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Preface

The 8th Knowledge Globalization Conference was held in Istanbul, Turkey on May 8-9, 2013. The Conference was hosted by Bogazici University, Istanbul. The conference was attended by scholars, members of the business community, and students from many countries.

A total of 56 papers were accepted for presentation in seven tracks covering innovation issues in the areas of environment, culture, globalization, technology, education, agriculture, leadership and management processes. Among these 38 papers were presented at the conference. The presenters included experienced researchers, young scholars and PhD students from 14 countries. The mix of people and representation of countries make our efforts worthwhile.

The quality of the papers and the level of participation were of high standards. Prof. Mohamamd Ismail Gomaa of Alexandria University,-Egypt and Ekran Erdil, from Middle East Technical University, Turkey delivered the keynote speeches. The conference also offered four plenary sessions presented by academic and business people.

This Proceedings Edition includes many of the conference papers. As such, it offers a wide window into the current global scholarship and the continuing dialogue concerning innovations in the areas of social, cultural, economic and business trends and thus offers an opportunity for cross-cultural exchanges and increased global understanding. We thank the conference presenters and participants for their insightful contributions. It brought scholars from developed countries and developing countries under one roof. For example, scholars from Iran, USA, Kazakhstan, and Malaysia debated and discussed their papers face to face without any barriers of politics or geography.

We thank Dr. Emine Nur of Bogazici University for hosting the conference and Dean William O'Neill for his continued support to the knowledge globalization efforts. We also thank the faculty and staff of Suffolk University and Bogazici University who contributed in many ways from the topics development to the presentation process of the conference.

A very special thanks are due to Dr. Nargis Mahmud, who in spite of her arduous responsibilities as the Executive Vice-President of Knowledge Globalization Institute has taken the burden of editing and publishing this proceedings.

On behalf of the editorial Board

Mawdudur Rahman
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Abstract

The world is continuing to change, with increasing collision, connection, and integration amongst various ideologies and cultures. In such a world, led by increasing globalization, it may be desirable for productive and successful countries to have a positive effect on the global society. However, it may be beneficial to have a policy community inside and outside the country in order to have a positive effect. Recently, the policy literature has placed emphasis on policy communities and networks. To develop policies, governments require information from non-governmental sources. Additionally, the ease of implementing policies in a sector increases as the interests and organizations of that sector become more coherent. Thus, the recent emphasis on policy communities and networks is a result of their perceived role in policy development and implementation. This role also extends to a global context, where the communities and networks may exist outside of the country in which a policy is being developed or implemented. However, the main influence that the policy communities and networks have on government may be only through generating, discussing ideas, and promoting these ideas to various groups. They may not actually engage in any decision making, and some have argued that interest groups within the government actively work to limit any participation in decision making from non-governmental organizations and individuals. However recent trends in policy community management show such as public consultation, citizen engagement, and horizontal management are working against these limitations. In this paper, we will discuss two contrasting approaches to policy communities and networks: taken by Iran and Canada. In addition, we will examine how these countries could engage in policy borrowing to improve their effects on the global society.

Introduction

In a world led by increasing globalization it may be desirable for productive and successful countries to have a positive effect on the global society. In other words, a country should be an integrated member of the global society. This integration requires successful governance at home as well as proper communication and cooperation with other countries.

One of the primary ways in which governments act is through policy. Recently, the policy literature has placed emphasis on policy communities and policy networks (Atkinson & Coleman, 1992; Marin & Mayntz, 1991). This is due to their perceived role in policy development and implementation (Pal, 2010). When developing policies, governments require information from external or non-governmental sources. When implementing policies in some area, the implementation becomes easier when there is a greater understanding of the needs, interests, and capacities of the people in that area. Yet, the biggest role of policy communities and networks may be simply through generating, discussing, and promoting ideas. In this role, the community or network need not be local but could be part of a larger global group or be located in a separate country. In other words, when policy communities and networks are seen for the role they play in public discourse, it is possible to look at the larger picture of how other members of the global society influence a single country just as one can look at how the government can affect its own country and others.

The goal of this paper then is to understand the approaches taken by researchers and practitioners towards creating and improving policy communities and networks. Specifically, we will compare and contrast the approaches taken by two countries – Canada and Iran – in the context of education. In the section that follows, we will discuss the main background ideas from the literature. Afterward, we will provide a comparison of the two countries, first with a brief discussion of Canada, followed by one for Iran, and ending with a comparison of the two. The fourth section of this paper will be a general discussion of how a country could improve itself, using policy borrowing as an example. Lastly, we will end with a summary of this paper.

Literature Review

In this section, we will briefly mention some background topics from the research literature. These topics include: policy communities and networks, vertical and horizontal management, and public policy discourse.

Policy Communities and Networks

The terms “policy community” and “policy network” are often used interchangeably in the literature. However, Pal (2010) makes a distinction between the two. Historically, the literature with a Marxist lens has focused on differences in social class and the affect these differences have on the influence of policies communities. The literature with a non-Marxist lens has instead focused on interest group pluralism (Baumgartner & Leech, 1998), and then has led to developments in associational systems, policy patterns, and other theories of policies communities (Pal, 2010). With respect to policy networks, work has been done to categorize them (Atkinson & Coleman, 1989) and to identify their primary features (Van Waarden, 1992). Below, policy communities and networks will be discussed in more detail.

Policy Community

Pal (2010) has defined policy community as a broad set of actors with an interest in some policy area and who have an understanding of the terminology and previous ideas of that area. This definition is similar to that of Coleman and Skogstad (1990), who defined it as the set of actors, public and private, who coalesce around some issue and share a common interest in shaping its development. In other words, a policy community is a community of people that is specific to an area in which one or more policies will be developed. It is this community that shares an interest in the area and in the development of policies that suit their understanding, needs, and desires for that chosen area. While a community is often focused on a single area or issue, there may be multiple communities for the same topic.

For example, the topic of education may have multiple policy communities. Teachers and school administrators could be participants of a policy community, with the goal of encouraging policies that match their day-to-day experiences of teaching. This community would be opposed to policies that, from experience, they know will not work or will have marginal benefit. However, parents or other members of the wider local community may be in a separate policy community. They would be providing support and discussion on education from their perspective, with a desire to see excellent education for their children. The parental policy community may be in agreement with the teacher policy community, or they may disagree on specific points. Both communities though want to see governmental policies that improve the quality of education.

An early work by Pross (1986) sub-divided policy communities into two parts: the attentive public, and the sub-government. The attentive public refers to those individuals in the country that continue to watch and follow policy developments in their area of interest. The sub-government refers to those individuals that actively engage in policy design and implementation. This division seems more relevant in the context of Pross' other arguments regarding the function of policy communities. For Pross, the attentive public does not engage in any decision-making that occurs within the government (1995). Their main influence is instead to generate, discuss, and promote ideas to other policy communities or to the government. That the public is limited in their actual engagement is a result of intra-governmental groups who actively work to limit public discourse, an example of which is the sub-government policy community. In a way, a policy community can be used by the government both for ideas and to prevent others outside that community from discussing government policy.

While Pross' view of policy communities may remain true in many parts of the world, recent trends in policy community management have provided ways in which the attentive public can become part of the decision-making process (Pal, 2010). Some of these ideas, such as public consultation and citizen engagement, will be discussed in more detail later in the Literature section.

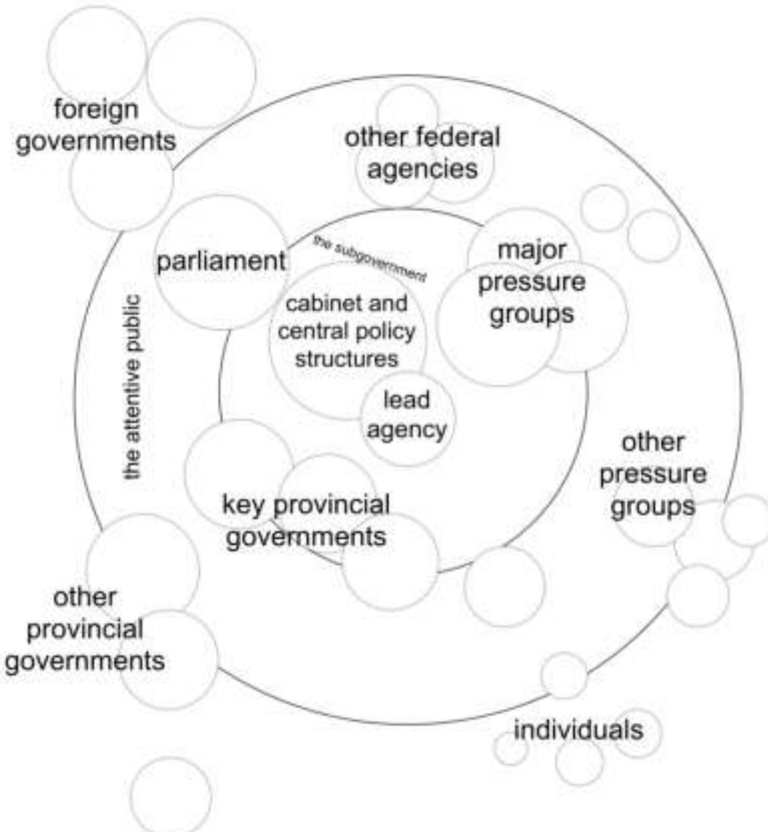


Figure 1. **A bubble diagram of the influence of policy communities, adapted from Pross (1995, p. 267).**

Policy Network

In contrast to policy communities, policy network has a more narrow focus. Pal (2010) defines it as those actors within a policy community that interact with each other and who have a greater amount of interest. The concept of a policy network captures the structural or power relationships that exist with and between members of the sub-government policy community (Coleman and Skogstad 1990). These are more-or-less two different ways of conceptualizing policy networks. In one case, a network is the interpersonal relationships between the actors. In the other, the network refers to the structural linkages between corporate public and private actors. For both of these cases, analysis of a policy network is done in multiple ways, including qualitative maps, and rational, institutional, and constructivist approaches to human behavior (Pal, 2010). Despite both understandings of a policy network being valid, the structural view is the one dominant among political scientists and public policy analysts.

The interaction that occurs between policy networks and those individuals in government who actually make policy can be understood in terms of a partnership. Partnership refers to the degree of equality or shared responsibility that occurs between individuals within the two groups (Kernaghan, 1993). As part of the decision-making and implementation process with a policy, consultation occurs in which these partnerships play a dominant role. By analyzing the partnership, it is possible to determine the degree to which those outside the government can influence policy and the form this influence takes. For instance, low equality suggests the government engages in consultation for reasons of bureaucracy or image rather than for actual consideration of the others' opinions. However, low equality can also mean that others within the policy network completely dominate and essentially dictate the policy that will ultimately be developed by the government. A higher amount of equality means a balance between these two extremes, in which individuals inside and outside the government can play a role in developing policy without dominating the process. While cooperation can occur, it is more common that strategic actors in policy networks seek to maximize the interests of those they represent (Skogstad, 2005). As such, conflict between groups within a policy network is more common than cooperation.

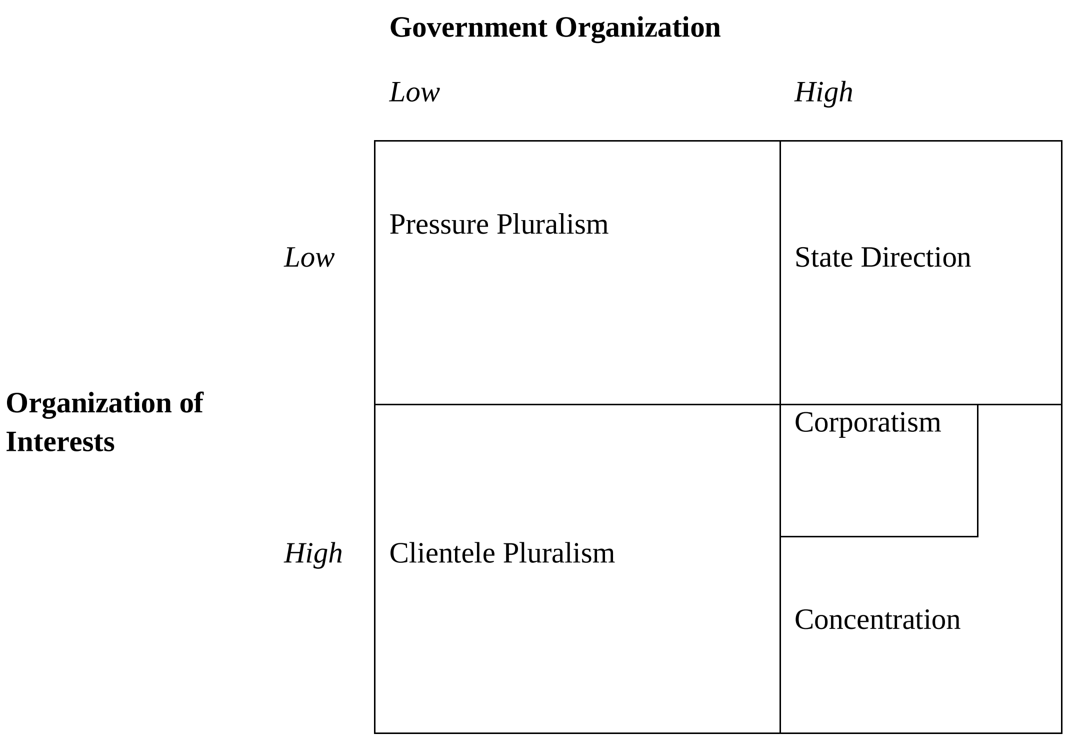
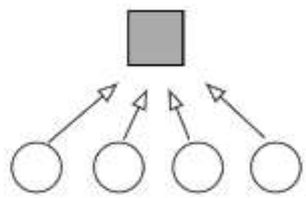
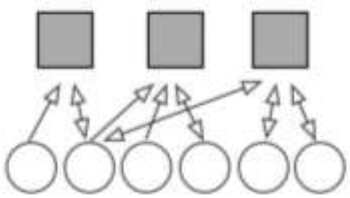
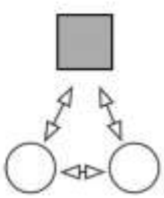
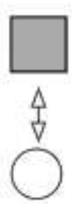
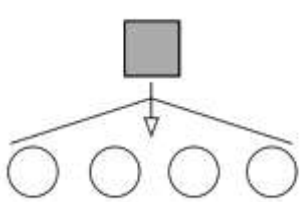


Figure 2. Comparison Of Policy Network Categories, Adapted From Lindquist (1992).

Table 1. Various types of policy networks (from Pal, 1992, p. 112).

Type	**Characteristics**
Pressure Pluralist Network 	State agency is autonomous: associational system is dispersed and weak. Many groups compete for state agency's attention. Groups advocate policies rather than participate in policy-making.
Clientele Pluralist Network 	State agencies are both weak and dispersed, as are associational system. Agencies rely on associations for information and support and allow them to participate in policy-making.
Corporatist Network 	State agency is strong and autonomous; associational system comprises a few large and powerful groups, usually representing consumer and producer interests. Groups and agency both participate in policy formulation and implementation.
Concertation Network 	State agency is strong and autonomous; associational system is dominated by one organization that represents it. Agency and organization are equal partners in long-term planning and policy-making.
State-Directed Network 	State agency is strong and autonomous; associational system is weak and dispersed. State dominates policy sector and associational system.

The concept of policy communities and networks has been applied to the context of educational policies, one of the popular theories being Actor-Network Theory (ANT). In ANT, a network is used as a metaphor to understand the flow of ideas and practices so as to aid in standardization and reaching consensus (Frankham, 2006). ANT is also useful in analyzing the way in which power is used to create cultural, social, and economic capital (Edwards, 2002). Lastly, Rizvi (2009) argues that ANT is especially useful in a global context, to understand how conflicting values, such as market economies and social justice, continually influence one another and the results of such influence on new values.

Management Structures

While still remaining within the context of governmental policy, a discussion on management can be quite valuable. Research in management has highlighted two main structural forms: vertical and horizontal. These forms apply not just to the governmental structure itself, but also to the structure of policy communities and networks as well as the form which dialogue between these groups occurs. As such, changing the structure can affect the equality between these groups and the dynamic that occurs when they engage with each other.

Vertical Structure

A “vertical” or hierarchal management structure is one that contains multiple distinct levels of management. There is an individual at the top of the structure, senior managers below him, other managers below them, and so on until the structure reaches the bottom or the lowest employee level. If a vertical management structure has many layers, it is often referred to as a “tall” organization (Daft, 2008). A “short” organization can still have a vertical management structure, but it just has few levels of management.

In such a structure, decision-making occurs at the upper levels and is passed down through the hierarchy. Each manager is responsible for ensuring compliance from the people below him, and is also responsible for sending feedback to his supervisor. Successful implementation is therefore dependent on the competency of multiple levels of individuals. In addition, feedback can only reach higher levels of the structure if the intervening members pass it upward. This has a tendency of hampering or restricting communication between levels, disconnecting the people in the hierarchy and making collaboration or sharing of ideas difficult (Daft, 2008). Monitoring and reporting are common tools for evaluating the implementation of decisions. Vertical structures are often effective at determining what people are doing, provided such information is effectively communicated.

Horizontal Structure

In contrast to vertical management, a horizontal management structure is one in which there is little in the way of a hierarchy. Such a structure lacks the middle management section of the vertical management, whereby a large group of employees often report to just one manager who then may report to the top of the structure (Daft, 2008). This type of structure is also referred to as a “flat” management structure.

Without the additional layers of management, these roles are placed upon all participants themselves. As such, members of a horizontal management are empowered to make their own decisions regarding specific issues and to only consult with the higher levels for larger problems (Daft, 2008). In other words, the lowest level of the horizontal structure is both an employee and a manager of his own work. Constant meetings, discussions, or collaborations do not occur. Instead, members collaborate and discuss issues as necessary, creating a more organic system of discourse, decision making, and problem solving. The consequence is a team-based approach to produce results that require combined efforts, and could not result from individuals working in isolation (Bakvis & Juillet, 2004). Similarly, communication tends to be more open and fluid among members of the structure, and the communication problems of a vertical structure rarely occur.

Citizen Engagement

The idea of engaging population in discussion of policies is the purpose of policy communities and network, and ideally these discussions would involve the general public. General dialogue between government stakeholders and interest groups is one form of engaging the public, and this is has typically been called public consultation. However, the focus has shifted to what is now referred to as citizen engagement partially due to a greater desire to see ordinary citizens active in policy discourse (Pal, 2010).

Citizen engagement recognizes citizens as stakeholders, and works to directly involve them in the discussion through means more representative than specific interest groups. The process of citizen engagement is meant to consider policy directions, address conflicts of value between various stake holders, and build common ground between conflicting interests (Privy Council Office, 2000). The best time, then, to encourage deliberation and reflection with the public is in the early stages of the policy process. It is at this stage that the focus is typically on the values and principles that will frame the manner in which an issue is considered. The greatest opposition to citizen engagement often comes from the government ministers and officials who dislike power sharing or who see the process as too expensive (Curtain, 2003). As such, the greatest obstacle from implementing citizen engagement is often from within the government itself rather than from a lack of interest on the part of the public.

Discussion

In this section, we will briefly examine and compare Canada and Iran in terms of their policy communities and networks. In a global context, many societies differ in terms of their culture, governmental structures, and the capacity of the general citizens to engage in policy discourse. Both Canada and Iran are multicultural, multinational, and multilingual countries. Although there are dominant groups within both countries, there remain large minorities that are still influential. Similarly, both countries cover wide geographic ranges, such that a diversity of industries is possible. Both countries use Oil as a major commodity, though Iran is currently more reliant on it than Canada. Despite this similarly though, the social and economic issues of both countries are different. Iran is heavily concerned with its economic situation, due to trade sanctions from other countries, while Canada is more concerned with difficulty in growing its economic due to poor diversity of trade partners and limited manpower. At a detailed level then, the two countries differ quite a bit, but at a broader level there is sufficient similarity that an interesting and worthwhile comparison can be performed.

Education is an important issue for both countries, and a similar corresponding management structure is used. In both Canada and Iran, the management structure for education is a vertical type (see Figure 3). This is true for both the government sphere and the wider education administration. As such, educational policies development by the government can be easily applied through a top-down approach. Similarly, decision making takes a top-down approach typical of vertical structures. However, these decisions are more centralized in Iran than in Canada.

In Canada, decision making is typically divided between the school boards and the provincial government, levels lower than the central government of the country. The role of the central government is to coordinate the other levels below it, and to ensure there is agreement and consistency between the provinces. Even within a province, the provincial government's role is often to work with school boards to achieve consistency rather than dictate policy, though it the provincial government that creates the education curriculum and its corresponding standards. This is not the case in Iran. Whereas decision making and power is distributed among multiple levels in Canada, most of the decision making and power is held at the highest level in Iran. The decision making is performed almost entirely by the central government, with lower levels only making decisions about how to implement the policy. Little in the way of variation or regional affordances occur within the education structure of Iran, which results in a more rigid system that is resistant to change.

Similarly, feedback and suggestions are not easily incorporated into Iranian structure. Suggestions or comments regarding the state of the education system rarely make it to the upper levels of management. In other words, the education management structure of Iran is suffering from a communication problem typical of vertical management structures. This also occurs in

Canada, though to a lesser degree due to a greater amount of power sharing. Additionally, and most importantly, Canada has provided mechanisms for feedback from the lowest levels of the structure – teachers, students, and parents. The process used by the provincial government to develop policies is an iterative one, and part of the process is to review feedback and performance results. As a result, Canada is incorporating aspects of a horizontal management structure into its policy development process, something that is not being done in Iran. This difference is larger when we consider the policy communities and networks in both countries.

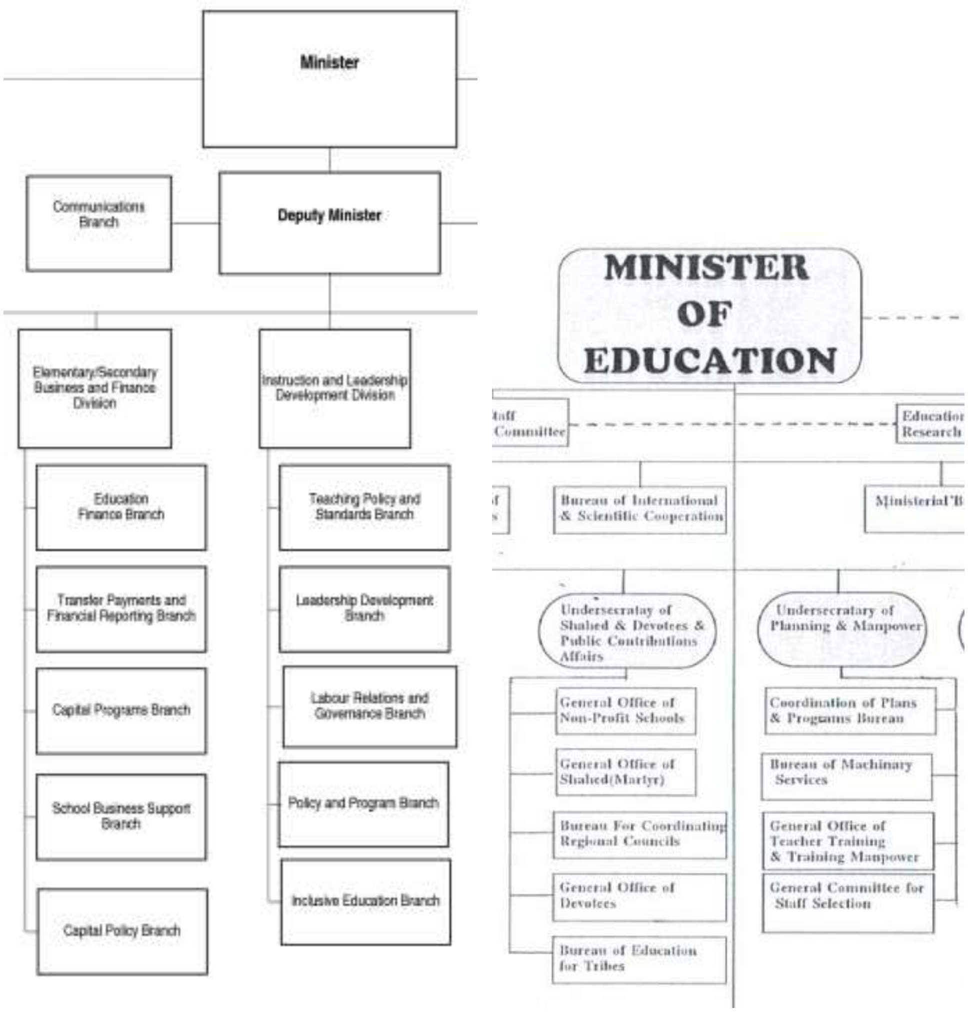


Figure 3. A portion of the education management structure of Canada (left, see Ontario Ministry of Education (2012)) and Iran (right, see UNESCO (2002)).

In summarizing previous literature on policy communities and networks in Canada, Skogstad (2005) points out that Canadian scholars are aware of the broader structure of their research. In other words, Canadian research into policy communities and networks considers a wide range of actors and institutions. While similar research could be done for Iran, Iranian academics and administrative groups either ignore or give little attention to policy networks and do not consider it sufficiently important for research (Rannei, aghihi, & Mortazavi, 2010). This results in the rather unfortunate situation of Iran ignoring research in policy networks, while also operating in a manner that limits the positive growth of policy communities or networks. If we consider Figure 2, Iran fits most clearly into the State Direction category whereas Canada fits more into the Concertation or Corporatism category. However, if one considers the circumstances, this is more understandable. The Iranian government has numerous enemies, both inside the country and especially outside it, and thus it is possible that they are unlikely to allow the growth of such communities for fear of attack. This fear is warranted, but unfortunately creates other social problems and limits citizen participation.

While the majority of the citizenry of Canada may not participate in policy discourse, at least Canada is working to improve their policy communities and increase awareness of the role of policy networks. While some academics, such as Rhodes (1997), suggests that policy networks are important for implementing policies but not developing them others, such as Skogstad (2005) suggest that these networks do play an important role in policy development provided that their agency is considered.

Developing Policies in a Global Society

In developing new educational policies, there is a long and at times controversial history of comparing existing policies of various countries (Zymek & Zymek, 2004). Policy-makers are interested in developing the best policy, and can therefore engage in examining other experiences or other policies so as to find the best policy. For developing the best education policy, in light of the topics and examples discussed above, a three-step process will be mentioned. First, policy-makers can engage in policy borrowing, so as to find an appropriate policy. Second, policy-makers engage in policy learning, so as to extract the best aspects of the chosen policy rather than merely develop a copy. Lastly, policy-makers should engage in policy dialogue to create a policy that not only uses ideas from the learned policy, but also is appropriate for their country and takes into account local differences. These three steps will be examined in more detail below, followed by an example.

Policy Borrowing

There is a continuum of ways in which existing policies can be transferred from one country to another. This continuum ranges from existing policies being imposed on another body, referred to as ‘policy lending’, to another body voluntarily looking for and accepting existing policies, referred to as ‘policy borrowing’ (see Ochs & Philips, 2004). In this sense, policy-makers can examine the experiences of other countries, determine the best approach out of these experiences, and 'borrow' that approach for use in their own country.

Examining other experiences, for transfer or mere curiosity, was practiced before globalization became a serious topic of study (Steiner-Khamsi, 2012). However, globalization has led to more detailed and extensive policy borrowing, both from a practical and theoretical perspective. This is especially true for education policies, where the language of globalization allows policies to be examined in a de-territorialized and de-contextualized form, aiding in their application to educational reform independent of the source or target (Steiner-Khamsi, 2004).

Comparing one's own educational policy to those of other countries can be beneficial for discussion and analysis, and can provide insight into how a better policy may be developed (Phillips, 1989). However, policy borrowing can be used as a way of merely adopting some other policy because of its benefits without proper analysis of the new policy (see Steiner-Khamsi, 2004). In other words, policy-makers look for the 'best practices' somewhere and copy them without much consideration for their applicability or appropriateness (Chakroun, 2010). In general, policy borrowing is very important for education. There is a wealth of relevant literature that could be examined. For brevity, however, it is not discussed further here. See the note on policy borrowing in the appendix for more information.

Policy borrowing is not simply copying a policy. In fact, policy borrowing is a process that requires the consideration of a number of different steps. Figure A1 depicts a model of policy borrowing in education from Phillips & Ochs (2003). This model accounts for the *process of policy borrowing*. Furthermore, each step of the process is equally important in determining the success of the outcome. The composite model incorporates an analysis of the impulses which initiate cross-national attraction; it then moves through the processes of decision-making, implementation and internationalization (or indigenization or domestication) which follow logically from any purposive attempt to borrow policy. For further information see Phillips & Ochs (2003).

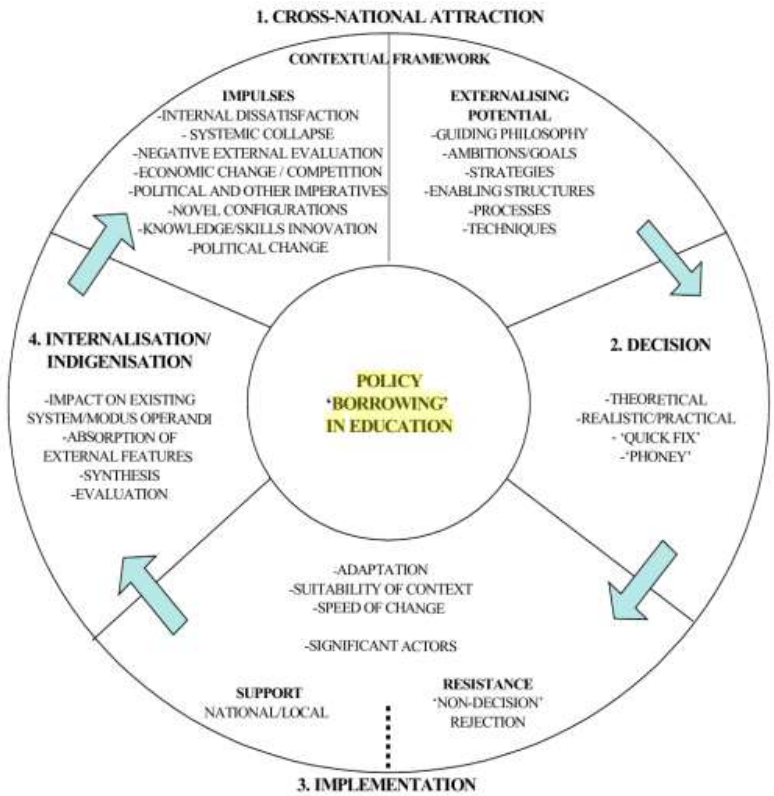


Figure 4: Policy borrowing in education as a composite process, adapted from Phillips and Ochs (2003).

Policy Learning

In contrast to policy borrowing, policy learning emphasizes the analysis of policies for use in a variety of contexts (Raffe, 2011). These contexts could include understanding one's own policies, identifying potential issues with new and existing policies, and clarifying alternative strategies. Policies could also be analyzed to determine what aspects of them are appropriate for the policy-makers' context (Chakroun, 2010). Policy learning is thus the second step, in that borrowed policies can be better applied to new contexts and the policy process itself can be improved.

Policy Dialogue

Even when policy learning is performed there needs to be some outcome in the form of new policies. Policies can be developed in a manner similar to globalization from above, where a central group decides on the best policy and does not consider the needs of other interest groups or specific localities. However, policy-makers can also act in a manner similar to globalization from below, a method more commonly known as policy dialogue.

Policy dialogues are discussions about policy issues, regardless of whether such discussions occur in person, through documents, or through online exchanges (Davies, McCallie, Simonsson, Lehr, & Duensing, 2009; Winton & Pollock, 2009). These discussions do not just involve policy-makers, but allow policy-makers to engage with citizens or specific policy stakeholders. For education policies, policy dialogues offer a space for student, teacher, parent, and community stories to be shared (Winton, 2010). Students, teachers, and parents are thus involved with policy-makers in analyzing education policies and providing suggestions for how they could be improved. Research suggests that policy dialogues are effective in gathering public opinion and support, and that citizens are quite capable of being involved in such dialogues (Delli Carpini, Cook, & Jacobs, 2004; Hart & Livingstone, 2009).

In a democratic society, where citizens are engaged in the functioning of the government, public policy needs to be critically examined by the citizens (Solomon & Portelli, 2001). However, the real potential of policy dialogue occurs when there is a diversity of individuals participating and that all interested and motivated participants are capable of participating (Winton, 2010). Unfortunately, it is far more common that individuals with higher education, better income, and better understanding of politics are the only ones involved, regardless of the interest or motivation of other people (Levine, Fung, & Gastil, 2005; Young, Levin, & Wallin, 2008). Thus, while a government should encourage more participation in policy dialogues, simply creating the opportunity or space for them to occur is insufficient.

Conclusion

This paper has briefly compared Canada and Iran in terms of the education policy structure, communities, and networks. This comparison, although interesting in its own right, is valuable when recognizing that many countries can be compared in a similar way. However, simply comparing countries yields little benefit unless there is also a desire to improve, both within the country and in terms of its external connections with other countries. The needs, desires, and expectations of a country’s citizens continue to challenge the capacity of their government, leading to the need for improvement. Improvement can arise as a result of policy borrowing and the related processes, as was discussed in the previous section. For instance, countries such as Iran could engage in policy borrowing and learning so as to develop policies that increase the distribution of power, changing management structures to become more horizontal than vertical.

Such management changes are especially importance. Increasing trends in globalization, whereby a country and its citizens are more heavily interconnected with other countries than ever before, is necessitating the change of management structures, attitudes, and thinking styles in the public sector. Similarly, rapid changes in population composition, diversity, and multiplicity as well as increasing technological advances are creating new challenges to which a typical or bureaucratic management structure cannot respond (Reinicke et al., 2000).

Combining these changes with a decreasing confidence in traditional institutions and government bodies means that purely vertical structures and isolation of the citizenry from public policy decisions are no longer effective means of governance. Gradually, the number and organization of actors and stakeholders in different policy fields have been increasing, to the point where the border between government and non-government sectors is becoming increasingly blurred (Reinicke et al., 2000). As the public access to information continues to spread, public policy-making systems will need to change to accommodate an increasing knowledgeable and aware, though not necessarily interested, citizenry.

For countries in which government groups experience difficulty engaging with policy communities, an increasingly horizontal management structure is needed. However, the citizen may still need to be educated, not only in literacy but in the ability to engage in problem solving and critical thought, so as to become capable of working with government policy makers. In addition, the willingness to be active participants and be interested in the policy process also must be developed, or else the citizenry will remain detached and unsupportive. Unless government groups become willing to change their management structures and policy processes, they will not be able to address the rapidly changing social landscape of their country and be unable to re-engage with an increasing mobilized and distrustful public.

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Media Entrepreneurship Policy: Transition of Developing Economies towards the Global Knowledge Economy by Promoting Digital Media Enterprises

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Abstract

The paper highlights the dimensions of digital media entrepreneurship which enable transition toward the global knowledge economy by facilitating the access and circulation of high-tech knowledge inside the societies. Based on fast growing nature of industry, this allows the individuals possibility to adapt with the global knowledge. This share in knowledge creation and implementation is with regard to the fact that there is difference among countries and economics in the Globalization and thus any of them have different potentials and abilities and relatively play different role in the Globalization process. By developing a framework from three models previously suggested for media entrepreneurship and media policy, Paper contributed to new approach in media policy research, by logic of up to bottom as the nature of policy rely on. In this framework the media governance set policy by funding, regulating, owning and other advances to improve media environment a more suitable for entrepreneurial activities. This is possible by presence of the facilitators such as financial, technical, business solutions, venture capital and so on to offer supporting services to small enterprises. Suitable media environment, results the media enterprises to grow and foster digital innovations in turn. The final output of such process is to development of entrepreneurship on the digital media platform which enables the transition of the economy toward global knowledge. The proposed model may used as a foundation for further researches in the media entrepreneurship policy.

Keywords: *Global knowledge economy, Media Entrepreneurship, Innovation Policy, Digital media industry, developing economies.*

Introduction

New Emergent Niche Markets which are the products of advances in digital technologies are the wining card for entrepreneurs in their competition to get market share in the market. Before the technological advances, in media markets large companies ignore small market segments, because many of them were too small to be able to invest and act in such expensive industry. Digital Media platform has changed the circumstance, because production cost has reduced and by this low cost of media activity, many of those niche markets become profitable. Now media entrepreneurs, who according to their nature use resources efficiently and have not major sunk costs, are able to cover niche markets, even as dominant player, not a rival, because in many of them there is no competition at all. This new characteristics for media market, made it very important sector for developing countries to use it as a locomotive for injection of innovation and moving the economy ahead with the power of small sections and individual resources. Global knowledge is disseminating by the products of these media entrepreneurs which by their efforts increase the access and reach of people to the knowledge and by its fast growing technology lesser the gap among them and developed ones. Thus this seems valuable to by considering media entrepreneurship as a relative low-capital and high-tech industry, discuss about how governments and public institutions may promote and facilitate such entrepreneurial activities inside their economies and make benefit for their societies and for world as whole. The paper is a starting point to study the policy for digital media entrepreneurship, in regard with lack of literature in both subject of 'media entrepreneurship' and 'policy for media entrepreneurship. This is wonders that despite the obvious importance for any of these areas, previous academic works are so few that in some cases there are no publications to be found neither in internet resources nor in libraries. Thus this paper is an academic effort to highlight the subject of media entrepreneurship in digital platforms and the policy making for its development, and the role it may have in global knowledge by dissemination of access and usage and with a focus on developing countries in the global economy.

Something which makes the subject more important is the effective role of entrepreneurship in developing countries. Over the past two decades or so the emphasis in regional economic development theory has shifted from a focus primarily on exogenous factors to an increasing focus on endogenous factors (Stough et al, 2011:3) Stimson et al (2006:6) describe regional economic development as the application of economic processes and resources available to a region that result in the sustainable development of, and desired economic outcomes for a region and that meet the values and expectations of business, of residents and of visitors. From the other side, main engine of economic growth and prosperity is entrepreneurship (Dutta et al, 2009), which is a complex and multifaceted phenomenon (Faltin,2001). Entrepreneurship helps the developing countries to exploit the opportunities by deliberately implementation of its abilities by allocation of Resources. Developing Countries have their own opportunities and challenges, and certainly entrepreneurship in these economies influence on these situations. According to these contextual situations this seems reasonable to consider every country as a unique case and investigate the subject exclusively (Khajeheian, 2013:132).

Media Entrepreneurship

As the area of media entrepreneurship is still a young and undeveloped field, this phenomenon is poorly understood. Most media management research to date focuses on larger, established firms. In comparison, very little is known about entrepreneurial activities of independent start-up companies in the different media industries (Achtenhagen, 2008:124). A small number corresponded to studies of the impact of media on entrepreneurship (Hang & Van Weezle, 2007). Khajeheian and Arbatani, (2011) investigate Media Entrepreneurship in the period of recession in economy. They argue that global recession caused some serious negative effects in media industry, mostly referred to decrease in advertising income, and downturn in many media products sale. However like any other phenomena in the world, recession had another face and that is growth of entrepreneurial activities in media. This caused media entrepreneurship raised as a suitable option for unemployed technical personnel. The interesting side of this phenomenon consists of low barriers to enter, low capital requirements, more specialization of media production in digital sector, encourage people to enter the media entrepreneurial activities. In fact digital media entrepreneurship plays a crucial role for economics to prevent the expansion of recession in general level. This needs little resources, but offers considerable results, which in economic terms mean less unemployment, more national and domestic Production, and offering more services. Media Entrepreneurship also emits some unnecessary costly processes, like prevention from many physical processes to reach a product, is a facilitator for economy to get power and ready to jump up again. Achtenhagen (2008:138-139) articulates Media entrepreneurs role as change agents in society, by five functions. Firstly by adopting a mission to create and sustain some kind of artistic, cultural and/or societal value (not just economic value), second, recognizing and relentlessly pursuing new opportunities to serve that mission, thirdly, engaging in a process of continuous innovation, adaptation, and learning, fourthly by acting boldly without being limited by resources currently in hand, and finally by exhibiting a heightened sense of accountability to the constituencies served and for the outcomes created.

The most concise definition of Media Entrepreneurship to date has explained by Khajeheian (2013:127) as following: "Individuals or small firms which use their own or others' resources to create value by extracting opportunities via offering a service or product consist of any innovation in each of product/service characteristics, process, distribution channel or place, or different innovative usage, to media market, or any other market which media is its main channel of interaction." The important note in this definition is to respect on different types on innovations including innovation in characteristics, process, distribution channel, usage and etc. thus we can diffuse innovation to any effort from individuals or firms who offer the value for costumers in any above mentioned area of newness inside any given media platforms. Obviously Media Convergence is a leveraging factor to expand the broadness of media for entrepreneurial activities and therefore cause to more development of media entrepreneurship. Also in my idea of course, Media may cause by its virtual proximity a new and different meaning for Knowledge spillover, which replaces the access to better knowledge infrastructure for geographic proximity. Thus, the more actors in media sector may leads to more access to knowledge, more chance to development and more effective role in the global knowledge.

For better understanding of media entrepreneurship, this is required to have a certain idea about what innovation is in the context of the phenomenon. Ireland et al (2003:981) introduce two types on innovation in which firms can engage—disruptive and sustaining. In general, disruptive innovation produces revolutionary change in markets while sustaining innovation leads to incremental change (Tushman & O'Reilly, cited in Ireland et al, 2003). Incremental or sustaining innovation is the product of learning how to better exploit existing capabilities that contribute to competitive advantages. In contrast, radical or disruptive innovation is derived from identifying and exploiting entrepreneurial opportunities through new combinations of resources to create new capabilities that lead to competitive advantages. They believe that through effective Strategic Entrepreneurship, firms are able to engage in both disruptive and sustaining innovation. However, there is another type on innovation which should be considered precisely, especially in developing economies, referred as imitative innovations (Khajeheian, 2012). He shows that Disruptive innovations mostly flourish in developed economies with media markets established, While in developing economies, Imitative innovations have a great deal of chance to yield. This type of innovation plays a major role on structure of media entrepreneurship activities in developing countries. We should notice that Hindle and Klyver (2007) literature review reveals that societies stressing different cultural values will experience different levels of innovation and entrepreneurship. Relationship between culture and entrepreneurship is not causal, but that cultural values impact entrepreneurship through the agency of economic freedom national cultures influences individuals' capacities to interpret and respond to strategic issues. One consequence might results an impact on the levels of innovation and entrepreneurial participation displayed by a population. According to this conclusion, Imitative innovations have risen from cultural values of developing countries beside the infrastructures which prevent for disruptive innovations or make it inappropriate.

