to private sector grew faster than stock market development. During this period, the country witnessed twelve new entrants in the banking sector. The trend was however reversed in 2000 as stock market capitalization grew rapidly driven by the listing of these new banks on the country’s sole stock exchange, the Zimbabwe Stock Exchange (ZSE).

Zimbabwe’s banking industry

The country’s banking industry dates back to 1892 and evolved through the century to become a competitive industry in Sub Saharan Africa (International Monetary Fund, 2004). In 1892, The Standard Bank of British South Africa (now Standard Chartered Bank) opened its first branch in Zimbabwe (Standard Chartered, 2008). Other international banks opened offices in the country in later years. For instance, Barclays in 1912; Zimbabwe (Rhodesia) Banking Corporation in 1951; and Merchant Bank of Central Africa and Stanbic Bank (a subsidiary of South Africa’s Standard Bank Group). In 1980, the defunct Bank of Commerce and Credit International (BCCI) opened its offices in the country after partnering with the Zimbabwean government. Between 1991 and 2000, 15 new banks were established. These include, Commercial Bank of Zimbabwe (former BCCI) (1991), National Merchant Bank (1992), Trade and Investment Bank (1993), Trust Merchant Bank (1996), FBC Bank (1996), United Merchant Bank (1996), Universal Merchant Bank (1996), Royal Bank (1999), Barbican Bank (1998), Kingdom Bank (1997) among others. The banking industry in Zimbabwe consists of discount houses, finance houses, merchant banks, commercial banks and building societies. The commercial and merchant banks are regulated through the Banking Act Chapter 24:20 of 1999. Banks provide demand deposit accounts, foreign exchange trading, lending activities and advisory services among other banking activities (Government of Zimbabwe, 1999).

Non-bank financial intermediaries

Building societies

The Building Societies Act Chapter 24:02 of 1965 as amended, governs the country’s building societies. Building Societies specifically provide funding of mortgage finance and provision of savings and classified deposit accounts (Government of Zimbabwe, 1965). The country had four building societies in 2005.

These were the Central African Building Society (CABS), Beverly Building Society (now CBZ Bank), FBC Building Society, Intermarket Building Society (formerly Founders Building Society) (RBZ, 2011). FBC Building Society was established during the period under review as Zimbabwe Building Society before being acquired by the ZSE listed FBC Holdings Limited – a parent company of FBC Bank. The industry comprised mainly of matured building societies which however, as opposed to commercial and merchant banks, act as deposit taking institutions with a long-term credit book. In 1998, First National Building Society was established but collapsed in 2002 due to bankruptcy and financial mismanagement (RBZ, 2003). According to the RBZ (2000), building societies' deposit interest rates as well as interest rates charged on mortgage loans are regulated by government. During the period under review, building societies responded to high inflation and interest rates offered in short term instruments by shifting their focus from core low yield mortgage lending to money market investments (RBZ, 2000).

Discount houses and Finance houses

Both discount houses and finance houses are regulated by the Banking Act Chapter 24:20 of 1999. Discount houses are specialized financial institutions that buy and discount bills of exchange and also tender for government securities. They further play an active role in the money markets by buying and selling short-term securities. During the period under review, the country's discount and finance houses were dominated by a few firms like the Discount Company of Zimbabwe Limited (a subsidiary of ZSE listed Kingdom Financial Services Limited) and newly established houses like NDH, Highveld Financial Services Limited, Tetrad Securities Limited, Trustfin (Private Limited) and Global Investment House Limited. Global Investment House, a discount house, was established in 1999 and later acquired by Century Holdings Limited (which was later acquired by CFX, then by Interfin Holdings). As interest rates surged due to escalating inflation rates, discount houses recorded boom business. This was further escalated by increased government borrowing from the domestic market (RBZ, 2000). Finance houses on the other hand provide asset-backed finance including leasing. Most finance houses in Zimbabwe are part of larger banking institutions. During the period under review, finance houses shifted from lending to high yield money market instruments mainly due to inflationary pressures (RBZ, 2000).

BRIEF REVIEW OF LITERATURE

Corporate lifecycle studies have focused on a variety of aspects covering share repurchases (Yu & Jiang, 2010); the pecking order theory (Bulan & Yan, 2009); and the firm's relative value (Aharony, Falk, & Yehuda, 2006). All these studies show that firms follow the lifecycle stages. A longitudinal study of the corporate lifecycle showed that organizations undergo the stages in the same sequence despite inter-stage differences (Miller & Friesen, 1984). Miller & Friesen found that each stage in a life cycle lasted for an average of six years. Consequently, firms younger than six years are referred to as young while firms seven years or older as old firms (Evans, 1987). Furthermore, a growth firm may be defined as the one that is six years old following their initial public offer (IPO) (Bulan & Yan, 2009); while a mature firm initiates dividends (DeAngelo, DeAngelo, & Stulz, 2006). A key assumption of a lifecycle model is that new entrants have low product quality which should affect their pricing model and hence their survival (Warusawitharana, 2010).

Corporate lifecycle consists of four phases: start-up, growth, maturity and decline (Bender & Ward, 2002). During each phase, firms face different levels of business and financial risk. Business risk is the "inherent risk associated with the underlying nature of a particular business and the specific competitive strategy that is being implemented" (Bender & Ward, 2002:38). Business risk may be measured using the degree of operating leverage (Correia, Flynn, Uliana, & Wormald, 2003). Financial risk on the other hand, relates to the company's financing structure (capital structure) and is measured using either the degree of financial leverage or the debt ratios (Bender & Ward, 2002; Correia et al., 2003). According to Bender and

Ward (2002), an inverse relationship exists between business risk and financial risk. Table 1 below shows financial strategy parameters at different levels of corporate lifecycle.

Table 1. Corporate lifecycle parameters

Parameter	Start-up	Growth	Maturity	Decline
Business risk	Very high	High	Medium	Low
Financial risk	Very low	Low	Medium	High
Sources of funding	Venture capital	Growth equity Investors	Retained earnings + debt	Debt
Dividend policy	Nil payout	Nominal payout ratio	High payout	Total payout
Future growth prospects	Very high	High	Medium to low	Negative
Currently profitability	Nominal or negative	Low	High	Low & declining

Source: Bender and Ward, 2002

Sources of funding in the table above relate to the financing side of the banks' balance sheets. Banks may finance their operations using venture capital (seed capital); growth equity investors (usually through listing); retained earnings and debt (organic growth at maturity); and debt at the declining phase (Bender & Ward, 2002). Firms may distribute excess cash flows through either dividend payouts or share repurchases (Hillier, Grinblatt, & Titman, 2008). Future growth prospects or market's perceptions of the future is measured by the company's price/ earnings ratio (P/E) (Bender & Ward, 2002). In the absence of P/E, the retention ratio multiplied by the return on reinvestment provides the company's growth rate (Firm, Ross, Westerfield, & Jordan, 2008). The analysis of these variables requires a detailed financial analysis and, more importantly, reliable financial statements.

DATA AND METHODOLOGY

Data

Data used in this study was obtained from the Reserve Bank of Zimbabwe, the respective banking institutions websites, IMF and World Bank databases. In this study, as per the study by Miller and Friesen (1984) and DeAngelo, DeAngelo and Stulz (2006), we define banks younger than six years as start-up, banks which are six years and older or listed on the stock exchange for not more than six years as growth firms. Banks in the maturity phase are those that initiate dividends as per the study by DeAngelo and Stulz (2006). This study uses data from 1990 to 2008. We use descriptive statistics to analyze the corporate lifecycle of banks in Zimbabwe. The chosen timeframe captures a period characterized by both new entrants and the collapse of several banks (Njanike, 2010). The early 2000s captures the effect of hyperinflation which increased from 18 percent in 1990 to 133 percent in 2005 (RBZ, 2006).

Methodology

The study uses the mean and the median to ascertain the lifecycle stages of banks in Zimbabwe. Focus is placed only on the banks that were founded between 1990 and 2008. To calculate the average age of each variable, the mean is calculated as $\bar{x} = \frac{\sum x}{n}$ where x represents the variable and n the number of observations.