Global Media Ecosystem

Increased and improved communication across the globe – through satellite technology, digital television, improved telephone links and the Internet – certainly means that we are now in touch with people and events internationally with a frequency, speed, quality and affordability never imaginable in the analogue age. This has seemingly resulted in an increasing 'globalization'; that is, the combination of economic, technological, socio-cultural and political forces by which the people of the world are gradually becoming interconnected. Although components of globalization are nothing new, the deployment of business and capital across borders have continued at an unprecedented pace since the arrival of New Media (Creeber and Martin, 2009:5). The process of globalization influenced on many industries, one of them media as one of the most influenced ones, and caused an integrated global media ecosystem, with interrelated processes and elements. In Global Media ecosystem, new concepts and new functions have appeared for media. The new generation is characterized by their adoption of new media, and new media serve both as a tool for them and as a way for them to define themselves. Young people often lead the way with new technology, and this is a source of pride for the millennial generation. New media are important to them not just for what they can do with the devices, but because new media are seen as theirs (Geraci and Nagy, 2004). The characteristics of the new media are openness and transparency for all users, which have evaluate to participants and co-authors not only audiences anymore. Networking information exchange from device to device blurred boundary of author and audience. Macionis and Plummer (2002, cited in Casey et al, 2008) distinguish three aspects of globalization of the media, Consist of Means, Ownership and Content. Globalization of means is evident in the rapid spread of new technologies such as satellite, cable, digital and the internet, and the mushrooming of television channels and broadcasting hours. Globalization of ownership has seen the apparent eclipse of public service communications agencies with their tradition of public accountability, regulation of content, and protection from competition. This model has increasingly been replaced by deregulated television which is privately owned, motivated by profit and largely funded by advertising. The globalization of content implies on global events such as World Cup, Olympic Games, Pop music Concerts, etc. But as Casey et al (2008:141) imply specific television genres have also become globalized. the stand up and reality shows such as 'Opera', or series such as 'Lost' points to the globalization of content.

According to the changes in Global Media Policy, 'We have witnessed a shift from vertical, top-down, and state-based modes of regulation to horizontal arrangements, while, at the same time, governing processes have become more permeable to interventions from a plurality of players with stakes in media and communication and also there has been a shift from formal and centralized steering processes to informal, and sometimes invisible, policy interventions in the media and communication sector. This development explains the growing attention devoted to self- regulatory and co-regulatory mechanisms, including loose interactions that have come to be analyzed as networked forms of governance and Finally we have witnessed a ''shifting in the location of authority'' by which more and more institutional arrangements to steer communication systems take place at the supranational level. This also implies a plurality of decision-making arenas where different interests, goals, and opportunities are played out' (Raboy & Padovani, 2010;153). They also explain that 'due to developments in technologies and digital convergence, has been the shift from sector-specific detailed regulation to more general and broad parameters for managing media and technology' (p153).

According to Khajeheian et al (2013), the Global Media Ecosystem thus characterized by six major factors: Globalization of Genres and Contents, Digitalization of Production and Distribution, Interactivity and Bottom-Up Participation, Media Convergence, Mergers and Acquisitions, and Audience Fragmentation. Any of these briefly imply in upcoming pages, but worth to notice that they have been articulated by many different scholars with various labels and different typologies and explain them as much as there is no doubt about their authenticity and merely the selection and inclusion of them inside the framework the paper intended to offer is upon the recognition.

A Review of Frameworks and Models

In this section we take a brief review on the frameworks and models provided in literature. This is helpful to use the existed knowledge to develop an improved one in the case of subject. Three frameworks has been explored, which each one includes the factors and elements deserved to consider for preparing a better one.

Digital Media (Television) Policy in Global Media Ecosystem

This seems useful if refer to a new framework recently proposed for media policy in the global media ecosystem, which help us to mention the essentials of new media policy and benefit them to develop our model. Based on this, global media ecosystem is characterized by six above mentioned factors, including Globalization of Genres and Contents, Digitalization of Production and Distribution, Interactivity and Bottom-Up Participation, Media Convergence, Mergers & Acquisitions, and Audience Fragmentation, Thus any model should mention these trends as effective factors in any kind of policy or action. Media governance is the upper hand dimension which set policy, and usually government and political system is in its place by ownership, funding, regulating, soft control, its expectations and the media environment which is its produce. The policy is set by media governance and in the age of media convergence, the media mix, or media matrix management is the combination of the media used to implementation of the given policy.

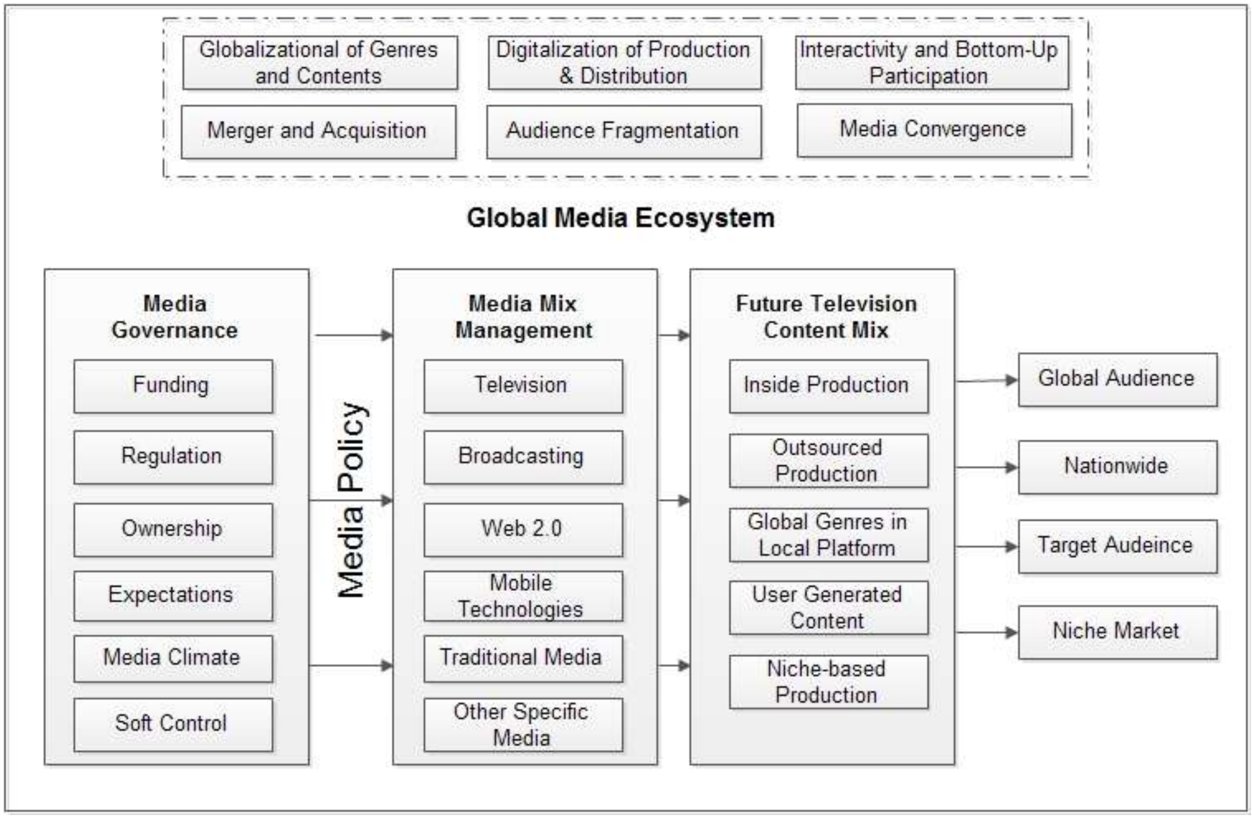

Figure 1: Media Policy in global media Ecosystem

We use this framework as a canvas to develop our preliminary model about the media entrepreneurship policy, but will include more knowledge from other frameworks or models in following sections.

Digital Innovation Commercialization

Another model which provides insight about what may results to commercialization of digital innovations, from an idea to the marketable products is what I proposed in my PhD thesis. In this framework, there is four internal dimensions, and one external. Internal ones include Resource, Product, Enterprise, Strategy, and External dimension is Environment which is out of control for media managers and entrepreneurs. This is the most concise model about what may helps the digital idea to commercialize to the markets as products. This model also articulates twenty three factors inside the five dimensions which help to create a successful digital product by small media enterprises. The important thing in this model is to offer the infrastructure (media environment in fact) as the ground for circling the wheel of media entrepreneurship. In this idea, if the ground slopes downward, the wheel circles easily (entrepreneurship occurs with high rate of success and with fewer drawbacks), while uneasy ground make the wheel to move hard, or even prevent from its move (entrepreneurship becomes hard, risky and with low chance for success). This is what makes media policy significant in study of media entrepreneurship development.

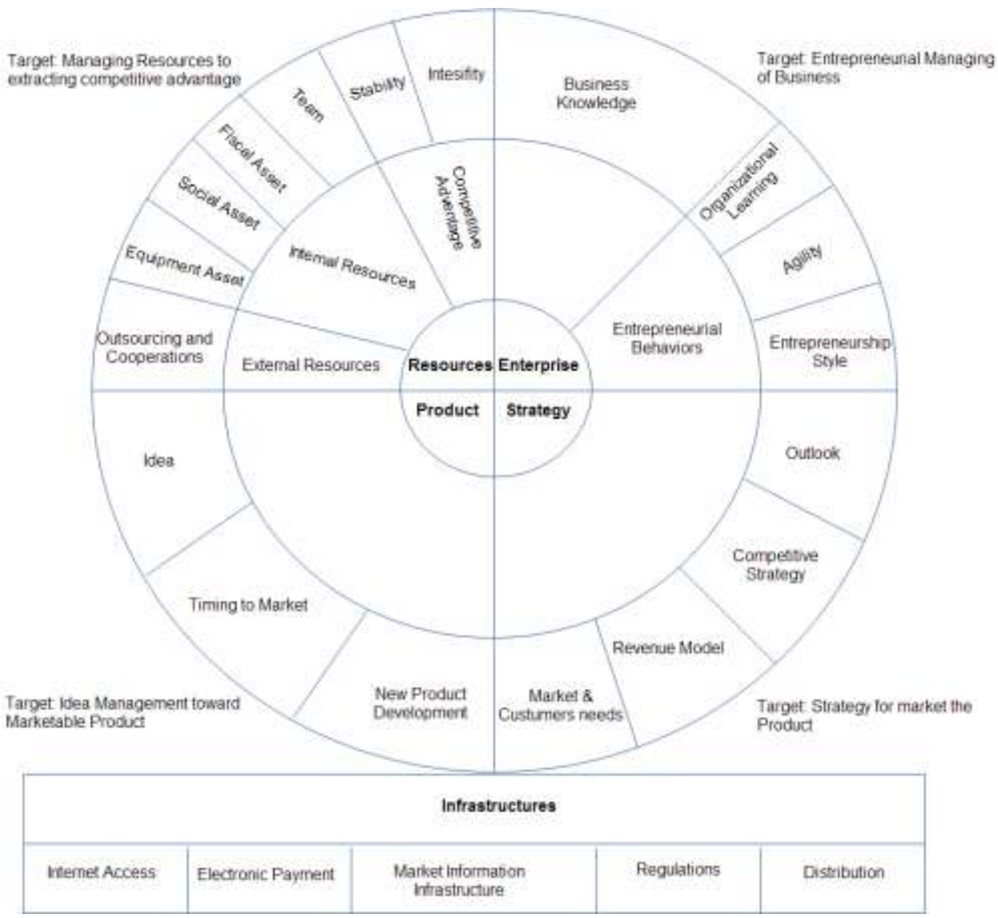

Figure 2: the model or commercialization of Digital Innovations

Efficient Media Market Framework

Most important factor in nurturing the media entrepreneurship is to make media markets as efficient as it gets. An influencing factor on media entrepreneurship activity, which is deeply incorporates with degree of economic development, is Media Market efficiency. Media Market structure plays a crucial role in flourishing media entrepreneurships. Some Media markets provide the opportunities to commercialization of innovations while incomplete ones, will prevent from its flourishing. An efficient media market should provide diversity of options for media entrepreneurs to market their innovations. Any media market, regardless of its development and efficiency, consists following Actors: Large media companies, which joys from resource and operational competitive advantage; Small and Entrepreneur media companies, which their innovation and new ideas are their strength; and media users, which help the media to cover more extensive area than its natural power of coverage, by their feedbacks –whether technical or practical- and content generation. Strength of Media Entrepreneurs is exactly in the weak point of Media large companies. Media entrepreneurs generally rely on their innovative and risky ideas, which commonly not covered by large ones. Generally large media companies concentrate on idea which is applicable in huge markets and critical mass. This can cover the costs and cause deeper penetration. Media entrepreneurs rely on small pieces of resources. Beside these three sections which shape major players of any media market, there are some financial and technical facilitators, which their performance is one of the most important determiners of the media markets efficiency. Financials consist of venture capitals and institutions which invest or lend for commercialization of new innovations, and technical are generally small and large non-media companies which offer third party services in commercialization. These facilitators evaluate and filter best innovations offered by media entrepreneurs, and introduce them to larger media companies to buy innovations, or acquisition of small firm, or other options like joint ventures. Efficient market provides an exit market for media entrepreneurs to select their strategy: sell innovation and start new other one, sell the company and work as part of larger company, or aggressively continue to act as an independent firm which aims to grow. Especially in this later strategy venture capital will play a crucial role by financing the project. In such conclusion, Eliasson and Eliasson (2005) stress on the role of venture capitals in fill the gap between operational competitive advantage and innovation advantage. Figure3 illustrates an efficient media market to promote entrepreneurship.

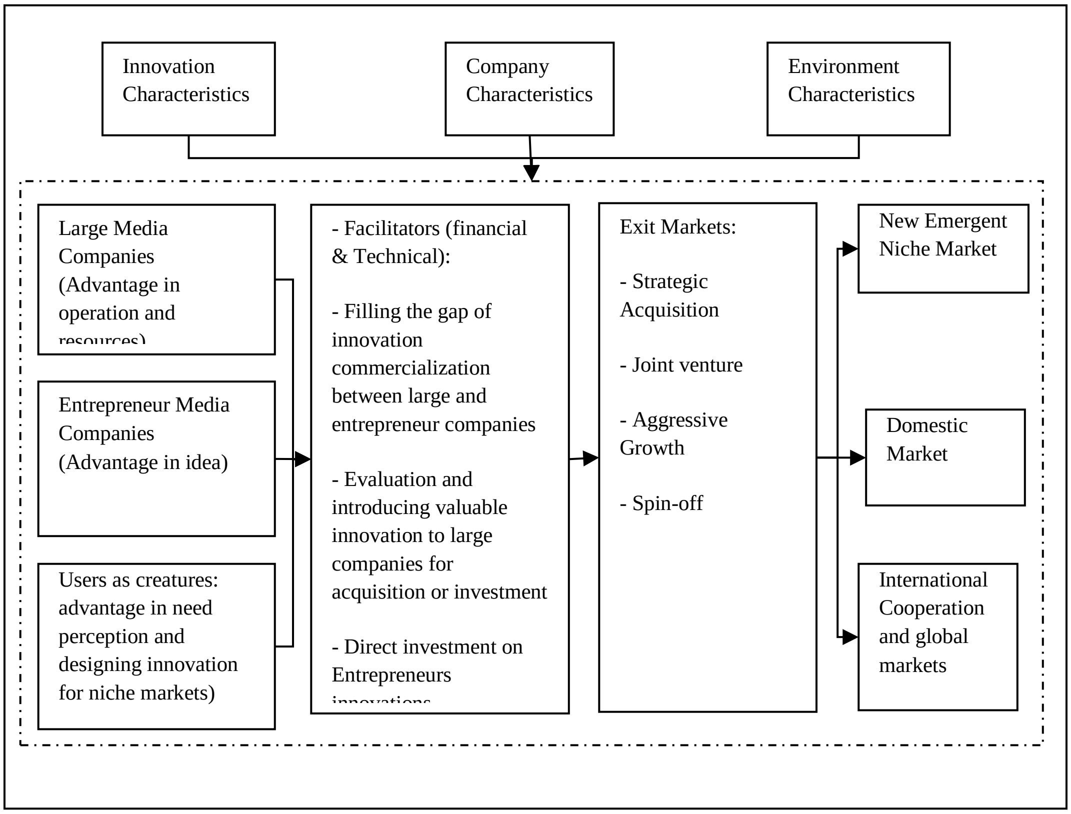

Figure 3: Model for efficient Media Market

The Policy for Promotion of Media Entrepreneurship

As van de Donk et al (2005:12) argue, 'Policymaking is lagging behind new developments and definitely not anticipating the future'. This claim has been proofed more and more in the recent decades in regards with new technologies societies adapted by and the delayed and usually not deliberated responses of governments. Mobile technology and web expansion are two obvious examples that illustrated disability of media policy to be in consistence with new technologies, both in control and exploiting. Thus this not wonders if media policy has lagged behind to use media entrepreneurship in digital platforms as leverage for benefit of economy. However the paper is intended to explain the subject to highlight the effective role governments can play to improve transition of their societies towards global knowledge.

This is a preliminary framework, which has provided as a grounded one for conference, thus clearly may change, modify and develop after getting the idea of other colleagues and participants. However this is first effort to model media entrepreneurship policy. Major part of this, has developed from three frameworks briefly explained in previous sections, but new insight has been inserted to adapt it with the perspective government and policy making organizations should play to foster and nurture entrepreneurial activities in their societies. This framework may results to further more developed models to show how developing economies may fill the gaps inside their societies by efficiently play their role to create the infrastructures needed to encourage entrepreneurial activity for young potential and educated population.

According to the figure 4, the framework in whole consists of a logic: media governance (1) set policy (2) that shapes media environment (3) which make environment more suitable for media enterprises creation (4) which foster and encourage digital innovations and idea to flourish (5). This straight logic explains four function for media governance to leverage the given policy: Funding, Regulating, Ownership (establishing lacking institutes) and other advances for entrepreneurs. Then after the elements in media Environment has been articulated as Intermediating and supporting service providers include Technical and Financial facilitators, Business Solutions and consultants, Venture Capitals and R&D agencies. Each of them may be public owned institutes which government has established to fill the lack of them, or may be the private ones who supported by government to offer the needed supports and make media market even more effective. This market makes a compromise for media big companies and media enterprises to use their advantages in resource and operation (big companies) and advantage in innovation (enterprises). In result of this profitable match of different actors in market, the innovative ideas get the chance to be offered and be attended by the potent and interesting individual entrepreneurs or enterprises and to be developed and commercialized.

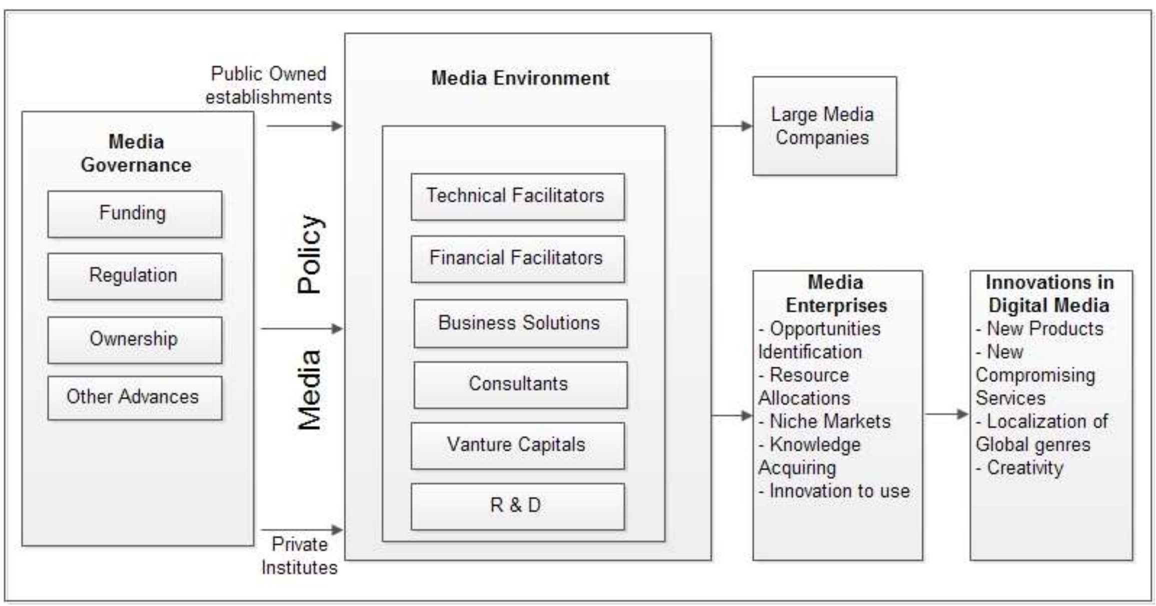

Figure 4: proposed framework for Media Entrepreneurship policy

The framework is adaptable to the media entrepreneurship policy to support the transition of society towards the knowledge economy and better place to advantage itself and benefits the world. Innovation is still the core, either in product/service, in distribution channel, in usage, in geographic region or any other types. An efficient media market makes it possible to turn the creativity into innovation (idea to action) by facilitating the entrepreneurial action and reducing the risk of run the product to market by supportive institutes and actors. These actors are entrepreneurs companies which are another necessary part of the media market. They introduce opportunities to fill the gaps and meet the needs by allocating the resources, human, money and other materials needed either by owning or to borrow. They also benefit or damaged from the characteristics of environment, which on my invented metaphor played as the slope of the ground wheel circulate in and may be downward (helps to faster move) or upward (permits to move). Thus the media entrepreneurship policy may provide the more suitable environment for media entrepreneurs to act more productively and support creativity and innovations to be created and offers to them, either by individuals or R&D sections in the very companies.

The bigger companies are expected to be existed already, so we neglect the requirements for their presence, but focus on the facilitators and intermediating actors which provide the financial, marketing, consulting services. They are a necessary part of any industry and their role makes the markets efficient and potent for entrepreneurs to operate in. this is the part of market which usually missed in the non-developed economies and the major lack to flourishing the entrepreneurial actions, and policy should mention how to support the creation and strengthening of these facilitators, because more strong facilitators, more services to entrepreneurs and less risk for their success.

Conclusion

The media entrepreneurs are the injectors and importing agencies of knowledge into the societies. Knowledge is the enabling factor for societies to efficiently use the resources and exploit their potentials and this is what entrepreneurs do in the best manner. The digital industry, in its own, is a very fast changing and the actors in this industry have to get knowledge in rapid rate in compare with many other industries, thus the more actors in the digital media market, the more knowledge in the economy. From the other side, this knowledge is global in nature, and not merely technical, but cultural and social and this is what makes digital media very different from other industries from the global perspective. While many other industries are based on technology and their effects on culture and socials norms are indirect, the media is the most important mean which have direct effect on the society and is the main change agent in globalization of cultures. Thus the media entrepreneurship policy is the concept which despite the being neglected in researches, may play a very considerable role in transition of economies and specially developing ones to the global knowledge economy.

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Information Sharing Framework for ERP Deployment

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Abstract

Enabling enterprise-wide knowledge sharing and improving business–IT alignment is the primary success factor for any information system, and more specifically for any Enterprise Resource Planning (ERP) system. Despite the wide-spread adoption of ERP solutions, there is a limited study concerning requirement management challenges associated with sharing cross-organizational requirements and needs. In this paper a holistic requirement management framework is proposed to address the misfit between the enterprise requirements and supported ERP functionality throughout the deployment process.

Keywords: *Enterprise Resource Planning, Requirement Engineering, Information Systems*

Introduction

Unprecedented levels of competition have brought up new uphill challenges for today's enterprises with respect to globalization, which makes the transition from mass production to mass customization and crowdsourcing a must [1][2]. Experiencing the pain of not being able to efficiently drive service demands across the enterprise, could be a sign of misalignment between the company's infrastructure and the new business requirements. Addressing this misalignment is the core benefit of Information systems, and more specifically Enterprise Resource Planning (ERP) systems.

Research on different aspects of ERP has been the focus of much attention in recent years and the activity on the field has grown impressively [3]. ERP systems are comprehensive software packages that aim to integrate a wide range of business processes and functions to shape up the business information technology architecture [4]. Their potential to improve both operational and business efficiency is the key factor of their wide-spread adoption by numerous enterprises across the world [5][6][7]. A recent survey by Jacobson et al. mentions the increasing revenue estimate associated with ERP market during a six year period [8].

Despite this widespread adoption, there are still a lot of challenges facing successful implementation of ERP systems, and many organizations have reported their deployment not as successful as expected [9][7][10]. These challenges are mostly due to the enterprise-wide scale of ERP impact on business processes, large number of stakeholders and numerous software modules.

As declared earlier, ERP systems are general software packages that give support for a wide range of business and organizational models and thus customization becomes mandatory. The major problem in ERP deployment is the distance between the end-users expectations of the system, and the actual functionality that ERP gives support for [11]. This is mainly because of the hard task of identifying adequate requirements and also satisfying various and often contradicting requirements of the large number of stakeholders involved.

Points of departures as the analytic level for requirement identification are varied substantially and include functional analysis, organizational objectives, top management decisions and critical success/failure factors. But none of them provides a comprehensive view of different aspects of requirements [11].

Previous study on ERP requirement engineering is scarce and very few has considered the important role of different stakeholders and organization's power structure in requirement identification and gathering phase. An exception is a recent study by Johansson et al [12] which provide a comprehensive approach to identify requirements for future ERP systems concerning various challenges, but limits its study domain to small and medium sized enterprises.

In [13] an iterative process to requirement identification is proposed that focuses on matching ERP system functionality to customer requirements. Using this iterative approach, unmatched requirements are gradually investigated until enough has been refined.

Borell et al. in [14] have used competing value approach (CVA) as the basis of their requirement specification framework to match different capabilities of software packages and organizational needs. In this framework different ERP capabilities are divided into four main sections, each of which linking to a specific section of CVA: human resources, open system, internal goal and rational goal model. In a similar work [15] the use of object-process based approach is suggested to match the enterprise requirements model and off-the-shelf ERP capabilities model, but no advice is provided on how to build the required models.

In the next section more information on requirement identification challenges is provided. In section 3 a thorough explanation of the proposed framework is provided, followed by conclusion in section 4. Our approach consists of a holistic framework for requirement gathering and requirement management, considering various stakeholder groups and organizational segments.

Sources and Problem Overview

Our research builds on the existing body of knowledge in ERP deployment and requirement engineering and the authors' experiences in ERP deployment and customization and also.

The misalignment between ERP functionalities and business requirements has been alluded to in both real-world experiences and academic research in the literature. This misalignment originates from variety of sources including unmet organizational requirements [2]. Correctly capturing business requirements using software specification tools and models is the key to bridge the gap between requirement gathering and software engineering [16].

Soh et al. [17] categorize ERP misfits into following types

a) Data format and entity relationships
b) Access, control and operational functionality
c) Output format and content

He then states that once a misfit is identified a resolution strategy can be deployed that trades off between the amount of organizational change and the amount of package customization required.

Requirement engineering challenges referenced in the literature can be summarized as follow:

Large Scale Problem Domain

ERP systems are general software packages that support a variety of business models. If requirements are not identified in the early stages of deployment, as the deployment process advances, the gap between the business requirements and the system's functionality gets wider.

Large Number of Stakeholders

Regarding the large scale problem domain, numerous stakeholders are involved within ERP deployment. Having different roles, each stakeholder may have a different view of requirements in relation to the system being deployed [11].

Misapprehension of ERP Customers and Developers

Mutual understanding of ERP consultants and stakeholders is a key to a successful ERP implementation which makes the use of experienced consultants a must in the deployment process.

Risk Involved for Stakeholders

For many organizations, ERP projects are the biggest investment in IT department and most of the time the whole enterprise. Because of the immense scale of ERP deployment projects in both financial and organization terms, an unsuccessful deployment will have devastating results.

Huge Variation in Customer Requirements

Many have considered huge variation amongst customers, industries and countries in terms of what requirements ERPs need to fulfill. Since ERPs aim to support different business models as general software packages this could be root of various problems in satisfying different busyness' needs.

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Inadequate Representation of the Organization's Business Process

Not only most companies do not have adequate information on their "As-Is" business processes, but this information soon become out of date as the enterprise tend to change on a regular basis.

Requirement Engineering Process Deficiency

Some requirements might not be captured in the artifacts used by ERP deployment team which leads to an improper view of system requirements.

Unclear View of Future Customization

Ambiguity in maintainability requirement identification is the main source of future development problems regarding further customization and flexibility of the system. A summary of key challenges of ERP systems and their impact on requirement management is provided in Table 1.

Table 1 Requirement management challenges

Challenge	Impact on ERP Requirement Management	Source(s)
Large scale problem domain	Difficulty of requirement gathering	Problem Domain
Large number of stakeholders	Establishing the trade-off between stakeholders' opinions	Problem Domain
Misapprehension of ERP customers and deployment/development teams	The misfit between the supported ERP functionality and the business requirements	Problem Domain, Deployment Team
The risk involved for shareholders	Vital consequences of poor requirement modeling	Problem Domain
Huge variation in customer requirements	Difficulty of requirement management	Problem Domain
Inadequate documentation on business processes and business plan	Leads to incorrect or misinterpreted requirements	Managers
Requirement engineering process deficiency	Incomplete requirement management	Deployment Team
Unclear view of customization/configuration and the relation to future upgrades	Deficiency in maintainability requirement identifications and complexity in change	Deployment Team

The Requirement Management Framework

Hereby we propose a framework to model the descriptive representation of the ERP requirements, together with the guidelines to address the misfit between business requirements and supported ERP functionalities, based on prior experiences and related studies. The framework is described across two independent aspects of requirement management process: The major stakeholders and different views of the requirements. Different stakeholders and organizational segments should be identified and prioritized based on their level of importance to the deployment approach. An overview of the framework is presented in Figure 5.

Figure 5: Requirement Management Framework Overview

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As shown in Figure 5 four major groups of stakeholders and 3 different views of requirements are used in this framework to categorize various requirements and provide a holistic view of the business requirements.

Table 2 Requirement management challenges

Challenge	Impact on ERP Requirement Management	Source(s)
Large scale problem domain	Difficulty of requirement gathering	Problem Domain
Large number of stakeholders	Establishing the trade-off between stakeholders' opinions	Problem Domain
Misapprehension of ERP customers and deployment/development teams	The misfit between the supported ERP functionality and the business requirements	Problem Domain, Deployment Team
The risk involved for shareholders	Vital consequences of poor requirement modeling	Problem Domain
Huge variation in customer requirements	Difficulty of requirement management	Problem Domain
Inadequate documentation on business processes and business plan	Leads to incorrect or misinterpreted requirements	Managers
Requirement engineering process deficiency	Incomplete requirement management	Deployment Team
Unclear view of customization/configuration and the relation to future upgrades	Deficiency in maintainability requirement identifications and complexity in change	Deployment Team

Identifying and Ranking Stakeholders

As discussed earlier, many stakeholders are involved with the deployment process of ERP systems in organizations, each of which having different needs of the system being deployed. Not all of the requirements of the stakeholders are at the same level of importance for the ERP deployment team, based on various parameters such as stakeholder's role in the organization. A critical success factor for ERP Implementation is recognition of the stakeholders and satisfying requirements regarding their level of importance to the system. Based on authority in organization and significance to ERP goals, four major stakeholder groups are identified that a successful deployment heavily relies on.

Shareholders have the power of voting on board elections, profit contribution and strategic decisions. Most of the shareholders requirement is captured through narrative analysis [18] and interviews.

Managers of different departments and headquarters of the organization may not have a broad vision of the system being deployed and therefore their requirements are not at the same level of importance as shareholders or as consultants.

End-Users are the staff of the organization which interact with the system on a daily basis but don't have any power or authority in the organizational chart.

ERP Consultants and development and selection teams are the most responsible stakeholders for successful implementation of the ERP system.

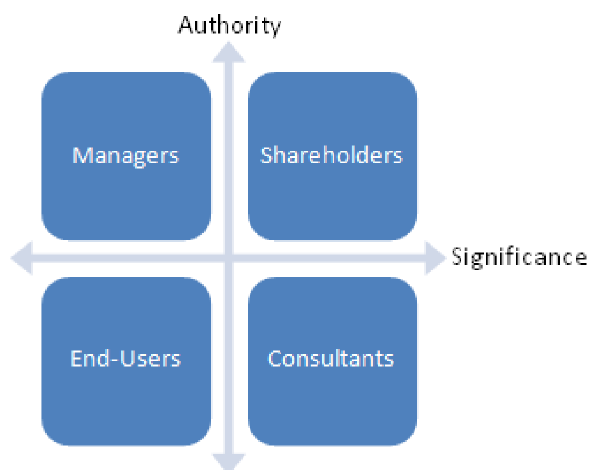

Figure 6 Stakeholder Groups

Prioritizing Organizational Segments

Regarding the organization's strategic plan and distribution of high ranking stakeholders, different organizational segments should be identified and prioritized. The requirement gathering should be considered as an iterative process starting with the top most segments first.

Capturing the possibly most important requirements at the very first stages of the gathering and also more efficient gathering process by splitting into different partitions is beneficial to both the deployment team and the organization. The iterative approach also supports the deployment methods that consider a subset of modules to be implemented, by partially involving the related stakeholders.

Requirement Modeling based on Stakeholder Views

Capturing the requirements of the numerous stakeholders involved in ERP deployment, requires considering different views of each stakeholder group in a holistic manner. In the provided framework these requirements are divided into three different views: Static, Dynamic and Motivational.

The static view is compiled of data entities and enterprise rules and regulations. As shown in figure 1 this view contains the details of organizational vision artifacts in higher levels and business entities in lower levels of stakeholders' hierarchy.

In the dynamic view column, more details are considered as moving from higher levels of stakeholders (i.e. Decision makers having a general view of the organization) down to lower levels, and thus making the alignment between the supported ERP functionalities and stakeholders' expectations more feasible. For example, decision makers' requirements is limited to the business model while expressing their needs, in contrast to intermediate mangers who provide business process of their corresponding section in terms of detailed descriptions and sometimes written documents. As discussed in section 2 correctly capturing the organization requirement is considered to have a great impact on ERP deployment in this part.

Considering motivations in early requirement gathering stages plays an important role in success or failure of ERP deployment projects as they are related to maintainability requirements and future customizations of the deployed system. For example the motivations of the ERP deployment for an office end-user could be as limited as facilities to daily routines and tasks which should be perfectly aligned to possibility contradicting requirements of higher level stakeholders.

Conclusion

In this paper an iterative framework for requirement management was proposed to address the misfit in ERP solutions. The framework covers the enterprise requirements across two important aspects of requirement management: stakeholders and their different views of the requirements as a whole. Different stakeholder groups should be identified and ranked before the requirement gathering starts, as well as involved organizational segments and their level of importance in implementation.

Moreover, because of considering the role of deployment team throughout the requirement modeling and gathering phase, this method could help successful ERP implementation in terms of choosing ERP systems.

As mentioned in the introduction, studies regarding requirement management in ERP deployment are scarce and future research in this field could further contribute to develop tools and define detailed artifact based on the proved framework.

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The Crisis of 2008: Emergence of the New US Financial Architecture and the New Capitalism

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Abstract

The Global Financial Crisis of 2008 has destabilized the system in its time and place. As a consequence, the components of the system are reorganizing their structures to establish a new dynamic regime able to cope with the initial perturbations. Capitalism is a trans-historical socio-political system of production that cannot disappear because it has a power recovery, meaning that it absorbs within its structural logic any new input that tries to affect it. One of capitalism's most essential principles lies in the need for markets to enjoy social legitimacy because their political sustainability ultimately depends on it. International markets can be legitimized only if the State reconciles them to social values and to shared institutional practices and this happens multilaterally. In this regard, the Global Financial Crisis has opened a window of opportunities for the State and civil society to reassert their social logics and for creating a culture of moral imagination. Hence, a new model of capitalism is needed. In this line, this paper elaborates the so called capitalism of participatory responsibility, a form that considers the structural dialectic triad of Civil Society↔State↔Market (CS↔S↔M) as an ensemble that has a transformative power. The narrative behind the new capitalism is that the cycle of capitalism can be balanced by the democratic logic that reasserts the principle of equitability. The sketching of the capitalism of participative responsibility has a nomothetic endeavor. It does not aim to describe different singularities, because the effective character of the future capitalism is hard to predict, but aims to elaborate generalities that can be used for policy prescriptions, by taking into account the dynamics of our times.

Introduction

Between 2000 and 2007 the amount of total assets and liabilities for advanced economies augmented by 125% in terms of share of GDP. Furthermore, from 1970 to 2007, the largest share of financial instruments was represented by debt (Milesi-Ferretti 2007). In view of this exponential financial globalization that produced a wealth effect disconnected from the real economy, it should have become clear that it was too big and factice in order not to fail. In September 2008, to use Keynes' analogy between bubbles and music chairs, the music ceased and agents stopped dancing. After the collapse of Lehman Brothers and the overall explosion of the fictitious housing bubble, the world entered officially into a Global Financial Crisis. A financial crisis is a crisis caused by poorly allocated credit and increased leverage. A strong recourse to debt can only adjourn, but not resolve, the inherent contradiction between increasing income inequality and growing consumption expenditure (Stiglitz 2009). The growth of leverage in US households and the worthlessness of most mortgaged-backed securities are considered as the underlying causes of the Global Financial Crisis of 2008. The desire to postpone the crisis, by escalating credit distribution and creating money *ex-nihilo*, engendered a persistent surplus capital that took disruptive paths which accelerated the contradictions of neoliberal capitalism. In this sense, Marx was right, "the true barrier to capitalist production is capital itself" (Marx 198: 358). The Global Financial Crisis of 2008, which has ultimately evolved into a sovereign debt crisis, marks the end of the latest development of capitalism, namely neoliberal capitalism, alternatively called financial, casino or money-manager capitalism and has brought the nature of it into question (Bendell et al. 2010; Gamble 2009; Posner 2009). Neoliberal capitalism has felt down under the distortion of its own genome. The fear of a collapse of the global financial system called attention on the need for an increased coordination and regulation on financial policy for limiting the pro-cyclicality of the financial system. In 2008, French president Nicolas Sarkozy stated that "the present Global Financial Crisis must incite us to refund capitalism on the basis of ethics and work" (cited in Bereson 2008). Goldstein (1998: 67) remarked that "there's nothing like a major Global Financial Crisis to focus people's minds on why it is important to improve the international financial architecture". Yet, global financial organizations such as the G20 and Basel III are self-appointed and have *de facto* constituted themselves as central coordinating bodies. They lack legitimacy and representation. Additionally, Basel III works by inverse delegation which deprives it from exercising effective decision-making. On the other hand, neither is the alternative of instituting a centralized global authority with full decision-making powers suitable. The risk of such a global organization would be to repeat the experience of the failed Gosplan in the former Soviet Union (Chorafas 2012: 93). These incurable pitfalls at the international level draw attention on the fact that the national level should be considered as the sole analytical unit for a new financial architecture. As stated by Gramsci (1971), the international situation should be considered in its national aspect because the point of departure is domestic.

This paper is inscribed within a line of specialized literature from the field of international political economy assessing the causes of the Global Financial Crisis of 2008 and tries to acknowledge whether or not this Global Financial Crisis offers a momentum for a new form of capitalism. Its originality resides in sketching a new model of capitalism, the capitalism of participatory responsibility, based on the structural dialectic triad, Civil Society↔State↔Market (CS↔S↔M).

This paper focuses specifically on the US as a subject of study, because it is the epicentre of the crisis, it took the lead for setting a new financial architecture and any new form of capitalism can be extrapolated from the US to other developed countries. This paper considers that the origins of the Global Financial Crisis are to be located within the subversive authoritarianism used by neoliberal capitalism for perverting the virtues of the competition market. Neoliberalism has structurally embedded authoritarian financial streams and represented a new financial anthropological model of agency that produced incoherence and irresponsibility. The new US financial architecture acts like sand bags that only fight against the symptoms of the Global Financial Crisis. These measures are caught within the present temporality, meaning that when a future crisis will arise (which is the product of a peculiar context), they will neither forecast it, nor will they solve it. Furthermore, the self-regulating financial market hypothesis, proper to neoliberal capitalism, continues to remain at the core of US regulatory practices (Cassidy 2009; Johnson 2009; Kregel 2008). The Global Financial Crisis of 2008 is a period of historical transition that affects the structure and functions of the State, the market and civil society. The capitalism of participatory responsibility crystallizes how the economic logic can be balanced by the logic of responsibility. Two diagrammatic models, derived from systems theory, have been elaborated by the author: (i) the systemic change of paradigmatic hegemony (Fig1: 11) and (ii) the new model of capitalism, the capitalism of participatory responsibility (Fig2: 12).

The present paper has had three objectives, to: (i) highlight that the origins of the Global Financial Crisis are to be found in the paradigmatic contradiction of neoliberal capitalism and in the mechanisms of its systemic instability; (ii) show that the new financial architecture of the US is not a curative but a palliative tool that acts within the parameters of neoliberalism; (iii) contribute to how to apprehend the future of capitalism. In terms of the epistemological approach, this paper considers that social sciences must contribute to a greater ethical and normative reflexivity (Caille 1999: 317). Beside, the restructuration of capitalism is a change in contemporary experience that is so profound that our measurements cannot calculate their impact with traditional empirical tools such as surveys and statistics (Coyle 2011).

Related to these objectives and epistemological requirements, this paper falls under the category of theoretical research and uses qualitative data from specialized literature addressed via deductive and analytical methods. This paper contains two chapters, as outlined hereafter. The first chapter offers a critical analysis. It shows that the Global Financial Crisis of 2008 is a postponed tragedy of the commons triggered by a global savings shortage. It highlights the paradigmatic contradictions of neoliberal capitalist hegemony on two levels, the principle/agent level and the political level. Boldly, neoliberal capitalism has a dislocating logic that perverts and ultimately destroys the capacity of agents and structures to critically react, by confounding their logic, aims and means with those of neoliberal capitalism. It also evidences the mechanisms of the systemic fragility of neoliberal capitalism which led to a saturation of the growth capacity due to two mutually sustained instruments, credit and consumption. The second chapter asserts that the new financial architecture is caught within the narratives of neoliberalism and cannot regulate the capitalist financial market which is in a *perpetum mobile*. Then, the author elaborates a structural dialectic triad (CS↔S↔M) and analysis current factual developments that help to sketch the future model of capitalism. The sketching of the capitalism of participative responsibility has a nomothetic endeavour. It does not aim to describe different singularities, because the effective character of the future capitalism is hard to predict, but aims to elaborate generalities that can be used for policy prescriptions, by taking into account the dynamics of our times.

Paradigmatic Origins and Systemic Mechanisms of the Global Financial Crisis

The paradigmatic contradiction of neoliberal capitalism

Neoliberalism is the mode of existence of contemporary capitalism. Neoliberalism is hard to define inasmuch as it "stands for a complex assemblage of ideological commitments, discursive representations and institutional practices, all propagated by highly specific class alliances and organized at multiple geographic scales" (McCarthy and Prudham 2004: 276). What can be retained is that at its basis stands an economic theory, "that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong property rights, free markets, and free trade" (Harvey 2007a: 2). In order to understand the essence of neoliberal capitalism, its reified changing concretization should be analyzed. A reinterpretation of Arrighi's (2010) capitalist epochs indicates how capitalism grows both intensively and extensively eventually reaching its limits, as it has in 2008 (Robinson 2004). The extensive limits lead capitalism to grow more intensively by embedding more and more arenas into the competitive market logic. Instead of the growth of a domestic form of neoliberal capitalism as Arrighi's (2010) theory would suggest, neoliberal capitalism went beyond US borders and facilitated new globalized forms of neoliberal accumulation and distribution. Indeed, the switch in developed economies from Fordism to post-Fordism in the late 70s led to a process of neoliberal capitalism, a mode that is intrinsically unstable due to the massive self-supervision of markets. The hegemony of neoliberal capitalism is a perfect example of what Horkheimer and Adorno (2007) refer to as the dialectic of enlightenment. Neoliberal capitalist enlightenment reverts to a mythology that reifies the market and ideas of freedom by supposing a rationalized and outdated understanding of social life promoting the interests of capital. Neoliberal capitalism rests on an inherent internal coherence, based on a method that is neither empirical nor historical, but on a hypothetical-deductive mode, that involves an *explanans* constituted by a list of initial conditions and universal laws (Bresser-Pereira 2009; Hempel and Oppenheim 1948). Neoliberal capitalism is a theoretical antihumanism that dissolves the unity of humanity within the process of knowledge by attempting to apply a dynamic stochastic general equilibrium able to predict agents' behaviours. Nevertheless, macroeconomics is a complex system that outcasts predictability. Neoliberal capitalism is not able to project the future, or to be in adequacy to the social reality, but it is a mere Newtonian demonstration of its perfect equilibrium argument, aimed to push "the system of States in a desired direction [which] is perceived as pursuing the general interest" (Arrighi 2010: 30). According to Arrighi (2010), hegemony rests on consent and dominance rests on coercion. Neoliberal capitalism is a hegemonic ideology in the political realm, through having radically reinterpreted the American revolutionary values (Harvey 2007a). Hitherto, because it is a hegemon it can ultimately be sustained only by making use of authoritarianism. Neoliberal capitalism made use of a subversive authoritarianism by perverting the virtues of the competition market. It has also structurally embedded authoritarian financial streams and represented a new financial anthropological model of agency that produced social incoherence. Neoliberal capitalism by being hypothetico-deductive attempted to change the mode of social evolution (Wilke 1997). In the analytical line of Castoriadis (1975: 122-123), it can be argued that the individual became the product of the financial system, to the extent to which the socialization of the individual corresponds to the introjection of the imaginary social significances of a closed system. Hence, the fabricated agent was closed and adhered without reflection to the principles of the demand driven neoliberal capitalism. Neoliberal capitalism engendered a new representation of the individual, the individual as a consumer, disconnected from the *être de l'ensemble*.

Neoliberal capitalism as a hegemonic ideology is characterized by: (i) a large increase in the total value of global financial assets as a result of the multiplication of new financial instruments; (ii) the decoupling of the real economy from the financial economy and; (iii) a large increase in the profit rate of financial institutions. A matrix of factors has contributed to what I shall call the postponed Global Financial Crisis of 2008. Since 2001, neoliberal capitalism approached its extensive limits eventually leading to a crisis of savings shortage rather than to a global savings glut, as suggested by some authors (see Bernanke 2005). The data of the International Monetary Fund (2005) comforts the hypothesis that the Global Financial Crisis of 2008 was caused by a global savings shortage. Indeed, the global saving rate was very low between 2002 and 2004, especially when compared with the 1970s and 1980s. Furthermore, even if a savings glut would have been conceivable outside of the US borders, it would have been offset by the savings shortage in the US (Taylor 2009b). The Global Financial Crisis of 2008, by not having been prompted by a global savings glut, confirms that the US external imbalances were structural and not temporary and solvable by the market equilibrium. The external deficit of the US is due to the fact that the international monetary system is dollar based. As such, the international economy is inherently subjected to the Triffin dilemma and is strongly receptive to the long-term deteriorating standards of the dollar. This justifies why the US should be the main analytical unit for understanding the Global Financial Crisis. Prompted by low interest rates from 2001 until 2004, US consumers borrowed loans amounting $1200 trillion for home mortgages, without meeting certain conditions of reliability. The total volume of private mortgage-backed securities (excluding those issued by Ginnie Mae, Fannie Mae and Freddie Mac) grew from over $200 billion in 1994 to $3 trillion in 2007 (Johnson and Kwak 2010). Converted by securitization in bonds, they were transferred to banks and investors worldwide. The subsequent derivatives market was volatile due to the leverage involved and their risk to speculators was high (Brigham and Ehrhardt 2002). When real estate prices began to fall in 2005, mortgages could not be repaid and became subprime, thereby engendering colossal losses for buyers of securities based on subprime loans. According to Polanyi (1957), neoliberal systems cannot be stable on the long term, even if they offer a coherent social purpose together with a powerful international hegemon because these systems will generate their own double movement as social actors seek to resist the dislocating logic of the market system. Hence, the Global Financial Crisis of 2008 marks the contradiction of the neoliberal monopolistic phase of capitalism. A contradiction is defined as endogenous to a complex system that is both central to its positive operational dynamics as well as being a necessary negative outcome of its *modus operandi*. Depending on time and space which influence the balance of outcomes, these latter can be progressive or regressive. The notion of contradiction offers a pragmatic tool for conceptually analyzing the concrete operations of the system. There is a deep mismatch between the public aims of neoliberal capitalism, the general equilibrium and well-being, on the one hand and its means, narcissistic neo-individualism, and consequences, the institutionalization of chronic corruption, on the other hand. Non-exhaustively, the neoliberal contradictions of the system are related to the moral and psychological conceptualization of the *homo economicus* and can be decomposed on two working levels, the principle/agent level and the political level. Boldly, the morality of agents has been deregulated because under neoliberal capitalism, the market, which presumes that everything can be treated as a commodity, works as an ethic. Indeed, the cultural innovation that occurred in parallel to neoliberal capitalism provided the incitement for neoliberal mechanisms to work. Within this process of cultural innovation, neoliberal capitalism is a globalized playing field without broadly accepted normative legal or moral standards (Huntington 1998).

The principle/agent reason explaining the Global Financial Crisis is related to the idea of rational expectations, to the hypothesis of representative agent and to moral hazard. The idea of rational expectations takes the view that agents act rationally and anticipate the impact of actions external to the model, since they are completely familiar with the operations of the capitalist system. Because financial agents deal with a resource that contains significant non-material attributes (e.g. confidence) their activities are shaped and influenced by factors which are future oriented. Hence, the workings of the financial agents are symptomatic of a bounded rationality because they are always based on recent experiences. Markets cannot lead to a general equilibrium because they create trends that are up to an exaggeration, in positive or negative values, and then turn to antipodal trends. The hypothesis of representative agent considers that all agents are supposed to have rational expectations and therefore it is assumed that the collective of agents behave as one. However this hypothesis is subjected to a composition fallacy, it is opaque to the consequences of too many people performing a same action simultaneously. Individual changes affect the global variation of the market trend as much as the collective dynamics are reflected in the individual behaviour. In the context of the Global Financial Crisis of 2008, "too many agents were trying to squeeze double-digit returns from an economic system that grows only in the lower single digit range" (UNCTAD 2009: XII). Finally, the psychological representation of the neoliberal self as an autarkic profit-seeking agent is triggered by the competitiveness of neoliberal capitalism. This latter requires people to see it as being the progression of a self-aggrandizing individualism, as and is the endogenous result of a global capitalist system that is always undergoing transformations and destructive creation. Hence, the greed made that the financial sector became too big and failed. In the US it captured about 40% of all corporate profits. As Brown, (2002) stated the population as a whole became enculturated in the values of consumption on account that agents are driven by emotions rather than by rational thinking (Fox 2009; Chiru 2010). Agents' behavior is irrational due to their inability to process continuously all the relevant information bearing on their investment decisions (see Kahneman and Frederick 2002).

In this line of greed, the causes of the Global Financial Crisis are also related to moral hazard. As a consequence of the perfect equilibrium target of neoliberal capitalism, flexible supervisory practices relying on external auditors and credit rating agencies, able to cope with *ad hoc* problems, replaced the traditional State supervision. As a consequence of this self-regulation, the development of fraud became a normal business procedure that distorted the familiar character of the system. According to the US Court's report issued in 2010, Lehman Brothers committed criminal fraud through engaging in actionable practices and by setting its asset prices according to arbitrary procedures. By controlling the strategic factor of production, information, management officials created knowledge asymmetries and could extract a larger share of a firm's value even if in parallel it decreases the firm's market value (Edlin and Stiglitz 1995). Within the top-management of big investment banks (e.g. Citigroup; Goldman Sachs; Lehman Brothers; Merrill Lynch) and insurance companies (e.g. AIG), the enforcement and lawrencium were too lax and CEOs manipulated stocks through pump-and-dump practices for personal short-term profit. In the Global Financial Crisis of 2008, the paradox of individual *versus* system requirements has hindered profitability because the general power of business has been much less than that of CEOs. This reversed most of the gains and generated inequality and financial instability (Wray 2005).

The political and the economic sphere have not been disembedded *per se* by neoliberal capitalism. What is peculiar to neoliberal capitalism is that it is an all-pervasive *modus operandi* aimed at controlling the genome of society at all its levels and has infiltrated the State and the market. Neoliberal capitalism by requiring the State to "plan for competition" (Hayek 1976: 31), has replaced the associative social logic of the State with the atomistic one of markets, because the State has become the political form achieving the capitalist purpose of accumulating the extracted surplus value. The State and the market are structurally coupled and co-evolve like a non-equilibrium open thermodynamic system, meaning that changes happen both within the system and to the system. On account of the dialectic nature of their relation, the State and the market are structurally undetermined and unstable and can therefore never be completed. Since the State is a *loci* for globalization and this latter is the channel for diffusing neoliberal capitalism, the State has integrated within its functional logic, the logic of neoliberal capitalism, a logic which is auto-referential. The neoliberal market and the neoliberal State followed the same trajectory within which both have weakened themselves, as a result of the endemic incoherence of auto-referentiality. In this sense, because neoliberal capitalism has replaced the collective logic of the State with an individual one, it has destroyed the oppositional capacity and the public-mindedness of the State and ultimately it has disembedded both the market and the State from civil society.

The political reasons accounting for the Global Financial Crisis of 2008 are threefold and are stemming from the intrication of the State and the market. First, *laissez-faire* requires the State to play a positive role in the area of monetary policy (Friedman 1962a). Yet, this principle of Ricardian equivalence used to justify deflationary fiscal policy has failed to establish a stable monetary system and favoured the pro-cyclicality of financial capitalism. In the US between 2001 and 2004 interests have been at 1,5% to prompt consumption and after 2004 interests began moving up to 5,5%. The interest rate decisions were not made according to the Great Moderation policy recommendations of the 80s and deviated greatly from the Taylor rule. This deviation was due to the Greenspan/Bernanke type puts (Miller, Weller and Zhang 2002) wherein the government omits to control the market when there is a booming period in order to avoid deflationary scenarios. Moreover, States have liberalized their capital markets and therefore increasing flows of speculative capital came into the economic circuit. As a consequence, exchange rates have become subjected to high speculative pressures. These variations of money supply lead inevitably to crisis (von Mises 1978; Friedman and Schwartz 1982). Second, according to Pharr and Putnam (2000), developed societies are less satisfied with the performance of their representative political institutions than they were in 1960. This lack of trust is a direct result of neoliberal capitalism, defined as the new hegemony of a narcissistic neo-individualist ideology. The responsibility of the State has been eroded because perception has outweighed conceptualization and a democracy of the routine that confused the products of democracy with its procedures has been adopted. This introduced the Foucauldian neoliberal problem of the relationship between the principles of market economy and the political power. To solve this contradiction, the neoliberal financial elite, backed up by the theoretical grounding of the Public Choice Theory, captured and considered the State as a corruptible organization of politicians making trade-offs. The special interests related to the financial industry engaged in internalizing the corruption of authorities, “as if by osmosis, the objectives, interests and perceptions of reality of the private vested interests that they are meant to regulate and survey in the public interest” (Buiter 2008: 106). In Hall’s legacy, it can be inferred that neoliberal capitalism has once more been served and serviced, but rarely confronted by State institutions whose decision-makers share its ends and arguably its means, in a coincidence of interests expressed in a shared hegemonic ideology. Third, the democratization of credit and the political acceptance of indebtedness as a consequence of the step back of democratic social justice, has contributed to the spread of a risk culture. Especially in the US, the State did not perform its redistributive and distributive role as shown through the flattened Philips curves. Up to 2007, consequence of the shareholder value maximization ideology, in the US about 10% of global income has been redistributed from wages to profits. The State relied on the financial sector, as a provider of credits, in order to maintain livelihoods at an acceptable level of consumerism. In 2008 in the US, out of an adult population of 216,5 million, 176 million people had credit cards and credit had hit $975 billion (U.S. Census Bureau 2011). The State by assuming the logic of neoliberal capitalism became predatory and economic imbalances became so chronic that there is a danger for the crisis to become structural. The declining capacity of the democratic State to deliver social justice is not a result of the Global

Financial Crisis of 2008, but rather another cause for it. Hence, a basic role in the present crisis has been played by the dynamics of income distribution in the US (Barba and Pivetti 2009).

The Systemic Fragility of Neoliberal Capitalism

Systemic fragility refers to the probability of breakdowns in an entire system, as opposed to breakdowns in individual components and is evidenced by co-movements among most or all parts. The Global Financial Crisis of 2008 should have occurred in 2001, after that speculation collapsed with the Internet crisis. Nevertheless, through the asset-bubble-driven-privatized Keynesianism (Bellofiore 2011) and the expansionary monetary policy of the FED, aimed at suppressing the descendant part of the growth curve, the Global Financial Crisis has been postponed. Privatized Keynesianism has become a model were banks were exempted from responsibility by not carrying monitoring and accountability, whilst households gained by buying real goods and services through unreal money. The weakness of neoliberalism in this respect is that it is a market-motivated debt ratchet. Irresponsibility became a collective good (Crouch and Maclean 2011). In 2008 due to the subprime crisis combined to the increase in prices of energy commodities, the entire system broke down and the manic phase of economic agents has been replaced by a depressive phase. This postponing illustrates the mechanisms of the underlying systemic fragility of the demand driven neoliberal capitalism, which led to a saturation of the growth capacity due to two mutually sustained tools, credit and consumption.

Minsky's (1986) concept of systemic fragility provides an accurate explanation of the dynamics of the Global Financial Crisis of 2008. As a proof, many scholars have called this Global Financial Crisis, Minsky's moment (Chancellor 2007; Whalen 2007; Cassidy 2008; Moseley 2008). Systemic fragility is inherent to the difficulty to conciliate the economic system's degree of liquidity with the indebtedness as a privileged mode of investment, because these two variables operate in the future which by nature is uncertain. Minsky's (1986) financial instability hypothesis, is a model of a capitalist economy that does not rely upon exogenous shocks to generate business cycles of varying severity and covers two postulates. First, there are two financing regimes, one consistent with stability and the other inconsistent with it. Second, stability is destabilizing and therefore endogenous processes (i.e.: increasing debt-to-equity ratio) will push a stable system towards fragility. More precisely, the financial instability hypothesis can be decomposed into three cycles: (i) hedge funds finance; (ii) speculative finance; (iii) and Ponzi finance. The hedge funds finance (i) states that in a stable economy the financial structures of firms are covered by prudential types of funding. In this phase of stability and optimism, the repayment constraints are always higher than the expected profits and firms are inclined to increase their investments. In turn, commercial and investment banks favour the emergence of less conservative and more speculative financing tools and liability structures spontaneously become fragile. During the speculative finance period (ii), the reduction in liquidity preference and the strong trust of economic agents, results in a reduced vigilance of risk assessment. During this phase, economic agents are subjected to the phenomenon of self-referential rationality

(Aglietta 1995; Orléan 1999). Agents buy assets predicting that their price will rise, and prices really increase because their purchases push prices up. As financial operations grow in complexity, a phenomenon of shadow banking occurs. Various intermediary financial investors have overrun the financial scene before 2008 for managing money according to a total return logic that raised the mismatch of maturities and led to a risk of funding liquidity. On top of that, finance becomes distorted and risky because instead of financing production and commerce, it supports treasury operations. This leads to a contraction of credit resulting into a financial crisis. As a consequence, economy enters the Ponzi finance phase (iii), in which debt is needed to cover interest rates of already existing debts. Since money is endogenous, the dramatic fall in prices of both commodities and assets causes plummeting cash inflows and rising cash outflows. As a result, assets are sold in order to recover liquidity and Fisher's process of deflation through debt occurs. The Global Financial Crisis of 2008 is a logical outcome of the financial instability hypothesis. Furthermore, Minsky's (1986) concept of systemic fragility brings to the fore two main instruments that led to the saturation of the market and to the subsequent economic Global Financial Crisis, credit and consumption.

Under neoliberal capitalism multinational firms are, in a Schumpeterian terminology, corespective. Their profit-maximizing quest has resulted into a tendency of surplus to rise which in turn reduced the expected profits on investments. The consequence of this strategy, allied to new Keynesian claims according to which the downward flexibility in wages and prices is good, has been the regressive distribution of income among workers and a subsequent extension of poverty within society. With the development of new financial tools, credit has become the most influential channel of monetary policy for the past decade. Economic theory suggests that wealth should be considered in order to derive consumption. The credit between 2001 until 2007 became a substitute of effective wealth in order to boost demand and to create a wealth effect. In other words, the creation of credit served to postpone the crisis. For example in the US, the money supply in 2007 was $9.4 trillion, securitized debt was four times bigger, and the sum of derivatives was ten times bigger (Roche and McKee 2007: 17). The increasing instability of the financial system has been a consequence of a process of the expansion of fictitious capital and its de-correlation from the real economy, due to the fact that neoliberal capitalism reinforced the abstract-formal moment of exchange-value at the expenses of the substantive-material moment of use-value (Albritton, Jessop and Westra 2010). Marx (1894: Chapter 30–33) recognized that if financial capitals become more powerful than industrial capitals then the speculative bubbles that deviate create much system-instability. Neoliberal capitalism has generated less wealth than it has redistributed, creating a zero-sum game where the losses of some have been the profits of others. This has been achieved by the "accumulation by dispossession" process (Harvey 2005: 159). The reliance of workers on stock market and financial institutions and more generally on the fictitious capital bubbles, subsumed labour to finance and led to an economy characterized by profits without accumulation (Cordonnier 2006). To use Galbraith's (2009) analysis of the Great Depression, just as in 1929 the real economy had already long past its pick, 2008 should not be considered as the year when the GDP really declined.

Because economic agents have used equities in order to consume, their behaviour has been closely correlated to the stock market's one (Mankiw and Zeldes 1991) and has contributed to increase the markets' pro-cyclicality. Adjoined to this, since credit is a decoupling device because benefits of consumption come earlier than costs, self-control problems occur (Hoch and Loewenstein 1991). As a result, the purchasing capacity of consumers moved from the ability to purchase goods to the ability to buy credits. Moreover, according to the credit view, shifts in aggregate demand are dependent on the financial institutions' ability to lend (Bernanke 1993). As a consequence the structured finance tools offered to consumers, mostly expressed in complex derivatives, collateralized debt obligations, credit default-swap and structured investment vehicles imposed additional burdens on borrowers (Hacker 2006; Tett 2009). Keys, Mukherjee, Seru, and Vig (2008) offered empirical evidence that the increased securitization led to a decline in credit quality. In the US, the pre-crisis expansion in credit accounted for nearly 90% of the rise in household debt over 2000-2007 (IMF 2010). The trap of this credit expansion, which led to the establishment of the real estate bubble, was that the price increase became self powered: the reinvestment of a part of the capital to real estate led to a price increase, but this financial resource was insufficient to support the mass phenomenon (Totir and Dragota 2011). Furthermore, financial institutions are lenders and borrowers altogether. Hence, an increase in counterparty credit risk creates additional funding needs. After the crush of Lehman Brothers in September 2008, all major financial institutions bought credit default swaps to protect themselves against their counterparties. This further raised the prices of borrowing and exacerbated the shortage of liquidity.

Consumption is composed by disposable income, real interest rates and psychological factors. Between 2001 until 2007, consumption benefited from all these constituents, through a manic phase comforted by the Pigou effect that impacted confidence in a positive manner. Consumption is intrinsically related to the expansion of the areas and range of capitalist exchanges. The reports of the IMF show that the global saving rate, defined as the world saving as a fraction of world GDP, was very low in the 2002-2004 period (IMF 2005). A solution for avoiding a global savings shortage, for advanced economies, has been to integrate more actors within the consumption process. Governments have become financial actors and financialized the global commodity redistribution process (Callinicos 2010b) through debt-financed consumption, which ultimately led to a sovereign debt crisis. In this line, the US government continued to run increased account deficits and allowed economic agents in the aggregate to finance expenditures in excess to what national income and domestic saving would have permitted. In the US, personal consumption expenditure peaked above 95% of disposable personal income in 2005 (IMF 2010). The US government imposed to the financial sector a series of measures aiming at helping lower-income households to purchase housing. These measures violated the prudential regulation and led to the bankruptcy of two major financial players sponsored by the government, Freddie Mac and Fannie Mae, who used derivatives as an originate and distribute and slice and dice models, to create and circulate mortgages that further exacerbated the US crisis (White 2008). In summer 2008, Fannie Mae guaranteed subprime and Alt-A loans with an unpaid principle balance that were over 20%

of its total mortgage book and the same percentage is true for Freddie Mac as well. Altogether, the US top 25 subprime distributors advanced around $1 trillion in loans to more than 5 million borrowers between 2005 and 2007. The Pigou effect has heavily been criticized, "the adjustment required would increase catastrophically the real value of debts, and would consequently lead to wholesale bankruptcy and a confidence crisis" (Kalecki 1990: 132). It is precisely what happened. The loss of Keynes's so-called animal spirits (through the crisis of confidence), affected the banking sector, the stock market, the Treasury bond market, and households themselves, and made them enter into a neurasthenic phase.

Short and Long Term Solutions to the Crisis: Towards a New Phase of Capitalism

The national articulation of the new financial architecture

At the heart of economic and political research lies the question of the role of the State. "The State is constantly remodeled while legitimizing economic relationships" (Dobra 2011: 2). The crisis of 2008 has revived the question of the role of the State, by asking for rapid and direct structural solutions in order to alleviate its effects. Pro-cyclicality has become the most important issue for the new financial architecture as it can exacerbate economic fluctuations and lead to suboptimal behaviour. Hence, in the US a new financial architecture has been set up. For the purpose of this paper I shall focus on two of its constituting elements, the financial stimuli (attaining $700 billion) of the Bush administration and the Dodd-Frank Act of the Obama administration. The US relied on capital injection through generous bank bailouts and monetary policy easing that went beyond classic pump priming practices. As a consequence, the US government has become a stakeholder itself and has allowed investment banks to merge with commercial banks in order to stabilize the market and banks have become ever bigger. In 2011, the ten major banks of the US detained 77% of all US bank assets. Additionally, the Dodd-Frank Act of July 2010 aims to put a new regulatory structure for the instruments (e.g. derivatives) and the financial institutions (e.g. banks with more than $50 billion in assets) of the market. In practice, however, the Dodd-Frank Act, through manipulating markets by politics produced a set of unintended consequences. In addition, it has a regulatory dialectic, meaning that an input by the State will generate a counter-response from the market which will seek to influence the future in its own way, hence the Dodd-Frank Act it is inherently anachronistic. The State↔Market system is open and non-linear and any attempt to reach a predicted goal is deemed to fail, because the future cannot be reduced to a range of temporal sequences and the past of the system is not sufficient to determine its future. The control *per se* of the market is not possible because by rulling out unpredictablity, the controller (here the State) institutes a static conceptual path disconected from specific contexts. Control should be replaced by steering, which refers to the ability to connect what happens to an agent's behaviour and to decide differently on the basis of new incoming data. Steering is aimed at structuring the uncertainty of the future. Therefore, control is achieved not by comparing the input (present) with an ouput (future) but by comparing the input with memory (past), in order to draw a renewed open projection of possibilites. The new financial architecture assumes a linearity of progress and can only fully work under the conditions of a restricted capital mobility and globalization. Hence, the new financial architecture reconstitutes some sort of capitalism that we had and have had over 30 years in a slightly more regulated, benevolent form, but doesn't challenge its fundamentals (Harvey 2009).

Despite that the Global Financial Crisis of 2008 has discredited neoliberalism its logic continues to guide the working of system. It is believed that neoliberal capitalism has ended in 2008 when the banking industry did not hesitate to bring the State back in, in an even more radical way than in Keynesian times (Sennett cited in Altvater 2009: 79). This analysis misses out that according to neoliberalism the State is a lender of last resort in order to contain collateral damages when speculative booms turn into busts (Kindleberger 1978; Minsky 1986). One of the early measures taken by the Federal Reserve and the US Treasury was implementing the TARP (Troubled Assets Relief Program) with a package of $700 billion, seeking to take over toxic assets from fragile banks and then auctioning them on the open market to validate their fair price and build a market

for these assets. This type of operation has been abandoned due to the large amount of such assets. The alternative has been to recapitalize banks and take over State participation in them. The Dodd-Frank act does also contribute to the dramatic expansion of public deficits and debt, which will not be reversed by the unwinding of temporary stimulus measures and by the expected recovery of revenues as activity picks up (Fiscal Affairs Department 2010), will be a main problem for ensuring longer-term fiscal sustainability. The US is labelled as a red zone country within the ring of fire in terms of budget deficits and public sector debt as proportions of the GDP (Gross 2011). In the US the increases in public spending, as a share of GDP between 2007 and 2010, reached 6,3%. The US fiscal deficit is expected to continuously increase between 2012 and 2020, reaching $1200 trillion and 20% in terms of the total share of GDP (CBO 2009; Kasparek 2011), a level that has is much higher than those experienced during the Great Depression of 1929. Furthermore, if the current new financial architecture is maintained, the public debt of the

US federal government is projected to rise to 650% of GDP by 2076. As a consequence, the Dodd-Frank Act inevitably contributes to sustain the rational of nationalizing losses and privatizing profits. Besides, the new financial architecture has missed the fact that monetary expansion leads to high inflation which in turn may lead to falls in tax revenue (see Tanzi 1978). Indeed, the US sub-national governments have experienced in 2009 and 2010 very sharp declines in tax revenue (Boyd and Dadayan 2009). Overall, State budget deficits are pro-cyclical and they threaten to crowd out private investment and eventually it will constrain growth.

Another proof of the continuing neoliberal logic is that Wall Street is still locked into its old mindset. The Dodd-Frank Act maintains the institutional *status quo* of the Gram-Leach Bliley Rules that allow financial conglomerates in the US and universal banking rules in other countries. Related to this issue, what the Dodd-Frank Act attempts to implement may be for naught if the US State will continue to fund future fires, like Fannie Mae and Freddie Mac, with no walls around them (Achanaya and all 2011). As seen, the uncontrolled provision of credit lies at the heart of the Global Financial Crisis of 2008. Yet, financial institutions by relying on the process of destructive creation have found new ways to counteract the Dodd-Frank Act's policies and continue to operate within their classical scheme of providing factice wealth effects. Against the restrictions on derivatives and proprietary trading imposed by the Dodd-Frank Act, investment banks such as JP Morgan Chase have transformed their derivative section into a brokerage undertaking. Furthermore, financial institutions are devising new exotic investments that carry high negative spill-over effects. Banks bundle and securitize life insurance policies as bonds, or are repackaging their money-losing securities, including real estate mortgage investments, into higher-rated ones. These innovations are a variation on the old asset-backed securities model and are fraught with the same risks (Anderson 2009). In point of fact in May 2012, JP Morgan Chase has registered a $2 billion trading loss. CEOs and banks overall have found new ways to continue to engage in high risk proprietary speculation, thereby betraying the democratic hope embedded in the American Dream (Sorkin 2009; Huffington 2010; Pozen 2010). Institutionalized ideas on Wall Street about what constitutes appropriate risk-taking behaviour did not evolve. Proof of this is that the CEO of JP Morgan Chase, Jamie Dimon, stated that "if you are a restaurant and you can't charge for the soda, you're going to charge more for the burger" (cited in Dash and Schwartz 2010). The Dodd-Frank Act is the result of a set of regulatory trade-offs between the market institutions and the State. The requirements for higher bank reserves have been postponed *sine die*, because of the lobbying activity of global banks. In this sense, according to the Institute of International Finance, a higher capital requirement would bump 3% points of the US GDP. In reality the effects of capital requirements are hard to measure because research results are conflicting.

In response to the rules relating to consumer financial protection, regarding credit and debit cards, imposed by the Dodd-Frank Act, commercial banks raised the rates of their cardholders before July 2010. Furthermore, commercial banks are not engenderers of self-restraint behaviours. For instance, Citigroup issues an inControl Mastercard service, meaning that the card will be cut off at the holder's discretion when a spending threshold is reached. Examples of other ways that financial institutions have found for new sources of earnings are multiple and making their list proves to comfort a same point. The reaction of financial institutions in regard to the Dodd-Frank Act creates a zero-sum game that paralyzes actors within the continuous neoliberal logic.

JPMorgan's CEO Jamie Dimon has strongly criticized the Dodd-Frank Act, citing the huge costs of compliance and the difficulty of actually making the regulations work effectively. The Dodd-Frank Act is too complex and leaves out ambiguity. Hence it acts as a hypothetico-deductive regulatory device, just as neoliberalism does and encounters the risk of proposing regulations that will not be enforceable and effective. Ambiguity is necessary because it flexibilizes the system and can help to steer new responsible risk-management practices. Since market conditions are in a continuous change, the Dodd-Frank Act is too rigid and has no forecasting capacity. Banks should try to acknowledge their real limits of exposure according to the situation of markets and should be punished if they would go over a dynamically defined limit. What this underlies is that the Dodd-Frank Act fails to impose real sanctions on the financial actors because it fears that it might hinder the financial recovery of markets. Instead of instituting an effective punitive devolved regulatory framework the Dodd-Frank Act has created an inefficient central regulatory trade-off framework. The financial system and the monetary policy, at the basis of the new financial architecture, continue (just as *ante* 2008) to be used for social purposes and as means to widen opportunities in the provision of fictitious capital creation. Additionally, the increase in budget deficits has deepened the irresponsibility of politicians, while the Dodd-Frank Act has provided new incentives for the reckless financial elite to find new tools for further increasing the irresponsibility of consumers. The underlying fraudulent logic of neoliberal capitalism continues to take place, "there's been too much gaming of the system. Capitalism is not working! There's been a corrupting of the system of capitalism" (Greenspan cited in Suskind 2008). Finally, the new financial architecture is captured within the part-whole paradox. The State is one institutional ensemble among others within a social system, yet it has to maintain the cohesion of the social system of which it is part. This part-whole paradox has been translated, in the case of the new financial architecture, by the fact that only the State has in fact been burdened and considered as a catalyst for change. This narrative has eventually inhibited the necessity for the financial sector to become more responsible. The Dodd-Frank Act has not provided a renewed role for the State. This latter continues to act within the self-referential logic proper to neoliberalism and is fastly weakening, ultimately becoming bankrupt. Overall, the new financial architecture increases volatility and makes it more obscure for financial operators to obtain information from ongoing informational movements. Yet, as seen, markets that are self-regulated have no references to rely on in order to produce expectations. Hence, the only solution is to move capitalism forth.

Towards a Capitalism of Participatory Responsibility

The spirit of capitalism is "the set of beliefs associated with the capitalist order that helps to justify this order and, by legitimating them, to sustain the forms of actions and predispositions compatible within it" (Boltanski and Chiapello 2007: 10). Capitalism is thus a transhistorical socio-political system of production that cannot disappear because it has a power recovery, meaning that it absorbs within its structural logic any new input that tries to affect it. Boyer et al., after documenting the increase in financial instability since 1970 and principally in the 1990s and 2000s, remarked that this succession of national banking crises could be regarded as a unique global crisis (2005: 23). What turn will capitalism take in the near future? Who are the agents and forces that can balance the capitalist structure? The Global Financial Crisis of 2008 has destabilized the system in its time and place. As a consequence, the components of the system are reorganizing their structures to establish a new dynamic regime able to cope with the initial perturbations. These bifurcations are revolutionary transformations within the development of the capitalist system and when they occur the reins of power change hands, systems of hegemony are transformed and new governing structures are introduced. At our point in time the system is still traversing a period of relative indeterminacy and explores the different alternative responses it can provide to the initial perturbation. This period of initial perturbation opens a window of opportunities which might however become hindered if due to the economic hardship, States are becoming more protective and their political models bend towards nationalism. Indeed, the contagion of nationalism might not just preclude the EU to become the US of Europe, but might also lead in a short time frame to a global order characterized by multipolarity where the incentives for conflicts would increase. Yet, admittedly if this scenario takes place, then States will move outside of neoliberalism and would therefore dismantle its powerful structures, but the costs of such radicalization and the subsequent alternative to neoliberalism would fail to pave a better way ahead. For now however at the level of the political elite and realm, the wind of hope offered by newly appointed left-wing politicians, such as French President François Hollande, has rapidly been replaced by sentiments of disappointment in light of the fact that their respective political programmes are nurtured by the neoliberal logic. It becomes clear that political ideologies can no longer cope with the challenges of our times and that, regardless of their place within the political chessboard they enable capital to continue to shape its environment, thereby suppressing alternatives and subordinating the State to the neoliberal logic. Hence, a new model of capitalism able to transcend political ideologies must be offered. Friedman and Friedman (2008) alleged that it is time for *homo spiritualis* to replace *homo economicus* in capitalism. Leaders ranging from US President Barack Obama, former French President Nicolas Sarkozy, to Pope Benedict XVI agreed that capitalism based on selfish behaviour is not sustainable. In 2009, the Pope signed his third encyclical, *Caritas in Veritate*, in which he calls for a radical new approach to the world economy that requires greater social responsibility. The absence of a compelling form of responsible capitalism imobilizes agents and can lead, as it did in the current credit selling value chain, to a widespread fraud and violation of moral rights, as well as unfair treatment of all stakeholders, especially taxpayers (Barr and al. 2007). Moral imagination makes agents become conscient of the ethical demands of capitalism and creates a new normative theoretical model that can project new practical reforms (Werhane 1999). One of capitalism's most essential principles lies in the need for markets to enjoy social legitimacy because their political sustainability ultimately depends on it. In this regard, the Global Financial Crisis has opened an array of options for the State and civil society to reassert their social logics and for creating a culture of moral imagination. International markets can be legitimized only if the State reconciles them to social values and to shared institutional practices and this happens multilaterally.

Capitalism follows a self-reflective postmodernist abstraction. If capitalism could ask, it would pose the following question: "which combination of my selves, am I today, here, in this context?". Rather than something entrenched and permanent, the identity of capitalism is the discursive surface upon which a complex network of institutions, agents, forms of linkage, and logics converge and articulate themselves. The superior dynamism and reach of a globalizing market economy caused more problems substantively for other systems than other systems cause for it. In other words, in the multilateral process of structural coupling of systems, other systems adjust more to the logic of capital accumulation than capitalism is obliged to incur costs or losses in adjusting to their respective logics. The reasons for this asymmetrical interdependence among institutional orders include the relatively greater capacity of the capitalist economy to escape the constraints and controls of other systems (e.g. risk management; capital flight). Yet, the Global Financial Crisis of 2008 can offer the momentum for realizing a transformative vision (Fig.1).

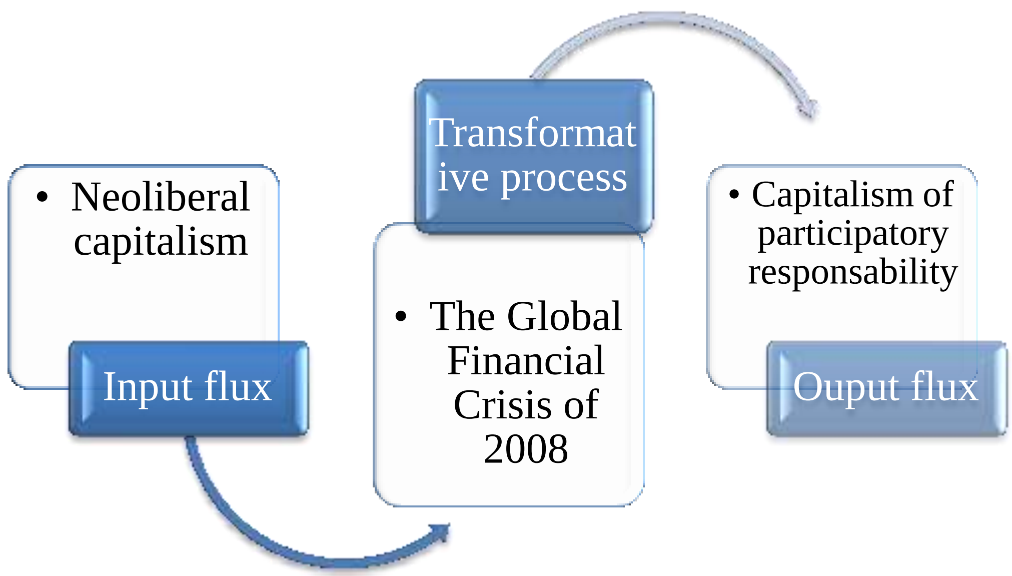

Figure 1: Systemic change of paradigmatic hegemony

The Global Financial Crisis is internal to the financial system and relates to expecations. Therefore, expectations must be regulated and this can be done through the capitalism of participatory responsibility. Within the next form of capitalism, individuals' willingness to accept the risks inherent to the market as it has been structured and as it has functioned until now, should be limited. The underlying rational of the capitalism of participatory responsibility is that free agents and institutions of the CV↔S↔M system act within a continuum of co-agency participation and power (Fig 2).

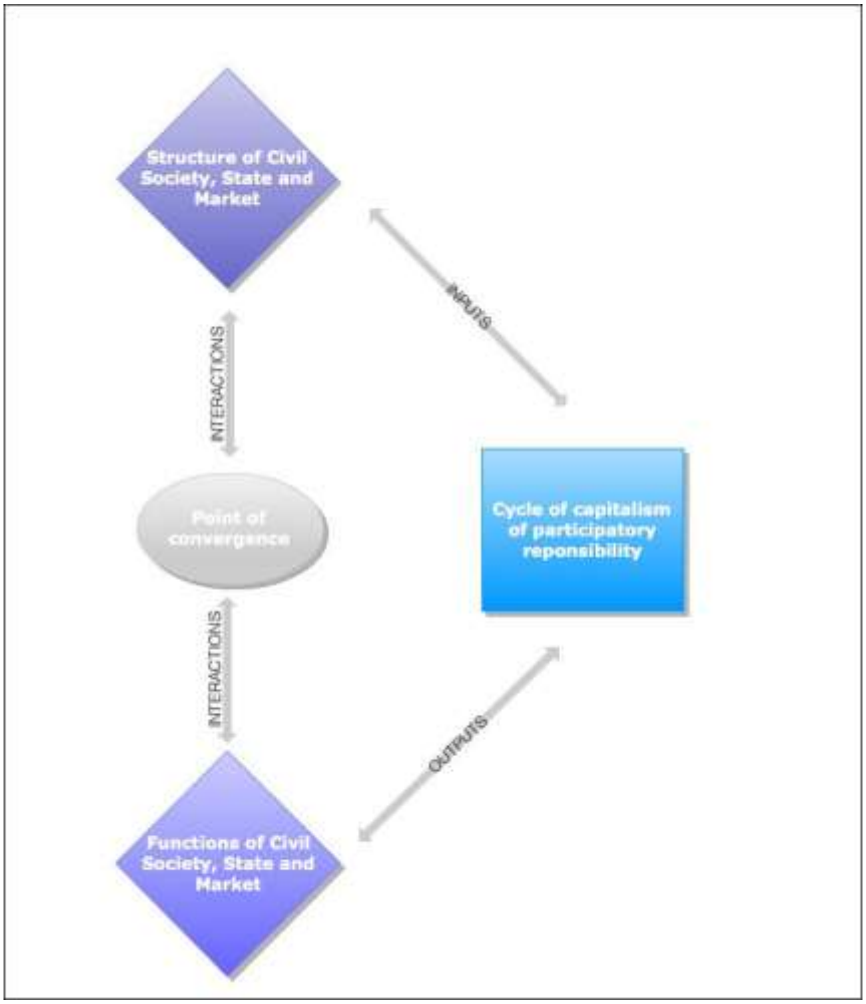

Figure 2: The New Model of Capitalism:
The Capitalism of Participatory Responsibility

The prototype of my new model of capitalism is based on the:

a) conceptual structural dialectic triad, Civil Society↔State↔Market (CV↔S↔M);
b) analysis of two current factual tendencies, the rise of civil society as an influential factor for the agent and the correlation of growth with the productive capacity.

In a complex non-linear adaptive system, such as capitalism, the catalyst scenario (endorsed by neoliberals regarding the role of State within the economy) can never be fully applicable, because an event has always more than one cause, all of which are intertwinned in a network of interdependence. The effort of sketching a new model of capitalism shall be contained by the epistemological requirement of analyzing the field of political economy under an institutionalist prismatic. In this sense, Bosanquet's theory of institutions as ethical ideas (1923: Chapter 11), based on the assumption that corporations are the embodiment of rationalized social commitments, should be embraced. This definition of institutions indicates the need to create a three-level structure for the new capitalism. In order to sketch a new paradigm of capitalism, its conceptualization must take a holistic view upon democracy. Capitalism is not reduced to the State↔Market relation, as the mainstream liberal, Keynesian and Marxist economic theories suggest. Schumpeter's main highlight was on the need to grasp how economic reality is entwined with social reality, as a dynamic process whose appreciation facilitates an understanding of how economy, society, and politics influence each other, are reciprocally constituted, and change over time (Dahms 2011: 449). In order for a capitalist system to survive and to develop itself into a sustainable manner the domestic realm, namely civil society, should also be considered as a full actor of capitalism. The structural dialectic triad, Civil Society↔State↔Market (CS↔S↔M) aims to break the linear casuistic of neoliberal capitalism. The CS↔S↔M system is an evolutionary process and similar to competition, cooperation develops at least partly in an evolutionary process as well (Axelrod and Hamilton 1981). Each institution, the State, the market and civil society, operates with norms of public reason that are appropriate to its level and the hermeneutic structure of the agents it governs. Within the CS↔S↔M system, each structure and function adapts with the environment in a dynamic evolutionary co-creation. The CS↔S↔M is a cyclical activity that maintains a dialectic within itself which is challenged continually by the purpose of the activity itself, namely that of developing capitalism. According to Hock, "all organizations are merely conceptual embodiments of a very old, very basic idea – the idea of community" (cited in Waldrop 1996: 8). Hock's notion of chaordic organization captures this concept of community and addresses issues of social development "in ways harmonious with liberty, the human spirit, the biosphere and the fundamental principles of evolution" (Hock 1994: 6). Extrapolated to the future of capitalism, it follows that only in a capitalism of participatory responsibility in which the whole does not control the parts and none of the parts controls the whole, can competition and cooperation be linked, order emerge, and efficient systems of human activity evolve. Stronger governance based including all institutions of the CS↔S↔M system is needed in order to preserve the advantages of global markets, but also to provide enough space for human and environmental resources to ensure that capitalism works for people and not just for profits. Future infrastructure arrangements will be subjected to rigorous public policy accounting. The aim for the future is to break down the psycho-moral and cognitive regulatory capture operated at the all levels of the system by neoliberal capitalism.