From the analysis if:

- (i) Firm age ≤ 6 years, then the firm is in the start-up (launch) phase;
- (ii) 6 years $<$ firm age ≤ 12 years, then the firm is in the growth phase; and
- (iii) Firm age > 12 years, then the firm is in the mature phase.

Since the banks established between 1990 and 2008 were both less than 18 years in 2008, the decline phase is therefore omitted from the analysis. The three scenarios described above are used to determine the banking industry average parameters and to test the first hypothesis that the banking industry does not follow the corporate lifecycle model.

A count is done to ascertain the lifecycle stages of collapsed banks. A tally is used to allocate collapsed banks within a particular lifecycle stage. This tally is used to determine the relative frequency of each variable (lifecycle stage) within the population of collapsed banks. The relative frequency is then used to test the second hypothesis that the collapse of banks was not a result of expected events in the lifecycle model.

RESULTS AND DISCUSSION

The Zimbabwean financial system grew from an oligopoly state comprising foreign owned financial institutions into a dynamic system characterized by the emergence of new and locally owned financial institutions between 1990 and 2008. Central bank assets grew on average by 171 percent, depository banks by 113 percent and other banking institutions by 91 percent. Table 2 below lists the new entrants in the banking sector between the period 1990 and 2008, dates of initial public offering (IPO), age of bank prior to IPO, date of collapse, and the age of the bank at the time of collapse, where applicable.

Table 2: Activities in the banking industry (1990 – 2008)

Bank Name	Established	Year of IPO	Age before IPO	Year of Collapse	Age at Collapse
Agribank	2000	NL	N/A	NC	N/A
Barbican Bank	1998	2002	5	2005	8
Ecobank	2004	NL	N/A	NC	N/A
FBC Bank	1996	2003	7	NC	N/A
Genesis Bank	1993	NL	N/A	NC	N/A
Century Bank	2000	2003	4	2004	5
Intermarket Bank	2003	N/A	N/A	2005	2
Kingdom Bank	1997	2000	3	NC	N/A
Metropolitan Bank	1997	NL	N/A	NC	N/A
NDH	1997	NL	N/A	NC	N/A
Interfin Bank	2001	2010	9	NC	N/A
NMB Bank	1992	1999	8	NC	N/A
Renaissance Bank	2003	2009	6	NC	NC
Royal Bank	2000	NL	N/A	2004	4
Time Bank	1997	NL	N/A	2003	7
Trust Bank	1996	2002	7	2005	10
TN Bank	2008	NL	N/A	NC	N/A
ZABG Bank	2005	NL	N/A	NC	N/A
First National Building Society	1997	NL	N/A	2002	5
Universal Merchant Bank	1996	NL	N/A	2000	3
United Merchant Bank	1996	NL	N/A	1998	3
<i>Mean</i>			6.125		5.2
<i>Median</i>			6.25		5
<i>Standard Deviation</i>			2.03		2.64

Key: NL – Not Listed. NC – Not Collapsed: N/A – Not Applicable

Source: RBZ and Various websites

The average period of banks before listing is six years with a standard deviation of 2.03. This suggests that the launch (start-up) phase of banks in Zimbabwe is approximately 6 years, which is in line with existing literature (see Miller and Friesen, 1984). At start-up phase banks face product quality and market acceptance challenges. During this phase, banks face product risk, uncertainty in market acceptance and market share among other factors, hence very high business risk. Furthermore, the banks in the launch phase experience negative cash flows arising from high launch, marketing and research and development expenditure and low cash inflows.

Three listed banks collapsed at an average of 2.3 years after listing. These banks collapsed during their growth phase. This is consistent with literature which suggests that at growth stages of development, firms become marketing focused and competition increases (Bender & Ward, 2002). On the other hand, 38 percent of the banks that collapsed did so during their start-up phase which should be of concern to regulatory authorities. Of the 21 banks that were established between 1990 and 2008, nine of them had failed by 2008.

The average age of banks before collapse is approximately 5.2 years with a standard deviation of 2.6 years. This average shows that banks collapsed during their start-up phase of the corporate life cycle. In this phase, according to theory, banks face uncertain market share, size of the market at maturity, length of maturity and maintenance of market share. Consequently, banks in the start-up phase face high business risk as they embark on marketing, fixed assets (branch network rollout and infrastructure) in line with Bender and Ward (2002)'s assertions.

Furthermore, 38 percent of the banks that collapsed during the period under review were listed on the Zimbabwe Stock Exchange. This is in contrast to financial theory which suggests that listing provides firms with access to capital markets for expansion purposes (Firer et al., 2008). Ordinarily, one would have expected these banks to thrive on the availability and accessibility of capital from the secondary markets. On the other hand, the collapse of the United Merchant Bank and Universal Merchant Bank provides us with some insight on systemic risk as the two banks had close to similar names. United Merchant Bank collapsed first in 1998 and was immediately followed by Universal Merchant Bank in 2000 (RBZ, 2000). The next bank collapses were witnessed during the hyperinflationary period of 2002 – 2005. This period, according to the RBZ, was propelled by imprudent banking practices in the sector (RBZ, 2006). However banks tend to blame the harsh economic environment for their failure and subsequent crisis in the banking industry.

Table 3 below shows the number of banks, according to age, that listed on the exchange and those that collapsed.

Table 3: Age Analysis (1990 -2008)

	Panel A (Listed)		Panel B (Failed)	
	Prior to IPO		Prior to collapse	
Age	< 6 years	> 6 years	< 6 years	> 6 years
Number of banks	3	5	6	3
Total		8		9

The table above shows that 38 percent of the banks (3 out of 8) that listed on the ZSE were less six years old while the majority of the banks that listed (62 percent) were more than six years old. Of the three banks, two collapsed during their start-up phase. This should be of major concern to regulatory authorities as founding shareholders who in many instances were top bank executives cashed-in their shareholding upon listing. This may have left the bank susceptible to mismanagement and imprudent practices by the same top executives. Also 67 percent of the banks that collapsed were less than six years old suggesting they were in their start-up phase. The collapse of banks within the six-year age category means that the banking industry follows the lifecycle model as some products fail to penetrate the market during this phase.

The first null hypothesis that the country's banking industry does not follow the corporate lifecycle is rejected as all characteristics of corporate lifecycle stages as promulgated by Miller and Friesen (1984) and

DeAngelo, DeAngelo and Stulz (2006) are observed. The rejection of this hypothesis suggests that both the entry and collapse of banks in Zimbabwe between 1990 and 2008 are a result of corporate and industry lifecycle stages in addition to the harsh economic and socio-political environment. Furthermore, the second null hypothesis that the collapse of banks in Zimbabwe was not as a result of expected events in the lifecycle stages is also rejected since these banks were within the launch and growth phases at the time of their collapse.

POLICY RECOMMENDATIONS

The collapse of banks adversely impacts on the confidence of the banking industry. This should be a major concern to policy formulators and as such should be given much attention. Banks in Zimbabwe collapsed between their start-up and growth phases which may point to corporate governance failures within these institutions. Although it may be argued that increasing the number of banks in the economy improves financial inclusion and subsequently economic development, the systemic risk posed by the collapse of a bank has the potential of destroying the entire banking sector. Since this study observes that banks collapse within their launch phase, regulators should ensure capital requirements for prospective banks are set at levels that prohibit speculative tendencies by its founders. Furthermore, management shareholding in banks should be curtailed to avoid the abuse depositors' funds by owners who are also executives. Thus there should be a clear separation of ownership from management in line with corporate governance best practices. Moreover, the management of new banks must be vetted and only experienced personnel should be allowed to lead these banks in order to avoid banking crises. Finally, the supervisory capacity of the central bank must be enhanced to enable early dictation of troubled banks to avert systemic risk within the sector.