Neuroeconomis showed that the rational processes, which addresses logical questions and affective processes that relate to emotional responses, are articifical constructions. The individual is inherently emo-rational (Oullier 2010). Agents construct their identities from the conceptual contours which they inherit from the collective of social purposes. Considering that the individual reacts, by developing a behavioral strategy, to the affects of his environment, it means that an individual's axiology can be positively influenced if a cooperative logic is instituted. Within this process of influence, civil society can play an active role, by fostering pictorial and conceptual representations aimed at coordinating action in a mimethic way – all agents will tend to develop a shared empathy and reproduce the axiological model of their affector, here civil society. The hegemonic vision of neoliberal capitalism has polarized the State↔Market system from civil society. Due to neoliberal capitalism, forms of civic engagement have withered away because individualism (Putnam 2000) and self-referentiality became the predominant culture of our societies. The Global Financial Crisis of 2008 has contributed to the progressive self-organization of civil society. Among the three types of civil society actors (Castells 200), the social movements aimed at controlling the economic process are considered. In attempting to shape the forces of the market, these social movements build networks of action and organization to induce a global social movement aimed at affecting the functions and eventually structures of markets. As such, new structures of global governance – as well as globally organized and globally concerned political movements – are slowly emerging (Held 1995). Indeed, the US Social Forum set in 2010 and Occupy Wall Street in place since 2011, are examples of the emergence of a new type of governance from the bottom. This type of social movements contributes also to move our participative democracy to an inter-associative democracy because the pressure of the workers and of the middle classes for more public participation continues to increase (Bresser-Pereira 2004). One may contend that the power of elites is still too strong in order for civil society to have an effective transformative impact. Yet, as Foucault remarked, "where there is power, there is resistance" (1997: 168) and resistance relies upon the context against which it struggles and meets power dynamically (as it is the case through Occupy Wall Street).

Expectations can also be regulated by correlating the effective growth of a State to its productive capacity, through a ressource-based economy. The real economy should not be in a large part replaced by a bloated financial system, as it has occurred in the US. The objective conditions, such as economic, social and ecological realities (Harvey 2010b) are contributing factors for finding an alternative sustainable form of capitalism, where confidence could no longer erode at the rhythm of the stock market's fluxes. Growth must not be disconnected from logical and physical first principles. Growth should not go beyond an optimal level correlated to the assimilative capacity of the system and should not be accelerated in a factice manner, which inevitably results in bubbles. In this line new proposals, such as the Tradable Energy Quotas (TEQ) which could soon be operationalized, aimed at controlling consumption, are in some sense correlating the productive capacity with effective growth. The underlying mechanism of this proposal is that a given quantity of TEQ is created, corresponding to the maximum emissions allowed for a specified year and a particular State. Whenever ane agent buys any form of carbon-based energy, payements are made in two currencies: (i) the cost payable in conventional money; (ii) and the quantity of TEQ corresponding to the carbon content. Agents or States who spend more than their quota have to obtain extra TEQ from other agents or States who have a surplus through an online auction system. The advantage of TEQ is that it mobilizes and integrates within the economic and market spheres all segments of society in order to achieve carbon reductions.

By implementing ecological monetary projects, economic agents will be forced by the system to self-constrain themselves and will tend to extrapolate, through a mechanism of cognitive dissonance, this moderate behavior of consumption to the entire level of the operating logic of capitalism.

Conclusion

A close study of the origins of the Global Financial Crisis of 2008 is critical for understanding its implications for the future of capitalism (Fig1: 11). Market imperfections, expressed through crises, are physiological to capitalism, because the future and expectations are governed by reflective patterns that are constantly affecting themselves and cannot be achieved. Neoliberal capitalism has been however more than just a punctual imperfection of the system, because the Global Financial Crisis of 2008 has triggered a profound political and economic order that challenged the democratic contract. The adoption of complex and obscure financial innovations combined with an increase in credit in the form of securities together with the neoliberal cognitive capture of the logic and means of structures and agents, led to what Bourguinat and Briys call "a general malfunction of the genome of finance" (2009: 45). The new model of capitalism, the capitalism of participatory responsibility considers the structural dialectic triad of Civil Society↔State↔Market (CS↔S↔M) as an ensemble that has a transformative power. The narrative behind the new capitalism is that the cycle of capitalism can be balanced by the democratic logic (Fig2: 12). Just as Cronos has eaten all its children apart from Zeus thanks to the action of Rhea, the future of a sustainable capitalism can be secured from the predatory neoliberal logic, thanks to the action of all agents of the CS↔S↔M system.

For further research, in order to develop a consistent and comprehensive sustainable model of capitalism, we need to analyse the new nature of the socialist post-statist State (Dobra, 2011) and how this further affects the capitalist cycle.

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Foreign Direct Investment and its Effects on Home Country: Implications for Developing Countries

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Abstract

In the global world, Outward Foreign Direct Investment (OFDI) is one of the most prominent economic development factors for the growth of home and host countries total factor productivity (TFP). OFDI and Trade performances are positively engage in the complementarity or substitutability relationship depending on the country factors advantages and microeconomic and scale of economies in firm and industrial level.This paper attempts to explore the long run relationship between outward foreign direct investment (OFDI) and home country TFP using eight South and East Asian Countries as a case for the period of 1980-2010. In order to promote OFDI-led growth, the home government should prepare the private sector for increasing competition in the era of globalization so that linkages can be forged with Asian countries multinationals, and to facilitate home sourcing for OFDI activities. However, the study reveals the evidence of long run relationship between outward FDI and total factor productivity through the implementation of VAR-based cointegration test using the methodology developed in Johansen(1991, 1995) .

There is considerable heterogeneity in the long-run effects of outward FDI on total factor productivity across countries, and which can be explained by cross-country differences in the level of human capital, the level of financial development, and the degree of trade openness which are significantly related to cross-country variations in the domestic productivity effects of outward FDI. Meanwhile, the variables which act as the determinants of growth effects of outward FDI have been discussed about herewith as well as the home country effects of OFDI in developing countries and the role of governmental policies to expand the positive effects of OFDI.

Key words: *Outward FDI, Total Factor Productivity, Developing Countries, Panel-VAR*

Cointegration

JEL Classification: F21, O11, F23, C23

Introduction

The contribution of Foreign Direct Investment (FDI) to economic growth has been debated quite extensively in the literature. The traditional argument is that Foreign Direct Investment (FDI) improves economic growth by increasing the capital stock, whereas recent literature points out to the role of FDI as a channel of international technology transfer. There is growing evidence that FDI enhances technological progress through technological diffusion. Multinational corporations are probably among the most technologically advanced firms in the world. Moreover, FDI not only contributes to exports of more efficient foreign technologies, but also generate technological spillovers for local firms.

Foreign direct investment (FDI) and economic contribution of foreign firms is one of the major channels of providing developing countries with access to advanced technologies. With start of globalization from the past decades, while many developing countries started liberalization and have opened their financial market to international capital, foreign firms, and foreign direct investment, only a few countries experienced economic development and growth. Therefore, economics looked after other factors which might be needed to interact with foreign investment to bring growth and development.

While most studies focused on main areas of determinants of growth, determinants of FDI, role of multinational firms in host countries and studying the direction of causality between FDI and economic growth, but this study aims at investigating the relationship between own economic growth and outward FDI (OFDI) considering the interaction of OFDI with other macro level variables such as human capital and level of financial development. We study the effect of these variables and OFDI on productivity and efficiency improvement using an endogenous growth model. East and South-East Asian region contains typical countries in outward FDI. We present an overview of FDI outflow in the eight developing countries that are under investigation in this study.

Rapid economic growth in South, East and South-East Asia has contributed to the continued increase in FDI outflows. The importance of the region in the world economy and its high growth rate has made it incline towards FDI. The 2006 Global CEO Survey (PricewaterhouseCoopers 2006) confirmed that reaching new customers is a more important motive than reducing costs for FDI in emerging markets in general, and in large world economies in particular.

Asia's newly industrializing economies, namely Hong Kong (China), the Republic of Korea, Singapore, and Taiwan Province of China, remained the main sources of OFDI among developing countries, despite a significant decline in their total outflows in 2005. Meanwhile, the rise in China's foreign currency reserves stimulated a rapid growth in outward FDI from the country, helping to reshape the pattern of flows from Asia.

Outward FDI from East, and South-East Asia still focuses on services, but a growing share of capital outflows from the region has been targeting manufacturing and natural resources. In terms of cross-border M&As, the combined share of the manufacturing and primary sectors rose significantly, from 29% in 2004 to 54% in 2005. Asian energy companies, in particular those from China and India, have intensified their efforts to acquire oil assets.

Rapid economic growth in South, East, and South-East Asia shows a further expansion of outflows. FDI outflows from China have been gaining momentum in recent years, and the country's prospects for OFDI are promising. FDI is also likely to continue its upward trend in East and South-East Asia, especially in relatively low-cost countries. Outflows from Singapore are likely to rebound. With a strengthening of Government support and some large M&A deals expected, the surge in outward FDI from China is likely to continue.

Policies to promote FDI take a variety of forms, but the most common are partial or complete exemptions from corporate taxes and import duties. Standard policies to attract FDI include tax holidays, import duty exemptions, and different kinds of direct subsidies. FDI outflows are also affected by corporate tax rate differentiation. Subsidizing FDI helps multinational firms reduce production costs, improves incentives to create patents, trademarks, and enhances the relative attractiveness of locating production facilities in the country offering incentives and raises the economic benefits of OFDI. To better understand OFDI in the countries under investigation; foreign investment for each country the specific incentives and policies are presented in some details.

Literature Review

Outward foreign direct investment from developing countries or Third World FDI (TWFDI) can be traced back to about a century ago [Katz and Kosacoff, 1983]. However, the share of TWFDI was infinitesimal before the 1970s. The real surge, encompassing many more countries and continents, has taken place in the last three decades. The 1990s witnessed a big jump in OFDI from developing countries: its share in the world total FDI outflow reached about 15 per cent, approximately 3 times that during the 1980s [UNCTAD, 1994-2000].

As OFDI from developing countries is concentrated geographically in terms of sourcing – several East Asian countries plus a few Latin American countries accounting for the major portion, the growth of FDI from developing countries is impressive. In addition, as the process of economic catch up and FDI development goes on, multinational enterprises headquartered in developing countries have been increasing in number, size, complexity of organization, and transnationality. Among the 50 top multinational enterprises from developing countries in 1998, there were 29 with foreign assets above US$1 billion, and two ranked the 43 and 73 respectively in the world’s top 100 multinationals [UNCTAD, 1998, pp.48-49, 36-38].

Van Pottelsberghe and Lichtenberg (2001) use country-level macro data for a panel of 13 developed countries over the period 1971-1990 to examine whether technology-sourcing FDI affects domestic productivity through foreign R&D spillovers. They find a positive long-run relationship between the foreign R&D capital stock weighted by outward FDI and domestic total factor productivity, implying that outward FDI into R&D-intensive countries indeed has beneficial effects upon home-country productivity by transferring technological knowledge from the host country. However, Bitzer and Kerekes (2008) reach a different conclusion. Their findings, based on industry-level data for 17 OECD countries between 1973 and 2000, suggest that the interaction between foreign R&D capital and outward FDI is negatively associated with domestic productivity in non-G7 countries; for the G7 the evidence of R&D spillovers through outward FDI is not significant. Both studies investigate only whether outward FDI into major R&D-performing countries acts as a channel for R&D spillovers, thus neglecting all other potential productivity effects of outward FDI.

Braconier et al. (2001), in contrast, investigate both the effect of the outward-FDI-weighted foreign R&D capital stock and the effect of “pure” outward FDI on domestic productivity. Using firm- and industry-level data for Sweden over the period 1978-1994, they find neither evidence of FDI-related R&D spillovers, nor any correlation between outward FDI per se and domestic productivity for Sweden. These results differ from those of Driffield et al. (2009). In an industry study for the UK covering the period 1978-1994, the authors distinguish between outward FDI in high-cost, high-R&D-intensive and outward FDI in low-cost, low-R&D-intensive countries. They find that both types of FDI generate productivity growth in the UK, suggesting that technology sourcing and efficiency-seeking FDI increase domestic productivity. A similar result is obtained by Driffield and Chiang (2009), who investigate the effects of outward FDI from Taiwan to China. Based on industry data for 1995-2005, they report a positive association between outward FDI to China and labor productivity in Taiwan. Given the fact that labor costs in Taiwan are significantly above those in China, the authors conclude that this productivity effect is due to vertical (efficiency seeking) FDI. Vahter and Masso (2007), on the other hand, use firm-level panel data from Estonia between 1995 and 2002 to examine the effects of outward FDI on total factor productivity of the investing firms and the rest of the industry. They find that outward FDI is positively related to the productivity of the parent companies, whereas there is no robust evidence of productivity spillovers to other firms. Since the overwhelming majority of FDI by Estonian firms is horizontal (market seeking) (see, e.g., Masso et al., 2008), the positive productivity effects of Estonian outward FDI appear to be primarily associated with this type of FDI.

Bitzer and Görg (2009) examine the effect of outward FDI on domestic total factor productivity using industry-level panel data for 17 OECD countries over the period 1973-2001. Their results suggest that outward FDI has, on average, a negative effect on total factor productivity, but that there are large differences across countries. Outward FDI has the largest negative effect on total factor productivity in South Korea — the only developing country in the sample. In France, Japan, Poland, Sweden, the Czech Republic, the UK, and the US, in contrast, increased outward FDI is associated with higher total factor productivity.

Given the mixed results, perhaps the only conclusions that can safely be drawn from these studies are that outward FDI can have positive, as well as negative, effects on domestic productivity, that the domestic productivity effects of outward FDI do not necessarily depend upon the investment motive, and that the effects of outward FDI can differ significantly from country to country. The latter may apply in particular to developing countries, which differ widely in terms of country size, income level, economic structure, natural resources, technological capabilities, trade openness, government policies, and other characteristics. Unfortunately, the studies do not provide any information on how outward FDI could affect aggregate productivity in developing countries on average over the long run.

The current study which aims to find out how OFDI influence the TFP ratio on the developing countries. It also aims to specify how a change in this variable affects the TFP ratio would therefore be a useful contribution to the academic literature on the determinants of developing countries outward FDI. These south East Asian countries-specific factors include OFDI and TFP. These determinants had been identified to be key determinants of outward FDI in previous studies, and therefore reference is made to these previous studies to provide a theoretical and empirical justification for selecting variables to be included in the Panel Data model to be estimated in this study. The literature survey will be confined to studies that analyze the relationships of these home country-specific factors to outward FDI.

Theoretical Model

The analysis will examine the long-run relationship between outward FDI and total factor productivity in developing countries. In this section, we present the basic empirical model, discuss some econometric issues, and describe the data.

Empirical Specification and Econometric Issues

Following Herzer (2010), we assume that the correct specification of the functional form of the long-run relationship between total factor productivity and outward FDI is given by

$$\text{Log}\,(TFPit) = ai + \delta it + b\log\,(OFDIit) + \varepsilon it, \qquad (1)$$

where $i = 1, 2, ..., N$ is the country index, $t = 1, 2, ..., T$ is the time index, log($TFPit$) represents the log of total factor productivity, and log($OFDIit$) is the log of outward FDI. Following Bitzer and Görg (2009), we use outward FDI stocks rather than outward FDI flows, because stocks, due to the accumulation of flows, may more effectively capture long-run effects. The size of the long-run effect of outward FDI on total factor productivity is measured by the coefficient b, which can be interpreted as the long-run elasticity of total factor productivity with respect to outward FDI. Finally, any country-specific omitted factors which are relatively stable in the long run or evolve smoothly over time are captured by country-specific fixed effects, a_i , and country-specific time trends, δ_{it}.

Equation (1) assumes a long-run bivariate relationship between permanent movements in the log level of outward FDI and permanent movements in the log level of total factor productivity. Necessary conditions for this assumption to hold (and thus for our model to be a correct description of the data) are that both the individual time series for the log of total factor productivity and the individual time series for the log of outward FDI are nonstationary or, more specifically, integrated of the same order and that log (TFP_{it}) and log ($OFDI_{it}$) form a cointegrated pair. A regression consisting of two cointegrated variables has a stationary error term, ε_{it} , in turn implying that no relevant integrated variables are omitted; any omitted nonstationary variable that is part of the cointegrating relationship would enter the error term, thereby producing nonstationary residuals and thus leading to a failure to detect cointegration. The rationale is that recent theoretical work on firm heterogeneity and FDI suggests that the establishment or acquisition of foreign affiliates involves additional costs of overcoming legal, cultural and social barriers, so that only firms above a certain productivity threshold can cope with these fixed costs and thus engage in outward FDI (see, e.g., Helpman et al., 2004; Aw and Lee, 2008). Total factor productivity growth is generally associated with domestic output growth, higher demand, and hence better profit opportunities for domestic investment, an increase in total factor productivity can also lead to a reallocation of scarce funds to more profitable domestic investment opportunities in place of less profitable outward investment. Consequently, increased factor productivity may be both the cause of reduced and the cause of increased outward FDI activity. Given that standard panel unit root and cointegration tests may be biased in the presence of such cross-sectional dependence, we also use recent advances in panel data econometrics to account for this issue.

Productivity Decomposition and Malmquist Index (Mpi)

Economic theory of production explains that productivity is defined in terms of the efficiency with which inputs are transformed into outputs in the production process. Indexes of productivity are simply the ratios of an aggregate output index to an index of either single or total factor use. Total factor productivity approach also seeks to evaluate the independent influences of technical change and factor substitution. One of the most popular forms of approximation for the total factor productivity is Malmquist index. The Malmquist index has developed and gained in recent years in works of Fa¨re, Grosskopf, Norris, and Zhang (1994). It applies linear-programming approach to calculate the distance functions that make up the Malmquist index.

To analyze knowledge spillover through FDI, we will calculate the productivity growth rate g using the Malmquist Productivity Index (MPI). This index is based on the output distance function "D^t" defined as follow:

$$D^t(x^t, y^t) = \min\left(\theta : (x^t, y^t / \theta) \in S^t\right)$$

(Min means "minimum,")

Where t represents the time period, x denotes a matrix of input, y stands for a vector of output, and S^t is the technology set which is convex, close, bounded, and satisfied strong disposability of x and y (Coelli, 1996).

From the definition distance function, $D^t(x^t, y^t) \leq 1$ if and only if $(x^t, y^t) \in S^t$. In addition $D^t(x^t, y^t) = 1$ if and only if (x^t, y^t) is on the boundary of technology frontier. This condition occurs when productivity is technically efficient.

The definition of the output distance function can be expanded to two different time periods. For example the definition below measures the maximal proportional change in outputs required to make (x^{t+1}, y^{t+1}) feasible in relation to the technology at t (Fare et al., 1994):

$$D^t(x^{t+1}, y^{t+1}) = \inf\left(\theta : (x^{t+1}, y^{t+1} / \theta) \in S^t\right)$$

If production (x^{t+1}, y^{t+1}) occurs outside of the previous feasible technology set S^t in period t, technological change has occurred.

Therefore, MPI, which represents the productivity change between two periods, can be defined as:

$$\left(\frac{D^t(x^{t+1}, y^{t+1})}{D^t(x^t, y^t)}\right)$$

or

$$\left(\frac{D^{t+1}(x^{t+1}, y^{t+1})}{D^{t+1}(x^t, y^t)}\right)$$

However we defined the output-oriented MPI as the geometric mean of the MPI in two consecutive periods to avoid choosing on arbitrary benchmark, following Fare at al. (1994).

$$MPI^t(x^{t+1}, y^{t+1}, x^t, y^t) = \left[\left(\frac{D^t(x^{t+1}, y^{t+1})}{D^t(x^t, y^t)}\right) . \left(\frac{D^{t+1}(x^{t+1}, y^{t+1})}{D^{t+1}(x^t, y^t)}\right)\right]^{1/2}$$

Thus to calculate the output-oriented MPI at time t, we need four distance functions:

$$D^t(x^t, y^t), D^t(x^{t+1}, y^{t+1}), D^{t+1}(x^t, y^t), D^{t+1}(x^{t+1}, y^{t+1})$$

In order to investigate the effects of FDI on efficiency improvement and productivity growth, we need two other indices which can evaluate efficiency improvement and technological progress. By some algebraic manipulation, definition of MPI can be decomposed into two parts as follow:

$$MPI^t = \frac{D^{t+1}(x^{t+1}, y^{t+1})}{D^t(x^t, y^t)}\left[\left(\frac{D^t(x^{t+1}, y^{t+1})}{D^{t+1}(x^{t+1}, y^{t+1})}\right) . \left(\frac{D^t(x^t, y^t)}{D^{t+1}(x^t, y^t)}\right)\right]^{1/2}$$

The ratio outside the square brackets of equation measures the change in relative efficiency, so it is called the efficiency change index or simply efficiency index EI. The geometric mean of the two ratios inside the square brackets of equation captures the shift in technology so it is called the technology change index or simply technology index TI. The computer program DEAP 2.1 provides by Coelli (1996) is used to calculate MPI, EI, and TI. Since definition implies the ratio of productivity level change between two periods, we can calculate the growth rate of productivity in the discrete case as follow:

$$g = MPI - 1$$

Similarly, we can calculate efficiency improvement "EFFG" and technological progress "TECG" as follows:

$$EFFG = EI - 1$$
$$TECG = TI - 1$$

We use MPG instead of g to denote the growth rate of productivity because we calculate it using MPI. Therefore, in out empirical model we get:

$$MPG_{it} = c_{i0}^{M} + c_{1}^{M} OFDI_{it} + \varepsilon_{it}$$

Since MPI was decomposed into EI and TI, and growth rates are calculated.

Data and Descriptive Statistics

We now describe the data used in the empirical analysis. As we define above, we will calculate the total factor productivity data by using Data Envelopment Analysis (DEA) through two input variables namely Labor force and capital formation stock and one output variable which is real GDP. The data analysis is presented in next chapter in detail. All data used to calculate total factor productivity are from the World Development Indicators (WDI) 2011 CD-Rom.

The data on outward FDI stocks are obtained from the UNCTAD FDI database (http://www.unctad.org/templates/Page.asp?IntItemID=3277&lang=1). UNCTAD (2012) defines FDI as an investment involving a long-term relationship and reflecting lasting interest and control of a resident entity in one economy in an enterprise resident in an economy other than that of the foreign direct investor. The stock of FDI is defined as the value of the share of the foreign enterprise capital and reserves (including retained profits) attributable to the parent enterprise plus the net indebtedness of affiliates to the parent enterprise. Since UNCTAD reports outward FDI stocks as shares of GDP, we multiply the outward FDI-to-GDP ratio by real GDP (from the WDI) to construct real outward FDI stocks (in 2005 US$). Given that the UNCTAD data start in 1980 while the WDI 2012 data end in 2010, the empirical analysis covers the period 1980-2010.

Data Analysis

Data Envelopment Analysis

For productivity analysis, we used the DEAP computer program. Our data includes observations of eight countries over 30 years from 1980 to 2010. We perform the analysis is in two parts. In the first part, we calculate productivity indexes using the whole data from 1980 to 2010. In the next part, data was divided into two periods of 1980-1994 and 1995-2010. The reason for this was to investigate the change in productivity indexes during the two periods.

The results report Malmquist index summary on annual means (geometric means) of all the eight countries during 1980-2010. It shows fluctuation in average productivity indexes in different years. In 1984, 1985, 1991, 1994, 1995, 1996, 1998,1999, 2002,2004,2006 and 2008, the average means of all three indexes are greater than one. It indicates gain in the average means of productivity indexes for eight economies. And also confirm the fluctuations and show that change in the efficiency index is less than fluctuation in technological index and Malmquist index. The consideration over the results show all eight countries have overall improvement in MPI change overall the period 1980-2010. However, efficiency improvement and technological progress in some countries declines. Only, China, Hong Kong, Korea and Singapore have MPI, efficiency and technological change greater than unit.

Regarding the sources of productivity growth, the results suggests that during 1980-1994, some Asian economies experienced either technical regress or efficiency loss, and thus deterioration in productivity. The only exceptions are Hong Kong, Korea, Singapore, and Thailand who perform rather well in catching up. The overall finding of productivity analysis imply that in average most of East Asian countries showed a good performance in productivity indexes during the periods of study. The some fluctuations in productivity in the second period (1995-2010) were because of financial crisis in the region and its influence on economic performance of East Asian countries. Moreover, some countries like Korea and Thailand has progress in all three indexes and in both periods.

Panel Data Analysis

Empirical specification and econometric issues

We assume that the correct specification of the functional form of the long-run relationship between total factor productivity and outward FDI is given by

$TFPit = \mathrm{F}\,(OFDIit)$

Where i =1, 2, ..., N is the country index, t =1, 2, ...,T is the time index, *TFPit* represents the total factor productivity and *OFDIit* is outward FDI. Following Bitzer and Görg (2009), we use outward FDI stocks rather than outward FDI flows, because stocks, due to the accumulation of flows, may more effectively capture long-run effects.

In this section, we estimate this model using panel analysis techniques. We performed panel unit root test to ensure our variables are stationary.

Panel Unit Root Test

Levin, Lin, and Chu (LLC), Breitung, and Hadri tests all assume that there is a common unit root process so that ρ is identical across cross-sections. The first two tests employ a null hypothesis of a unit root while the Hadri test uses a null of no unit root. LLC and Breitung both consider the following basic ADF specification:

$$\Delta y_{it} = \alpha y_{it-1} + \sum_{j=1}^{p_i} \beta_{it} \Delta y_{it-j} + X'_{it}\delta + \varepsilon_{it}$$

Where we assume a common $\alpha=\rho-1$, but allow the lag order for the difference terms, *Pi*, to vary across cross-sections. The null and alternative hypotheses for the tests may be written as:

$$H_0 : \alpha = 0$$
$$H_1 : \alpha < 0$$

Under the null hypothesis, there is a unit root, while under the alternative, there is no unit root.

Table 1: Panel Unit Root Test of Total Productivity Growth and Outward FDI

Variable	TFP		OFDI	
Method	I(0)	I(1)	I(0)	I(1)
Levin, Lin & Chu	0.29019	-5.65810	5.55785	-4.95638
Prob.	0.3858	0.0000*	1.0000	0.0000*

Table 1 shows results of panel unit root test of TFP and outward OFDI. The lower part of the summary output gives the main test results, organized both by null hypothesis as well as the maintained hypothesis concerning the type of unit root process. For the all parts, the results fail to indicate the presence of a unit root. On the other word, there is no unit root in productivity growth.

The table shows that the Levin, Lin & Chu (LLC) is significant and therefore we can reject the null of existing unit root (P<0.05) in TFP and outward OFDI. For the all variables of order zero, the Levin, Lin & Chu (LLC), was not significant (P=1). It implies that the null hypothesis of common unit root cannot be rejected. Therefore, OFDI and TFP are not stationary variable.

Then, we performed the test of integration order one I (1). The most of tests and especially the Levin, Lin & Chu (LLC), test with null hypothesis of unit root were significant. Therefore we can conclude that the first order of these variables is stationary. The overall results of unit root test imply that the regressands and regressors are of a different order of integration.

Test and Long-Run Relationship

The purpose of the cointegration test is to determine whether a group of non-stationary series is cointegrated or not. As explained below, the presence of a cointegrating relation forms the basis of the VEC specification. We implements VAR-based cointegration tests using the methodology developed in Johansen (1991, 1995a).

Consider a VAR of order:

$$y_t = A_1 y_{t-1} + \ldots + A_p y_{t-p} + Bx_t + \varepsilon_t$$

Where y is a k-vector of non-stationary *I (1)* variables, x is a d-vector of deterministic variables, and ε is a vector of innovations. We may rewrite this VAR as,

$$\Delta y_t = \Pi y_{t-1} + \sum_{i=1}^{p-1} \Gamma_i \Delta y_{t-i} + Bx_t + \varepsilon_t$$

Where:

$$\Pi = \sum_{i=1}^{p} A_i - I$$

$$\Gamma_i = -\sum_{j=i+1}^{p} A_i$$

Granger's representation theorem asserts that if the coefficient matrix Π has reduced rank $\tau<k$, then there exist $k \times \tau$ matrices α and β each with rank τ such that $\Pi = \alpha\beta'$ and $\beta' y_t$ is *I (0)*. τ is the number of cointegrating relations (the cointegrating rank) and each column of β is the cointegrating vector. As explained below, the elements of α are known as the adjustment parameters in the VEC model. Johansen's method is to estimate the Π matrix from an unrestricted VAR and to test whether we can reject the restrictions implied by the reduced rank of Π.

In the present study, a researcher with regard to Article Lorenzo Valdés, Durán Vázquez(2010) and Damiaan Persyn, Joakim Westerlund(2008) of the panel around them, long-term relationship had been established, used this robust technique.The results of cointegration test are presented in Table 2. The test was significant at 0.05 confidence level. It indicated that all non stationary variables are cointegrated at 1% significant level.

Table 2: Cointegration Test				
Series: OFDI , TFP				
Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.293921	90.54839	18.39771	0.0001
At most 1 *	0.058091	13.28603	3.841466	0.0003

Trace test indicates 2 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

As can be seen, The estimator produce similar results, suggesting that the Long Run relationship between outward FDI and total factor productivity is neither due to potentially restrictive homogeneity assumptions nor to possible cross-sectional dependence.

Explanations for the Cross-County Heterogeneity

The cross-country differences in the long-run effect of outward FDI on total factor productivity pose a new question: What factors can explain this heterogeneity or, in other words, what factors determine the long-run effect of outward FDI on domestic productivity? A possible way to answer this question is to examine whether the observed pattern of the long-run effects of outward FDI can be linked to cross-country differences in human capital, financial development, trade openness, or labor market regulation.

We use the secondary school enrolment rate (*SCHOOLi*) as a proxy for human capital, the ratio of domestic credit to the private sector to GDP (*CREDITi*) is our measure of financial development, openness is represented by the Sachs and Warner openness index (*OPENNESSi*), and labor market regulation is measured by the Heritage Foundation's labor freedom index (*LABORFREEDOMi*). Note that a higher labor freedom index indicates less regulatory constraints. (Herzer 2010)

The data on schooling and financial development are from the World Development Indicators 2008 CD-Rom, the Sachs and Warner openness index is constructed on the basis of the liberalization dates provided by Sachs and Warner (1995) and Wacziarg and Welch (2008), and the labor freedom data are from http://www.heritage.org/research/features/index/downloads.cfm. Since the estimated productivity effects of outward FDI can be interpreted as time averages over the period 1980-2005, we also use averaged data for the above variables over that period. An exception is the labor freedom index for which data before 2005 are not available; accordingly, we are constrained to use values for that single year.

To examine the relationship between the estimated productivity effect of outward FDI and the four variables, we first regress *bˆi* separately on *SCHOOLi*, *CREDITi*, *OPENNESSi*, *LABORFREEDOMi* (and an intercept). Since an estimated dependent variable may introduce heteroskedasticity into the regressions, we use Fixed Effect and autocorrelation consistent standard errors to compute the *t* statistics. The results of these regressions are reported in the Table 3. They show that the long-run effect of outward FDI on total factor productivity is significantly correlated with the level of human capital (measured by the secondary school enrolment rate), the level of financial market development and trade openness. In contrast, we do not find a positive and significant association between the productivity effect of outward FDI and labor market regulation. (Note that the coefficient of *LABORFREEDOMi* is insignificant and removed from the model.). Outward FDI can have beneficial effects on home country productivity by transferring technological knowledge from the host country. The ability to absorb foreign knowledge and technology depends, however, on the absorptive capacity of the home country, which, in turn, is closely related to the level of human capital. Knowledge spillovers are typically realized only if both outward investing firms and domestic producers have the ability to invest in absorbing foreign knowledge, which is related to financial market development. Greater trade openness, may promote trade between parent firms and their foreign affiliates, which increases the scope for intrafirm specialization and economies of scale, thus leading to higher efficiency of outward FDI. We expected, restrictive or costly labor market regulations may prevent both the efficient allocation of resources to foreign investing firms — which are the most productive — and the creation of linkages and spillovers to local firms. That is, the efficiency of outward FDI is reduced to the extent that labor market regulations impede the expansion of domestic multinationals and their local suppliers, but in the subject sample, we do not find a significant association between the productivity effect of outward FDI and labor market regulation.

Table 3.shows Regression of the estimated long-run effects of outward FDI on indicators for human capital, financial market development, openness, and labor market regulation

Table 3: Regression of the estimated long-run effects of OFDI on macro level variables

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.008335	0.602812	-1.672719	0.0960
LOG(OFDI(-1))	0.772866	0.047636	16.22427	0.0000
LOG(CREDIT)	0.339720	0.093362	3.638751	0.0004
LOG(SCHOOL)	0.421275	0.197179	2.136505	0.0339
LOG (OPENNESS)	0.251053	0.137569	1.824931	0.0695
LOG (LABOR)	-0.911902	1.207566	-0.755157	0.4559
R-SQUARED 0.97		DURBIN-WATSON 2.1		

Without question, our sample of 8 countries is too small to draw definite conclusions regarding systematic variations in the long-run effects of outward FDI across countries. In addition, the estimated productivity effects may be biased due to the relatively small number of time-series observations.

Nevertheless, our results suggest that cross-country differences in the long-run effects of outward FDI on total factor productivity can be explained by the level of human capital and of financial development and the degree of trade openness appear to have statistically significant effect on the efficiency of outward FDI.

Findings and Discussion

Home Country Effects In Developing Countries

Here we intend to discuss about the home country effects of FDI and the home country policies meant to handle these effects in developing countries.

FDls are classified into two types based on their purpose: horizontal FDls (HFDl) and vertical FDIs (VFDI). While the HFDI aims at avoiding broadly-defined trade costs by setting up production facilities within overseas markets rather than by exporting goods from the home country, the VFDl is a corporate strategy meant to exploit low-cost production factors abundant in the host country. VFDI firms are theoretically specified to relocate the activities in which the host country has a comparative advantage to developing countries, and specialize domestically in those activities in which the home country has a comparative advantage. Since developed countries are often modeled as knowledge-abundant compared to developing countries, VFDI firms are meant to specialize in non-production activities, or at least, knowledge-intensive production activities at home.

In the case of HFDI, a firm makes the decision of whether or not to market its products to the destination country either by exporting the products or by setting up production facilities within the host country and selling them locally. They choose the option with the higher total profit, which is the sum of gross profits from the home and host county markets. A firm can avoid the setup costs of production facilities by exporting its products, while it can save on shipment costs by producing and selling locally through investing abroad, i.e., HFDI. Firms, then, generally choose HFDIs if the fixed cost, i.e., setup costs, is low enough with respect to the shipment cost.

However in the case of VFDIs, the investing firm relocates production activities abroad either in part or completely. The firm's decision of whether or not to relocate depends on joint profits from production activities at home and abroad with respect to the initial profits from integrated production (the whole process of production is located in one country) at home. Integrated production at home enables a firm to save costs on supervision, coordination and control over different activities in different locations. If a portion of production is relocated abroad with VFDIs, the investing firm incurs the costs of shipping semi-finished products across borders, as well as the various costs of connecting these remote activities. As a result, a firm only chooses VFDI if the costs required to manage cross-border production sharing are low enough, and if the difference in worker wages between the home and host countries are large enough, to take advantage of the benefits of specialization.

FDls affect the volume of output at home as follows. In the case of HFDIs, because the firm stops the production of goods designed for the destination country after investing, the domestic output decreases unambiguously. However, if the investing firm can enjoy the spillover of knowledge and technology from the overseas plant, as Navaretti et al. (2006) point out, its use of technology might improve. If such benefits are significant enough, domestic output could expand after investing. Moreover in the case of VFDI, as the product/product bundle manufactured by the firm at home changes through investing, domestic output before and after investing abroad is hardly comparable.

FDIs have some influence on employment at home. As for the impact of HFDIs on production workers, while the number of workers is likely to primarily decrease due to the decrease in output, it could increase along with the output expansion due to spillover effects. Nevertheless, wages will stay constant since the production activity *per se* and its required skills remain unchanged before and after investing. In the case of VFDI, the number of workers, in particular, skilled production workers may increase along with the benefits from cross-border production sharing. Furthermore, the specialization in skilled-labor-intensive production activity at home could raise the wages of skilled production workers due to the changes in composition of skilled and unskilled workers.

As for the impact on non-production workers, on the other hand, the number of non-production workers primarily increases along with the need of supervision, coordination and control over remotely located activities, irrespective of FDI type. If the above, newly engaged non-production activities through investing abroad require skills different from those initially used before investing, the wages of non-production workers may also change. Furthermore, if the investing firm specializes domestically through VFDI in non-production activities such as marketing and R&D, the demand for non-production workers will increase significantly at home. In addition, if the VFDI firm requires non-production workers to be highly educated, their wages will rise after investing.

The impact on cost efficiency at home is similar to the effects on output. In the case of HFDI, cost efficiency for the entire firm, as well as for the production activity itself, is likely to deteriorate due to the decrease in output (i.e., the violation of scale economy).However, as mentioned above, if the spillover effect is strong, cost efficiency might only see a negligible change, both on the level of production activity and the firm in general. Furthermore, if the number of non-production workers and/or their wages increase, resulting in mounting fixed costs at the overall level, cost efficiency may decline at the entire firm level as a result of HFDI. As for VFDI, on the other hand, evaluation of the cost efficiency is qualitatively difficult, as it is in the case of output.

In the case of HFDI, the empirical results of constant cost efficiency (TFP) imply that the positive impact of knowledge spillover offsets the negative impact of the home production reduction, i.e., the violation of scale economy. As is consistent with the theoretical prediction, however, such a decrease of home production reduces the number of production workers whose wages remain unchanged. On the other hand, the number of non-production workers increases significantly, and their wages do change. These results imply that the HFDI yields additional non-production activities that do not require non-production workers to possess a higher skill set than before.

In the case of VFDI, the number of production workers does not change before or after investing. This result implies that the benefits of cross-border production sharing offset the negative impact of the relocation of unskilled-labor-intensive processes to the host country. In addition, as is consistent with the theoretical prediction, the specialization of skilled-labor-intensive production processes raises wages for production workers. On the other hand, VFDI has no impact on non-production activities in terms of the number of workers and their wages. These results imply that VFDI does not yield any additional non-production activities, and does not qualitatively alter existing non-production activities. (Ayako OBASHI et al, 2009)

However, there is no ground of fears about job losses at home when firms in low-cost countries establish in other countries. On the contrary, especially in the case of investments by domestically owned firms quite strong job creation is expected at home after investment. Given that, the policy should rather promote the entry of domestic firms into other markets via direct investments. In earlier surveys, the investors have indicated a number of steps the home country government can take to facilitate outward investments, such as providing information and contacts about target markets (Varblane et al. 2001). Since there are some problems present that inhibit investments abroad, and therefore one may consider the need for a governmental strategy for foreign expansion of domestic companies.

Regarding the home country export-FDI complementary question, it is possible that there are smaller effects than in the case of developed countries. In developing countries, it is possible that the production linkages between parents and affiliates are weaker. The stylized view is that horizontal FDI is more commonly found in services like construction and hotels than in manufacturing. The flows of intermediates in these activities are relatively limited, and it is not certain whether home country production will benefit much from FDI. When it does, however, the structural effects are likely to be favorable: what the home country can provide may be concentrated to management and skill development. There seem to be few examples of vertical investments, since the differences in factor prices between developing countries are often relatively small. Hence, the aggregate impact of such ventures is still likely to be very limited.

It appears that there are relatively few cases of horizontal FDI from developing countries to developed economies. The likely reason is that developing country firms have few assets that can be exploited profitably in developed markets: generally, their R&D investments are too low to generate significant innovations, and their advertisement expenditures have also been too low to establish successful brand names and trademarks. There are some exceptions, but these are more commonly found in services than in manufacturing. Instead, vertical investments seem to be more frequent. However, unlike the standard vertical FDI case, where the parent company and the home country are relatively more advanced than the affiliate and the host country, the situation in horizental FDI is often the opposite. The technology flows and spillovers may also have the opposite direction than in the standard case. More specifically, some share of horizental investments is likely to be motivated by the wish to gain access to technology and skills that are not easily available in the home country. It is obvious that such investments require substantial local capabilities, since the foreign technologies must typically be adjusted for the conditions in the developing home country. These investments focus on backward integration, which suggests that the scope for complementary export increases from the home country to the affiliate is limited. Instead, the parent MNC gains skills and knowledge that can potentially be used for import substitution or exports to third country market. The net trade effect in this case is unambiguously positive, since there is no substitution in the initial stage: the entire employment and export effect emanates from the parent company's ability to make use of the foreign technology. Moreover, as suggested by Globerman, Kokko, and Sjoholm (2000) for developed countries, it is likely that the knowledge gained through outward FDI will spread to other firms in the home economy, adding to the positive effects on productivity, employment, and exports.

While the inward FDI will often export oriented, particularly in the smaller developing economies, the technology flowing in though outward FDI linkages is more likely to be import substituting. The reason for this is the competitive situation in the developing country's home market.Foreign export oriented MNCs are often already present, and it is more difficult to enter into direct competition with these forms than to compete with imports. Moreover, the developing country will explicitly have to pay for the technologies that are accessed through outward FDI, and the developing country will also have to cover all costs for adapting the technology to local conditions. In the case of inward FDI, the costs for adjusting the technology to local conditions is born by the foreign MNC, the local firms that are potential beneficiaries of spillovers do not make any formal payment to the owner of the technology, but the foreign MNC will be higher the more successfully the technology can be applied in the developing country. It is an empirical question which of these sources of technology is more economical and more important for developing countries. Given the weaker technological capability of most other developing countries, it is possible that it would be even more difficult for them to fully exploit technologies gained through outward FDI.

It therefore seems fair to conclude that the home country effects of developing country FDI are likely to be similar in kind as the effects in developed host countries, but perhaps smaller in size and importance. The exception may be technology-sourcing outward investments that aim to secure access to strategically important knowledge and skills that have been developed abroad. Developing countries potentially have much more to gain from these types of investments, although substantial local capabilities are needed to exploit the foreign technologies (Ari Kokko, 2006).

Policies for Outward FDI

The increase in FDI may reduce the bargaining power of the national government, since the MNCs may make reasonably creditable threats to move out production if their wishes regarding economic policies are not met. In fact, the MNCs' possibilities to use transfer pricing to shift profits (and tax revenue) out of the home country may be strong enough to force the government to adjust their policies.

The home country policies toward FDI to some extent reflect the divergent effects. A first point to note is that the overall attitude to outward FDI in most developed countries is positive. In other words, the beneficial effects of FDI are assumed to dominate. Most governments therefore provide a variety of policies that encourage their firms to invest abroad. For instance, almost all OECD country governments provide information, financing and political risk insurance for outward investors. The most prominent of the institutions in charge of their functions are the Overseas Private Investment Corporation and the EX-IM Bank of US, the Commonwealth Development Corporation and the Export Credit Guarantee Department of the UK, and the Japan External Trade Organization and the Japan Bank for International Cooperation.

However, similar organization exist in most other developed countries, as well as number of developing countries that have merged as outward investors over the past decades: India, Kuwait, Malaysia, Saudi Arabia, Thailand, Singapore, and South Africa are only a few examples.

Several of the leading home countries have also been active through bilateral and regional treaties and multilateral organizations (particularly the WTO) to ensure that host country policies are not harmful to their MNCs. For instance, the TRIMS agreement of the WTO has contributed to liberalized the business conditions for many MNCs, and the increasingly effective protection of intellectual property rights through the WTO has reduced the perceived risk of many FDI projects in developing nations.

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Ethics & Malaysian Political Blogosphere: Carving a Non-traditional Security Concern

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Abstract

Political blogging is a unique phenomenon in Malaysia. It is a flourishing democratic platform for freedom of speech in the country. However, more democracy does not necessarily mean a good thing. When certain sensitive information about the *Lahad Datu* terrorists' intrusion goes viral in political blogs and replicates in other social media settings, it signals that there is a lack of ethics in the Malaysian political blogosphere. The paper examines this further by utilizing both qualitative and quantitative methods. The findings revealed that even though political blogs are still considered as vital democratic channels in Malaysia, the unethical postings and irresponsible writings could be detrimental to the security of the nation. The paper then carves the connection between unethical conducts in the Malaysian political blogosphere with non-traditional security threats.