CONCLUSION

The study investigates corporate lifecycle patterns in banking sector in Zimbabwe using the lifecycle model. Results show that the country faced an influx of new banking institutions comprising merchant and commercial banks, discount houses and finance houses between 1990 and 2008. As competition became tense and the country's economy became more volatile, banks began to collapse in 1998 and the collapse became more pronounced between 2002 and 2005, a period characterized by high inflation. Descriptive statistics reveal that the banks that collapsed had an average life of 5.2 years suggesting that they collapsed during their start-up phase. The collapse of banks at an average age of 5.2 years further attests to literature which posit that at launch phase there are high research and development costs and the firm's products may not be accepted by the consumers. Furthermore, banks sought and acquired listing on the Zimbabwe Stock Exchange at the age of six in line with evidence from existing literature. However, in spite of the advantages of listing on the stock exchange, 38 percent of the new banks that listed on the exchange collapsed during their growth phase pointing to the need for enhanced corporate governance reforms within the sector. The study shows that the banking sector in Zimbabwe follows the lifecycle model and collapse of banks was in line with the expectations of firms in the start-up and growth phases. This requires bank licensing and supervision in under developed countries to be enhanced to avert failures and the resultant systemic risk in the banking sector. Overall, the transformation of the Zimbabwean banking industry which was driven by liberalization of the financial sector in the 1990s and later socio-political and economic challenges, forced some banks to fail during their start-up and growth phases. Close monitoring of banking activities is thus required to avert these systemic failures in future.

ACKNOWLEDGEMENT

We would like to express our sincere gratitude to the two anonymous reviewers for their invaluable input and contribution towards shaping this piece of research work.

REFERENCES

- Aharony, J, Falk, H, & Yehuda, N. (2006). Corporate Life Cycle and the Relative Value - Relevance of Cash Flow versus Accrual Financial Information. Working paper. The Technion- Israel Institute of Technology. Israel.
- Bender, R, & Ward, K (2002). Corporate Financial Strategy (2nd ed.). Great Britain: Elsevier Butterworth Heinemann.
- Bulan, L, & Yan, Z (2009). The pecking order theory and the firm's life cycle. Working paper. Brandeis University.
- Correia, C, Flynn, D, Uliana, E, & Wormald, M. (2003). Financial Management (5th ed.). South Africa: Juta and Company Limited.
- DeAngelo, H, DeAngelo, L, & Stulz, R.M. (2006). Dividend policy and the earned/ contributed capital mix: A test of the lifecycle theory. *Journal of Financial Economics*, 81, 95-287.
- Evans, D.S (1987). The relationship between firm growth, size, and age: Estimates for 100 manufacturing industries. *Journal of Industrial Economics*, 35(4), 587-581.
- Firer, C, Ross, S.A, Westerfield, R.W, & Jordan, B.D. (2008). *Fundamentals of Corporate Finance* (4th South African Edition ed.). Berkshire: McGraw-Hill.
- Godana, T , & Hlatshayo, B. (1998). Public enterprise reform and privatization in Zimbabwe: Economic, legal and institutional aspects. *Zambezia*, XXV(1).
- Building Societies Act Chapter 24:02, Government of Zimbabwe (1965).
- Banking Act Chapter 20:24, Government of Zimbabwe (1999).
- Hillier, D , Grinblatt, M, & Titman, S. (2008). *Financial Markets and Corporate Strategy* (European edition ed.). Berkshire: McGraw-Hill.
- International Monetary Fund. (2004). Country Report No. 04/296: International Monetary Fund.
- Miller, D, & Friesen, P. H (1984). A longitudinal Study of the Corporate Life Cycle. *Management Science*, 30(10), 1161-1183.
- Moss, T. (2007). Zimbabwe's Meltdown: Anatomy of a peacetime economic collapse. *The Fletcher Forum of World Affairs*, 31(2).
- Ncube, B, Richards, K, & Yau, J. (2009). Republic of Zimbabwe.
- Njanike, K. (2010). The impact of globalization on banking service quality in Zimbabwe (2003-2008). *Annals of the University of Petrosani, Economics*, 10(1), 205-216.
- Ranga, D. (2004). The migration effects of the Economic Structural Adjustment Programme on a rural community in Zimbabwe. *African Population Studies*, 19(1), 165-185.
- Tambudzai, Z. (2003). Privatization: A review of the Zimbabwean experience. *Africana Bulletin*, 51, 165-203.
- Warusawitharana, M. (2010). Profitability and the Lifecycle of firms: Board of Governors of the Federal System.
- World Bank. (2009). *World Development Indicators*.
- Yu, Y, & Jiang, S. (2010). Corporate life cycle and share repurchases: Evidence from the Taiwan Stock Market. *African Journal of Business Management*, 4(14), 3139-3149.

CORPORATE SOCIAL RESPONSIBILITY: TO YOURSELF BE TRUE

James Brusseu, Larry Chiagouris and Rocio Fernandez Brusseu

ABSTRACT

Brand trust is an integral component of brand identity. Consumer suspicion may undermine the building of brand trust through attempts to incorporate corporate social responsibility (CSR) into brand identity. One cause is businesses conforming to a definition of CSR that does not fit their operation and culture. One response is to set authenticity at the center of CSR discussions by broadening the ethics used to conceive a business's role in society and international commerce. This paper uses philosophical tools to construct a model for authenticity-based corporate social responsibility.

Keywords: CSR branding, ethics, CSR, greenwashing, conformity, authenticity, philosophy, marketing

INTRODUCTION

Conducting business on an international scale increasingly requires businesses to be clear about their obligations to society beyond simply making profit (Dos Santos 2009). Businesses are commonly expected to create mission and vision statements that are shared with employees, investors, customers and suppliers. A common element is language related to corporate citizenship and social responsibility.

Corporate social responsibility (CSR) is the ethical values defining a business's role in society. CSR branding incorporates the business's social values into the reputation of its goods and services. Like most

James Brusseu, hold a Ph.D. in *Phylosophy*, teaches in the Philosophy Department at Pace University in New York City. He is author of *Decadence of the French Nietzsche* and *Isolated Experiences*, academic books in the history of philosophy, as well as *The Business Ethics Workshop*, a textbook in business ethics. Prior to joining Pace, he taught in California, Mexico City and Europe. He currently works on intersections of philosophy and economics.

Larry Chiagouris is a Professor of Marketing at the Lubin School of Business, Pace University in New York City. He has a BS degree in Economics from New York University, magna cum laude, an MBA in Industrial Psychology and a PhD in Consumer Behavior from the Baruch Graduate School of Business, City University of New York. Prior to joining Pace University, he served as an executive for major Fortune 500 companies and as the Chairman of the Advertising Research Foundation and member of the Board of Directors of the American Marketing Association. His research interests focus on branding related issues.

Rocio Fernandez Brusseu holds a Bachelor's degree in Sociology, and a Master's degree in Political Science from the Universidad Complutense in Madrid, Spain, as well as a Master's in business management (IPADE, Mexico). She is Senior Vice President of Human Experience Strategy in Starcom MediaVest Worldwide. Prior to arriving in New York, she worked for leading advertising companies in Europe and Latin America including Ogilvy, JWalter Thompson and DDB. Her work emphasizes the creation of transmedia storytelling platforms for clients including Pepsi, Levis and Mondelēz.

branding initiatives, central goals include increases in brand trust and brand differentiation, consumer loyalty, affinity and advocacy.

TOMS Shoes does CSR branding right in its name. There is no Tom at the company. The name derives from “Tomorrow’s Shoes,” which captures the brand’s mission: to donate *alpargatas*, light, canvas slip-ons. The footwear is needed in Argentina’s impoverished corners to block infections that creep up from the local soil. The idea is simple: for every pair of shoes sold today in the US, a pair will be donated tomorrow to someone in need.

There are not many businesses like TOMS, but mixing CSR with brand messaging can generate business and significant effects on brand attitude (Lii and Lee 2012). Although some might view CSR as a supplement to corporate profit-seeking (Sabadoz 2011), CSR is evolving to become a more common strategy to business development. Whether it is Starbucks and fair trade coffee, or the Body Shop rejecting animal testing or Toyota’s environmentally friendly Prius, the CSR branding formula is in effect: a business’s articulated role in society is not a detail added to some remote webpage, it is an integral and amplified feature of the brand’s public face (Lafferty and Goldsmith 2005; Klein and Dawar 2004).

CSR BRANDING AND SUSPICION

As CSR branding has flowed toward the mainstream, a sceptical suspicion has come with it: the internal logic sometimes is reversed. Instead of starting with a CSR profile – a clear definition of the business’s values and purpose in society - and then branding that to generate enviable marketplace results, some businesses are starting with the branding that produces marketplace results, and then backing themselves into the profile (Polonsky 1997).

Understood in the broadest sense, greenwashing is the accusation that a business advertises itself as preoccupied with social welfare or environmental stewardship, while the real intention is to convert that branded concern into money on the bottom line. Companies, in others words, fake it. It is important to note here that the problem is not profiting itself. As Ellen, Webb and Mohr have shown, consumers are comfortable with the reality that businesses adhere to the profit motive, and they expect that socially oriented actions will dovetail with bottom line results. What consumers are less willing to tolerate, however, is the sense that the *reason* for the social action is the profit or, stronger, that the social cause is being exploited for profit. There is also resistance, the three authors find, to social initiatives that do not reflect corporate values so much as the demands of stakeholders: there is consumer scepticism when companies seem forced to launch social initiatives. Taken together, the two scenes of scepticism lead to a conclusion: “Consumers may care less about what firms are doing than about why they are doing it (Ellen et al. 2006).”

Of course, reading the minds of others and discerning their true motivations is a risky business, but that has not stopped sceptics from gleefully shooting a snapshot around the internet showing an Eco Smart Company vehicle. The phone number 877-47-GOGREEN stenciled onto the side and back, along with the vehicle’s lush green paint job, give a good idea of the image the company promotes. The only problem is the vehicle happens to be a Hummer (Richard 2009).

Then there is the infamous *I’m Sorry* commercial for British Petroleum. Aired shortly after the Deep Water Horizon accident gushed crude oil into the Gulf of Mexico, BP CEO Tony Hayward fixed stern eyes on the camera and asserted deep regret for the human and environmental disaster, along with a promise to set things right (Climatebrad 2010). Today, what is most notable about the video is that it is hard to find on YouTube because it is drowned in so many cynical parodies (often featuring fake English accents).

With respect to CSR branding generally, what is important here is not finding the underlying cause of the greenwashing accusation in any one case. What matters is that suspicion is pernicious in two senses. First, where it exists it is hard to eradicate: once a brand or company has been stained, it is difficult to recover a socially-conscious or green-friendly reputation for the simple but inescapable reason that it is almost

impossible to *prove* that the motive behind any initiative does not ultimately trace back to the thirst for profit. Second, where suspicion exists, it can spread. If BP is a greenwasher, then why not Shell, or all the oil companies? Why not all companies? Why not TOMS? Online vigilantes now regularly attack shoes across the blogosphere, and there is a convenient Facebook page titled *TOMS Shoes is a scam* where sceptics can pile on (Community 2011).

What is certain is that CSR branding faces trouble. Suspicion that at least some companies are branding themselves as something they are not stains the project of incorporating the ethics of their role in society into brand identity (Darke and Ritchie 2007; Ihlen et al. 2011).

RESPONDING TO SUSPICION WITH AUTHENTICITY

One response to suspicion of CSR branding is to set authenticity at the endeavor's core. Instead of attempting to conform to an established definition of correct behavior, CSR branding works to discover and communicate the ethical values driving a particular business's role in society. The labor is not so much about making slick ads. It is about carefully discerning a business's real values: there is as much philosophy in it as there is marketing expertise. Then, and only after a profile of defining values has been drawn, are ways sought to communicate the values effectively, compellingly and profitably in order to further establish brand identity. Suspicion, consequently, is cut off at the roots.

This paper, in sum, is about the transition from conformity with established models of CSR, to the construction of a philosophically based authentic CSR profile for use in branding initiatives. An explanation of the transition takes two steps. First, we define the idea of authenticity. Second, the difference between conformity and authenticity in CSR branding is traced in concrete terms.

As Trilling has shown, authenticity contrasts with sincerity, and the difference goes beyond authenticity as being true to myself and sincerity as being true to others (Trilling 1972). It is also that the *kind* of truth the two trade in diverges. Sincerity is about objective facts that can be verified, authenticity, as Liedtka and others have noted, is about purposes that can be experienced (Liedtka 2008).

As an example of how purpose provides authenticity, there is a page from dearphotograph.com. The website allows users to upload pictures taken of old photographs held up and superimposed over the reality the old photo captured, but as it exists today. One of the site's pictures shows an expansive green backyard. Held into the shot there is an old photo taken from the same spot years ago. It contains two young boys standing in the middle, but in the old days the yard was not flattened and mowed, it was overgrown with trees and bushes, the kinds of things boys live to explore. Beneath the dual shot the contributor - the mother of the two, pictured children - wrote, "How I long for the days of make believe adventures in the forest. Now it is just a lawn that needs mowing" (Brown 2011).

The mother is lost in her own backyard. She is because the difference between the forest and the lawn is the difference between an authentic and inauthentic relation with the stretch of land. When the yard was overgrown and children lived in the house, the place had a purpose, a role in the world she was creating as a mother. Now, with the children grown, the place no longer exists. Or, if it exists, it is just an empty and meaningless fact, a chore, a space that needs to be run over with a mower. Authenticity, finally, happens when people find a coherent role in the world, when they relate to the things and people around them with an understood purpose (Heidegger 2008). This is, some readers will recognize, the core idea of Martin Heidegger's existential philosophy.

As Liedtka observes, Heidegger's notion of personal authenticity tied to purposiveness can be transferred to business organizations and understood as a particular kind of truth in the business world (Liedtka 2008). It is not the truth of sincerity that typically involves facts and representing things as they objectively are. For example, the bathroom mirror is sincere, the fun-house mirror distorting my body is insincere. Transferring the point into the business realm, when Goldman Sachs writes on its webpage that it always puts their clients

first, and later we learn that they were hocking flimsy mortgage-backed securities to some clients so that others could short them on the derivatives market, we have pretty good reason to ask whether the company's claims about clients and priorities are sincere (Securities and Exchange Commission 2011).

Goldman does far better when adopting an ethics of authenticity, as they do with the campaign *Progress is Everyone's Business*. One of the campaign's videos combines a basketball arena's construction in Louisville with Goldman-organized financing. There is little discussion of corporate generosity, not much about a vaguely altruistic benefactor swooping in and saving the day for small-town Americans. All of that could have been there – just as there could have been empty promises about always putting clients first – but the impression actually generated is authentic purpose: Goldman gets money, people and projects together, and profit spreads.

The distinction between sincerity and authenticity – between the lean toward facts and toward purposes – is also active in greenwashing. Frequently, the greenwashing accusation has little to do with failing the test of conventional truth. The online vigilantes aiming for TOMS Shoes do not charge that the company is not really donating shoes as they claim, the charge is not that TOMS *lies* to consumers; it is that the organization is not true to its own project. If TOMS *really* existed to benefit poverty-stricken Argentines, then a way would be found to nurture shoe production in rural Argentina: that would ultimately allow more of the locals to protect themselves, and benefit them economically as well (Underwood 2011).

The point could be disputed, but the accusation remains. Moreover, underneath it there exists the barely muted suspicion that what leaders at TOMS Shoes actually want from their business is the opportunity to parade around New York and Los Angeles, bathing in the accolades of social responsibility. That may be too cynical, but what is significant here and from the broader perspective of CSR branding is that greenwashing is not so much about insincerity as it is inauthenticity. It is not that people are not telling the truth about what their company is doing so much as faking the passion for what they claim is their project.

DIFFERENCES BETWEEN CSR BRANDING AS CONFORMITY AND AUTHENTICITY

CSR branding as conformity starts with a general definition of what counts as CSR, and then asks how a business fits into the profile. As Eabrasu (2012) has pointed out, this definition typically includes support for labor unions and affirmative action, as well as acceptance of global warming as happening and accelerated by modern industry. Association with recycling and its growing industry is viewed positively. Association with gun and military manufacturing is seen negatively, as is involvement with tobacco. The assertion that property owners may do what they wish on their land (think of clear-cutting lumber companies) is viewed very negatively. In general, the list of good things and bad things that Eabrasu sees operating inside the standard definition of CSR fits an ideological bias that he links with the United Nations, university professors and similar.

However that may be, what is important here is not the specific elements of CSR approval, it is that there *are* specific elements: there is a definition of CSR out in the world that operates normatively. It is composed of clear approbations and reproaches, and if corporations want to be considered CSR participants, they have to fit in. As opposed to that model of conformity, CSR branding centered on authenticity starts with a *business's* values and purposes, and then draws a profile of the company for branding efforts.