***Keywords**: Computing ethics; Malaysian political blogosphere; non-traditional security; political blogging; human rights*

Introduction

Political blogs are vital sources of social-political information in Malaysia. Criticisms against the *Barisan Nasional* (BN) ruling government are almost unheard of in the mainstream media[1]. This propels the Malaysian public to turn to political blogs and alternative news portals to seek for different viewpoints or channel their dissatisfactions. In this regard, political blogs are easily perceived as the final frontier for freedom of speech in the country. However, the rising numbers of court cases involving slanderous postings by political bloggers seem to suggest that there is a lack of ethics in the Malaysian political blogosphere. It is disturbing when democratic demands for electoral reforms publicized by *BERSIH 3.0* organizers in political blogs resulted in violent clashes. On 28 April 2012, the demonstrators of *BERSIH 3.0* were allegedly responsible for assaulting several policemen, overturning a police vehicle, and causing business losses along *Jalan Tuanku Abdul Rahman*, Kuala Lumpur[2] [3] [4]. It is more worrying when basic ethics are not observed by the online communities in the *Sulu* terrorists' intrusion in *Lahad Datu*, Sabah[5] [6]. Oblivious of the security implications, the place of the intrusion, the photos of the deceased policemen and terrorists, and the spotted location of Malaysian security forces were uploaded in political blogs almost instantaneously. The Inspector General Police of Malaysia had to issue a statement asking the Malaysian public not to leak any sensitive information (e.g. the whereabouts of the security forces) in political blogs or social media networks. If the entries from political blogs are replicated in other social media settings or vice versa, the information could be relayed to the terrorist network residing in the Southern Philippines. Whether it is for freedom of information or freedom of speech, faulty ethics in political blogosphere could bring detrimental security threats to the sovereignty of the nation. Security threats are no longer compounded in the form of physical aggressions, i.e. wars brought by a state or a group of states. Instead, a non-physical aggression from an individual or a group of individuals could also produce security threats. As defined by Mely Caballero-Anthony, non-traditional security threats are "those that challenge the survival and well-being of peoples and states that arise primarily out of non-military sources"[7]. The paper explores how irresponsible writings or postings in Malaysian political blogs could pave a non-traditional security concern. First, it investigates 3 essential questions: What is the current scenario of the Malaysian political blogosphere? Should political bloggers be responsible in the Malaysian political blogosphere? Should a code of ethics governing the Malaysian political blogosphere be drawn out? The paper then discusses how unethical postings in political blogs could implicate a non-traditional security concern in Malaysia.

Methodology

Both qualitative and quantitative methods were employed in the paper. In-depth interviews with 11 pro-BN, 11 pro-opposition, and 4 independent political bloggers were carried out. Apart from in-depth interviews, a face-to-face survey was also conducted among 544 Malaysian blog readers. The medium used in the in-depth interviews and the survey questionnaire is Malay language.

Findings & Discussions

What is the Current Scenario of the Malaysian Political Blogosphere?

The responses gathered from the 26 in-depth interviews revealed 3 views about the current scenario of the Malaysian political blogosphere. First, it is still perceived as a platform for alternative news shunned by the mainstream media and a communication outlet for those who wish to express themselves. Below are the excerpts of the interviews which support this view:

> "Political blogging in Malaysia is a unique phenomenon. The Malaysians feel that they are not getting accurate information that reflects on the real world. They seek for alternative views which they cannot get from the mainstream media." (Blogger A, in late 30s, blogging since 2008).
>
> "This is great. Blogs cannot be controlled by the government and blogs trained the public to be more critical. In the long run, this will help the public transformed into a mature society." (Blogger B, in late 50s, blogging since 2008)

"The leaders utilized blogs as a way to give criticisms. Eventually, this will create an 'agree to disagree' culture." (Blogger C, 32 years old, blogging since 2002)

"The blogosphere is explosive and moving fast. One could get 300 blogs containing particular information within a minute." (Blogger D, in mid 50s, blogging since 2006)

"The Y Generation is very idealistic and individualistic. They used political issues brought by blogs to validate their votes in the General Election." (Blogger E, 25 years old, blogging since 2004)

"When many people blogged, many different views that cannot be found in the mainstream media are exposed. Now, it is difficult for the government to lie to the people." (Blogger F, in late 50s, blogging since 2008)

"It is a good outlet for people to voice out their opinions." (Blogger G, in early 30s, blogging since 2001)

"Political blogs are very important platform for people to express their views." (Blogger H, 53 years old, blogging since 2003)

"Blogs have been used by the opposition after the 2008 General Election. The opposition has influenced the mindsets of the people. Many government servants switched over to the opposition side." (Blogger I, in mid 50s, blogging since 2007)

"Unlike Malaysia, political information is not blocked in other countries' mainstream media. So, these people look for recipes or entertainment information, not political news in blogs. This is the reason why Malaysian political blogs play a crucial role in disseminating information." (Blogger J, in mid 40s, blogging since 2006)

These excerpts show that 10 out of 26 political bloggers believed that the Malaysian political blogosphere is currently still the channel for freedom of speech and the platform for freedom of information in the country. Besides this, the second view gathered from the in-depth interviews exhibit that the Malaysian political blogosphere today is no longer dominated by the opposition. This view could be seen expressed in these in-depth interview responses:

"There are 3 groups presiding in the Malaysian political blogosphere: anti-government supporters, government-supporters, and neutral citizens who neither support the government nor the opposition." (Blogger K, 86 years old, blogging since 2008)

"The opposition monopolized blogs prior to the General Elections in 2008. Now, some prominent bloggers who used to be critical of the BN government have become its ardent supporters." (Blogger L, 66 years old, blogging since 2006)

"Before 2008, almost no Cabinet Ministers had any blogs. They believed that bloggers could not be trusted and the bloggers are liars. Now, the BN government has their own cyber troopers and pro-government bloggers who give their solid supports to the government. So, there are groups of pro-BN bloggers, pro-opposition bloggers and the BN cyber troopers." (Blogger M, in mid 50s, blogging since 2006)

"There are now two opinions: one is the opposition and the other one is the government. It is up to the people to decide which one to believe." (Blogger N, in mid 30s, blogging since 2005)

The excerpts manifest that the current Malaysian political blogosphere is no longer monopolized exclusively by the opposition. Instead, today's political blogs have become the communication platform for all. Even though the first and the second views of the current political blogosphere may insinuate that democracy is a good thing, the third view gathered from the in-depth interviews portrays that the current Malaysian political blogosphere has been contaminated with unethical postings/writings. Below are the related excerpts:

"There is no guarantee that the public can get feedback from the authorities if they write their dissatisfaction via snail mail. But, it is a concern if their written grouses in political blogs could be read by foreigners. Sensitive information could be broadcasted openly." (Blogger O, 25 years old, blogging since 2007)

"There are political bloggers who used pseudo names to conceal their identities. These bloggers could get away with inaccurate reports or speculations. They could twist the minds of the readers with false postings." (Blogger P, 40 years old, blogging since 2005)

"There is a lot of useful information in political blogs. But, there are also malicious gossips, character assassinations, *scandalmongerings*, and superimposed photos. Technology is good, abused of technology isn't." (Blogger Q, in mid 50s, blogging since 2005)

"At first, political blogosphere is teaching the public to be open. Then, it gets too crowded with many viewpoints, libelous comments, and nonsense entries." (Blogger R, in mid 40s, blogging since 2007)

"The Malaysian political blogosphere is plain rubbish. It is a '*stupidification*' [sic] process of the nation. There is no intellectual discussion. It is polluted with swearing and indecent languages." (Blogger S, 45 years old, blogging since 2005)

"We are living in an uncivilized world whereby pornographic videos featuring the alleged former Deputy Prime Minister and Opposition Leader sex scandals are displayed openly in political blogs. Yet, the authorities have taken no actions against these bloggers." (Blogger T, in late 50s, blogging since 2006)

"Blogging has become an effective force of representation of the people's concerns. What we do not know is the culmination of political blogosphere. It could be detrimental to us if we are reckless about it." (Blogger U, in mid 50s, blogging since 2009)

I think that our society has not reach the maturity level yet. Although we are freer now to express our views, this freedom must be protected so that it would not disrupt other people's freedom." (Blogger V, in mid 50s, blogging since 2010)

"The current scenario is extreme and excessive. There are too many partisan bloggers. When there are too many partisan bloggers and few neutral bloggers, the blogosphere gets contaminated. This is unhealthy. It would be difficult for the blog readers to know the truth." (Blogger M, in mid 50s, blogging since 2006)

"I think that the influence of political blogs in 2007 – 2009 is strong. But, now it is unhealthy. There are too many partisan bloggers, pro-leftists and pro-rightists but they do not engage in intellectual discourses." (Blogger W, in early 40s, blogging since 2006)

"It is not alright for any blog readers to refer to partisan blogs. Partisan bloggers support the parties that they belong to blindly." (Blogger X, in mid 50s, blogging since 2008)

"Bloggers used to be fooling around with their postings in the early years of blogging. But, now legal charges can be brought against them." (Blogger Y, in mid 50s, blogging since 2006)

"It is a complete chaos. The line that separates facts from fictions is blurring." (Blogger Z, in mid 50s, blogging since 2008)

Although the first and second views collected from the in-depth interviews may illustrate that political blogosphere is still a pertinent democratic tool for Malaysia, these 13 excerpts disclosed that too much freedom may not necessarily be a virtuous thing. 6 pro-government, 4 pro-opposition, and 3 independent political bloggers asserted that the current Malaysian political blogosphere is tainted with irresponsible postings/writings. If the Malaysian political blogosphere is 'contaminated' as claimed by blogger M or 'in a complete chaos' as put forth by blogger Z, the next question explored by the paper is 'who should be responsible'.

Who should be responsible?

A survey was conducted among 544 Malaysian blog readers. 3 questions were asked to the respondents: Should political bloggers be given freedom to write or post or publish in their blogs? Should political bloggers observe ethical values when blogging? Should political bloggers be responsible for their blogs?

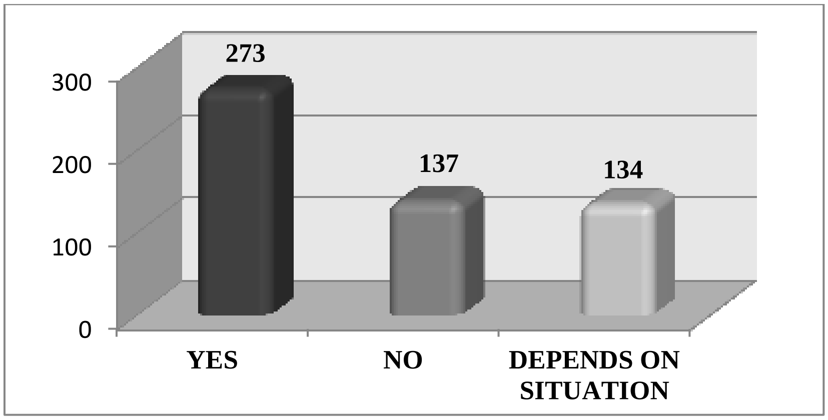

Figure 1. Should political bloggers be given freedom to write?

As shown in Fig. 1, 544 respondents are split in their views about the freedom given to Malaysian political bloggers. 50.2% (273 respondents) opted 'yes' for political bloggers to have their freedom in writing or posting comments or information. 25.5% (137 respondents) ticked 'no' and 24.6% (134 respondents) picked 'depends on situations'. Although blog readers are split in their opinions with regards to bloggers' freedom to write or publish in blogs, a majority of the respondents concurred with the idea that political bloggers should observe ethical values when they write or publish postings. This is illustrated in Fig. 2 whereby 459 respondents or 84.4% agreed and the remaining 85 respondents or 15.6% disagreed.

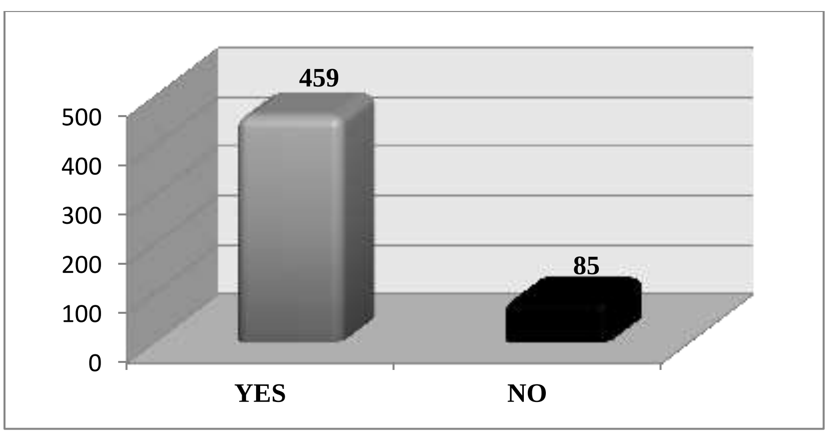

Figure 2. Should political bloggers observe ethical values?

If a majority of blog readers believed that bloggers should observe ethical values when blogging, a majority of them too be of the opinion that political bloggers should be responsible in political blogosphere. As depicted in Fig. 3, 518 out of 544 blog readers ticked 'yes' when answering 'should a political blogger be responsible for his or her blogs'. Only 4.8% believed that political bloggers should not be responsible for their blogs. This means that a 95.2% majority is with the opinion that the burden of responsibility in the Malaysian political blogosphere should lie with political bloggers.

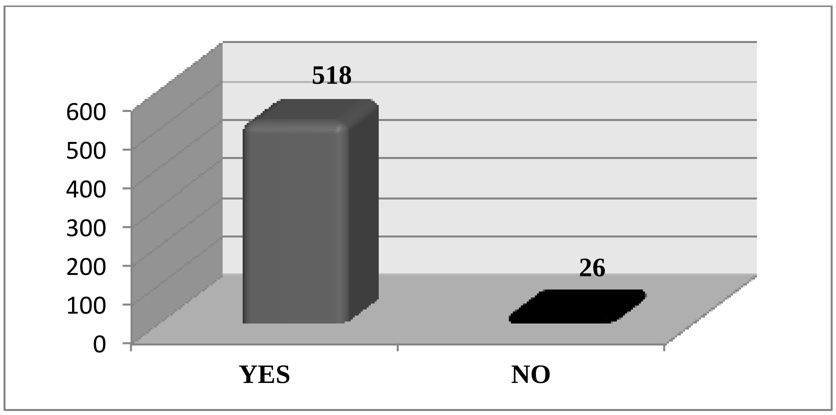

Figure 3. Should political bloggers be responsible for their blogs?

Apart from blog readers, political bloggers' opinions about this issue too were collected during the in-depth interviews. All 26 political bloggers, regardless of political inclinations, expressed unanimously that blog readers must observed ethical values when commenting in blogs. The 26 political bloggers articulated that they do not appreciate anonymous bloggers or anonymous blog readers. Anonymity, to them, does not correspond well with accountability. If the survey and in-depth interviews revealed that both online communities (blog readers and bloggers) should be responsible in the Malaysian political blogosphere, the paper then explored the next question, should a code of ethics governing the Malaysian political blogosphere be drawn out?

Should a Code of Ethics be drawn out?

The question on 'should a code of ethics be made' was directed at political bloggers. As gatekeepers, they control the entire process of updating, posting, and publication of an entry. From the in-depth interviews carried out, it is revealed that 15 of the political bloggers solidly said 'yes, we should have a code of ethics governing the Malaysian blogosphere'. 9 of them agreed with some reservations. A minority of 2 completely disagreed to have a code of ethics. This is demonstrated in Fig. 4.

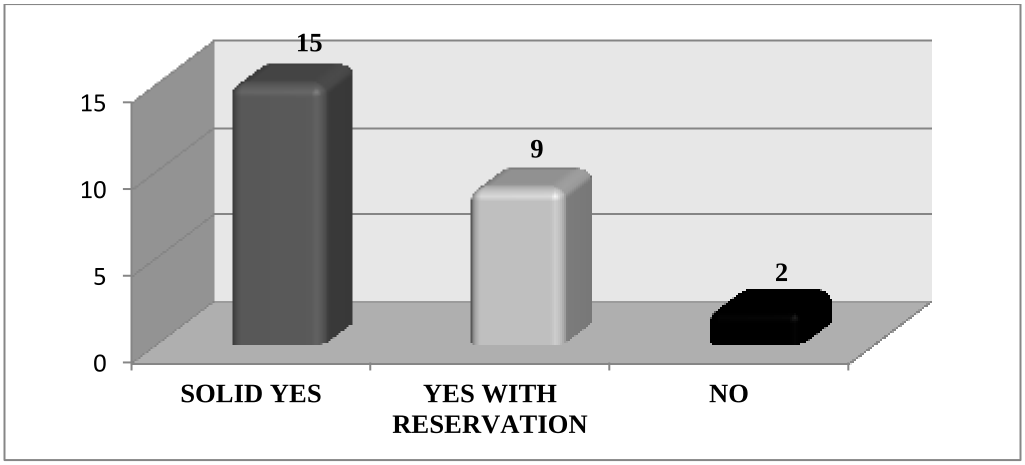

Figure 4. Should a code ethics be drawn out?

Seven out of fifteen political bloggers who have said 'yes, we should have a code of ethics' shared their thoughts on who should formulate or design the code of ethics. Their suggestions are reflected in Fig. 5.

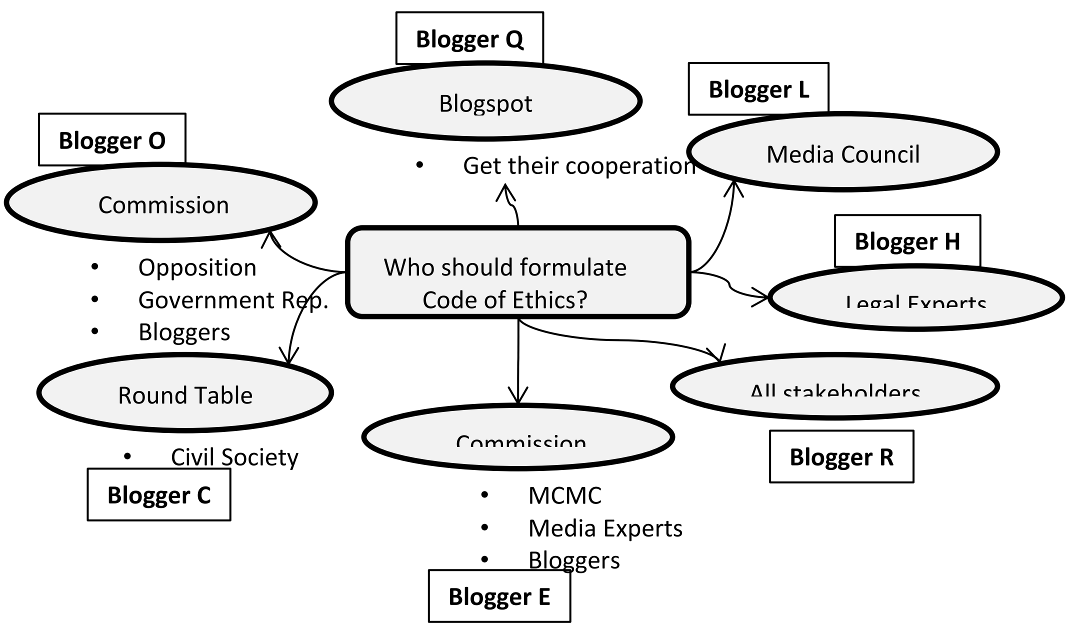

Figure 5. Who should formulate Code of Ethics?

The sketch in Fig. 5 implies that when it comes to formulating the code of ethics, these 7 political bloggers believed that the process should involve all stakeholders in the Malaysian political blogosphere. Unlike them, the remaining 8 political bloggers (blogger F, blogger G, blogger H, blogger M, blogger P, blogger S, blogger W, and blogger Y) shared a view that the code of ethics should be formulated by the bloggers themselves via bloggers' associations. The involvement of the government, to them, should be strictly prohibited.

As depicted in Fig. 4, 9 political bloggers have said 'yes' but with some reservations. Among the skepticisms mentioned were:

> "It is difficult to implement as it requires the registration of all political bloggers in Malaysia." (Blogger T)
> "The code of ethics should not be an obstacle hindering freedom of speech in the country." (Blogger U)
> "I agree, but how are we to implement it? It's difficult." (Blogger G)
> "Do not make it compulsory. No one is forcing anybody to view any blog. If someone does not like a blog, he has the choice to go to other blogs." (Blogger N)
> "I agree, but it's pointless. How are we to enforce the code of ethics in the cyber world? There is no way we can control the flow of information." (Blogger A)
> "The code of ethics has to be self-regulatory." (Blogger W)
> "The code of ethics is not practical. We cannot force people to abide by it." (Blogger X)
> "It should be self-regulatory and voluntary." (Blogger Z)
> "It should not be dictated by bloggers' associations. Not all bloggers joint this kind of associations." (Blogger K)

Despite asserting their doubts, these 9 skeptics nonetheless concurred that the Malaysian political blogosphere should be governed by a code of ethics. Their opinions differ from the 15 strong advocators only in terms of implementation. If the 9 skeptics are combined together with the 15 strong advocators, the total that supports the formulation of a code of ethics increased to 24, i.e. a majority of 92.3%.

Ethics in Malaysian Political Blogosphere & Non-traditional Security: Carving the Connection

A non-traditional security issue challenges the survival and well-being of peoples and states that originate primarily out of non-military sources[7] [8]. These kinds of threats push political scientists to go beyond the 'Realist' thinking. States are no longer the only or primary actors in international politics and fears about security are no longer compounded by military aggressions. Individuals, network of individuals and global forces could pose security challenges. Hence, transnational crimes, illegal migration, water security, food security, global economic crisis, climate change, H5NI (bird flu), and Severe Acute Respiratory Syndrome (SARS), i.e. non-traditional security threats, could bring detrimental socio-economic-political impacts to the well being of individuals, societies, and states.

How do unethical conducts in political blogosphere converge with a non-traditional security concern? If one were to juxtapose the findings of the in-depth interviews with the survey results, 2 inferences could be rendered. First, political blogs in Malaysia are no doubt a significant communication technology that enhances freedom of speech and freedom of information for both political bloggers and blog readers. The remarks made by all interviewed respondents speak volume of this phenomenon. Second, the Malaysian political blogosphere is tainted with unethical and irresponsible postings or writings. The figures (84.4% of blog readers believed that bloggers should observe ethical values and 92.3% of political bloggers supported the formulation of code of ethics) suggest that the political blogosphere is indeed contaminated. It is this second inference that connects a lack of ethics in the Malaysian political blogosphere with a non-traditional security concern. Malaysia's concept of national security has always been political stability and social harmony of its people[9] [10]. Defending these interests are vital for the nation's economic well being, territorial integrity and sovereignty. Unethical postings or irresponsible writings in political blogs could be as devastating as global pandemics.

Blogger L, blogger I, blogger V, blogger H, blogger Y, and blogger C in their interview sessions warned that certain sensitive issues, e.g. race, religion, *Sultans*, and Kings should not be manipulated in any blog postings. So, an entry that states, "An accident involving a car and a motorcycle had caused the death of the motorcyclist" should not been written as, "An accident involving a Chinese car driver and a Malay motorcyclist had cause the death of the motorcyclist." An insensitive line of reporting like this could incite hatred among the Malays towards the Chinese community. The 1969 race riot is a constant reminder how racial sentiments are delicate matters in a multi-racial Malaysia. Not only racial issues, the usage of the term *Allah* in the bibles, if not reported intricately in political blogs, might incite hatred among Muslims and Christians and eventually could wreck the stability of the nation. The *BERSIH* 1.0, *BERSIH 2.0*, and *BERSIH 3.0* demands of electoral reforms when publicized in political blogs compelled thousands of demonstrators to flock in the streets of Kuala Lumpur. The *BERSIH* 3.0 organizers did not anticipate the supposedly peaceful gatherings could turn into violent clashes. The territorial integrity and sovereignty of the nation are put to test in the February 12, 2013 *Sulu* terrorists' intrusion[11]. Who would have thought that uploading photos of the deceased terrorists and policemen or updating the location of the security personnel in political blogs or other social media settings could bring serious repercussions to the territorial integrity of the nation? Who would have thought that political blogs are read by the terrorists residing in the Southern Philippines? Irresponsible writings and unethical postings in political blogs, whether done consciously or not, could pave a non-traditional security concern.

Conclusions

Since the location of 'computing ethics' is positioned in the engineering or computer science disciplines, technical threats such as 'hacking', 'worms', 'viruses', 'Trojan Horses', and 'network security' take center stage in the research of these domains. Hence, a social angle of a non-traditional security threat is almost non-existent in these disciplines. The paper attempts to make the preliminary connection between ethics or the lack of it in political blogosphere with non-traditional security concerns. However, more research is needed to further explore and comprehend this connection.

Acknowledgement

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Impact of Natural Disasters in the Sustainable Development of Developing Countries

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Abstract

The objective of this paper is contributing to support developing countries in coping with the limitations that disasters may impose on their capacities to achieve sustainable development goals from their participation in the global system. With this objective in mind, the paper offers a framework for analysis in which the links existing between disaster risk and the capacities of developing countries to achieve sustainable development benefits are made explicit. This contribution aims at creating conceptual platforms to build strategic proposals for disaster risk reduction in the perspective of supporting development strategies in these countries.

The framework is based on further deepening the knowledge on the system of relationships for which attention has been focused on key development-related processes in which the creation of endogenous capacities takes place in the context of globalization. In this focused perspective, links have been further exposed between disaster risk and the creation and destruction of capacities involved, on one hand, and three global-scale development issues particularly relevant for the international community in the other: competitiveness and productive sector development, food security, and climate change adaptation of developing countries.

Keywords: *Natural Disasters | Developing Countries | Sustainable Development*

Introduction

The objective of this paper is contributing to support developing countries in coping with the limitations that disasters may impose on their capacities to achieve sustainable development goals from their participation in the global system. With this objective in mind, the paper offers a framework for analysis in which the links existing between disaster risk and the capacities of developing countries to achieve sustainable development benefits are made explicit. This contribution aims at creating conceptual platforms to build strategic proposals for disaster risk reduction in the perspective of supporting development strategies in these countries.

The framework is based on further deepening the knowledge on the system of relationships on which the ISDR has structured its recent work, for which attention has been focused on key development-related processes in which the creation of endogenous capacities takes place in the context of globalization. In this focused perspective, links have been further exposed between disaster risk and the creation and destruction of capacities involved, on one hand, and three global-scale development issues particularly relevant for the international community in the other: competitiveness and productive sector development, food security, and climate change adaptation of developing countries.

Sustainable Development of Developing Countries in the Context of Globalization

Two fundamental facts of development processes provide us with leads to be followed in trying to define a framework in which sustainable development achievements or limitations of developing countries nowadays can be explained.

The first is that development-related processes in which all countries participate occur in the context of globalization, which implies that crucial influences originating from the integration in the world system operate on all such processes, due to the intense interaction and the ever increasing importance of large-scale economic, technological, socio-cultural and environmental phenomena involved. These facts justify giving explicit consideration to the global influences and interactions, and to the most relevant development-related processes involved, in explaining sustainable development achievements.

The second fact is that development benefits are not generalised in the world system to all participating countries; neither are they automatic outcomes of these countries' integration in the global economy. This fact gives good reasons to focus the attention in the differences existing between countries that have succeeded or are on their way to succeed, and the rest of developing countries. Being these differences obvious in development achievements, as they effectively are, the real value that a conceptual framework can add resides in the underlying explanation of these differences, which justifies concentrating in endogenous capacities to internalise development benefits.

The above described reality, in which every country in the world is implicated, is particularly relevant to explain -from a strategic perspective for action- how individual developing countries may improve the wellbeing of their societies and move towards closing the development gaps in our time.

Basic concepts, relations and strategy implications in an endogenous capacities perspective of sustainable development

Development aspirations of countries respond to the expectations of their individuals and social groups in the economic, social, environmental and political dimensions, a vision on the goals of societies that goes beyond the limited objective of securing economic growth for a country. In the key development-related processes in which nations get involved, their societies' assets are used in generating outputs, which ultimately contribute to people's wellbeing in the four dimensions referred.

Correlation between Disasters and Development

Impact of Disasters on Development

Disasters resulting from natural hazards such as floods, drought, earthquakes, cyclones, forest fires, desertification and insect infestation impact development in several ways. Disasters damage infrastructure, lifelines and critical facilities, resulting in human, financial and environmental losses. Rehabilitation requires funding, often resulting in the diversion of monies originally planned for development and service provision. Thus, disasters delay development programs by reducing available assets and interrupting planning. Disasters also decrease the economic potential of society by exacerbating poverty, disrupting small business and industry activities, and disabling lifelines vital for economic activity and service delivery. Disasters also reduce human capital as a result of the deaths, injuries and long-term trauma suffered by affected individuals.

Cost of Disasters

According to the World Meteorological Organization, floods caused hardship for more than 17 million people worldwide and accounted for losses of more than US$30 billion in 2002. Statistics indicate a significant increase in the frequency and cost of disasters in the last half century. The average global economic cost of disasters increased approximately six-fold from 1970 to 2000 (Munich Re; 2001). Losses from disasters related to climate change could reach US$300 billion annually if safeguards to mitigate its impact are not implemented (SEI, IUCN, IISD; 2001). On average, about 100,000 people are expected to lose their lives due to natural hazards each year. Moreover, disasters disproportionately affect least developed countries. An estimated 97 percent of natural disaster-related deaths occur in developing countries (World Bank, 2000-2001) economic losses (measured as a percentage of gross national product) are some ten times greater.

Collision between Human Development and Natural Hazards

The increase in the cost and frequency of disasters is the direct result of human action. Disasters are not completely natural phenomena. Disasters are directly correlated with development that increases vulnerability to natural and manmade hazards. Development impacts the frequency and severity of disasters, exposing a growing proportion of the world’s population to hazards. In the last half century, human development has been characterized by rapid and unplanned urbanization in the developing world. Ninety percent of global population growth is taking place in the least developed countries. These countries do not have the ability and resources to manage the high rate of urban growth. Between 1950 and 2000, the urban population in developing countries increased from less than 18 percent to more than 40 percent. By 2030, the increase is expected to reach 60 percent. By 2010, eight out of ten of the largest cities of the world will be in developing countries. The greatest potential for disasters exists in the hundred most populous cities. Over three-quarters of these are exposed to at least one natural hazard. No less than seventy of these cities can expect, on average, a strong earthquake at least once every fifty years (ISDR; 2002).

Unsustainable Development and Unsustainable Risk

Unplanned and ill-planned urbanization has been the cause of environmental degradation (e.g., deforestation), overexploitation of natural resources (e.g., water), ecological disturbances (e.g., pollution), and social destitution (e.g., increase in poverty). These factors turn hazards into disasters. Increased population concentrations and substandard construction increase the vulnerability of the built environment and the fragility of socioeconomic systems. Land use and urban development practices often do not take into account susceptibility to natural hazards. United Nations statistics indicate that in the 1990s, close to 70 percent of construction in developing countries was built illegally. Hence, year after year, exposure to natural hazards increases as a result of unsustainable development. In sum, the following factors correlate disasters and development:

a) Poor land management
b) Increased population concentrations in hazard areas
c) Environmental mismanagement, resulting in environmental degradation
d) Lack of regulation and a lack of enforcement of regulation
e) Social destitution and social injustice
f) Unprepared populations and unprepared institutions
g) Inappropriate use of resources.

These interrelated factors create a trend that increases susceptibility to natural disasters and reduces resilience.

The Four Cornerstones of Disaster Risk Reduction

Disasters impact sociopolitical factors. Actions aimed at reducing risk should address the social factors that determine vulnerability as well as changes in the political environment that could increase the resilience of communities. Four parallel and complementary lines of actions can be considered to reduce exposure to disasters and achieve a more sustainable approach to development:

1) Community/stakeholder participation
2) Public policy actions
3) Safer construction and urban development
4) Development of a culture of prevention.

Reducing Vulnerability through Community Participation

Experience has shown that some of the most successful risk reduction initiatives have closely involved communities in understanding risks and designing appropriate response plans.

Community-based disaster management (CBDM) transforms vulnerable groups into disaster-resilient communities. Communities understand the socio-environmental constraints that define vulnerability and the parameters that determine the success of risk reduction policies and actions. Communities also have perceptions that may or may not be based on reality, but nonetheless are important to consider and incorporate in the development of risk reduction initiatives.

Communities also represent different interests and thus, their involvement is essential in the process of reaching consensus and achieving acceptability. Community involvement ensures transparency and disclosure and favors responsibility sharing, important mechanisms for disaster risk reduction and sustainable resource use. The top-down approach, still in practice in many countries, fails to involve people in development planning, vulnerability identification and disaster reduction. Community participation, on the other hand, builds capacity and trust at the local level and reduces political manipulation by special interest groups. Community involvement helps not only in identifying vulnerability, but also the trade-offs involved in achieving sustainability. Furthermore, disaster risk reduction is a dynamic process that should adapt to new conditions. In this respect, community participation provides an inherent mechanism for adaptation and control.

Various techniques have been used to engage communities in disaster mitigation. By its nature, community participation creates partnerships around a common agenda. Hence, it relies on developing participatory mechanisms among stakeholders by identifying leaders, understanding interests, gaining trust and attaining commitment. However, to be successful, communities should be construed as “being part of” rather than “taking part in” an activity. Disaster risk reduction issues must be framed within a community’s social, cultural, environmental and economic context. Garnering community participation often requires a catalyst for change (e.g. experts who can provide knowledge and facilitate discussions), as well as self-motivated participation. Community participation involves a process that first identifies linkages between formal government structures and a community’s social structures and then creates mechanisms to integrate them into a common agenda. Lessons learned with regard to community participation and managing disaster risk include:

a) Progress with risk management concerns are easier when fully integrated into the development agenda
b) Informed civil society is a potent force in moving risk management forward and in generating responsible, people -oriented policies
c) The basis for sustained work and intervention for disaster preparedness and response correlates directly with a community’s level of organization and information
d) Community participation requires an honest commitment to a process from government, community leaders and stakeholders where the interests of the community at risk determine the final goal

e) Communities often view disaster protection in the context of improved livelihood security, hence disaster reduction should be seen in light of sustainable economic, social and physical development.

Successes in community participation come mostly from experience in rural areas. In rural environments, individuals rely more heavily upon local communities and mechanisms for engaging communities in the decision making process are easier to devise. Experience with community participation in complex urban environments is limited and more research is needed to understand the factors for success and develop effective mechanisms for engaging communities in large metropolises.

Reducing Vulnerability through Public Policy Action

Public policy generally consists of a set of decisions that guide the actions of government, business and civil society. Disaster risk reduction policy deals with the course of actio n adopted by government and civil society to understand hazards, assess vulnerability, evaluate risk and adopt measures for risk reduction. Examples of risk reduction policy include legal and institutional arrangements that govern land use, urban planning, enactment and enforcement of construction regulations and risk financing. However, experience has shown that risk reduction polic ies are more likely to be successful if the linkage between disasters and development and disasters and societal needs are recognized. Experience has also shown that even in cases where policies have been enacted by law, the absence of enforcement can negate the effectiveness of the legal structure. For example, most developing countries have competent building codes, yet code provisions are ignored in the implementation process due to a lack of enforcement mechanisms.

Government has the responsibility of protecting life and property, maintaining security and providing services. Government at every level is obliged to protect citizens from the risks caused by natural and technological hazards. Government uses legal instruments and institutional arrangements to impose a set of societal rules that order and protect society. Disaster risk reduction and its relationship to sustainable development are to a great extent determined by the existence or lack of government regulations for land use and urban planning, construction standards, civil protection and public safety. Unfortunately, pressure from special interest groups, lack of competency and bureaucratic hurdles often hinder the effectiveness of public policy in protecting the environment and reducing vulnerability. Often, these issues are not in line with the objectives of government that may have short term goals and often react rather than plan ahead.

Reducing Vulnerability through Safer Construction and Urban Planning

In many ways, urbanization issues lie at the heart of safer cities and sustainable development. Unplanned urbanization, caused by population growth and migration, is a key factor in vulnerability and environmental degradation. In large cities, sustainable development and disaster risk reduction goals are often in conflict with pressure to provide housing, employment, social services and education. Cities attract new inhabitants because they offer better prospects for employment and access to social services and education. Because cities are not able to keep up with housing needs, a significant portion of urban growth takes place in an unplanned manner, resulting in illegal construction and a lack of compliance with safety standards. Homes are built on a city's periphery, and in areas of cities subject to hazards such as flooding and landslides. People in more established housing are also at risk because building regulations may not have been followed during construction. As a result, large urban areas are often vulnerable; leaving the poor in the worst position of all should a disaster occur. In developing countries, institutions in charge of urban planning, land use management and construction supervision are often overwhelmed by the challenges of urban growth. This situation may require a new approach in conceiving land use management, urban planning and housing development plans. One option is to ensure adequate services, improve infrastructure and provide employment in rural areas and small and medium cities to slow the growth of large and megacities.

Reducing Vulnerability through a Culture of Prevention

Developing a culture of prevention to reduce the vulnerability of society to hazards—natural and manmade—constitutes the foundation of disaster risk reduction. Cultural factors dictate how people perceive risk and their motivation to enhance resilience or aggravate vulnerability. Developing a culture of prevention develops human potential which provides a community with the skills, knowledge and confidence to cope with the impacts of hazards to proactively reduce the negative consequences of future events. Human potential capacity translates into sustainable livelihood actions and infuses its influence into sustainable human development and sustainable resource use.

Typically, socio-environmental constraints of rural communities make individuals more environmentally aware and more receptive to collectively adopting safeguards against hazards and environmental degradation. However, in an urban environment, especially in areas of high urban growth, individuals are pressured to address every day needs, sometimes causing them to favor personal risk adversity. Developing a culture of prevention within communities under stress that may be skeptical about government intentions is a challenging task. However, a common denominator is the creation of mechanisms and opportunities to involve stakeholders in the capacity building process. The principal stakeholders should be identified and their roles in disaster management clarified to enable the development of sustainable partnerships. While government is traditionally identified as a principal stakeholder, affected people, corporate bodies, civil society organizations and educational and religious institutions are also now recognized as having an important role. The key actions for developing a culture of prevention are:

a) Raising awareness
b) Societal arrangements
c) Accountability forging
d) Empowerment.

Raising Awareness

Raising awareness makes individuals, communities and institutions aware of vulnerabilities and the negative impacts of disasters on their livelihoods. Armed with this knowledge, they can better understand their environment and take an active role in its management. Awareness raising efforts have mainly targeted school children and educators; following the mantra that today's children form tomorrow's society. While this is a good strategy, it is not sufficient in and of itself to ensure safer communities. Children do not retain and apply the full body of knowledge that they are taught. Children also grow up in complex environments and are influenced in several ways. For example, if children live in an environment indifferent to risk due to the harshness of everyday life, their idea of safety may not include natural hazard risk since it seems irrelevant to the daily struggle. To be effective, awareness raising must target several segments of society. Awareness raising should be aimed at governmental and non-governmental institutions and civil society organizations to reform existing sociopolitical structures to make them more responsive to community needs. Educational processes aimed at raising awareness must also be put in the context of the everyday challenges of a community in order to attract attention. Everyday risks related to human safety constitute an opportunity for preparing for less frequent but potentially more disastrous events. Awareness raising should be viewed as a long-term educational process, and therefore, should have built-in mechanisms for sustainability. Long term funding commitments and evaluation processes must be devised to ensure sustainability, measure efficiency, and make corrections when necessary. Awareness raising is the first level of action to impact individuals and societal attitude towards vulnerability reduction and towards building a culture of prevention.

Societal Arrangements

Societies organize themselves to link individuals in a community. This involves both the strengthening of government institutions and the creation of organizations representing civil society. Active civil society organizations represent the interests of stakeholders in the policy and decision making process. They place community concerns in discussions surrounding policy development. Civil society organizations can also improve transparency by disseminating information and initiating reform. Societal organizations can also be effective actors in capacity development by providing training and creating partnerships. They can also mobilize resources and implement disaster risk reduction programs. As actors of change, societal organizations can prepare communities to address their own needs and protect their interests. Sometimes in developing countries, however, civil society is weak due to a lack of resources and capacity.

Forging Accountability

Where there is accountability, institutions and individuals tend to act responsibly towards society. The process of forging accountability among institutions and individuals is a powerful mechanism for building a culture of safety because it incorporates penalties and rewards. It forces individuals at every level of society to think about the consequences of their actions. Accountability is an enforcement instrument for good governance that favors community interest over the interest individuals and powerful groups. Accountability is essential to achieve sustainable development and reduce disaster vulnerability. In developing countries, a lack of accountability is often a major impediment to disaster risk reduction. It can be seen through the disregard of regulations related to building construction, land use and resource allocation. Forging accountability requires leadership within all branches of government as well as within civil society. Accountability starts with a vision and is followed by good policies that give communities and individuals a voice in governing and managing their lives.

Empowerment

Empowerment comes from several sources. First, good governance empowers individuals and communities and makes them active participants in society. Knowledge is also an instrument of empowerment. A community that is aware of its vulnerability to disasters is more likely to take action. Knowledge engenders confidence and vigilance. More importantly, knowledge constitutes the active ingredient in the participatory process that enables communities to make informed decisions about environmental and resource allocation issues. The post-disaster period provides a window of opportunity to build networks aimed at empowering local communities in disaster management, preparedness and response. During this period, when fear and awareness of hazards and feelings of helplessness run high, community members are more receptive to learning about how to cope with life-threatening hazards. They become survivors with resources that can be mobilized and strengthened instead of being passive, helpless victims. However, sustaining programs for community participation and developing a culture of prevention cannot be motivated by fear and anxiety alone. It should be backstopped through funding for community training, building networks, and developing a sense of community ownership by involving individuals in the development of action plans for disaster mitigation and preparedness.

Conclusions

Natural hazards become disasters as a consequence of human action. Investing to reduce the impact of future disasters saves lives and protects assets and resources. Mitigation is good public policy and is in the public interest. It preserves a country’s human capital and assets. Instead of paying for large losses as the result of a disaster, one can incrementally reduce future losses by reinforcing existing housing, infrastructure, social buildings, lifelines and critical facilities. Such action can save lives, preserve scarce resources, safeguard development gains, shelter economic output and protect communities. Significant progress can be achieved in disaster reduction within the next 25 years if countries allocate a portion of average annual disaster losses to preparedness, prevention and mitigation. Development and environmental programs should also include funding for disaster risk reduction. Benefits of such a program would more than offset projected losses from disasters in the next 25 years.

A large body of knowledge exists and can be used to reduce community vulnerability and exposure to disasters. However, procedures to ensure and speed knowledge dissemination are weak. "Natural disasters" are more a failure of foresight and neglected responsibility than the consequences of natural forces. The development of a safer environment implies accepting common responsibility and building moral imperatives, to mobilize political will, and support nations and communities in their development and resource allocation processes. Without such commitment, disasters will continue to collide with human development in ways that cause pain, suffering and tremendous losses.