CSR branding from conformity can feel like doing a checklist. Does the company contribute money to charity? Is there an employee health program that encourages exercise? Is there participation in community projects? Is there environmental stewardship along the line of value creation? (Or, at least an office recycling program?) CSR branding from authenticity is more exploratory. What purposes drive the business? How can the purpose be converted to a set of ethical values expressed as the business's relation with society? How can those values be rendered in compelling human terms?

CSR branding from responsibility is judgmental. A pre-established definition of what role a business should have in society yields a verdict on whether the role is executed well. The plethora of CSR rankings feeds this impulse. Google the term “CSR ranking” and you get lists from: the Boston College Center for Corporate Citizenship, justmeans.com, CSR magazine, ethisphere.com, Corporate Knights’ Global 100, and from many other sources. CSR branding from authenticity, by contrast, is descriptive. There is a business in the world, and the task is to set the ethical aspects of that relation into sharp vivid relief. It is to illustrate and clarify the values connecting the economic enterprise with the larger social world. If there is judgment, it is not about where the company appears on someone else’s list, it is about how well the description captures what actually drives the company’s actions.

The operative question for CSR branding on the conformity side is *What is the business doing?* Answering means checking a list to see if the company is doing the right thing. The operative question for CSR branding on the authenticity side is *Why is the business doing what it is?* Answering means understanding the purposes and values guiding the company.

MOVING FROM CONFORMITY TO AUTHENTICITY IN CSR BRANDING: WHAT IS REQUIRED

Moving from conformity to authenticity in CSR branding requires broadening the spectrum of what counts as the ethics of business in society because currently accepted definitions are too narrow. Here is a standard definition of CSR, articulated by the European Commission:

To fully meet their CSR, enterprises should have in place a process to integrate social, environmental, ethical, human rights and consumer concerns into their business operations (European Commission 2011).

The problem here is that you cannot simultaneously ask a business to be authentic, and then insist that it “integrate social, environmental, ethical and human rights concerns into business operations.” What about businesses that do not want to do the integrating? What about the businesses that believe that the best way to serve society’s interest is through the invisible-hand, that is, just by producing better products at lower prices? What about enterprises that believe social problems are most effectively answered by governmental, religious or non-profit organizations?

Stated in the opposite direction, CSR branding should not be reserved for some few, compliant organizations; it is not only for TOMS, Starbucks, Body Shop and other familiar names that have dominated the social responsibility space so far. That limitation implies that only a few socially and environmentally active businesses are ethical with respect to their role in society, only a few have a public ethics dimension worth talking about. That is wrong, though. When it comes to a role in society, every business has an ethics.

Because ethics means aligning values to guide and justify decisions, it is inescapable. No business – and for that matter, no person – can act at all without first defining something that is wanted, and that is forming values, that is *doing* ethics. It happens whether a person or business wants it to happen or not. It immediately follows that since ethics happens in every organization, the incorporation of ethics into branding is available too. When that ethics – that establishment of values – concerns a business’s role in society, the result is a profile of CSR.

Next, if CSR branding is going to happen, and if it is going to be centered on authenticity, then businesses will brand their ethical role in society in their terms, as opposed to conforming to any single pre-established model. To prepare for this reality, a broad range of concepts for understanding how businesses relate to society will have to be constructed, and it will have to be sufficiently broad to account for most all the kinds of companies that are out there in the world.

CSR BRANDING FROM AUTHENTICITY: MANAGERIAL OPTIONS

Two steps lead to a CSR profile generated from authenticity. The first defines the structure of a business's possible roles in society, and does so with sufficient range to account for most of the organizations active in the economic world. The second humanizes the roles, it provides substance with philosophical ethics.

Step 1: Locate a particular business's place on a wide conceptual spectrum running from profit to social and environmental engagement.

Locating a particular business's place on the spectrum starts with a direct question: will initiatives supporting the surrounding community or natural world be undertaken even when they detract – at least in the short to medium term - from bottom line results? On the *Yes* side, these are three frameworks for a business's role in society:

- Progressive CSR
- Triple bottom line (sustainability)
- Stakeholder theory (the collective bottom line)

“CSR,” “sustainability,” “stakeholder” and similar concepts are ambiguous: talking about them can feel like discussing the meaning of inkblots. Still, and for present purposes, it will be sufficient to attach general thumbnail definitions to each of these postures.

Progressive CSR obligates the business first to achieve a reasonable profit while operating within the law. With that obligation satisfied, the attempt should be made to act virtuously, even at the cost of profit. The case of Malden Mills would be an example: after his factory burned down, owner Aaron Feuerstein could have laid off his employees while rebuilding the plant, but he chose to keep paying them, knowing that they and their families depended on the checks (Vaughn, 1997). Finally, if economic capacity remains, the business should make philanthropic contributions (Carroll 1991).

Triple bottom line conceptions of the corporation require that annual balance sheets be drawn up not just on the financial side. It also requires balance sheets on the social and environmental performance of the corporation. Just as sustainable results should be sought in the economic realm, so too they ought to be pursued for the natural world and human communities (Elkington 1997).

Stakeholder theory gives those who are affected by a business's operations a voice in decision-making. Just as managers are obligated to respond to the shareholder interest in escalating stock prices, so too they must acknowledge and respond to concerns voiced by workers, customers, suppliers and neighbors (Freeman 1984).

With three ethical frameworks set on one side of the tension between profit and social/environmental engagement, a set of marketplace-based models may be positioned toward the other end. One shared characteristic of these structures for a business's role in society is that bottom line concerns will not be sacrificed for social or environmental initiatives. Three degrees of marketplace business ethics are:

- Pure marketplace
- Libertarian Marketplace
- Social marketplace

Pure marketplace ethics gears all decisions to supply and demand. Profit is not the overwhelming value. Profit is the only one. Examples include illegal businesses such as the narcotrafficking of the Sinaloa cartel, or a rogue financial unit like UBS Global Wealth Management. Though these kinds of businesses operate outside most business ethics discussions, some do foment ethically coherent CSR branding efforts.

The Sinaloa cartel, for example, not only does not attempt to hide its vicious, profit-driven nature, but actively encourages and subsidizes the outlaw brand. They intimidate newspaper reporters, hang the ruined and naked bodies of captured competitors over roadway bridges for easy photographing, and they underwrite the efforts of musicians including *Los Tucanes de Tijuana*. While the *Tucanes* biggest shows have been in Mexico, they have also played before over 100,000 people in New York City. They have also sold-out the Astrodome and have 27 platinum records. They are a big deal, and some of their most popular songs are gems of authenticity. Called *narcocorridos*, they accurately, compellingly and rhythmically report the vile deeds and adrenaline-pounding reality of drug trafficking (Bárceñas 2008; Hernandez 2010).

Considered purely in terms of branding results, the *narcocorrido* titled El Chapo Guzman could be a textbook model. Listeners have taken their own time and effort to produce amateur videos and post them across the web where the Sinaloa Cartel's values and purposes are communicated infinitely at no charge to people who *want* to hear about them. YouTube hits on only one version of that song have climbed past three million views (Cheko01 2007).

While few promote crime as a career choice, the Sinaloa cartel example does have the virtue – as extreme cases sometimes do – of providing clarity. In this case, what is conspicuous is the space in CSR branding between conformity with the established practice, and the possibility of authenticity. Conformity means branding confined to a pre-set list of socially or environmentally friendly obligations. Authenticity is branding starting with a business's values and purposes, and then finding ways to communicate them powerfully.

The corollary is that authenticity in CSR branding means authentically capturing a business's role in society; it does not mean telling the truth only when it is fuzzy and nice, and it definitely does not mean papering over jarring realities. In fact, taking sugary routes is just what caused the problem of suspicion of CSR branding in the first place. Stated slightly differently, business ethics is about values, it is not about correctness. And branding is the hard work of discerning values and presenting them in compelling ways, not the easy ride of taking values that are nice and helping companies pretend as though that is the way they are.

Libertarian marketplace ethics generates a CSR familiar to admirers of Milton Friedman and supporters of the CATO institute. Here, both profit and broad social welfare are acknowledged, respected and valued. However, the value allotted to broad social concerns is restrained by obligations to shareholders and profit. Social responsibility cashes out as respect for laws and commonly accepted regulations.

One attitude coursing through this ethical framework is that other organizations – governmental, religious and non-profit – are better equipped and more legitimately charged with managing broad social and environmental concerns and, in any case, the best way for most companies to make the world better is to do well themselves. For example, in response to *The Stanford Social Innovation Review* naming Apple as one of "America's Least Philanthropic Companies," (Ni 2007) a writer at *The National Review* exploded:

Steve Jobs's contribution to the world is not some Steve Jobs Memorial Foundation for Giving Stuff to Poor People in Exotic Lands because he already did that: He gave them better computers, telephones and music players. Jobs created superior products at better prices. Profits are the real measure of the social value a firm creates. Those who talk about the horror of putting profits over people make no sense at all. The phrase is without intellectual content (Williamson 2011).

That last part is wrong, but it is also wrong for CSR branders and advocates to assume that the only way a business can succeed ethically – or even *exist* ethically - is by directly engaging with community needs and environmental concerns.

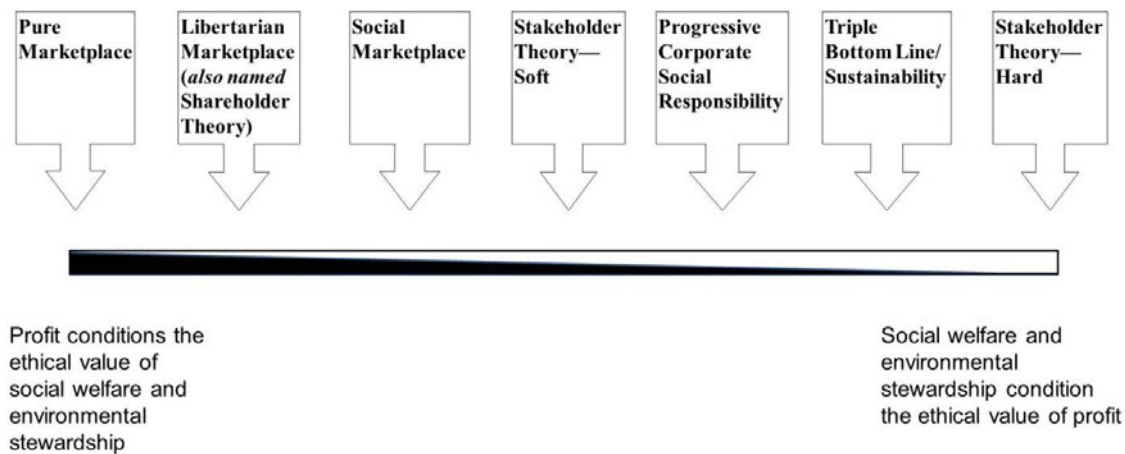
One notable aspect of the libertarian marketplace is that the laws and commonly accepted regulations its proponents respect may be understood broadly. For example, a pair of Finance professors in Taiwan has amassed statistical evidence for the claim that bribery and similar types of corruption in countries where the practice is common may increase economic efficiency and social welfare as measured by broad economic growth. The situation is fluid, but the firm and broader point repeats the previous one: it is mistaken to view a

necessary conflict between the ethics of the economic marketplace and broader concerns about social welfare (Ho and Huang 2011).

Social marketplace ethics moves still further from the extreme of pure profit. Here, social concerns are explicitly and directly engaged, but *only if* they contribute on the bottom line. Donations may support community events, but only if the result is more customers in the store, or the creation of positive associations with a brand and its products (Dos Santos 2009). Steps may be taken to improve energy efficiency on the factory floor, but only if the cost of implementation is ultimately offset by energy bill savings. In other words, high efficiency “green” lightbulbs will be installed as long as the energy savings equal the bulbs’ extra cost.

Finally, these six ethical frameworks of CSR are not intended to exhaust the possibilities or match any one particular organization. They are intended to indicate the *range* of ethical relationships joining businesses with the social and environmental world (see Figure 1). For CSR branding to start from authenticity, the work of branders must move easily from one extreme to the other. Ethics is everywhere in the economic world, and the labor of CSR branding is to maneuver effectively in all those places.

Figure 1. Ethical Frameworks Spectrum (Brusseau 2012)



Step 2: Humanize a CSR profile with philosophical ethics

With the structure of a CSR identity constructed, compatibilities with philosophical theories can be enlisted to support and humanize branding efforts. Different corporate responsibility profiles will adhere to distinct philosophical theories, and there is not space here to cover every possibility. However, one concrete example can be outlined.

A libertarian marketplace ethics fits together with

- Rights theory and libertarianism
- Rational egoism
- Utilitarianism (under conceptions of economic growth shaped by the invisible hand)

Of that group, the rights theory direction may be the tightest fit. Assuming it is, the following values and hierarchies emerge. They may be explored individually:

- Individualism valued over collectivism
- Independence valued over belonging
- Dignity valued over compassion

Going through these hierarchies, we are attempting to indicate how concepts common in philosophy may cross over into branding efforts to provide authenticity that connects with consumers. These are concepts

companies can use to understand their authentic role in the world and subsequently project through branding efforts. As Ellen and co-investigators have empirically shown, consumers evaluate CSR efforts positively when driven by tangible and intrinsic corporate values as opposed to formulas seemingly adapted for economic or social convenience (Ellen et al., 2006).

Individualism valued over collectivism means general social welfare is conceived as generating from individual initiative. Flourishing individuals make successful communities. This opposes the conception of individual wellbeing as enabled by previously established welfare on the broad social level; it opposes the idea that successful communities open the way for flourishing individuals.

A good example is the iPad2: *Learn* commercial (Apple 2011). The spot affirms that the product is desirable not because it serves the general welfare, as, say, TOMS Shoes claims to do, but because it allows individuals to reach their potential. “You can master something new,” the narrative overlay relates, “or uncover a hidden talent.” These are things individuals can do on their own, and potentially do better with the iPad. Of course broad social benefits may exist further down the line – maybe artistic excellence that all enjoy, or a healthcare breakthrough facilitated by iPad technology – but those social benefits arrive only *because* individuals led the way on their own.

Independence valued over belonging means the independence of individuals and organizations conditions the acceptance of shared obligations, beliefs and customs. This opposes the idea that individuals and organizations belonging together in a community delineate the space allowed for independent action.

A good example is the E*Trade: *Solitary* commercial featuring a baby imprisoned in his crib, but still freely trading stock via a smuggled smartphone with an E*Trade app (E*Trade 2011). Not only is stock trading so easy a baby can do it, there is also the message that independence ought to be maintained in relating with others. We are free before anything else, and we find common ground with others only *after* marking the territory of our personal endeavors and aspirations. Because the idea of belonging to a community and its standards generates from independence, this outlook facilitates non-conformity. Stronger, it *begins* with non-conformity, and interaction with others only modifies that initial state. The contrasting and rejected ethical orientation - represented in the video by the faceless mom - is that maintaining relationships with others sets the boundaries for independent action: options for individuals exist within a pre-established network of belonging.

Dignity valued over compassion. What is most valuable about others is their dignity; compassion is first expressed as recognition of that dignity. Respect for individual autonomy maximizes, while charity and pity are minimized as patronization. This stands against the idea that the leading obligation to others is compassion, and dignity is first recognized in others as their inherent worthiness of aid and generosity.

A good example is the Ford: *No Bailout* commercial (loudobbsnation 2011). What is most valuable about Ford, the message goes, is the company’s dignity, its autonomy as expressed by refusing the infamous 2009 auto bailout. The rejection of the handout sets the carmaker apart from others and identifies the brand with consumers who share an ethical partiality for self-reliance. This ethics of self-reliance is very different from the general notion (which more or less everyone finds laudable).

When dignity and self-reliance are paired in ethical terms, accepting aid is not just a shortcoming; it is an *insult*, an offense against the idea of dignity itself. What makes the ad powerful is that it invokes this higher level dismissal of Ford’s rivals: they did not just come up short in the marketplace. They humiliated and debased themselves when they groveled for free money. The attack’s point was so sharp that, according to the *Detroit News*, rumors circulated of White House pressure on the company to pull the ad down (Hoft 2011). Regardless, the broader message is that true compassion for others is exhibited by engaging them in fair competition, not by offering or accepting charity, which is really shame, patronization disguised as generosity.