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Leaders as Enablers: Creating Ecologies of Innovation within Organizations

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Abstract

Organizations are expected to devise adroit actions in the face of prevailing complexity in business environment. Under the circumstances of intensive competition in global markets, dealing with the concept of innovation entails to embrace a more profound coverage than generally ascribed. Innovation is about building capabilities that will eventually be materialized into novel ways of doing things. The very essence of innovation lies in its ability to carry a work process to a superior level of value generation. Therefore, leaders (leadership) are supposed to be reengineered as enablers who function as catalyst for the transformation of organizations into ecologies of innovation where building capabilities and creation of knowledge are continuous endeavors. This conceptual paper aims to tap into the heart of this matter and deal with the relationship between becoming innovative and the appropriate context of leadership that should be instilled in contemporary organizations.

Keywords: *leadership, innovation, adaptiveness, capability building, emergence, complexity*

Introduction

Over the last three decades, an integrated world economy has emerged with new markets opening up in previously closed regions, and new competitors with very different operating norms to those usually emphasized (Birkinshaw, 2010). Globalization, which refers to entrenched and enduring patterns of worldwide interconnectedness, suggests a growing magnitude and intensity of global flows such that states and societies have become enmeshed in networks of interaction (Held and McGrew, 2003). Rapid growth in information and communication technologies, intensified competitive forces, the vicissitudes and volatility of global markets have reshaped the organizational landscape to such an extent that continuous change has become a permanent phenomenon with organizations having to constantly reinvent themselves (Kamoche, *et.al.*, 2002).

The modernist paradigm, which basically assumes a predictable environment based on linear models that unravel relationships between cause and effect appears to be lagging behind the needs of the contemporary organization in the face of an increasingly turbulent environment. In order to be able tackle challenges of hyper-competitive markets, managerial architectures of organizations should be re-designed in a way that will render them adaptive. Organizations are supposed to be transformed into ecologies of innovation where system is totally adaptive in spite of the fact that it is almost impossible to envision what lies ahead.

This drives the need to extend beyond the prolonged assumptions in the area of organizational studies so far and replace them with new and appropriate ones in a world where organizations confront pervasive dynamism and non-linearity (Osborn and Hunt, 2007). The increased pace and complexity of markets highlights the need for innovative, flexible, and responsive solutions to emerging novel needs of organizations. (Halbesleben, *et.al.*, 2003). Unpredictable nature of future calls for a new leadership context, which has usually been argued as a power driven dyadic relationship between leaders and followers. It would be more appropriate to reposition leadership as the critical function that enables intellectual assets flow through cellular networks of (social) interaction (Uhl-Bien, *et.al.*, 2007). Designing an innovative organization in a world of complexity requires a dynamic leadership process that occurs between people rather than depending on the individual characteristics of the leadership role (Karp and Helgo, 2008). This conceptual paper intends to draw a general framework for the implications of incorporating complexity science into organizational and leadership studies. Complexity science deals with organizations as complex adaptive systems and attempts to derive a new stream of thought, which deals with leadership phenomena in terms of emergence, interdependence, social interaction and tension.

Embracing Complexity in Organizational Studies

The concepts suggested by Cartesian-Newtonian ontology of stable matter "are all discontinuous and fixed, and the only mode of making them coincide with real life is by arbitrarily supposing positions of arrests therein. With such arrests our concepts may be made congruent" (James, 1996 as cited in Styhre, 2007). This is a clear manifest of conventional arguments that have been situated in the vast amount of literature on organizational studies. The majority of the mainstream theories attempt to define organizational experiences in terms of variables and linear cause – effect, reductionism, predictability, equilibrium and linear evolution (Marion, 1999). These studies regard actions as sequenced in order to achieve rationally declared ends where actors behave mechanistically in pursuit of organizational goals (Pettigrew, 1990). Given the nature of analysis of the putative studies adhering to predetermined solutions, however, the severity of current competition entails to implement real time and novel ways to respond to shifts in the environment especially when changes in the environment are substantial and continuous that the system has not recovered from one before being exposed to an another (Johannessen *et.al.*, 1999). In order to be able to cope with the unprecedented competition organizations should evolve into ecologies of innovation, in terms of conceptualizing, designing, developing, and applying new learning interventions to business needs, while simultaneously modeling strong values and openness to change (Rothwell, *et.al.*, 2004).

There is a widely heralded call for organizations to become more fluid. This raises the need to manage complex information flows, grasp new ideas quickly and spread those ideas throughout the enterprise (Kanter, 2003). Fluidity, is an important contribution of process philosophy to research on organization and management practice referring to the shift from being to becoming, from existence to 'in-the-making' (Styhre, 2007). Knowledge, for instance, is in perpetual flux and flows along various receptors across the organization and penetrates into work settings and effect unpredictable consequences. Affirming fluidity enables us to challenge simple linear causal logic in favor of complex mental models (Schein, 2010). As characterized by Urry (2003), "fluids move according to certain novel shapes and temporalities as they break free from the linear, clock time of existing scapes – but they cannot go back, they cannot return, because of irreversibility of time."

Complexity is conceded as one of the prominent fluid epistemologies. Complexity theory is the study of the dynamic behaviors of complexly interacting interdependent and adaptive agents under conditions of internal and external pressure (Uhl-Bien and Marion, 2008). It implies what is fluxing and fluid and operating in non-linearity (Styhre, 2007). In a complex (non-linear) system a small exogenous event may trigger a change in the fundamental functioning of the system (Schneider and Somers, 2006). Any organizational activity can feed back onto itself in ways that are positive (enhancing, stimulating) or negative (detracting, inhibiting) (Uhl-Bien and Marion, 2009). Evolutionary change arises when series of alterations and modifications ensue shifts in practice, which lead to occurrence of conditions for further breakdowns, unanticipated outcomes and innovations (Orlikowski, 1996 as cited in Burke, 2011). Dynamics of complexity ensures system plasticity and evolution, which induces adaptation.

More recent theorizing has placed greater emphasis on complexity suggesting that many phenomena may in fact fit multiple opposing categories simultaneously (Denison, *et.al.*, 1995). There is a growing tendency to treat organizations as complex adaptive systems. Complex adaptive systems invoke neural networks of social interaction (Uhl-Bien, *et.al.*, 2007). Incorporation of complexity theory into organizational behavior and leadership offers unique perspectives to delve into the embedded behavioral dynamics of organizations. Lichtenstein and Plowman (2009) explains the way dynamic social interactions influence the behavioral repertoire of an organizations:

> In complex systems, mutual influence across agents is necessary for survival. Agents are in constant interaction exchanging information, learning, and adapting their behavior in locally coherent ways. Every contact, every exchange of information present an opportunity for influence, which reflects one important type of leadership. While these everyday contacts may seem routine, they can be significant because each conversation builds on the last and is infused with the new information provided by the one before. In

> addition, some interactions can be perceived as more “meaningful” to agents, depending on the content, the norms, and their interaction. In such complex adaptive systems, the agents in the system recognize the meaning of a given exchange, and adjust their own behavior as their response to that meaning within the system. As they do so the system changes: it is not the same system as it was before. That is, when an agent adjusts to new information, the agent expands his/her own behavioral repertoire, which, in effect, expands the behavioral repertoire of the system itself.

Within the purview of complexity science, researchers become more capable to elucidate dynamic adaptability generation, which is embodied in the innovative outcomes of the organizational processes. That is the very reason why the ‘ecology’ is used as a simile to tap into internal complexity of organizations which are (like ecologies) characterized by multiple systems of interaction that are both ordered and chaotic (Morgan, 2006). An ecology consists of many subsystems, each operating at its own unique scale or level (Goldstein, *et.al.,* 2010). These subsystems randomly interact over time and their behaviors are related to each other. Random disturbances (as a consequence of intra-organizational network of communication) can produce unpredictable events and relationships that reverberate throughout a system, creating novel patterns of work (Morgan, 2006). Ecologies are systems of difference in which differences are seen as strength and stability stems from the way these differing components and interactions enable resilience to each subsystem (Goldstein, *et.al.*, 2010). Diversity within organizations, when appropriately guided and channeled, will lead to departures from the expected and cultivate innovation. Therefore, diversity is a *sine qua non* for organizations when innovative outcomes are anticipated from the network of interactions.

In complex systems, due to the richness of information flow (interaction resonance) and dynamic interaction between the members/groups within the organization, order is emergent, organic and unpredictable (Uhl-Bien, *et.al.,* 2007). Emergence lies at the heart of complex (non-linear) systems (ecosystems, food chains, insect swarms, humans societies) and it is the kernel of innovation. It is referred to as complexity theory’s anchor point phenomenon (Chiles, *et.al.*, 2004). It is a phenomenon of the process of adapting and transforming spontaneously to changes in circumstances (McMillan, 2008). Emergence enables the coming-into-being of superior level structures, patterns and processes and the way complexity arises out of the interactions among people (agents) that constitute the system (Goldstein, 1999). It paves the way to create organizational processes, structures and practices that will render the organization more adaptive (Goldstein, *et.al.*, 2010). The significant aspect of emergence is that outcomes of this process are very difficult to predict from the knowledge of the parts (Maguire, *et.al.*, 2011). Study of the individual components or agents of an emergent phenomenon does not enable us to understand the whole (McMillan, 2008). Innovation is attained when emergence creates an unanticipated outcome which can be applied as a solution to a previously unsolvable problem (Uhl-Bien, *et.al.*, 2007). Goldstein (2011) writes:

> Appealing to emergence, accordingly, explains varied aspects of organizational dynamics through emphasizing spontaneous innovations, which emerge out of the interactions within social networks of persons and between persons and technologies. Typically, these innovations in organizational functioning are understood as the emergence of collectivities at the macro level out of connectivities at the micro level. Moreover, because these innovations are not the result of imposition, it is believed they are more likely to evoke employee commitment and consequently are more likely to empower rather than disempower employee contributions.

As a management principle, emergence means putting in place the guiding structures that will stimulate individuals to coordinate their activities of their own volition (Birkinshaw, 2010). When appropriate organizational conditions are satisfied micro level diversities will lead to the emergence of qualitatively distinct macro level outcomes (knowledge) which in turn exert downward causality on organizational parts through the same rules that brought them into existence (Maguire, *et.al.*, 2011). Emergence occurs when the '*right context* for *knowledge creation* and *accumulation'* is established in order to be able to break the hold of dominant attractor patterns in favor new ones (Morgan, 2006). This is beyond problem solving, which tends to deal with the situation of the moment at the expense of the wider context (Haeckel, 1999). Act of establishing context, rather, is creative by nature and aims to conduce previously unknown methods, which will render company resilient to novel problems and embrace the new situation. Emergence will inevitably trigger the modification of existing behavioral structures and invoke 'enrichment of knowledge' through 'creation of knowledge'. Leaders are supposed to *enable* the 'right' context.

From Leaders to Enablers

Roles of the leaders and the members of the organizations have been reshaped in the cauldron of intense competition and relentless change (Wageman, *et.al.*, 2008). The question is 'How are we supposed to re-define the role of leaders and leadership in an environment where complexity prevails?' Actually, the answer lies in integrating the dynamics of complexity into prolonged understanding of leadership. We shall refer to our main analogy to tap into the new texture of 'enabling leadership' to be instilled in contemporary organizations.

The voluminous studies on leadership are based on the assumption that the leader maneuvers and motivates players and directs organizational response as issues arise (Marion and Uhl-Bien, 2011) because organizational structures are usually defined by fixed boundaries. These studies on leadership espouse the 'entity' perspective focusing on dyadic relationships because individuals are thought of as entities with clear separation between their internal selves and external environments (Uhl-Bien, 2006). However, approaches toward complexity are more holistic and avoid defining leadership within the limited framework of interpersonal influence. The organizations of the make-and-sell era are considered as operating machines with computational predictability, thereby, leadership in those organizations operated closed systems, ignoring (or failing to detect) signals that a change may be required (Haeckel, 1999). Within the framework of machine metaphor, there is no doubt, that the highest priority of leaders was to keep things stringently under control within the organization rather than heeding the warnings disseminated from the external environment. The lethargic attitude towards perceiving change in the environment instigates dysfunctional momentum. Such congestion occurs when people in an organization continue to work toward an original goal without pausing to recalibrate or re-examine their processes, even in the face of cues that suggest they should change course (Barton and Sutcliffe, 2010).

A more valid perspective of leadership should be developed that views innovation as an open-ended process of adaptation and learning that keeps the system in a far-from equilibrium state (Dawson, 1994; Altman and Iles, 1998; Burnes, 2009; Andriani, 2011). Learning is a by-product outcome of complexity dynamics and occurs when ideas collide, merge and diverge (Uhl-Bien and Marion, 2011). Knowledge emerges as individuals and social settings interact to create meaning (Fonseca, 2002 as cited in Uhl-Bien and Marion, 2011). Complexity leadership theory highlights leadership as providing linkages to ‘emergent structures’ within and among organizations (Marion and Uhl-Bien, 2007). Today, short periods of advantages are interrupted by frequent disruptions and the external environments in which organizations are carrying on their business activities are far from equilibrium (D’Aveni, 1994). This raises the need to absorb

new ways of doing business imposed by the knowledge created as well as developing relevant adaptive behavior. Leaders should provide a healthy intra-organizational ambiance for the incarnation of complexity dynamics. Anderson (1999) writes:

> Adaptation is the passage of an organization through an endless series of organizational microstates that emerge from local interactions among agents trying to improve their local payoffs. The task of those responsible for the strategic direction of an organization is not to foresee the future or to implement enterprise-wide adaptation programs, because nonlinear systems react to direction in ways that are difficult to predict or control. Rather, such managers establish and modify the direction and the boundaries within which effective, improvised, self-organized solutions can evolve.

Adopting a processual approach (continuously evolving modes of interaction) toward leadership supports the notion that leadership is more than a linear, mono-directional event (Kan and Parry, 2004), and is embedded in a complex interplay of numerous interacting forces and in the network of relations (Uhl-Bien, *et.al.*, 2007). According to Crevani, *et.al.* (2010) leadership should be redefined in terms of processes and practices organized by people in interaction. Thus, the new leadership function extends beyond the formally designated leader to include anyone taking on a leadership role (Neubert, 1999). As a matter of fact, in order to create ecologies of innovation instituting an enabling context of leadership seems critical, which facilitates sharing and development of new ways of working and promotes organizational innovativeness through influencing cognitive processes of innovation-related behaviors (Balogun and Jenkins, 2003; Krause, 2004). Leadership inspired by complexity theory recognizes that changes towards innovative outcomes occurs naturally within the system and the role of leadership is to create systems that disseminate rich information (through communication) about better practices, allowing the members of the organization to adapt those practices in ways that are most meaningful to them (Plsek and Wilson, 2001). In a hyper-competitive business world, the way leadership is being carried out and innovation converge. Both are essentially concerned with establishing connections between ideas (novelty) and outcomes (value) by building alliances between the members of the organization (Bilton, 2007).

The role of enabling leadership is to directly foster and maneuver the conditions that catalyze adaptive leadership and allow for emergence (Uhl-Bien, *et.al.*, 2008). Catalyzing refers to conducing to the mechanisms and contexts necessary to create ecologies of innovation. Leadership is defined as emergent change behaviors under conditions of interaction, interdependence, asymmetrical information, complex network dynamics, and tension (Uhl-Bien, et.al., 2007). Therefore, enabling leadership fosters complex networks by (1) fostering interaction, (2) fostering interdependency, and (3) injecting adaptive tension to help motivate and coordinate interactive dynamic (Uhl-Bien, *et.al.*, 2008). Interaction occurs when individuals or groups in a social systems gain and develop the possibilities of an understanding of each other's subjective views (Yolles, 2000) and are willing to extract meaning out of these views which will evoke changes in the current behavioral patterns. New meanings, methods and solutions will sprout via emergence of *'bottom-up structuration'*, which moves the system and its components to a more desirable level of fitness (Osborn and Hunt, 2007).

During the process of building an adaptive and learning organizational structure, leadership not only occurs through the managerial role, but also 'disruptions' of daily interaction patterns that affect change in structure. Leadership is a continuous process and engenders a rigorous and productive organizational ecology where perceptions of emerging structure and emerging ambiguity are constantly handled in interaction. Enabling leadership, nurtures interaction via network of linkages across which information flows as well as allowing room for conflicting ideas on organizational issues, which will eventually pave the way to new understandings regarding those issues (Uhl-Bien, *et.al.*, 2007). Leaders enable, rather than design, complex contexts in which creativity; adaptability and learning are maximized (Marion and Uhl-Bien, 2011). Embracing complexity within an organization is essential to innovation (Bilton, 2007).

Continuous knowledge creation is an indispensable feature of ecologies of innovation. Knowledge creation depends on the awareness of encouraging a social setting in which knowledge continues to grow (von Krogh, *et.al.*, 2000). Creation of knowledge is a process and a social/relational phenomena and this process concludes with learning when the patterns of the relationships change (Stacey, 2001; Calhaun, *et.al.*, 2003). Therefore, leadership is responsible for providing a 'knowledge vision' that synchronizes entire organization in order to create knowledge dynamically and continuously and serves as a mental map for the entire organization with its connection to an advancement strategy (Nonaka, *et.al.*, 2005; von Krogh, *et.al.*, 2000). Leaders should guide an organization through a course of disruptive change by providing direction and support throughout the process fostered by this vision, and communicate it effectively in a way that members of their organization will understand and want to follow the new direction of change (Cowan-Sahadath, 2010). Lack of such vision impedes knowledge creation initiatives, and when knowledge stops evolving it turns into opinion or dogma. Knowledge is created and accumulated when organization as a whole gains new and unanticipated understandings through activities encompassing the acquisition of novel facts (Chakravarthy, *et.al.*, 2005). Creation and sharing of knowledge are, both, means and ends of the evolution of intra-organizational ecology.

Manville (2003) argues that knowledge management is more than creating specific approaches and processes to improve an organization's learning and application, instead it entails to create the right kind of context and freedom to let all of the individual agents in the organization adapt dynamically to the business challenges. Stacey (2001) adopts an evolutionary perspective on knowledge in organizations and argues the implication of knowledge as 'meaning' and highlights that it can only emerge in the communicative interaction between people; thus, meaning is continuously reproduced and potentially transformed into action. This puts forward a description of knowledge as the thematic patterns of organizing the experience of being together. Nahapiet (2008) elucidates importance of developing an understanding of social embeddedness in organizations and draws our attention to the substantial body of research that put special emphasis on human and social capital in knowledge processes demonstrating that we should actually view global economy as a *relational* economy. Nonaka (2005) pursues the drives of a continuous process of knowledge creation in terms of leadership:

> The leadership in a knowledge-creating firm is based on more flexible distributed leadership, rather than leadership as a fixed control mechanism. Since knowledge is created through dynamic interactions among individuals and between individuals and the environment, leadership in a knowledge-creating firm is required to be improvisational. It also requires active commitment from all the members of the organization, not just from a few elites. In a knowledge creating-firm, planning and implementation of strategy is integrated through the interaction between subjectivities and objectivities, instead of being separated as suggested by existing theories of strategy and organization.

Evolution is possible when dynamics of communicative interaction are fluid enough, when there is diversity, tension and conflict in the thematic patterning of communicative interaction (Stacey, 2001). Leadership practices should include diverging processes, instances of unresolved conflicts, ambiguities and debates stimulating members of the organization to voluntarily transfer their talent and ongoing experience into organizational assets on the way to increase competitiveness built on knowledge creation and development (Crevani, *et.al.*, 2010; Yang, 2007). The process of knowledge creation is built on leadership awareness toward the importance of encouraging a social setting in which effective collaboration is fostered (von Krogh, *et.al.*, 2000). Auto-coordination emerges from the nature of system dynamics and is not imposed by authorities (Uhl-Bien, *et.al.*, 2007).

Adaptive climates acknowledges the presence of conflict as the fuel that drives system growth and enables learning and adaptive behaviors which make innovation possible (Plowman and Duchon, 2007; Andrade, *et.al.*, 2008 as cited in Uhl-Bien and Marion, 2011). Tension is feasible when managers encourage experimentation, allow for failures and examine them using adversities as opportunities to learn and grow (Plowman and Duchon, 2007). Internal tension can be generated by heterogeneity. Heterogeneity refers to differences among agents (members of the organization) in such things as skills, preferences and outlooks (Uhl-Bien, *et.al.*, 2008). Heterogeneity will create a certain amount of pressure upon the employees through interdependence, which will conclude with acceptance of differences. These differences will form as the basis on which the generative process of innovation will be built. Interaction of differences among individuals/groups may exhibit a high variety of behavior and thoughts. This interaction will end up with an emergent phenomenon (the solution) something that came into being and is better than either one could have developed alone (Bennet and Bennet, 2004).

Therefore, leadership should be conceded as a social influence process through which emergent coordination and change (i.e. new values, attitudes, approaches, behaviors, ideologies, etc.) are constructed, produced and *fostered* (Uhl-Bien, 2006). As Bilton (2997) suggests, with the intensification of network of social interaction (communication), 'strong ties' of loyalty, hierarchy and accountability are replacing 'weak ties' of sociability, curiosity and unpredictability. Plowman and Duchon (2007) argue that organizations designed for emergence encourage 'talk' and foster conversation. Fostering conversations, means taking advantage of non-linear interactions in a way that will accelerate the transmission of useful information, thus, keep the system fluid. Sustaining robust conversation and utilization of communication channels ensure perpetual flux in an organization where outcomes of novelty are always 'in-the-making'. If leaders attempt to align the network to their own strategic objectives they risk subverting the connections and complexity, which underpin creative work (Bilton, 2007). Plowman and Duchon (2007) emphasize the role of leaders as an enabler of communication through conversation:

Conventional views of organizations concentrate on connections in the vertical hierarchy, and in practice, this leads to system silos that operate in relative isolation. When managers design for emergence they enable a network that has rich connections both vertically and horizontally. The term "rich" refers to the *number* of nodes connected in the network (its density), and the quality of the connections, that is the amount of intelligence that passes among the nodes (its depth). Rich connections – lots of nodes and quality connections among the nodes – enable the effective distribution of intelligence, accelerate learning, and are the medium for conversations. In an organizational system, nodes are people and groups, but they can also be events – such as staff meetings or town hall meetings where managers hold conversations with front line workers.

Leaders are inevitably posed to the challenge of cultivating the leadership described so far in bureaucratic hierarchies. The fact that majority of the organizations are still being run through top-down structures should not erode our zeal to turn our workplaces into ecologies of innovation. Hannah, *et.al.* (2011) suggest four specific ways in which leaders in hierarchical structures catalyze emergent processes. First, they can encourage contribution of each individual in the organization through influencing individual and social regulatory structures, active goals, salient identities and experienced emotions. Second, they can comprise a suitable environment, which is conducive to unveiling positive meaning and positive emotions. Third, leaders can induce others' leadership attempts providing a role model that supports the members of the organization to become leaders. Fourth, leaders can encourage shared leadership rather than simple and hierarchical control by formal leaders. Shared leadership is an interactive, dynamic social-influence process used in groups or organizations where members influence each other to achieve stated goals or objectives (Pearce and Conger, 2003 as cited in Hannah, *et.al.*, 2011). Enabling leadership in complex environments, after all, is the ability to manage the entanglement between administrative leadership, which refers to the actions of leaders in formal managerial roles, and adaptive leadership, which is a collaborative change movement that emerges non-linearly from interactive exchanges (Uhl-Bien, *et.al.*, 2007; Uhl-Bien and Marion, 2008; Uhl-Bien, *et.al.*, 2008).

Conclusion

Conventional studies of leadership and organizations are too deterministic, so there is a need to challenge the ingrained perspectives. The environment is, and will be, the major source of uncertainty for business organizations. This conceptual paper intends to emphasize that change, leadership, knowledge creation and complexity are so intertwined that one who tries to handle each as discrete concepts will most probably fall far away from capturing the very insight of the interconnected nature of organizational context. In order to be able to stave off the limitations of conventional organizational studies, leaders are supposed to *influence* and *enable* rigorous social interactions between individuals and groups in a way that will produce feedback networks, which will ensue conflict, tension and dialogue through uninterrupted conversation. Leaders should create and preserve the appropriate organizational social context for continuous communication. Bottom-up behaviors (emergent) will be unveiled and through dynamic social interaction, interdependency and tension will be materialized into novel solutions (innovation) and render the

organization resilient. New meanings will be created out of the clash of differences and these new meanings will enrich the current knowledge base, which will eventually lead to differentiation through creation of inimitable competitive advantage. Enabling leadership does not claim to abandon the ingrained bureaucratic settings, rather, intends to provide a map for contemporary leaders to avoid stifling creativeness and make their organizations function more like complex adaptive systems. Leaders, or in other words, enablers are supposed to embrace complexity and trigger evolutionary dynamics, so that their organizations are transformed into ecologies of innovation.

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Towards Improving Quality of E-Commerce Websites in Hospitals

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Abstract

Due to the huge progress in the field of information and communication technology (ICT) across the internet, the computerized information systems in hospitals became an inevitable part of the infrastructures of modern hospitals. These organizations have started to establish sites characterized with high quality in interacting with users, w.r.t acceptability and understanding. One of the main challenges in specifying the attributes of the e-commerce site quality is the lack of formal specification of quality measure means. This paper handles the issue of presenting a set of standard criteria acceptable by the major part of the professionals and experts in the field in order to evaluate the quality of some competitive private Arabic and Non-Arabic hospitals. The used methodology here is based on presenting a chick-list to assess the e-site quality based on the literature. This paper has concluded that the e-site of the taken private Arabic hospitals suffer from low quality in comparison with the corresponding Non-Arabic sites since the Arabic ones do not acquire the high-quality standards. The application field of this research is in: hospitals e-sites, commercial e-sites, social and educational e-sites, etc.

Keywords: *E-Commerce, Quality, Website Quality***.**

Introduction

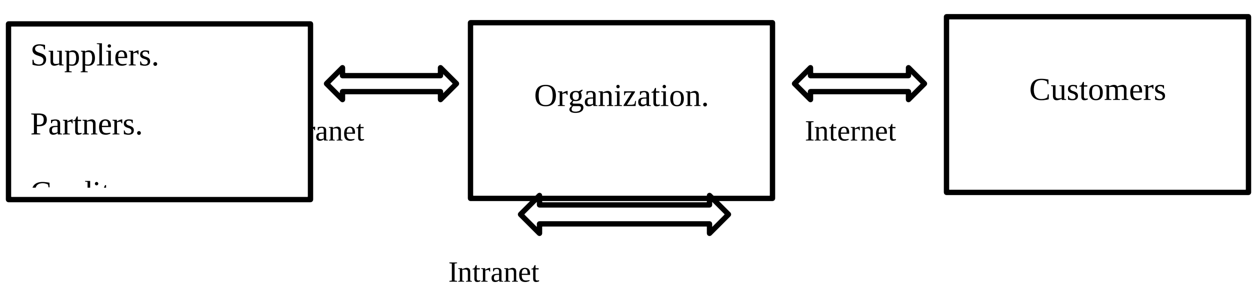
By the emergence of the internet at the end of the twentieth century, and its spread at the beginning of the third millennium, besides the rapid expansion of e-commerce value in the few years convinced many companies that a new economy has emerged. E-commerce as a new approach for buying and selling products and services via internet as well it has become an important tool for companies around the world, which has a significant influence on the traditional way of performing trade. The primary reason companies go to e-commerce is because of marketing reasons. They want to merchandise their products and conveyance/introduce their services better; as well the wide interest in the subject is attributed to the fact that organizations are becoming aware of the possible implications of the internet on their work. Quality has been established as a key factor in ensuring the success of e-commerce in attracting and retaining customers, as well e-commerce websites must possess certain characteristics in order to attract customers/users.

Review of the literature

Electronic commerce

The term e-commerce refers to the use of electronic information technology to conduct business transactions among buyers, sellers, and other trading partners. It combines business and electronic infrastructure, which allows traditional business transactions to be conducted electronically, ignoring the physical or geographic boundaries separating them (K.Aggarwal&Travers,2001). A more general definition defines e-commerce as “any form of business transaction in which the parties interact electronically rather than by physical exchanges or direct physical contact”. The scope of e-commerce reaches from simple web presence to shared business processes connecting different organizations (Sarathi.P&et al., 2012). It involves the use of information and communication technology (ICT) in making commerce between customers and organizations, organizations and organizations, customers & customers as showing in figure -1- below:

Figure-1:Networks that should be depend in e-commerce environment



Source: Boar, Bernard, 2001,”The art strategic planning for information technology”, 2nd.Ed., USA.

According to O’Brien, 2005, e-commerce is the buying and selling, marketing, and servicing of products, services, and information over a variety of computer networks.

Quality and Websites Quality

With the vast development of information technology and global advances in this field, e-commerce plays an important role in the operations of companies. Since e-commerce has become the main distributing channel between companies and the customers in B2C transactions, focusing on the quality of this channel and the service that it renders to customer, is very critical for the sustain of the business (Dehbozorgi&Jafari,2012). As quality is the main factor in regulating the market as it supported by the customer who has the right of choosing the best for his needs and expectations. Thus, considering the customer's needs a priority, quality becomes an important factor for civil society. Thus, quality is a strategic element of global management and organizations which determines the services competitiveness both domestically and internationality (Craciun, 2013). In the current paper, the quality is going to be clarified with respect to its relation with the respective website.

According to Hamadi, 2011, e-quality includes pre and post-service experience with the website. It represents the evaluation of the effectiveness and efficiency by which a website facilitates shopping, purchase and delivery products or services. Whereas Bearden&et al, 2011, refer to the websites quality as broadly encompass all phases of a customer's interactions with a website-the extent to which a website facilitates efficient and effective shopping, purchasing, delivery, and services. On the other hand, Ellahi&Bokhari, 2013, consider that the quality of services and products is necessary to create customer satisfaction and customer loyalty in a physical environment similar the quality of services provided through a website is also a major success factor for companies. There are lots of studies and researches as published papers dealing with the quality websites based on a wide range of standard criteria. The following Table -1- exhibits the main credited criteria:

Table -1: The Most important Website Quality Criteria according to some of the main Specialists

Authors	**Standard Criteria**
Singh&Fisher,1999	Content, Design, Organizing.
Singh&Sook,2002	Content, Design, Organizing.
Barnes&Vidgen,2002	Usability, Information, Service interaction.
Albuquerque&Belchior,2002	Usability, user friendliness, navigability, Maintainability, technology suitability, reusability, implementation feasibility, profitability, Involvement capacity.

Aladwani&Palvia,2002	Content, Organizing, Security, Web appearanc
Van der merwe&Bakker,2003	Navigability, Security/Privacy, Web appearance.
Lin&Joyce 2004	Content, Design, Security.
Gledec,2005	Usability, Content.
Signore&Sook,2005	Content, Design, Organizing
Miller,2008	Content, Performance, Time, Structural, Accuracy, Response.
Sevilla&Sharp,2008	Content, Design, Usabilit
Rababah&Masoud,2010	Usability, Conceptual reliability, Representation reliability.
Choudhury&Choudhury,2010	Security, Appearance and adequate information about products and services, Speed in downloading the pages, Navigation friendly, Ability to obtain information in limited number of pages instead of browsing several pages, Search option, Hyperlinks to other information, Information on member facilities, History and profile of the company, Option for providing feedback from customers, Visitor statistics, Interactive.
Ellahi&Bokhari,2013	User-friendliness, Navigation, Efficiency, Security/Privacy, Entertainment, Website appearance.

After identifying the criteria provided by the researchers in this area, it appears that there are discrepancies in quality standards of the websites available on the internet depending on the type of those sites and their target. It is clear from Table -1- different views of the specialists about the proposed quality standards; may be due to the different orientations of scientific researchers or their specialties.

In this context, the current research is an attempt to achieve the integration of the available studies on the quality of the websites to attain the most important criteria that should be adopted so as to enhance the confidence of the users, which in turn will support the activities of e-commerce in general and B2C category in particular. This paper recommends several criteria of those listed in Table-1.

Amongst them there are: (Singh&Fisher,1999),(Singh&Sook,2002),(Aladwani&Palvia,2002), Lin&Joyce,2004),(Miller,2008),(Choudhury&Choudhury,2010),(Sevilla&Sharp,2008).

1. Content quality:

Content can be considered as the most fundamental element of a site. Content is the best tool for building trust with the users and many studies indicated that content is more important than other criteria. Content is the essential pillar in business and commerce towards the electronic dimension in the electronic commerce. Content quality indicator can be summarized as follows:

Updating: Content criteria depends on the goal of the content and it depends on how much information update is needed on the site during a specification period.

Site relevance with organization: Which denotes the site relevance with its organization w.r.t the contents, comprehension, and information details.

Accuracy: represents the information level of trust, and how deep they are free of errors (Scientific, Typography, etc.), failing to ensure for that, it is likely that a very significant information could be suppressed from the customer/user.

Retrieval Capability: It denotes to examine the referenced electronic sites w.r.t their capacity to retrieve the information through recognizing the following:

i. Number of ports available to access and retrieve.
ii. Possibility to combine more than one port at a time.
iii. Speed of retrieval.
iv. Cross access between ports.

1.5 Responsibility: A criterion that represents the trust level of the customer/user towards the information available in the respective site.

1.6 Reliability: A criterion that represents the trust level of the customer/user towards the services available in the respective site.

2. Design quality:

Website design must be clear, comfortable and easy to use, with good utilization of colures, typography and white space. Most organizations assert to show their sites (on the internet) in the best and dazzling appearance. Thus to attract customers to visit and re-visit after the first use. This is in order to leave best impression from the first visit. Design quality indicators may be summarized in the following:

2.1 Attraction (Charisma): This indicator focuses on the "innovation" dimension in design. It also emphasizes on showing the beauty in moves and pictures, in such a way to make the customer/user satisfied and willing to visit again.

2.2 Convenience: Denotes the suitability level of the design and its used pictures and moves to the service type provided by the site.

2.3 Color: Denotes the characteristic features of colors used in background and texts during design.

2.4 Audio, Video, Pictures: Denotes the characteristic features of audio, video, and pictures filed used in the site pages.

2.5 Text: This sub-criterion is concerned with specifying the texts used in the site pages.

3- Organizing quality:

This criterion focuses on the site structure and organization of its services. This yields to provide easy means of browsing to help the customers/users in fast accessing the required information. Thus to make the customer/user satisfied during visiting the site. The relevant sub-criteria of this quality are listed below:

3.1 Index: It denotes the indexing all site pages within the main page.

3.2 Sit Map: Means to ensure providing a suitable map for the site. This also involves to set some joints in each page for to ease browsing.

3.3 Coherence: Denotes to ensure the cohesion in all pages and in the way of their displaying, too.

3.4 Links: This sub-criterion focusses on the necessity of setting links and joints in a correct manner. This also involves to set some auxiliary links in each page to ensure correct transfer as required.

3.5 Slogan: It is important to fix the selected organization slogan in each page of the respective site.

4- Usability quality:

This quality is one of the important qualities in evaluating electronic sites as agreed by most of the previous studies. It has been strongly considered by these studies. It denotes the simplicity in dealing with the respective site by the customers/users, regardless his cultural background, in order to get the required information. It also denotes the ability of this site to provide stable and satisfactory performance. This may further denotes the site efficiency. The sub-criterions of usability can be summarized as below:

4.1 Simplicity in Use: This can be achieved through accessing its various parts and using the available, as well as to easily access all the other site parts.

4.2 Nomenclature: Denotes the matching between the site name with the site nature and its functions.

4.3 Merits of Interaction: This sub-criterion denotes the availability of clear instructions for the customer/user to access any part of the site. It also involves to include some necessary auxiliary programs and tools for communication and for feed-back between the customers/users and the site through various communication means.

4.4 Adaptation According to Need: Means to ensure the capability of the site contents to adapt as needed by any customer/user.

Table -2-: Check List

Content
A- Update: 1. The information available on site are recent. 2. Time & Date of update is present. 3. The update is periodical. B- Site Relevance with Organization: 4. Historical nation about organization is present in the site. 5. The site involves information about products/services provided by the organization. 6. The site includes demonstrative pictures about products/services provided by the organization. C- Accuracy: 7. The information in the site are free of scientific errors. 8. The information in the site are free of typographic errors. 9. The information in the site are free of linguistic errors. 10. The references used in the site are clear. D- Retrieval Capability: 11. Information retrieval in the site is easy. 12. It is possible to combine more than one port for retrieval. E- Responsibility: 13. The actual address of the organization is available on the site.

14. The essential information about the high-level staff and their positions are available.
15. The necessary copy rights information are available on site.
16. The e-mail address is available for content.

F- Reliability:

17. Comprehensive & Diversified services are available for customers.
18. Speed in achieving services.
19. Ease in understanding text available on the site pages.
20. Several main languages to be available in the site.

Design

A- Attraction

21. The site is to be attractive with innovation in the design.
22. The site is to have emotional effect on the customer/user when accessing such that to make him happy and enthusiastic to re-visit.

B- Convenience

23. The design should be convenient to the service type provided by site.
24. The pictures used in the site should be convenient to the site nature.
25. A balance should be sustained during the distribution of pictures, texts, and colors with a page.

C- Color

26. To use suitable colors in the site.

D- Audio, Video, and Pictures

27. The site should involve files of Audio, Video, and Pictures.
28. To maintain the facility of the associating texts for all audio, video, and pictures files. This will ensure recognizing their objectives in case of difficulty when loading.
29. To keep the size of audio, video, and pictures files as small as possible in order not to affect the page loading speed.

E- Text

30. To sustain different fonts (in size & color) for the headings & sub-headings in order to maintain them distinguished.
31. The used scripts should be readable and of suitable font size.
32. To use inter-spaces between paragraphs for easier reading.
33. To display the associating text before their pictures in the site pages in order to enable the users to read them during loading.

Organizing

A- Index

34. To make the site containing index or joints for all site pages with the main page.

B- Site Map

35. To avail a proper maps for the site or joints in each page such that the user can move to any page within the site.
36. To avail a facility that the user can identify the current page under browsing through displaying its full address.

C- Coherence

37. The site page should be specified with coherence and harmony during the displaying.

D- Links

38. To ensure that the links operate correctly so that it is easy to move properly to the required place. 39. When using a link in the main site towards an external site, it should be possible to get back to the original main site. E- Organization Slogan 40. It is important to set the organization slogan in a salient position on site. 41. It is also important to set the organization slogan in all site pages.
Usability
A- Simplicity in Use 42. The site should be found easily by the search-engines. 43. The site should be easily used, understood, and dealt with by users. 44. It should be easy to find the required information in the site with easy browsing. B- Nomenclature 45. The site name should match its nature and its function. It should be easy to remember, as well. 46. The time of loading the site by the user should be short enough. 47. There should be a counter to count the number of users of the site during a specified period. C- Merits of Interaction 48. There should be clear instruction to use the site. 49. There should be "Frequently-Asked-Questions" (FAQ) with their users, available on site. 50. There should be available the error messages in order to help the user in such cases. D- Adaptation According to Need 51. To make the site adapted with the user need through providing the information required by the user.

Methodology

It is possible to clarify the methodology of this work through the following main features.

Problem Identification

In this changing world, the big organizations have followed the new trend of adapting electronic applications that caused a great growth in the field of e-commerce. This has been backed-up by the internet as one of the main (or rather fundamental) sources restored by the users to get the needed information. Within the confines of this changing world, it appeared that it is too important for the commercial organization to pay higher attention to the offered electronic services through focusing on the "quality" of their sites. This would further positively reflected on the number of their customers, and consequently on their profits.

The research problem can be identified through raising the following two questions:

1- Are criteria which when being available in an electronic site of an organization (especially hospitals), would give the respective sit the attribute of "HIGH" quality?

2- Are there difference between the electronic sites Arabic countries private hospitals, and the sites of the private hospitals of non-Arabic countries, w.r.t the availability of quality criteria?

Hypothesis

It is possible to answer the questions faced in the research problem through the following hypotheses:

1- There are specific criteria that should be considered when an appreciable level of quality is required for the website.
2- The electronic sites of the private Arabic hospitals different from the private Non-Arabic hospital websites in the percentage of quality criteria available.

Importance of research

The important of this research arises through highlighting a very important sector in the society that is the hospitals sector. That is due to its major services that clearly appear on their websites. Furthermore, those websites can be generally considered as an important source of information ton which the customer/user may seek his need. This will moreover yield to attain higher speed in selecting the convenient hospital according to the sickness status, and according also to the available specialization at the respective hospital. Thus, under the atmospheres of globalization and high competition all the organizations, including hospitals, seek to promote their services, especially the electronic services, aiming to attain outperformance. Therefore, they assert to achieve high quality especially in electronic sites on the internet.

Objectives

This paper is keen to achieve several objectives, amongst these are:

1- To articulate the concept of “Quality” in general and “Site Quality” in particular.
2- To recognize the most important criteria presented by the specialists in the field.
3- To consider a “Check List” presented by this paper in order rely on. This list has been arranged depending on the available literature in order to compare the e-websites of some private Arabic hospitals with the corresponding Non-Arabic once.
4- To resolve the merits of electronic sites of some private hospitals in order to be considered then generalized for use by other hospitals. This will also include to mitigate weakness sites suffered by some hospitals.

Samples

In order to complete the practical side of this paper, and also to examine the presented two hypotheses, a specific check list has been considered. This list involves Fifty One (51) questions encompassing the most significant criteria of the e-site Quality. This has been done to analyze the website quality of some private Arabic and Non-Arabic hospitals (20 Arabic and Non-Arabic) Table -1- and Table -2- duration 4/4/2013-20/4/2013. The data analysis was achieved through the respective check list, depending on the SPSS-11.5.

Table -3: Some Arabic private Hospitals

Hospitals	Country
1- Al-Essra Hospital. (www.essrahospital.com). 2- Ibn al-haytham hospital. (www.ibn-alhaytham-hospital.com).	Jordan
3- As-Salam International hospital. (www.assih.com). 4- Nozha International Hospital. (www.alnozha-hospital.com).	Egypt
5- Clinique Alyssa. (www.cliniquealyssa.com). 6- Saint Augustin Clinic. (www.clinique-saint-augustin.com).	Tunis
7- Shefa Private Hospital. (www.shefaprvatehospital.com).	Iraq
8- Al-Ahli Hospital. (www.ahlihospital.com). 9- Al-Emadi Hospital. (www.alemadihospital.net).	Qatar
10- Beirut General Hospital. (www.beirutgeneralhospital.com). 11- Monla Hospital. (www.monlahospital.com).	Lebanon
12- Al-Afia Clinic. (www.alafiaclinic.com).	Libya
13- Al-Makassed Hospital. (www.almakased.org).	Palestine
14- New Mowasat Hospital. (www.newmowasat.com). 15- Hadi Hospital. (www.hadiclinic.com).	Kuwait
16- Kingdom Hospital Consulting Clinics. (www.khccgroup.com). 17- National Hospital. (www.rnh.meda.sa).	Saudi Arabia
18- Al Zahra Private Hospital. (www.alzahra.com). 19- Gulf Speciality Hospital. (www.gshdubai.net).	UAE
20- Ibn Al-Nafees Hospital. (www.ibnalnafees.com).	Bahrain

Table -4-Some Non-Arabic Hospitals

Hospitals	Country
1- Delmont Hospital. (www.delmonthospital.com). 2- Western Private Hospital. (www.westernprivatehospital.com.au).	Australia
3- Varde Heart Center. (www.phvarde.dk).	Denmark
4- Hospital Soup. (www.hospitalsoup.com). 5- Vancouver Coastal Health. (www.vch.ca).	Canada
6- St.vincents Private Hospital. (www.svph.biz).	Ireland
7- Max Hospital. (www.maxhealthcare.in). 8- Apollo Hospital. (www.apollohospdelhi.com).	India
9- Spire Healthcare. (www.spirehealthcare). 10- The Portland Hospital. (www.theportlandhospital.com).	UK
11- Hattat Hospital. (www.hattathospital.com). 12- Memorial Antalya Hospital. (www.ivf.net).	Turkey
13- Avista Adventist Hospital. (www.avistahospital.org).	U.S.A
14- Arwyp Medical Centre Private Hospital. (www.arwyp.com).	South Africa
15- Aleris Hamlet Hospital. (www.aleris.dk). 16- Medicover Hospital. (www.medicover.com).	Poland
17- Helse Bergen HF Hospital. (www.helse-bergen.no).	Norway
18- St.Georges private Hospital. (www.stgeorge-hospital.com).	Cyprus
19- ISCARE Hospital. (www.iscare.cz).	Czech Republic
20- Salud DE Torrevieja Hospital. (www.torrevieja-salud.com).	

Application Side

This side discusses the results achieved, through analyzing the data gathered from the handled sites, using the check list shown in Table -2-. Then to describe these results in statistical manner in order to examine the presented hypotheses.

1- Content Quality Criterion:

It is clear from Table -5- that the percentile availability of content quality criterion, in some private Arabic hospitals web sites, are (50.68%) on the total average level of said criterion. This percentile availability yielded a mean of (2.30), and a standard deviation of (0.79). This percentile availability is actually low when compared with the cases of the Non Arabic private hospitals, in which the percentile availability attained (81%), with mean of (2.74), and a standard deviation of (0.51), as show in Table -6-. Generally speaking, the results listed in Table -5- and Table -6-, indicate that the e-sites of the taken private None Arabic hospitals are better that these corresponding Arabic ones. That is because those None Arabic hospitals have sites which involve most of the main indicators that denote users-satisfaction when searching about the need data.

Table -5: Statistical Description of Content Quality Criterion in the E-Sites of Some Private Arabic Hospitals

Variables	Available		Almost Available		Not Available		Mean	Standard Deviation
	Frequency	%	Frequency	%	Frequency	%		
X1	12	54.5	5	22.7	3	13.6	2.45	0.75
X2	6	27.3	1	4.5	13	59.1	1.65	0.93
X3	8	36.4	2	9.1	10	45.5	1.90	0.96
X4	16	72.7	3	13.6	1	4.5	2.75	0.55
X5	13	59.1	4	18.2	3	13.6	2.50	0.76
X6	12	54.5	3	13.6	5	22.7	2.35	0.87
X7	17	77.3	2	9.1	1	4.5	2.80	0.52
X8	9	40.9	4	18.2	7	31.8	2.10	0.91
X9	14	63.6	4	18.2	2	9.1	2.60	0.68
X10	12	54.5	5	22.7	3	13.6	2.45	0.75
X11	8	36.4	5	22.7	7	31.8	2.05	0.88
X12	7	31.8	3	13.6	10	45.5	1.85	0.93
X13	15	68.2	4	18.2	1	4.5	2.70	0.57
X14	15	68.2	-	-	5	22.7	2.50	0.88
X15	12	54.5	4	18.2	4	18.2	2.40	0.82
X16	14	63.6	3	13.6	3	13.6	2.55	0.75
X17	11	50.0	5	22.7	4	18.2	2.35	0.81
X18	8	36.4	8	36.4	4	18.2	2.20	0.76
X19	8	36.4	5	22.7	7	31.8	2.05	0.88
X20	6	27.3	5	22.7	9	40.9	1.85	0.87
Rate	50.68%		17.0%		23.17%		2.30	0.79

Table -6: Statistical Description of Content Quality Criterion in the E-Sites of Some Private Non Arabic Hospitals

Variables	Available		Almost Available		Not Available		Mean	Standard Deviation
	Frequency	%	Frequency	%	Frequency	%		
X1	18	90.0	2	10.0	-	-	2.90	0.30
X2	15	75.0	4	20.0	1	5.0	2.70	0.57
X3	15	75.0	3	15.0	2	10.0	2.65	0.67
X4	18	90.0	-	-	2	10.0	2.80	0.61
X5	15	75.0	4	20.0	1	5.0	2.70	0.57
X6	17	85.0	3	15.0	-	-	2.85	0.36
X7	17	85.0	2	10.0	1	5.0	2.80	0.52
X8	15	75.0	2	10.0	3	15.0	2.60	0.75
X9	17	85.0	1	5.0	2	10.0	2.75	0.63
X10	17	85.0	3	15.0	-	-	2.85	0.36
X11	19	95.0	1	5.0	-	-	2.95	0.22
X12	18	90.0	2	10.0	-	-	2.90	0.30
X13	17	85.0	2	10.0	1	5.0	2.80	0.52
X14	16	80.0	4	20.0	-	-	2.80	0.41
X15	16	80.0	2	10.0	2	10.0	2.70	0.65
X16	17	85.0	2	10.0	1	5.0	2.80	0.52
X17	18	90.0	1	5.0	1	5.0	2.85	0.48
X18	16	80.0	4	20.0	-	-	2.80	0.41
X19	15	75.0	4	20.0	1	5.0	2.70	0.57
X20	8	40.0	4	20.0	8	40.0	2.00	0.91
Rate		81%		12.5%		6.5%	2.74	0.51

Design Quality Criterion:

It is quite clear from Table -7- that the percentile availability of the design quality criterion on average level of the web sites of some of the private Arabic hospitals was (41.95%), with a mean of (2.19) and a standard deviation of (0.78), which is low in comparison with the corresponding Non Arabic sites, which reached (77.30%) with mean of (2.70) and standard deviation of (0.55), as shown in Table -8-. This yields the interpretation that the take private Non Arabic web sites outperformance the corresponding e-sites. This has been proved by the results gained by this paper through browsing the electronic web sites, and through examining the respective indicators of the design quality criterion.

Table -7: Statistical Description of Design Quality Criterion in The E-Sites Of Some Private Arabic Hospitals

Variables	Available		Almost Available		Not Available		Mean	Standard Deviation
	Frequency	%	Frequency	%	Frequency	%		
X21	5	22.7	3	13.6	12	60	1.65	0.87
X22	8	36.4	7	31.8	5	22.7	2.15	0.81
X23	12	54.5	5	22.7	3	13.6	2.45	0.75
X24	14	63.6	4	18.2	2	9.1	2.60	0.68
X25	7	31.8	2	9.1	11	50.0	1.80	0.95
X26	13	59.1	4	18.2	3	13.6	2.50	0.76
X27	9	40.9	7	31.8	4	18.2	2.25	0.78
X28	6	27.3	6	27.3	8	36.4	1.90	0.85
X29	6	27.3	6	27.3	8	36.4	1.90	0.85
X30	13	59.1	4	18.4	3	13.6	2.50	0.76
X31	14	63.6	3	13.6	3	13.6	2.55	0.75
X32	8	36.4	10	45.5	2	9.1	2.30	0.66
X33	5	22.7	10	45.5	5	22.7	2.00	0.72
Rate	41.95%		24.83%		24.53%		2.19	0.78

Table -8: Statistical description of design quality criterion in the e-sites of some private Non Arabic hospitals

Variables	Available		Almost Available		Not Available		Mean	Standard Deviation
	Frequency	%	Frequency	%	Frequency	%		
X21	15	75.0	2	10.0	3	15.0	2.60	0.75
X22	14	70.0	3	15.0	3	15.0	2.55	0.75
X23	16	80.0	4	20.0	-	-	2.80	0.41
X24	15	75.0	4	20.0	1	5.0	2.70	0.57
X25	15	75.0	2	10.0	3	15.0	2.60	0.75
X26	15	75.0	5	25.0	-	-	2.75	0.44
X27	15	75.0	5	25.0	-	-	2.75	0.44
X28	14	70.0	4	20.0	2	10.0	2.60	0.68
X29	14	70.0	3	15.0	3	15.0	2.55	0.75
X30	17	85.0	3	15.0	-	-	2.85	0.36
X31	17	85.0	3	15.0	-	-	2.85	0.36
X32	18	90.0	2	10.0	-	-	2.90	0.30
X33	16	80.0	2	10.0	2	10.0	2.70	0.65
Rate	77.30%		16.16%		6.54%		2.70	0.55

Organizing quality criterion:

The result of Table -9- indicator that the percentile availability of the organizing quality criterion of the e-sites of the taken private Arabic hospitals has attained (52.85%) on average level. This has yielded a mean of (2.4), and a standard deviation of (0.69). This percentile availability in the corresponding Non Arabic hospitals reached was higher; it attained (76.88%), with mean of (2.76) and a standard deviation of (0.37), as illustrated in Table -10-.

Table -9 Statistical description of organizing quality criterion in the e-sites of some private Arabic hospitals

Variables	Available		Almost Available		Not Available		Mean	Standard Deviation
	Frequency	%	Frequency	%	Frequency	%		
X34	13	59.1	5	22.7	2	9.1	2.55	0.68
X35	7	31.8	9	40.9	4	18.2	2.15	0.74
X36	15	68.2	5	22.7	-	-	2.75	0.44
X37	7	31.8	5	22.7	8	36.4	1.95	0.88
X38	10	45.5	6	27.3	4	18.2	2.30	0.80
X39	8	36.4	3	13.6	9	40.9	1.95	0.94
X40	16	72.7	3	13.6	1	4.5	2.75	0.55
X41	17	77.3	2	9.1	1	4.5	2.80	0.52
Rate	52.85%		21.58%		16.48%		2.4	0.69

Table -10-Statistical Description of Organizing Quality Criterion in the E-Sites of Some Private Non Arabic Hospitals

Variables	Available		Almost Available		Not Available		Mean	Standard Deviation
	Frequency	%	Frequency	%	Frequency	%		
X34	20	100	-	-	-	-	3.00	0.00
X35	15	75.0	5	25.0	-	-	2.75	0.44
X36	18	90.0	1	10.0	-	-	2.90	0.30
X37	16	80.0	4	20.0	-	-	2.80	0.41
X38	18	90.0	2	10.0	-	-	2.90	0.30
X39	11	55.0	9	45.0	-	-	2.55	0.51
X40	9	45.0	11	55.0	-	-	2.45	0.51
X41	16	80.0	3	15.0	1	5.0	2.75	0.55
Rate	76.88%		22.5%		0.62%		2.76	0.37

Usability Quality Criterion

Through inspecting Table -11- it is clear that the e-site of the taken private Arabic hospitals are suffering of low usability quality criterion. The percentile availability of this criterion has reached (43.65%), with mean of (2.25), and standard deviation (0.74). This was quite lower than the corresponding value in the Non Arabic hospitals which attained (78.5%), with mean of (2.72) and standard deviation of (0.54), as exhibited in Table -12-.

Table -11 Statistical Description Of Usability Quality Criterion In The E-Sites Of Some Private Arabic Hospitals

Variables	Available		Almost Available		Not Available		Mean	Standard Deviation
	Frequency	%	Frequency	%	Frequency	%		
X42	14	63.6	2	9.1	4	18.2	2.50	0.82
X43	15	68.2	5	22.7	-	-	2.75	0.44
X44	15	68.2	3	13.6	2	9.1	2.65	0.67
X45	11	50.0	4	18.2	5	22.7	2.30	0.86
X46	8	36.4	9	40.9	3	13.6	2.25	0.71
X47	8	36.4	3	13.6	9	40.9	1.95	0.94
X48	5	22.7	10	45.5	5	22.7	2.00	0.72
X49	6	27.3	7	31.8	7	31.8	1.95	0.82
X50	4	18.2	9	40.9	7	31.8	1.85	0.74
X51	10	45.5	7	31.8	3	13.6	2.35	0.74
Rate	43.65%		26.81%		20.44%		2.25	0.74

Table-12: Statistical Description of Usability Quality Criterion in the E-Sites of Some Private Non Arabic Hospitals

Variables	Available		Almost Available		Not Available		Mean	Standard Deviation
	Frequency	%	Frequency	%	Frequency	%		
X42	19	95.0	1	5.0	-	-	2.95	0.22
X43	18	90.0	2	10.0	-	-	2.90	0.30
X44	16	80.0	2	10.0	2	10.0	2.70	0.65
X45	16	80.0	2	10.0	2	10.0	2.70	0.65
X46	16	80.0	3	15.0	1	5.0	2.75	0.55
X47	11	55.0	7	35.0	2	10.0	2.45	0.68
X48	17	85.0	2	10.0	1	5.0	2.80	0.52
X49	15	75.0	3	15.0	2	10.0	2.65	0.67
X50	11	55.0	7	35.0	2	10.0	2.45	0.68
X51	18	90.0	1	5.0	1	5.0	2.85	0.48
Rate	78.5%		15%		6.5%		2.72	0.54

After passing through the above four criteria with their results, it is possible to say that the reason behind the outperformance of the e-site, in general, is due to the presence of specific indicators that indicate the quality of these. This verifies the first hypothesis of this paper. It can be also clear that, the web site of the taken Non Arabic private hospitals positively differ, from the corresponding Arabic sites, in the percentile availability of quality criteria, considered in this paper. This verifier the second hypothesis presented in this paper.

Conclusions

With the rapid advances in technology, novel ways of business process redesign, which include entering the e-business market place, have emerged. Organizations today frequently redesign their processes in ways that provide competitive advantage. Generally the organizations of commerce can achieve the competitive advantage through possessing some other dimensions, such as: possessing knowledge workers, cost-leadership strategy, market-leadership strategy, etc. However, it is possible to say that the globalization era makes the keys of success for any organization to be realized in how high-level of information this organization has, and how high-level of information interaction with the users it possess. This makes it inevitable for the respective organization to utilize the internet and also to upgrade their e-sites. This paper has concluded that the quality of the e-sites of some private Arabic hospitals is low in comparison with the corresponding Non-Arabic hospitals. That is because they lack to most of the criteria adopted by the Non-Arabic hospitals. The taken Arabic hospitals, may utilize the criteria highlighted in this paper to upgrade their e-sites quality. These articulated merits could be also utilized by other Non-hospital organizations such as universities, social sites, other commercial sites, etc. in order to improving and assess these performances.

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A Bibliometric Analysis on Green Business– A Comparative Study

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Abstract

This study discusses the trends in the literature on Green Business by using bibliometric analysis and presents the research findings based on the scholarly literature and professional publications. For addressing the Green Business oriented publications, indicators such as Green Innovations & Clean Technologies, Green Investments, and Green & Cleantech Venture Capital are used for the literature search. The time frame for this study is 1990 - 2012. Projections for publication trends are made by using Fisher-Pry model forecasts. This paper extends the findings of the paper "A Bibliometric Analysis on Green Innovations, Green Investments and Green Venture Capital" published by the authors in 2011, in further depth, and explores the Green Business trends in Europe and Middle East (EME) region in comparison to the global trends. It discusses the trends observed and forecasts made for the future. The paper introduces a validated methodological approach to forecast the growth of publications for understanding the trends of attention on sustainability in business and engineering practices, called Green Business in this study.

Introduction

The World Business Council for Sustainable Development (WBCSD) announced in its 2008 Annual Report that:

"Many businesses and governments have suggested that "Green solution" can be found to both economic and ecological challenges, creating new jobs and markets by investing in new forms of energy, redesigning or retrofitting buildings and equipment, and managing forests and other ecosystems sustainably."

Green Business has been receiving attention increasingly over the past 15 years and maybe at one of its highest points in the last 2 years following the global financial crisis (Tekin and Kocaoglu, 2011).

This study uses bibliometric analysis, and the application of Fisher-Pry model to explore the growth trend in "environmentally conscious", "environment oriented" business practices, investments, engineering and innovation outputs, which overall, we refer to as Green Business practices. Twelve models are developed to analyze the growth in economics & business and engineering publications in the world. Comprehensive analyses are made with respect to the geographic regions. The results are significant of the recent global economic trends in Green Business practices, validating the power of the Fisher-Pry models. Future projections for the three major areas of Green Business: (1) Green Innovations & Clean Technologies, (2) Green Investments, (3) Green & Cleantech Venture Capital are made based on the results of the twelve Fisher-Pry models developed.

Background

This study, uses Fisher-Pry models to assess the growth of "green business" in the literature as means of forecasting the growth trend for the future. Among a group of forecasting models such as the Gompertz model, Fisher-Pry Model, Pearl Read Model, Logarithmic Models, Log Natural Models, Exponential Models, Bass Model are used for bibliometric trend analysis and future projections. The Fisher-Pry Model is heavily used both in the industry and academia for forecasting technological innovations, developing S-Curves for growth patterns and analyzing market penetration trends (Tekin and Kocaoglu, 2011).

Fisher and Pry in their 1971 study claims:

> *"For people who attempt to forecast the future, there is a continuing need for simple models that describe the course of unfolding events. Each such model should be based upon easily understood assumptions that are not available for unconscious or invisible tampering by the forecaster in his efforts to make the future what he wants it to be. The model should be easy to apply to a wide variety of circumstances, and should be easy to interpret."*

In Fisher and Pry (1971), the authors describe a simple model of technological change. The model is very simple, and yet it has been shown to be extremely effective in modeling the competitive substituting of one technology by another. The model is then described by the authors as a substitution model for technological change. Fisher and Pry explain that the model would be powerful in forecasting technological opportunities (Suominen and Tuominen, 2010). In case of emerging technologies where adequate historical data are not available, Bibliometric analyses are apt to forecast growing areas of technology (Daim et al. 2007, Bengisu and Nekhili

2006, Kostoff et al., 2001). Fisher-Pry model (Fisher and Pry, 1971) has been widely used by researchers to explore technology forecasting (Bhargava, 1995).

Data Modeling

Growth curves are representative of performance growth over time and most of the technology growth curves are S-shaped (Porter et al., 1991). In this paper, the Fisher-Pry Model is used to explore the growth trends in publications on sustainability in the scholarly publications in journal articles, books, conference papers. One clarification we would like to make on a limitation of this study is that there is no physical upper limit that can be applied to the growth curves. Since publications do not have a physical property that would limit their growth and define the upper limit which could be used as for the upper limit, the trends are defined without such a limit as would be in the case when Fisher-Pry growth curves, are used for forecasting the growth of technologies (Tekin and Kocaoglu, 2011). This curve depicts a slow growth during introduction phase followed by a rise in growth during adoption phase and finally ending in saturation (Porter et al., 1991).

Data Analysis and Research Model

In Fisher and Pry (1971), The Fisher-Pry Model growth curve is defined as a function:

$$\mathbf{y(t) = 1 / (1 + e - b\ (t-a))}$$

where

y corresponds to growth at time **t**,
a and **b** are Fisher-Pry model growth coefficients

And the regions for growth stages are defined as:

0≤y≤0.2	Emerging (E)
0.2<y≤0.8	Rapidly Developing (D)
0.8<y≤1.0	Maturity (M)

The growth stages are shown in Figure 1 below, where the **X** axis corresponds to years **(t)**, and **Y** axis corresponds to the growth at time (**t).**

The methodological approach is similar to that used for Design of Experiments (DOE) in interpreting the, b and m values for the fitting of bibliometric analysis cumulative numbers. The values are determined, following the DOE approach, by shifting and alignment of the curve with the Fisher-Pry base curve. (Roy, 2001)

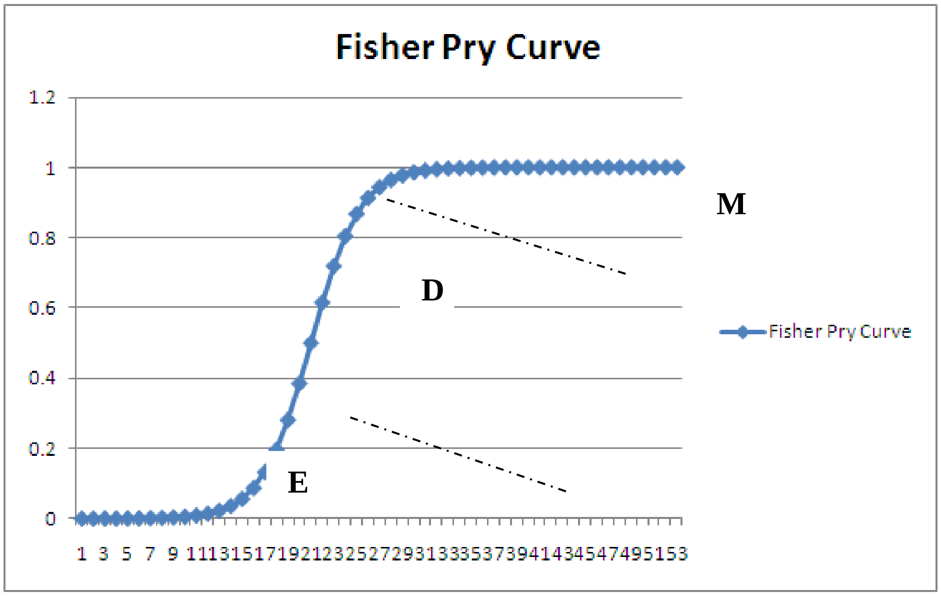

Figure 1: Fisher-Pry model and regions of growth stages (Tekin and Kocaoglu, 2011)

The assumptions made in the modeling are as follows:

1. Research and publication outputs are indicative of the attention in the market, and economy on Green Business practices, with a time lag of 2 years in average.
2. Business and Engineering publications follow S-shaped growth curves as they are used in Fisher-Pry model function.
3. Publications come out earlier than (on an average of 2 years) the business and economic activities in the market, thus signaling for the growth trend in the market for the activities.
4. Assumptions 1 thru 3 hold for all green business, and clean technology innovations.

Data for the growth curves

The data for bibliometric analysis were obtained from:

1. Business-oriented scholarly publications, using EBSCO search engine
2. Engineering-oriented scholarly publications, using Compendex search engine

The growth trends for Green Business were addressed by collection of data under three groups of key literature search terms:

1. Green Innovations and Clean Technologies
2. Green Investments
3. Green and Cleantech Venture Capital

The data collection was made for two groups of publications:

1. Global set of publications in the literature
2. Publications that are addressing the research focusing on the regions of Europe and Middle East (EME)

The literature search verified the growth trend in sustainability-related topics in both scholarly and general publications over the past 23 years, between 1990 and 2009. The trends analyzed, using the Fisher-Pry model with projections for the future are presented and compared in the following section.

Growth Of Scholarly Publications On Green Business In The World And EME (1990 -2012)

When overall general publications including economics, business and engineering professional journals, are studied, it is observed that the cumulative number of publications on Green Innovations & Clean Technologies have been highest in number in comparison to Green Investments and Green & Cleantech Venture Capital in the World from 1990 to 2012. The impact of the 2008 global financial crisis is also recognizable from the cumulative numbers after 2009. The pace of growth is slowed down since 2008. The cumulative number of publications on Green Business grows from 158 in 1990 grows to more 1594 as of 2012 (Figure 2).

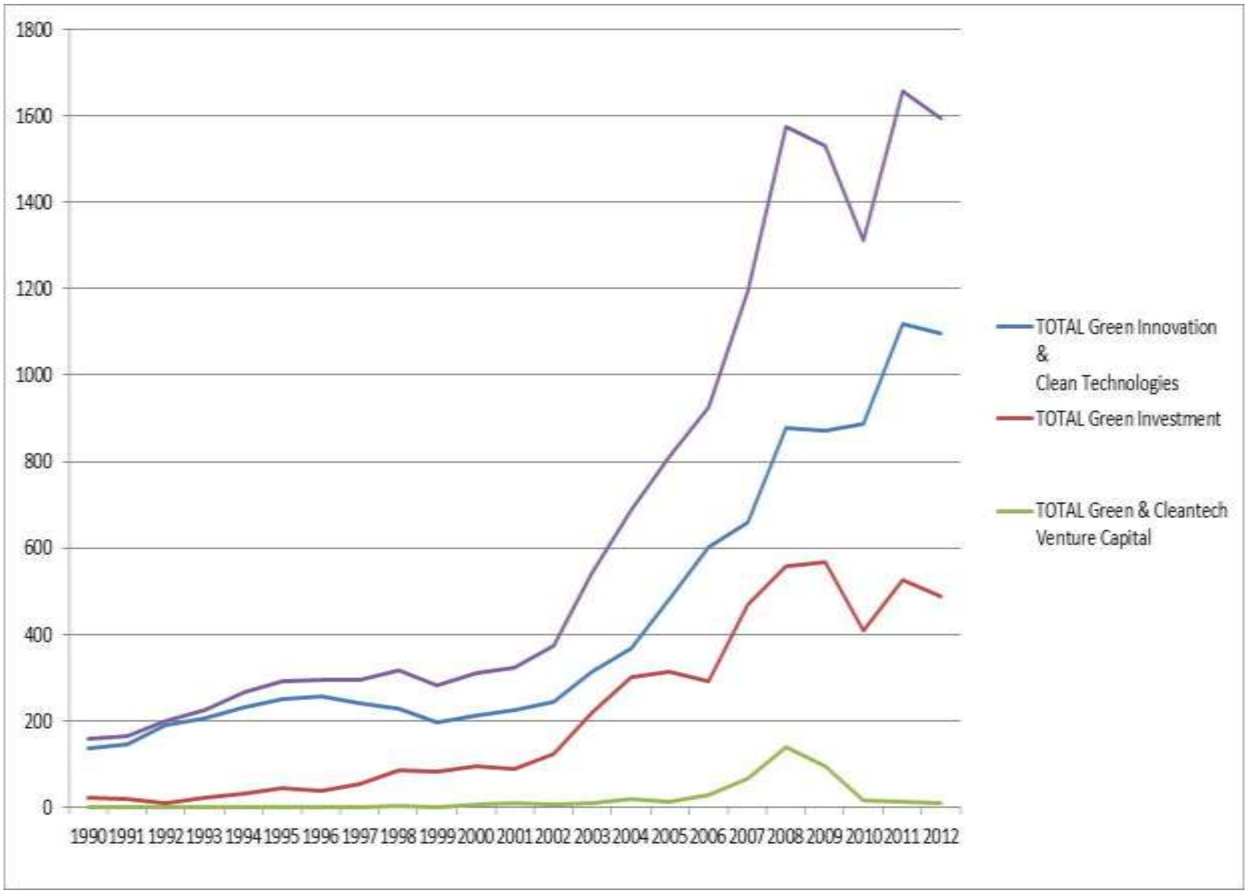

Figure 2: Total number and growth of publications in the world (1990 – 2012)

The growth patterns in the EME region are different from that of the World at large. The magnetic pull of Europe and Middle East in Green & Cleantech Venture Capital is strongly detected especially right before the global financial crisis in 2008. The cumulative number of publications on Green Business for the EME region has grown from 5 in 1990 to 66 as of 2012, after visiting the peaks of 138 and 107 range in 2007 – 2010 period (Figure 3).

When the cumulative numbers are explored in detail, Green & Cleantech Venture Capital are mainly focused on Middle East region, in the 2005 – 2009 time period. The reduced publication numbers following 2008 are also heavily clustered for the Middle East region.

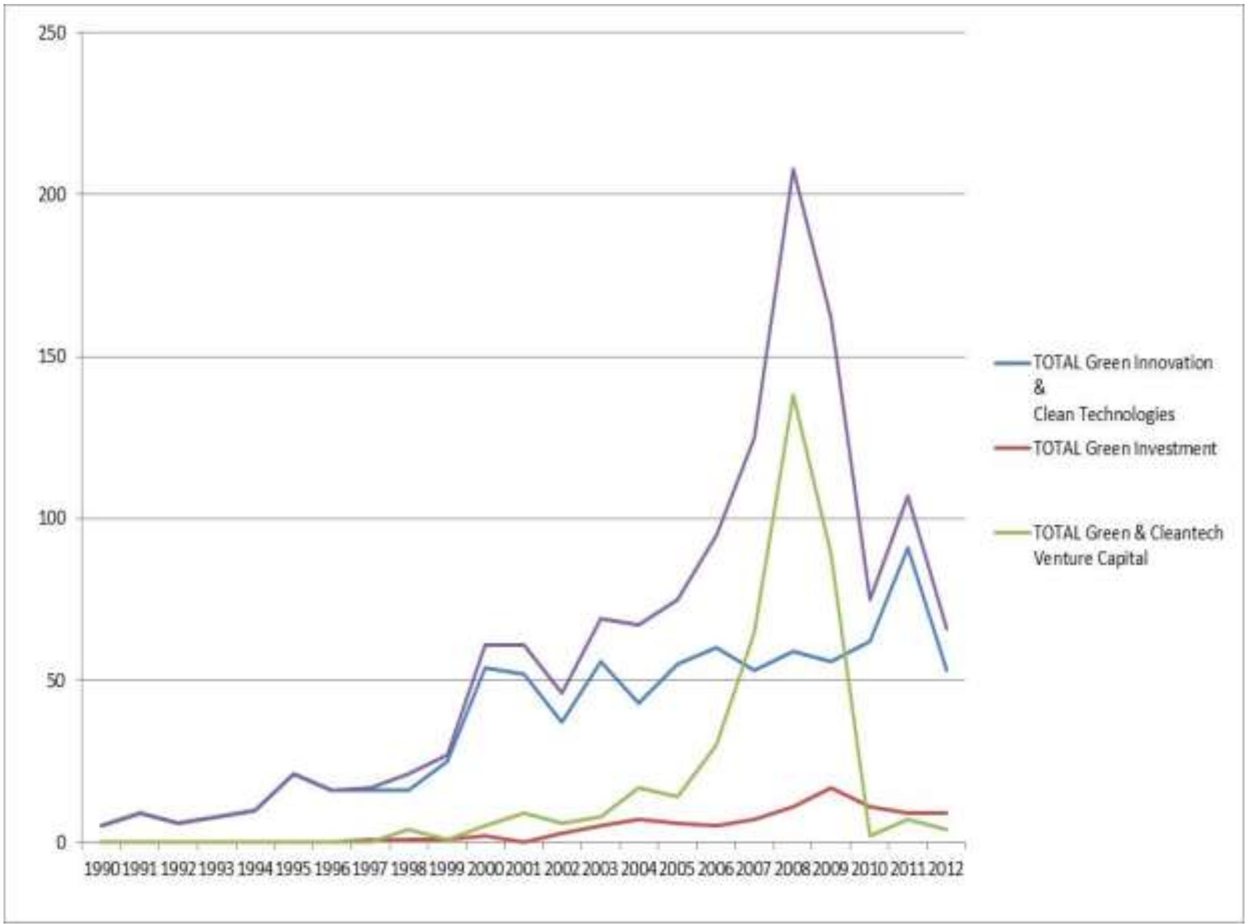

Figure 3: Total number and growth of publications in EME (1990 – 2012)

From another perspective, the percentage of Green & Cleantech Venture Capital studies in EME region has gone from 0 to 40% of the Global numbers from 1990 to 2012. The Green Innovation and Clean Technology studies which are focusing on the EME region showed very incremental increase from 3.6 % to 4.8% in the same time period. Similarly, Green Investments show an increasing trend for the Middle East region and reduced growth trend for Europe after 2008. Green Innovations, on the other hand are higher in growth pace in Europe over Middle East for the analysis time frame (Figure 4).

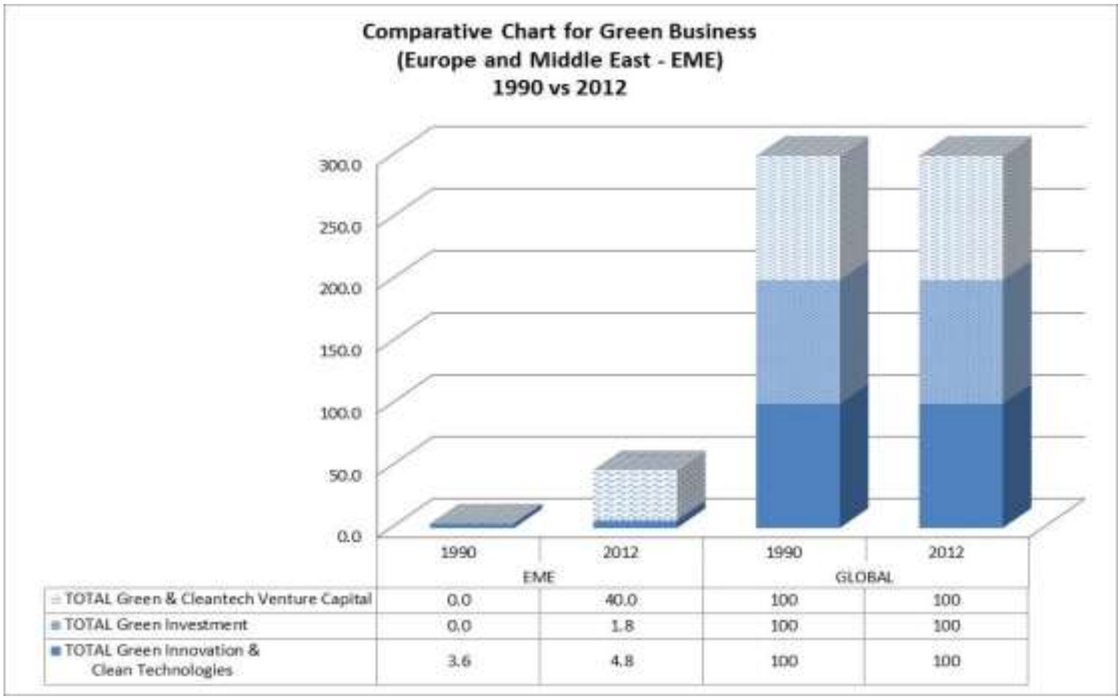

Figure 4: Percentage of publications on EME in comparison to Global for 1990 and 2012

Fisher-Pry Model Application Results

Twelve Fisher-Pry Models were developed for scholarly publications on Green Business at the Global scale. Out of these twelve models, six Fisher-Pry Models are developed assess the growth patterns for Europe and the Middle East (EME) region and the World at large, for three different indicators of Green Business. The models developed and their results are compared and discussed. Following, six other Fisher-Pry Models are developed for within the EME region to explore the growth of economics & business literature and engineering literature separately. The results and some comparative assessment outcomes are discussed in this section.

Fisher-Pry Model Application to the Global Bibliometrics

The Fisher-Pry model, with a goodness of fit of 0.999, indicates that the level of Green Innovations and Clean Technologies in business and engineering scholarly publications is at the Rapid Development stage, as of 2012 and is projected to transition to Maturity stage by 2013. The growth curve for Green Innovations and Clean Technologies in business and engineering scholarly publications in the world and its fit to the original Fisher-Pry Model is presented in Chart 1 below.

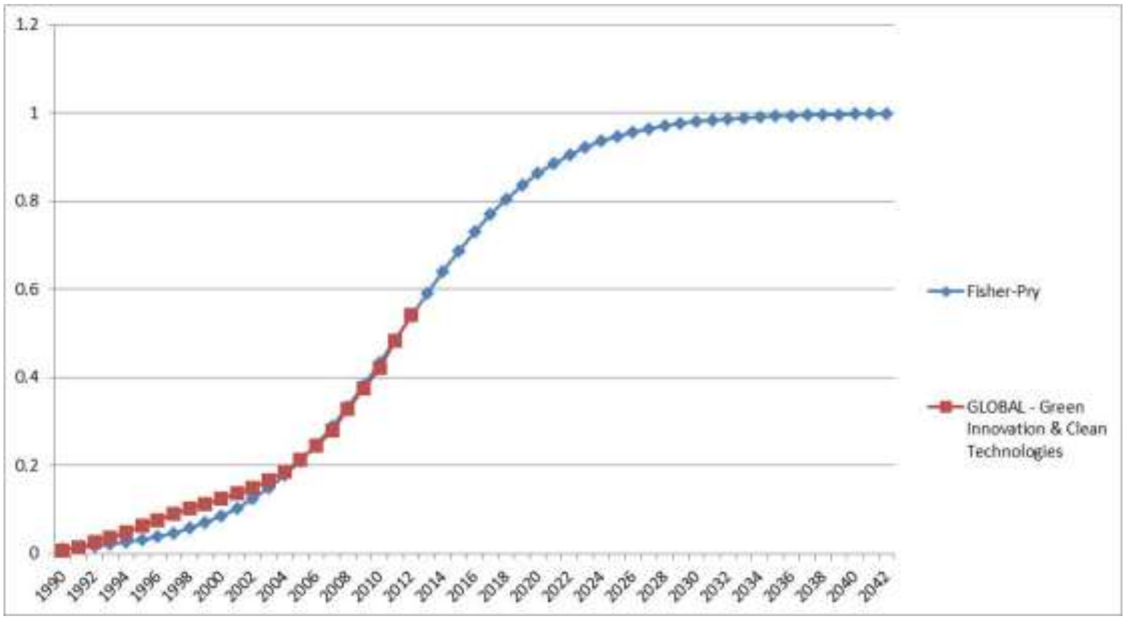

Chart 1: Growth of Green Innovations and Clean Technologies Globally for 1990 and 2012

The Fisher-Pry model, with a goodness of fit of 0.989, indicates that the level of Green Investments in business and engineering scholarly publications is at the Rapid Development stage, as of 2012, and projected to transition to Maturity by 2014. The projected Maturity completion is likely to take place by 2025. The growth curve for Green Investments in business and engineering scholarly publications in the world and its fit to the original Fisher-Pry Model is presented in Chart 2 below.

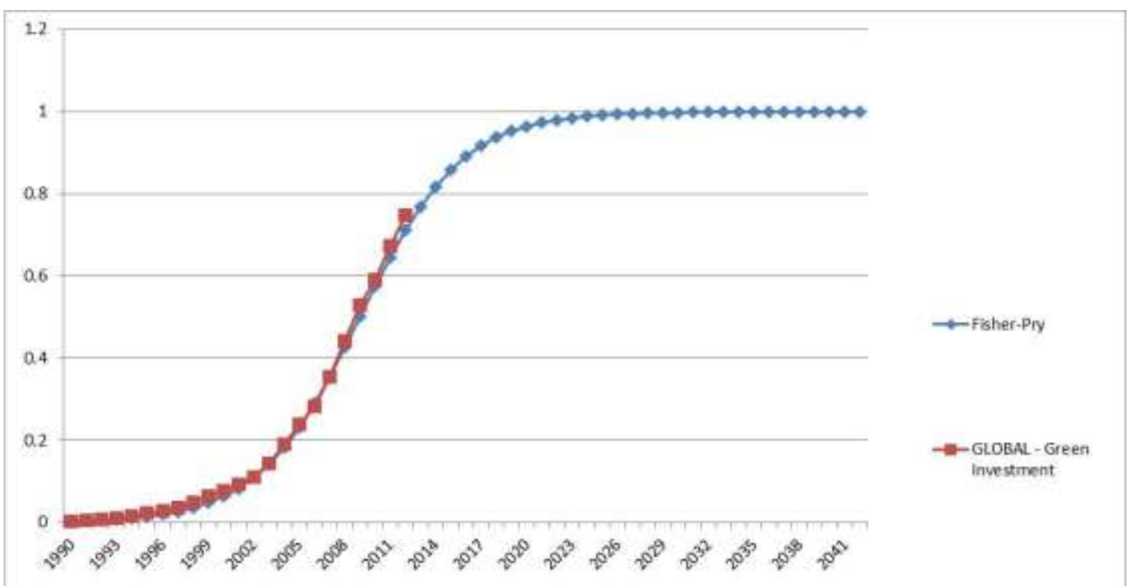

Chart 2: Growth of Green Investment Globally for 1990 and 2012

The Fisher-Pry model, with a goodness of fit of 0.996, indicates that the level of Green & Cleantech Venture Capital in business and engineering scholarly publications is at the Emerging stage, as of 2012, and was projected to transition to Rapid Development by 2010. The consecutive years from 2008 until 2012 are quite unexpected outliers in the model, given the big fall in Green & Cleantech Venture Capital activities due to the global financial crisis in 2008. The growth curve for Venture Capital and Cleantech Venture Capital in business and engineering scholarly publications in the world and its fit to the original Fisher-Pry Model is presented in Chart 3 below.

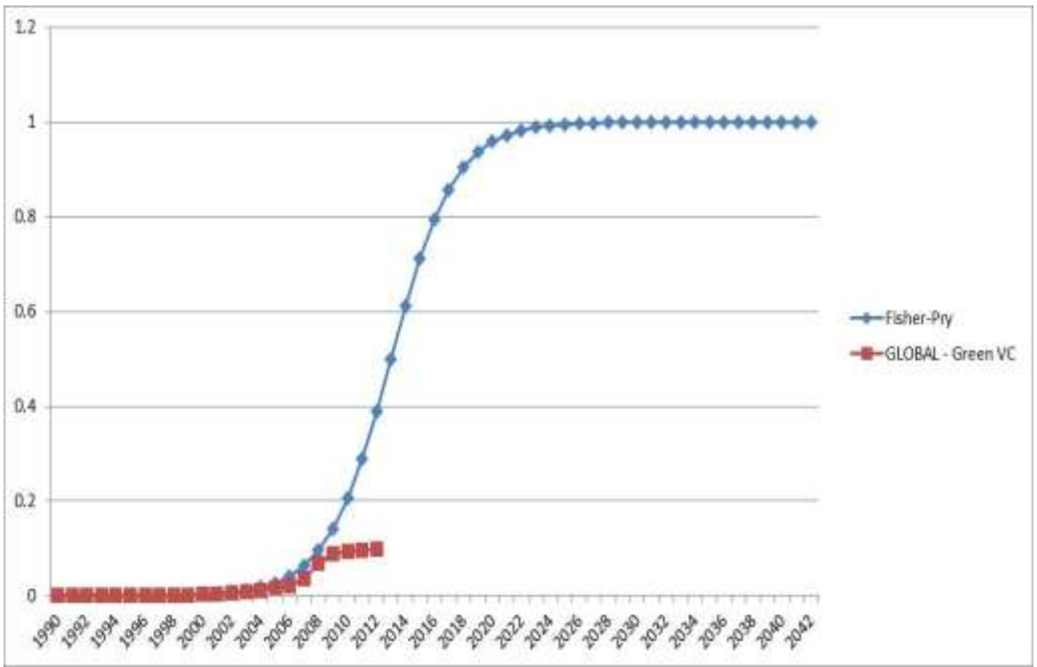

Chart 3: Growth of Green and Cleantech Venture Capital Globally for 1990 and 2012

Fisher-Pry Model application to the EME (Europe and Middle East) bibliometrics

The Fisher-Pry model, with a goodness of fit of 0.994, indicates that the level of Green Innovations and Clean Technologies in business and engineering scholarly publications which are focusing on the EME region is at the Rapid Development stage, as of 2012, and is projected to transition from Rapid Development to Maturity in 2013. The projected Maturity completion is likely to take place by 2034. The growth curve for Green Innovations and Clean Technologies in business and engineering scholarly publications focusing on the EME region and its fit to the original Fisher-Pry Model is presented in Chart 4 below.