CONCLUSION

A major problem with CSR branding today begins when businesses locate an idea about responsibility that works well on the advertising front, and then promote themselves as participating in that vision even when their core culture and operation do not cohere with the values and purposes of the promoted ethics. The result is suspicion and accusations of greenwashing.

One response is to promote authenticity at the start of CSR branding. Instead of trying to be something they are not, businesses define what they are, and then explore ways the ethics of their role in society can be presented to strengthen brand identity. Philosophical ethics participates by providing concepts of how individuals relate to society that may in turn be adopted by businesses as a set of values that consumers understand as human and real, as opposed to conformist and adopted.

There are, finally, two implications here. First, CSR branding means actually thinking through and doing ethics, as opposed to simply accepting an idea about CSR that may have gained wide recognition and worked well for others. Second, the hardest work of CSR branding is not the creation of advertisements, it is discerning the values a business incarnates and then identifying the way those values connect with consumers *so that* they may be expressed compellingly. CSR branding, the moral is, should be less about forcing businesses to conform to established social and environmental obligations, and more about helping them define their own identifying role and purpose in the larger world.

REFERENCES

- Apple. (2011, September 3). iPad2: Learn. *Youtube.com*. Retrieved December 15, 2012 from: <http://www.youtube.com/watch?v=tjqSsScRCwQ>
- Bárceñas, A. (2008, June 4) El narcocorrido sólo refleja lo que pasa. *La Jornada*. Ciudad de México. Retrieved December 15, 2012 from: <http://www.jornada.unam.mx/2008/06/04/index.php?section=espectaculos&article=a52n1esp>
- Brown, C. (2011, August 9). Dear Photograph. *Dearphotograph.com*. Retrieved on December 15, 2012 from: <http://dearphotograph.com/post/8707833443/dear-photograph-how-i-long-for-the-days-of-make>
- Brusseau, J. (2012). Handbook of Ethical Theories Relating a Business with Society. *handbook.businessethicsworkshop.com* Retrieved December 15, 2012 from: <http://handbook.businessethicsworkshop.com/>.
- Carroll, A. (1991). The Pyramid of Corporate Social Responsibility: Toward the Moral Management of Organizational Stakeholders. *Business Horizons*, 34 (4): 39-48.
- Cheko01. (2007, June 7). Los Tucanes de Tijuana El Chapo Guzman. *YouTube.com*. Retrieved December 15, 2012 from: <http://www.youtube.com/watch?v=jGBsFme7rOw>
- Climatebrad. (2010, June 3). BP Tony Hayward 'Sorry' Ad Original Version Exclusive. *YouTube.com*. Retrieved December 15, 2012 from: http://www.youtube.com/watch?v=_AwD_7yNzKo
- Community. (2011). TOMS Shoes is a scam. *Facebook.com*. Retrieved December 15, 2012 from: <http://www.facebook.com/pages/TOMS-Shoes-is-a-Scam/129037330477368>
- Darke, P. & Ritchie, R. (2007). The Defensive Consumer: Advertising Deception, Defensive Processing, and Distrust. *Journal of Marketing Research*, 44 (1): 114-127.
- Dos Santos, M A. O. (2009). Achieving Sustainable Competitive Advantage through the Implementation of the Societal Marketing Concept by a Major Retailer in South Africa. *Journal of Global Business and Technology*, 5 (2): 47.
- Eabrasu, M. (2012). A Moral Pluralist Perspective on Corporate Social Responsibility: From: Good to Controversial Practices. *Journal of Business Ethics*, 110 (1): 429-439.
- E*Trade. (2011, October 13). E*Trade: Solitary. *Youtube.com*. Retrieved December 15, 2012 from: <http://www.youtube.com/watch?v=Fmw23Ad9aLM>
- Elkington, J. (1997). *Cannibals with forks: the triple bottom line of 21st century business*. Oxford: Capstone Publishing.

- Ellen, P., Webb, D., & Mohr, L. (2006). Building Corporate Associations: Consumer Attributions for Corporate Socially Responsible Programs. *Journal of the Academy of Marketing Science*, 34 (2): 147-57.
- European Commission. (2011, October 25). A renewed EU strategy 2011-14 for Corporate Social Responsibility. *Ec.europa.eu*. Retrieved December 15, 2012 from: http://ec.europa.eu/enterprise/policies/sustainable-business/files/csr/new-csr/act_en.pdf. Page 6
- Freeman, R. E. (1984). *Strategic Management: A stakeholder Approach*. Marshfield, MA: Pitman.
- Heidegger, M. (2008). *Being and Time*. New York, NY: Harper Perennial Modern Classics.
- Hernandez, D. (2010, August 16). Los Tucanes de Tijuana: Banned in their namesake border city. *Los Angeles Times*. Retrieved December 15, 2012 from: <http://latimesblogs.latimes.com/laplaza/2010/08/tijuana-tucanes-banda-narcocorridos.html>
- Ho, Y. and Huang, C. (2011). The Corruption-Economic Growth Nexus: Evidence from Four BRIC Countries Based on the Panel Data Approach. *Journal of Global Business and Technology*, 7 (2): 45.
- Hoft, J. (2011, September 27) Unreal. OBAMA WHITE HOUSE Leaned on Ford to Pull Its Bailout Ad. Gateway Pundit. Retrieved December 15, 2012 from: <http://www.thegatewaypundit.com/2011/09/unreal-obama-white-house-leaned-on-ford-to-pull-its-bailout-ad/>
- Ihlen, O, & Bartlett, J & May, S (eds). (2011). *The Handbook of Communication and Corporate Social Responsibility*. Oxford, UK: Wiley-Blackwell Publishing.
- Klein J. & Dawar N. (2004). Corporate social responsibility and consumers' attributions and brand evaluations in a product-harm crisis. *International Journal of Research in Marketing*, 21 (3): 203-217.
- Lafferty B. & Goldsmith R. (2005). Cause-brand alliances: Does the cause help the brand or does the brand help the cause? *Journal of Business Research*, 58 (4): 423-429.
- Liedtka, J. (2008). Strategy Making and the Search for Authenticity. *Journal of Business Ethics*, 80: 237-48.
- Lii, Y. & Lee M. (2012). Doing Right Leads to Doing Well: When the Type of CSR and Reputation Interact to Affect Consumer Evaluations of the Firm. *Journal of Business Ethics*, 105 (1): 69-81.
- loudobbsnation. (2011, September 30). Ford no bailout ad. *Youtube.com*. Retrieved December 15, 2012 from: <http://www.youtube.com/watch?v=xvQ--Y1A-CM>
- Ni, P. (2007, June 20). America's Least Philanthropic Companies. *Stanford Social Innovation Review/Blog*. Retrieved December 15, 2012 from: http://www.ssireview.org/blog/entry/the_least_philanthropic_companies.
- Polonsky, M & Carlson, L. et al. (1997). International environmental marketing claims: Real changes or simple posturing? *International Marketing Review*, 14 (4): 218-232.
- Richard, M. (2009, April 30). Green Fail. *Treehugger.com*. Retrieved December 15, 2012 from: <http://www.treehugger.com/cars/green-fail.html>
- Sabadoz, C. (2011). Between Profit-Seeking and Prosociality: Corporate Social Responsibility as Derridean Supplement. *Journal of Business Ethics*, 104 (1): 77-91.
- Securities and Exchange Commission. (2011, April 16). SEC Charges Goldman Sachs With Fraud in Structuring and Marketing of CDO Tied to Subprime Mortgages. *Sec.gov*. Retrieved December 15, 2012 from: <http://www.sec.gov/news/press/2010/2010-59.htm>
- Trilling, L. (1972). *Sincerity and Authenticity*. Harvard University Press.
- Underwood, B. (2011, March 3). TOMS Shoes – Enough is Enough. *Brentunderwood.com*. Retrieved December 15, 2012 from: <http://www.brentunderwood.com/?p=368>
- Vaughn, S. (1997, November 3). Firms Find Long-Term Rewards in Doing Good. *Los Angeles Times*. Retrieved December 15, 2012 from: <http://articles.latimes.com/1997/nov/03/business/fi-49856>
- Williamson, K. (2011, October 5). A Jobs Agenda. *Nationalreview.com*. Retrieved December 15, 2012 from: <http://www.nationalreview.com/corner/279321/jobs-agenda-kevin-d-williamson>

JOURNAL OF GLOBAL BUSINESS AND TECHNOLOGY

MANUSCRIPT TOPICS

Accounting; Advertising & Promotion Management; Business Education; Business Information Systems (MIS); Business Law, Public Responsibility & Ethics; Communication; E-Commerce; Economics; Finance & Investments; Global Business; Health Care Administration; Insurance; Labor Relations & Human Resource Mgt.; Marketing Research; Marketing Theory & Applications; Non-Profit Organizations; Office Administration/Management; Operations Research/Statistics; Organizational Behavior & Theory; Organizational Development; Production/Operations; Public Administration; Purchasing/Materials Management; Risk; Sales/Selling; Services; Small Business Entrepreneurship; Strategic Management Policy; Taxation; Technology Innovation; Technology/Innovation; Total Quality Management; Tourism, Hospitality and Leisure; Transportation/Physical Distribution.

MANUSCRIPT GUIDELINES/COMMENTS:

Purpose of the Journal

As an interdisciplinary journal, the purpose of the *Journal of Global Business and Technology* is to contribute to the advancement of knowledge related to the theory and practice of international business and technology. Its primary goal is to present scholarly and managerially relevant articles on a wide variety of topics in international business and technology to a broad audience in academia (educators, administrators, students), industry (business executives, consultants), as well as those involved in formulating and implementing public policy. Articles should be timely, providing guidelines, techniques, and suggestions for problem solving in international business and technology management. Case studies relating to specific organizations, products/services, and industries are also welcome. It is a prime objective of *JGBAT* to bridge the gap between theory and practice. To this end, articles should offer strong managerial insights to help in the development of action-oriented business programs and strategies.

Style and Submission Guidelines to Authors

1. Submissions must be made electronically with a cover letter indicating that the manuscript is not currently being considered at another publication in addition to one-page managerially oriented executive summary. Send submissions to:

Dr. Nejdett Delener
Editor-in -Chief
Journal of Global Business and Technology
E-mail: info@gbata.org; delener@gbata.org

Submission of a paper will be held to imply that it contains original unpublished work and is not being submitted for publication elsewhere. The Editor-in-Chief does not accept responsibility for loss of papers submitted. Upon acceptance of an article author(s) will be asked to transfer copyright of the article to the publisher. This transfer will ensure the widest possible dissemination of information.

2. A cover letter must accompany each submission indicating the name, address, telephone number, fax number and e-mail of the corresponding author.
3. Manuscripts should be double-spaced with wide margins. All pages should be numbered sequentially.
4. Manuscripts should have a cover page with the author's name(s), contain affiliation, and the area of concentration (i.e., accounting, marketing, etc.). No other pages should contain information about the author(s). An abstract of 150 words or less, including five key words, should appear on the second page. The paper itself should begin on the third page. Manuscripts should not exceed 25 double-spaced, typewritten pages, including tables, figures, and references. Manuscripts that exceed these limits are routinely returned to the author(s) for shortening before consideration.
5. Tabular material and figure legend should be in box-form and incorporated in the proper part of the text. They should also be contained in the word processor file in MS Word, and cannot be hand drawn. Tables should be numbered in Arabic numbers (i.e., Table 1). Columns should be set using tab stops, not spaces, so they align. Figures are numbered similarly to tables (i.e., Figure 1).
6. References should be made by the in-text form of citation. The reference list should include information for all sources cited in the manuscript. The author should make sure that there is a strict one-to-one correspondence between the references in the text and those on the list. It should be double spaced and listed in alphabetical order according to APA style by author's last name, but including first name initial, on a separate sheet at the end of the manuscript.

The following are examples of proper form:

Journal Article

Muhlbacher, J., Nettekowen, M., & Putnova, A. (2009). Competence Development in the Czech Republic. *Journal of Global Business and Technology*, 5 (2): 15-27.

Authored Book

Delener, N. (1999). *Strategic Planning and Multinational Trading Blocs*. Connecticut, USA: Quorum Books.

Edited Book

Delener, N. (Ed.) (2012). *Service Science Research, Strategy, and Innovation: Dynamic Knowledge Management Methods*, U.S.A. IGI Global.

Chapters in Edited Book

Delener, N. & Lees, F. (2001). Global Planning of Business Activity. In Milner, M. & Lees, F. (Eds.), *Management of the Modern Company*, Moscow, Russia: 366 – 378.

Paper Presented at ...

Sturma, P. (2009). Global Challenges and International Law. Paper presented at Global Business and Technology Association's Eleventh Annual Conference, Prague, Czech Republic, July.

Published Proceedings

Florinda, M., Rodrigues, S., Lopes, A., & Matos, N. (2011). Intellectual Capital Tool. In Delener, N., Fuxman, L., Lu, V. & Rivera-Solis, L.E. (Eds). *Fulfilling the Worldwide Sustainability Challenge: Strategies, Innovations, and Perspectives for Forward Momentum in Turbulent Times* (pp. 615-621). USA: GBATA Press.

Instance of Publication in press

Afriyie, K., Torres-Baumgarten, G. & Yucetepe, V. (in press). Internationalization and Value-Creation Performance of Latin American Multinationals: The Case of Outbound Foreign Direct Investment. *Journal of Global Business and Technology*.

Article in an Internet-Only Journal

Fredrickson, B. L. (2000, March 7). Cultivating positive emotions to optimize health and well-being. *Prevention & Treatment*, 3, Article 0001a. Retrieved November 20, 2000, from <http://journals.apa.org/prevention/volume3/pre0030001a.html>

7. Sections of the paper such as INTRODUCTION should be flush in all capital letters with one extra line space between section head and text. Subheads should be in upper and lower case letters, flush with one extra line spacing above and no extra line spacing below subhead. For subheads below the first level subhead, indent one tab for second subhead.

8. The text should appeal to a wide audience by avoiding the use of methodological/technical jargon wherever possible. It may be more appropriate to include technical details in an appendix rather than in the body of the article.

9. Every effort should be made to avoid the use of specific national names of organizations and/or individuals which might be unfamiliar to the international audience of *JGBAT*. Authors may need to provide brief explanations in a footnote or an appendix.

10. Acknowledgements and information on grants received can be given before the References.

11. Explanatory footnotes should be kept to a minimum and be numbered sequentially throughout the text with superscript Arabic numerals. They should be double-spaced and not include displayed formulae or tables.

12. All spelling, grammar, and punctuation are the responsibility of the author(s). No corrections will be made by the Journal Editors. Therefore, all articles must be edited prior to submission.

Refereeing Procedure

Each manuscript is reviewed by at least three referees, as well as an Editor-in-Chief.

The Editor-in-Chief reserves the right to refuse any manuscripts, whether an invitation or otherwise, and to make suggestions and/or modifications before publication. The refereeing process takes up to three months from date of receipt of the article to communication to the author. The revised manuscript will be reviewed by one of the original referees.

The Editor-in-Chief is always happy to discuss contributions before submission.



Corporate, Institution, & Library Subscription Information

Name _____

Institution _____

Address _____

City, State, Zip

Country _____

Annual Fee US \$ 245.00

Please indicate when you want subscription to begin:

☐ Spring 201__ ☐ Fall 201__

Please complete the subscription form as well as the credit card particulars and e-mail to the Editor-in-Chief at info@gbata.org

* For subscriptions, please do not remove this page. A **photo copy** would be appreciated.



Individual Subscription Information

Name _____

Institution _____

Address _____

City, State, Zip

Country _____

Annual Fee US \$ 150.00

Please indicate when you want subscription to begin:

☐ Spring 201__ ☐ Fall 201__

* Please complete the subscription form as well as the credit card particulars and e-mail to the Editor-in-Chief at info@gbata.org

* For subscriptions, please do not remove this page. A **photo copy** would be appreciated.