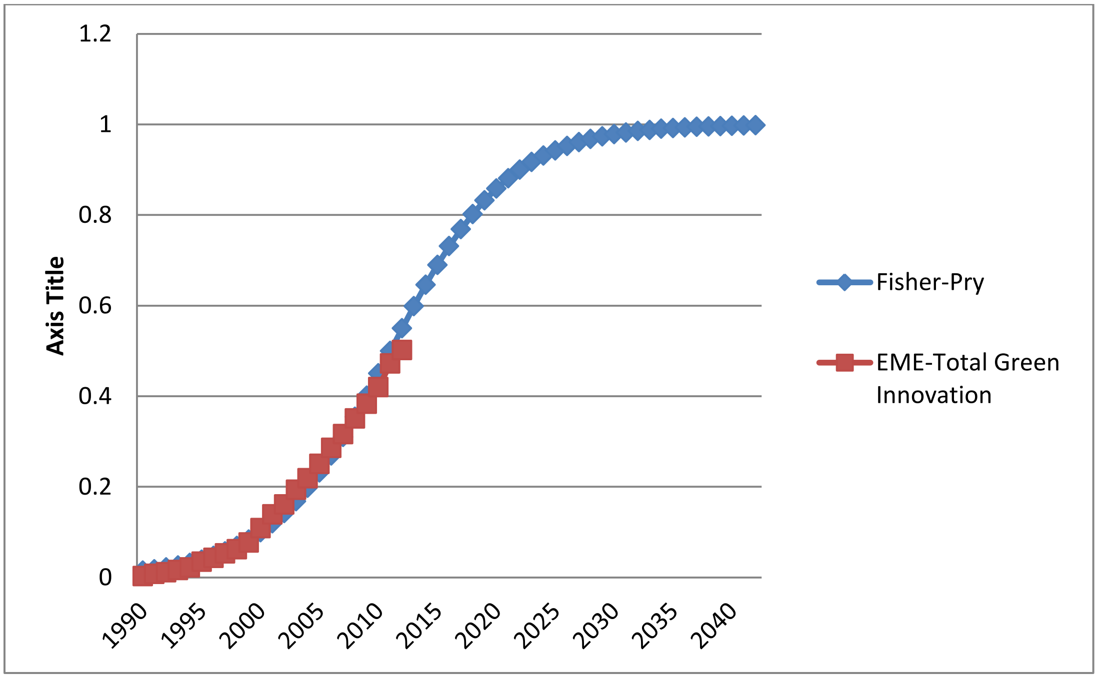

Chart 4: Growth of Green Innovations and Clean Technologies in EME for 1990 and 2012

The Fisher-Pry model, with a goodness of fit of 0.945, indicates that the level of Green Innovations and Clean Technologies in business and engineering scholarly publications which are focusing on the EME region is at the Emerging Stage, as of 2012, and projected to transition to Rapid Development stage by 2016. The projected Maturity completion is likely to take place by 2022. The growth curve for this Fisher-Pry Model is presented in Chart 5 below.

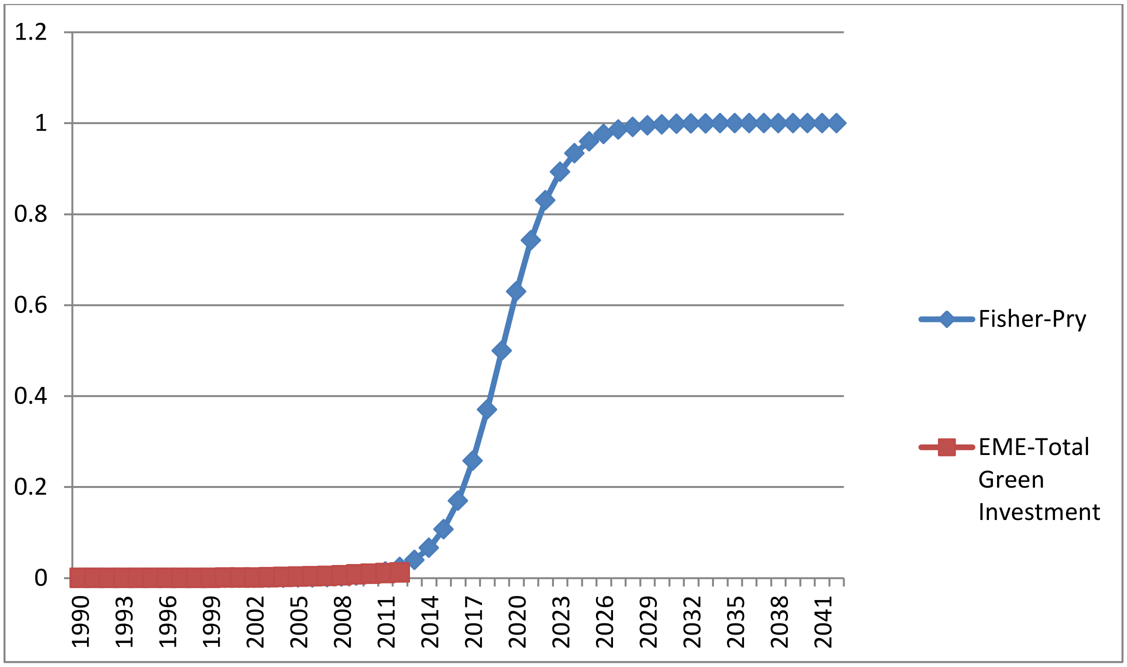

Chart 5: Growth of Green Investments in EME for 1990 and 2012

The Fisher-Pry model, with a goodness of fit of 0.995, indicates that the level of Green & Cleantech Venture Capital in business and engineering scholarly publications focusing on the EME region is at Emerging stage, as of 2012, and is projected to transition to Rapid Development by 2020. The big fall in Green & Cleantech Venture Capital activities in the World at large does not seem to have affected the growth of that in the EME region. This result is also significantly validated in the increasing trends of these activities especially in the Middle East region. The growth curve for Venture Capital and Cleantech Venture Capital in business and engineering scholarly publications focusing on the EME region and its fit to the original Fisher-Pry Model is presented in Chart 6 below.

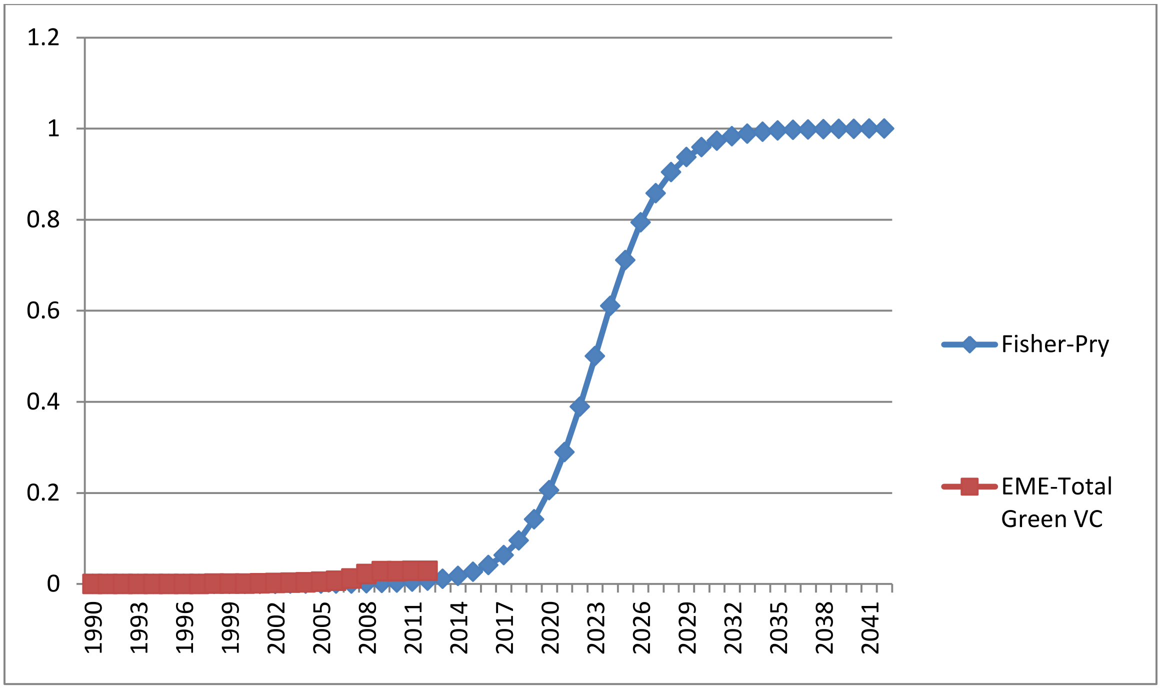

Chart 6: Growth of Green and Cleantech Venture Capital in EME for 1990 and 2012

Discussion on the Comparative Assessment of Green Business Growth in the World At Large and In the EME Region

The results, based on the six Fisher-Pry models, show that for Green Innovations and Clean Technologies; EME region (with the highest activity percentage taking place in Europe) and the Global growth trends are at close stages to each other in growth, while the global growth is almost completing the Rapid Development stage as of 2012, EME region is just half way through it. This suggests that there is potential for increasing Green Innovation and Clean Technologies in EME, more than that of in the World at large. In other words, we expect to see more increase in Green Innovation and Clean Technologies in EME than is likely to happen in the World at large.

For Green Investments; the growth at the Global level is close to transitioning to Maturity stage by 2014, while the growth of EME region is at Emerging stage as of 2012. In raw data, there is significantly a higher percentage of Green Investments in Middle East in comparison to that globally. This finding signals for high potential of Green Investments in the Middle East in the coming 30 years.

Interestingly for Green & Cleantech Venture Capital, the global financial crisis that happened in the global markets starting from late 2007, and in 2008, creates an unexpected shift in the actual trends and does not fit the Fisher-Pry Model for those years and until 2012, resulting in the Rapid

Development stage earlier than 2012, for the global assessment, even though the model fit is quite high 0.996. The actual happening in the Green & Cleantech Venture Capital trend is not meeting the expectation. On the other hand that for the EME region for the same time frame, is at Emerging stage, expected to transition to Rapid Development stage by 2020 earliest. This finding is indicative of the high and "active" potential of the Green & Cleantech Venture Capital having been experienced more for the EME region than in the world over all. And also it can be suggestive of Green & Cleantech Venture Capital initiatives in the EME region being less affected by the global financial crisis in 2008.

Comparative analysis of Green Business growth patterns in the EME Region

In this section, economics, business and engineering publication growth on Green Business focusing on the EME region, is analyzed by developing six Fisher-Pry Models for the 1990 – 2012 time period. Three groups of Green Business literature search key words are used to for economics & business literature by using EBSCO data base. Similarly, the same set of key words is used for engineering literature by using COMPENDEX database. The groups of key words are:

1. Green Innovations and Clean Technologies
2. Green Investments
3. Green and Cleantech Venture Capital

The comparative assessment of the literature growth models shows results that are indicative of various dynamics in business and engineering & technology field, and the connection between the two fields. The Fisher-Pry Models are also used to project the growth in these areas in the future.

Growth in Green Innovations and Clean Technologies in the EME Region

The Fisher-Pry model, with a goodness of fit of 0.968, indicates that the level of Green Innovations and Clean Technologies in economics and business scholarly publications focusing on the EME region is at the Rapid Development stage, as of 2012 and is projected to transition to Maturity stage by 2016. The growth curve for Green Innovations and Clean Technologies in economics and business scholarly publications focusing on the EME region and its fit to the original Fisher-Pry Model is presented in Chart 7 below.

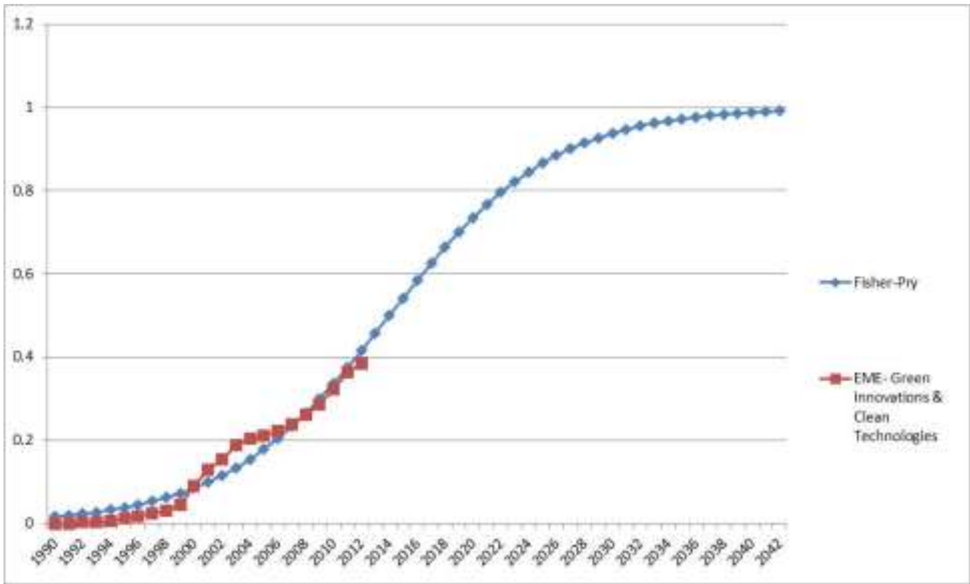

Chart 7.: Growth of Green Innovations and Clean Technologies in the EME region (Economics & Business publications 1990 - 2012)

The Fisher-Pry model, with a goodness of fit of 0.970, indicates that the level of Green Innovations and Clean Technologies in engineering scholarly publications focusing on the EME region is at the Emerging Stage, as of 2012 and is projected to transition to Rapid Development stage by 2016 and Maturity stage by 2022.

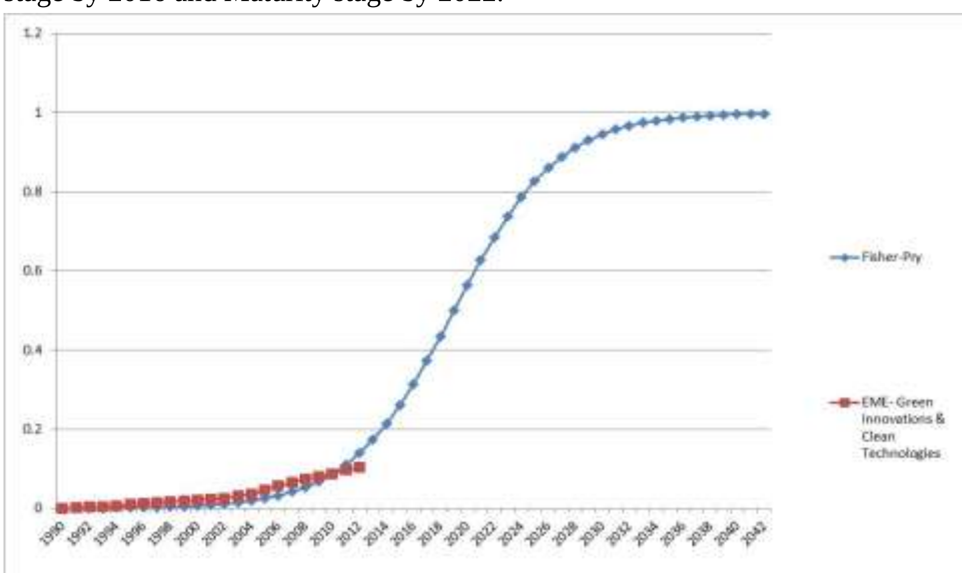

Chart 8: Growth of Green Innovations and Clean Technologies in the EME region (Engineering publications 1990 - 2012)

The growth curve for Green Innovations and Clean Technologies in engineering scholarly publications focusing on the EME region and its fit to the original Fisher-Pry Model is presented in Chart 8 above..

The comparative assessment of the publications in the fields of economics & business and engineering shows that the publications on business and economics are at a higher state of growth than those on engineering, representing the potential of the Rapid Development in Green Innovations and Clean Technologies in the EME region. Over the 1990 – 2012 time period, Europe shows a higher percentage share of Green Innovations and Clean Technologies than the Middle East Region in the growth for the EME region. Especially the period after the 2008 global financial crisis is also indicative of the high percentage share of Europe in the engineering field in comparison to Middle East. Thus the Fisher-Pry models project a Rapid Development stage in Green Innovations and Clean Technologies in Europe, within the EME region, between 2016 and 2022.

Growth in Green Investments in the EME Region

The Fisher-Pry model, with a goodness of fit of 0.941, indicates that the level of Green Investments focusing on the EME region is at the Emerging stage, as of 2012 and is projected to transition to Rapid Development stage by 2014/2015 and Maturity stage by 2022/2023. The Middle East area within the EME region has an increasing share in Green Investments growth since 2008 especially. Even though the Green Innovations and Clean Technologies growth in the

Middle East is still minor as of 2012, the increase in Green Investments since 2008, signal for potential growth in the future for the Middle East. The growth curve for Green Investments in economics and business scholarly publications in the EME region and its fit to the original Fisher-Pry Model is presented in Chart 9 below.

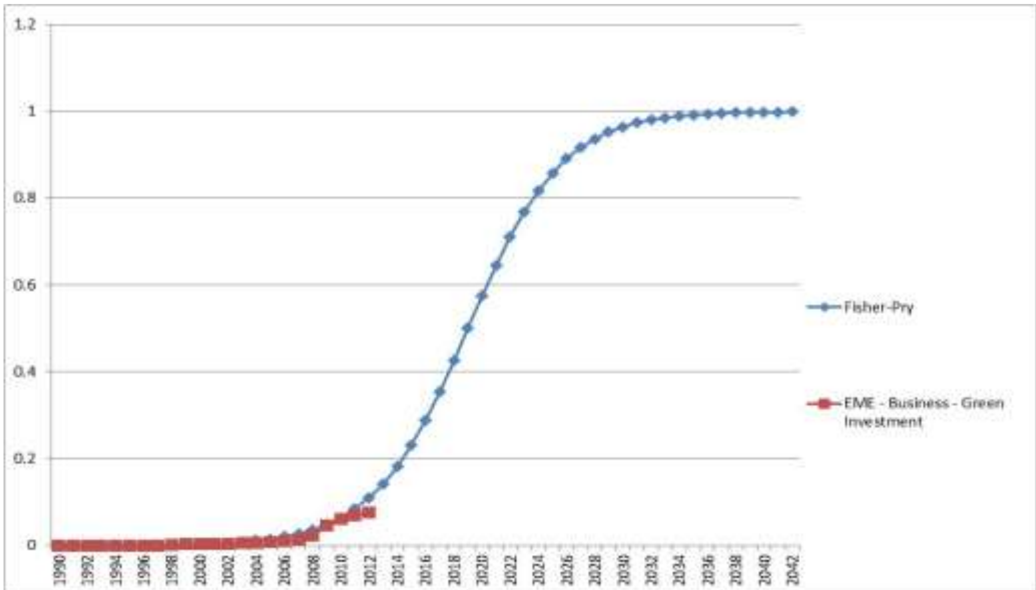

Chart 9: Growth of Green Investments in the EME region (Economics and Business publications 1990 - 2012)

The Fisher-Pry model, with a goodness of fit of 0.964, indicates that the level of Green Investments is at the Emerging stage, as of 2012 and is projected to transition to Rapid Development stage by 2015/2016 and Maturity stage by 2026/2027. The increase in Green Investments focusing on the Middle East since 2008, is higher than for those focusing on Europe. This increase signals for rapid growth potential in the future for the Middle East. The growth curve for Green Investments in engineering scholarly publications focusing on the EME region and its fit to the original Fisher-Pry Model is presented in Chart 10 below.

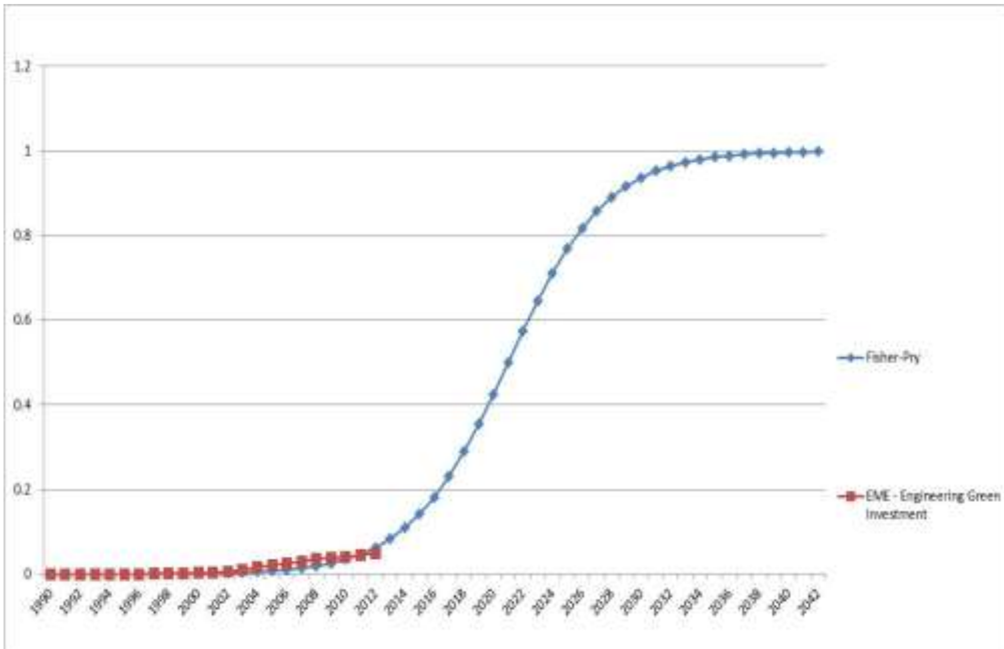

Chart10: Growth of Green Investments in the EME region (Engineering publications 1990 - 2012)

Growth in Green and Cleantech Venture Capital in the EME Region

The Fisher-Pry model, with a goodness of fit of 0.966, indicates that the level of Green & Cleantech Venture Capital is at the Emerging Stage, for economics and business publications as of 2012 and is projected to transition to Rapid Development stage by 2014 and to Maturity stage by 2024/2025. Europe within the EME region has received more Green & Cleantech Venture Capital growth from 2004 to 2008 especially. The impact of the global financial crisis reflects as a steady: not growing yet also not decreasing, state of Green and Cleantech Venture Capital existence in Europe in the EME area. The growth curve for Green & Cleantech Venture Capital in economics and business scholarly publications in the EME region and its fit to the original Fisher-Pry Model is presented in Chart 11 below.

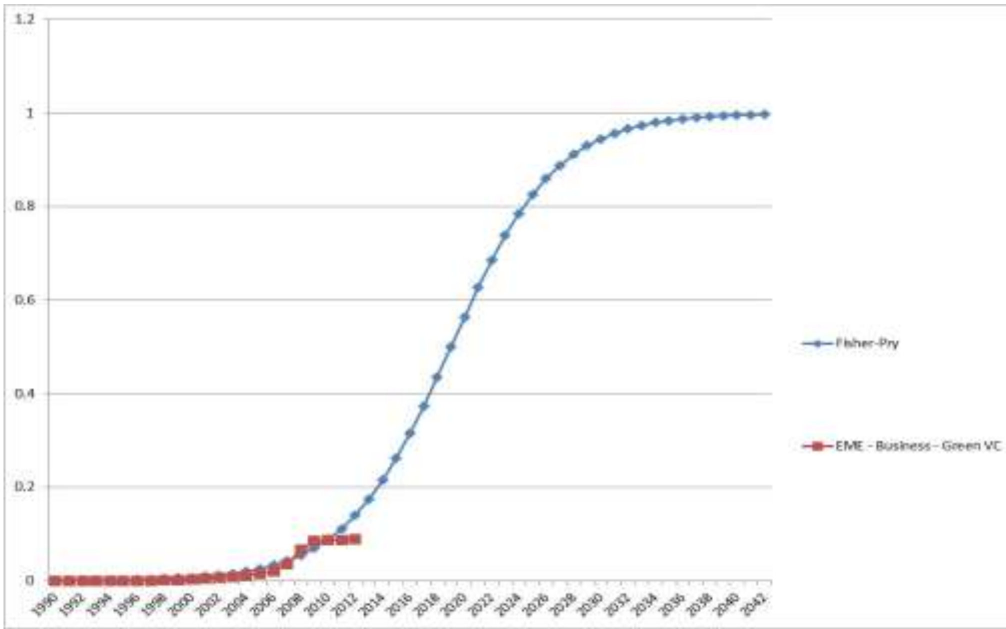

Chart 11: Growth of Green & Cleantech Venture Capital in the EME region (Economics and Business publications 1990 - 2012)

The bibliometric analysis data set has not got any scholarly publications data in the engineering field, which solely focus on Green and Cleantech Venture Capital, in the EME region. Therefore the sixth model for the EME region did not deliver any projection results for the engineering literature. This disconnect is interpreted as the disintegration between green innovations & clean technologies and Venture Capital drown to such as two separate streams of research growing over the years in the EME region. Green & Cleantech Venture Capital growth in the EME region and their connection with the Green Innovations and Clean Technologies in this region are not necessarily integrated in the research platforms and the deliverables on these two engineering and economics and business literature platforms are separate and disconnected.

Discussion and Conclusions

The conclusions derived from Fisher-Pry Models developed for this study are as follows:

1. The negative impact of the 2008 global financial crisis on Green Business is recognizable in the Fisher-Pry Models. The growth in Green Business went through fluctuations following the 2008 global financial crisis and has lost its pace since then, trying to catch up its high levels.

2. Green Business growth patterns for Europe and Middle East (EME) region are different from those of the global scale. The magnetic pull of Europe and Middle East in Green & Cleantech Venture Capital is strongly detected especially right before the global financial crisis in 2008.

3. Through the 1990 – 2012 period, EME region has showed the highest activity rate of Green & Cleantech Venture Capital from 2004 to 2008 as the highest form of activity in the Green Business field.

4. The percentage share of Green & Cleantech Venture Capital studies on EME region has reached to the 40% of the global scale from 1990 to 2012. Green Innovations & Clean Technologies studies in the EME region showed very incremental increase from 3.6 % to 4.8% from 1990 to 2012. Green Investments on the EME region has been in an increasing trend for the Middle East region and reduced growth / no growth trend for Europe region by itself, since 2008. Green Innovations, on the other hand are higher in growth pace in Europe over Middle East for 1990 - 2012 time frame. These results show the potential for growth of Green Investments in the Middle East and the continuous strong position of Green Innovations & Clean Technologies in Europe in the Global Green Innovations & Clean Technologies Map.

5. The Fisher-Pry models developed for Green Business show that:

i) For Green Innovations & Clean Technologies; EME region (with the highest activity percentage taking place in Europe) and the Global growth trends are at close stages of growth: while the global growth is almost completing the Rapid Development stage as of 2012, EME region is half way through it. This finding signals for an earlier Maturity stage in the EME region and more growth potential in Green Innovations & Clean Technologies in the world in the regions other than the EME region (Europe in EME region especially) The low level and untouched potential of Green Innovations & Clean Technologies in the Middle East for the future, are also detected in the Fisher-Pry Models. Yet whether such decisions of R&D would be made in the future with resource allocation is a managerial decision, which is out of the scope of this study. The models indicate the growth potential regardless of managerial decisions.

ii) For Green Investments; the growth at the global scale is close to transitioning to Maturity stage by 2014, while the growth of EME region is at Emerging stage as of 2012. In the data collected, there is significantly a higher percentage of Green Investments in Middle East especially from 2008 onward in comparison to that globally and also in comparison to that in Europe. This is finding with the Maturity stage projections with Fisher-Pry Models is signaling for increasing growth of Green Investments in the Middle East in the coming 30 years from 2012 onward.

iii) For Green and Cleantech Venture Capital, is at Emerging stage, and is representative of the 40% of the Green and Cleantech Venture Capital in the globe. A transition to Rapid Development stage is expected by 2020 earliest. This finding can also be suggestive of Green & Cleantech Venture Capital initiatives in the EME region being less affected by the global financial crisis in 2008. The growth pattern of Green and Cleantech Venture Capital in the Middle East in comparison to Europe is insignificant.

6. The Fisher-Pry Models developed for the EME region show that:

i) For Green Innovations and Clean Technologies, the Fisher-Pry model, with a goodness of fit of 0.968, indicates that the level of Green Innovations and Clean Technologies in economics and business scholarly publications is at the Rapid Development stage, as of 2012 and is projected to transition to Maturity stage by 2016.

In the engineering field, the Fisher-Pry model, with a goodness of fit of 0.970, indicates that the level of Green Innovations and Clean Technologies in engineering scholarly publications is at the Emerging Stage, as of 2012 and is projected to transition to Rapid Development stage by 2016 and Maturity stage by 2022.

The comparative assessment of the publications in the fields of economics & business and engineering, shows that the economics & business activities are at a higher state of growth than that in engineering field, representing the potential of the Rapid Development in Green Innovations and Clean Technologies in the EME region. Over the 1990 – 2012 time period, Europe shows a higher percentage share of Green Innovations and Clean Technologies than the Middle East in the growth for the EME region. Fisher-Pry models project a Rapid Development stage in Green Innovations and Clean Technologies in Europe, within the EME region, between 2016 and 2022.

ii) For Green Investments, the Fisher-Pry model for economics & business field, with a goodness of fit of 0.941, indicates that the level of Green Investments is at the Emerging stage, as of 2012 and is projected to transition to Rapid Development stage by 2014/2015 and to Maturity stage by 2022/2023. The Middle East area within the EME region has an increasing share in Green Investments growth since 2008.

The Fisher-Pry model for economics & business field indicates that the level of Green Investments is at the Emerging Stage, as of 2012 and is projected to transition to Rapid Development stage by 2015/2016 and Maturity stage by 2026/2027.

iii) For Green & Cleantech Venture Capital, the Fisher-Pry model, with a goodness of fit of 0.966, indicates that the level of Green & Cleantech Venture Capital is at the Emerging stage, as of 2012 and is projected to transition to Rapid Development stage by 2014 and to Maturity stage by 2024/2025. Europe within the EME region has received high Green & Cleantech Venture Capital growth from 2004 to 2008. The impact of the global financial crisis reflects as a steady: not growing yet also not decreasing, state of Green and Cleantech Venture Capital existence in Europe in the EME area in 2012.

The growth of Green & Cleantech Venture Capital in EME region is not captured in the engineering literature data bases. The disintegration between green innovations & clean technologies and Green & Cleantech Venture Capital in engineering literature is interpreted as two separate streams of research growing over the years in the EME region.

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Transferability of HRM practices in Developing Countries: Perceived Data from US and UK Garment Industries

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Abstract:

The purpose of this research is to explore HRM strategies and practices adopted by US and UK based garment industries operating in Bangladesh and to compare and contrast HRM strategies and practices between foreign and local garment industries in Bangladesh. This study surveyed thirty human resource managers of different levels of US and UK (taking fifteen from each company) based garment industries in Bangladesh and fifteen human resource managers of different levels from Bangladeshi garment industries. Results show that a blend of HRM practices has been adopted by the foreign companies, ranging from imitating home country practices and host country practices. Results also found that foreign garment industries operating in Bangladesh focus more on home country HR practices, especially in the area of selection and recruitment, performance appraisal process, organizational communication, and top management appointments. However, they are widely adopting host country HRM practices in training and development, industrial relations, and compensational benefits. Since this study pertains limited number of companies' generalization of findings of this study for cross-cultural adaptation/adjustment in other developing countries should be made with precaution. However, combination of home and host country HRM practices can have a positive influence on transfer of HRM practices in developing nations. It could open a new avenue for further potential research in the emerging economics of south Asia.

Keywords: *HRM Strategies and Practices; Bangladesh, US, UK, Emerging Economies; Garment industries*

Introduction:

HRM is regarding the policies, practices and systems that influence employee behavior, attitude, and performance (Noe, et al., 2007). Organizational culture, employee's performance and attitudes have been a major part of research of HR practices in the developed countries for years (Katou and Budhwar, 2007; Petrescu and Simmons, 2008). The impact of human resource management (HRM) is popularly known as HR practices.

In recent years, many research has been conducted on HRM practices in host countries through the subsidiaries of Multinationals (MNCs) of the home countries (Ferner, 1997; Gamble, 2003; Farley *et al*., 2004). The main drawback of the existing research is the restricted focus on western multinationals in western countries or emerging economies (Almond *et al*, 2003; Edwards and Ferner, 2004; Farley et al., 2004; Ferner and Edwards, 1998; Ferner and Quintanilla, 1998; Ferner and Varul, 1999; Guest and Hoque, 1996; Innes and Morris, 1995; Muller, 1998; Tayeb, 1998).

Unexpectedly, very limited number of studies has been conducted in the context of developing countries on this issue (Schuler as cited in Budhwar and Debrah, 2001, Sing, 2004, Yeganeh and Su, 2008) and Bangladesh in particular. Throughout this study, we try to reveal a comparative study on HRM practices between foreign and local Garment industries operating in Bangladesh. The spread of MNCs in developing countries and their ability to break through cross-border constraints has been a neglected issue. However, the rapid economic progress of MNCs from the South Asian developing countries such as Bangladesh has made it worthy of research.

All the above studies have analyzed the effect of different national characteristics on HRM practices and employee preferences for HRM. In short, previous studies revealed that cross-cultural research is continuing to be written from either from an American or European point of view, rather than from an international perspective (Adler, 1991; Brewster et al., 1996; Brewster and Scullion, 1997). Brewster and Scullion (1997) have identified a need for more research from other areas as scarcity of comparative HRM research between developing and developed economies (Budwar and Sparrow, 1997) persists.

One prime issue in the literature is to what extent MNCs and their subsidiaries perform as local firms as opposed to what extent their practices resemble the parent company as a global standard. In the era of globalization, HRM is evolving from being a mere source of support to one of strategic importance. Several authors has disagreed that HRM policies and practices are becoming crucial because they can act as mechanisms for coordinating international operations. But it has been acknowledged that HRM represent a major restriction when MNCs try to implement global strategies is the different cultural and institutional framework of each affiliates in which the MNC operates, (Myloni, Harzing & Mirza: 2003).

This research is important for at least two reasons. First, more MNCs from developed economies are entering into South Asia and transferring their HRM practices, for example Bangladeshi garment industries sectors of Bangladesh is increasing investment and European subsidiaries are establishing in Bangladesh would open up the opportunities in the hiring of more employees and executives from Bangladesh. The task of designing and establishing effective HRM policies in Bangladesh in order to manage these local employees is raising several challenges, for example how the Bangladeshi employees are adopting with their affiliates or other home countries HRM practices. Second, this paper expands our findings of what we actually know about the impact of host country and home country effect on HRM strategies and practices. Questions still remain in the process of findings on home and host country effect from the studies conducted regarding western MNCs. The MNCs from emerging economies may want to replicate the host country practices in the western countries rather than implementing home country practices. We have designed this research to extend a recognized fact through other backgrounds.

From the earlier research it is discovered that, when adopting HRM strategies and practices, MNCs have identified dual pressures of home and host country institutional atmosphere (both push and pull force) (e.g.Rosenzweig and Nohria, 1994; Taylor et al., 1996; Farley et al., 2004; Hillman and Wan, 2005). These dual pressures have an effect on HRM strategies and practices of MNCs at subsidiary level in emerging economies. The earlier comparative research on HRM in South Asia has identified firm's national origin and culture. (Ulgado et al., 1994; Hofstede and Bond, 1988; Hofstede, 1993, 1997; Bae et al., 1998; Chow et al., 1999; Huang, 2000; Awasti et al., 2001; Chow et al., 2002) These studies, however, also address how cultural and institutional differences affect the sharing of HRM strategies and practices by MNCs from developed economies operating in emerging economies of South Asia. This research will help to clarify the following issues:

On the basis of the above discussion, we intend to explore the following questions of this study:
a) Which home country HRM strategies and practices are more likely to be transferred by USA & UK based garment industries operating in Bangladesh? b) Which host country HRM strategies and practices are more likely adopted by USA & UK based garment industries operating in Bangladesh. c) What type of HRM strategies and practices are chosen by USA & UK based garment industries operating in Bangladesh choose under the pressures from home and host country effect?

Historical Background of HRM Practices in Bangladesh

The culture of Bangladesh is quite similar to India and Pakistan culture due to historical and religious bonding amongst the people of these three territories. The observations of commonalities amongst these countries include experiences of the researchers through personal interactions and field studies. Bangladesh was once part of the undivided Indian subcontinent for a time, and also a part of Pakistan (1947-1971). Pakistan, a predominantly Muslim country, has many social practices common with Bangladesh. (CIA Factbook, 2008). As India has a good representation of both Islam and Hinduism and India also possesses cultural similarity with Bangladesh (Abdullah, Boyle and Joham, 2010).

Bangladesh has a very rich cultural heritage. The prosperity of its culture is openness. The sources are mainly local tradition, many versatile religions, and a wide range of tribal people. Here 88.7%, of total population is Muslim, 10.2% Hindu, 0.7% Buddhist and 0.3% Christian

(Bangladesh Population Census, 2011). Bangladesh is a hierarchical society. People are respected because people of age and position and power are viewed as wise. The most senior male is granted respect to and they make decisions for the best interest of the people they belong to. This fact is also valid in businesses as well, especially for the family owned business.

Background Information of the Selected Garment industries Of This Study

Case One (Bangladesh Originate based Garment Industries):

It was established in 2004 and has been successfully exporting formal and dress shirts for over seven years and maintaining standards. With 80,000 pieces per month production capacity, fabrics used are numerous and include solid and yarn dyed cotton, CVC, TC, poplin, polyester, Twill and Dobby sourced from local and regional suppliers. It occupies 2000 sqm space in Ashulia and employs over 800 people. The garment has received certification from the buyers and they are satisfied with the performed norms and practices of work. It has average annual turnover of $30 million.

It began operation with 200 employees. The company has grown to over 350 people and 300 machines now. Number of Strike days is 20-25 days/year due to several employee demands. The employee turnover rate is high in this company as a result of employees looking for better opportunities. Business and sales growth are modest. This garment placed a great emphasis on satisfying the buyers' requirements than the employee requirements and has managed to build an award winning business on this philosophy.

Case Two (UK based garment Industries)

This is a popular UK-based garment company. It manufactures high quality readymade garment industries at competitive prices for some of the world's famous retailers. The crucial factor behind this the success is its innovative services in product development, fabric sourcing, technical support and teamwork. This group offers not only quality products at reasonable prices but also it meets high standards. This group has indeed one of the highest compliance ratings among many Bangladeshi factories in this industry.

This group consists of four companies, was incorporated in the Dhaka Export Processing Zone (DEPZ) in Bangladesh in 1997. It is one of the best factories that produce high quality ready-to-wear garment industries at competitive prices. For instance, this company is the first fully Nike compliant factory in Bangladesh and the first to produce Nike football jerseys.

It is renowned for a vibrant and dynamic management team and helped by a committed and motivated workforce of around 1200 employees. The key strengths of this company are constant monitoring of industry standards, technical know-how and technology, and tough quality control. system. Company operates within the international retail ethics policy. This company has local traders in UK and Bangladesh and has devoted employees who provide best professional service for their company. The company is now in a position to show versatility and to meet deadlines under rigid conformity requirements.

Case Three (US based Garment Industries)

The innovative identification and decorative solutions for businesses and consumers worldwide make them the leader in this industry. Total asset value of the company is around $3,056.7 million. It has manufacturing and distribution facilities in more than 60 countries around the world. The office of this company is located in Dhaka Export Processing Zone (DEPZ), Bangladesh. The garment develops, manufactures and sells their products. It is controlled by four components of businesses: pressure-sensitive materials, retail information services, office & consumer products, and other specialty converting businesses. For the past 23 years, this company create leadership excellence employee awards program and has recognized more than 900 employees for exemplary fulfillment of the company's strategic priorities of growth, productivity, people, values and ethics. The company is an equal opportunity employer for both men and women. Average age of the employees is 32. Employees have average education of graduation.

Methodology

Sample and Data Collection

We have gathered the information from both primary and secondary sources. To collect primary data regarding the HRM practices, a survey questionnaire was used. It consists of a series of questions, written or verbal, that a respondent answered in interviews. Initially we have identified two Bangladeshi garment industries company and two USA & UK based garment industries companies operating in Bangladesh to collect primary data. We have prepared a questionnaire consisting of different dimensions and we tried to put all the relevant questions therein. Some of the dimensions include recruitment, training and development, promotion policy, performance appraisal, compensation, etc. From a selected pool of 10 employees from the respective companies data was collected and then interview was taken to further get their view points. Info was collected from HRM managers of the USA & UK based Garment industries Company. the manager's opinions on this matter were a valuable input for this research.

Table 1: Summary results of background Information of study sample Industries

Country of origin	Bangladesh	United kingdom	United States of America
Host country Location	Dhaka	Dhaka	Dhaka
Main product	Yarn dyed cotton, CVC, TC, poplin and polyester	Ready-to-wear garment industries	Apparel Solutions
Establishment year	2004	1997	1988
Number of Employees	1500	2000	1800
% foreign Capital	-	82%	61%
No of foreign expertise	Only local employees	10	8
Total Asset (US $)	350 (in millions)	5,099.4(in millions)	3,056.7(in millions)
% Sale in domestic Market	55%	Nil	Nil
% Of Overseas Market	$100(in millions)	$5400(in millions)	$6500(in millions)
Average Age	30	28	30
Average Education	Higher secondary	Graduate	Graduate
Average monthly salary	14000	23000	22000
Number of Strike day	4-5/Year	1-2 days/Year	1-2 days/year
Business Growth	Medium	High	High
Sales Growth	Moderate	High	High
Employee Turnover Rate	Moderate	Very low	Low

However, while researchers have contended that quantitative research methods may hold some merit with respect to deducing real time information on different HRM practices of foreign subsidiaries, however, for the purpose of understanding and comprehending the development process and the dynamic nature of HRM practices, such retrospective historical and longitudinal information as is characteristic of quantitative methods will prove to be of little help. This may be attributed to the limited capacity of quantitative approaches to take into account the overall context. Therefore, with regard to foreign garment industries especially for HRM practices in garment organization which involves a variety of actors and consequently various national cultural effects, a more appropriate approach seems to be the qualitative one.

Two foreign and one local garment industries industry were selected for this study. A total of thirty copies of designed questionnaire were distributed among three garment industries in Bangladesh located in capital city in Dhaka. We contacted the manager human resources first to get an official appointment for distributing the questionnaire along with face to face interview among the foreign and local garment industries. In addition, in this study we basically collected data from human resource related officers and managers those who are directly related with HRM practices as this case based on very specific issue on HRM practices. Moreover we explained the purpose of the study categorically in advance to visit before we started data collection from the respective industries. The questionnaire focusing on all HRM practices and system was completed by total thirty managerial respondents from three different types of garment industries. The overall representation of the total returns was 30 questionnaires.

In order to properly contrast findings, we considered equivalence of research methods and research administration at the data collection stage. To take into account the process dynamics of the gradual evolution with distributed questionnaire, we collected retrospective and real-time data in the interview meeting. All interviews were tape recorded on-site and notes were taken of the discussion and to check the collected information from distributing before were taken. Then, recorded conversation were transcribed and translated immediately. Thereafter, structured and all interview transcripts were shown to the interviewees for verification. Based on our theoretical assumptions, we categorized our data in distinct groups such as related to recruitment and selection issues, HRM transferability issues, and bank performance issues.

After decoding all the interviews and structured questionnaire, we reviewed the narratives and compared and contrasted the facts of two cases. A general explanation of cause and effect relationship was developed for recruitment and selection practices industries by using the data contained in the mean and rank order in the case studies. We then employed the relevant codes to rearrange the evidence into categories that would be conducive to the comparison of evidence between foreign and local garment industries, while explaining the occurrence of HRM phenomena—or causal relationships among the organizational performance and transferability of HRM practices in Bangladesh. A number of summary tables are prepared to demonstrate the similarities and differences of HRM practices between foreign and local garment industries performance.

Results

Recruitment and Selection

Table 2 shows the hiring and selection approaches of foreign and Bangladeshi garment industries. Results indicate that Bangladeshi garment industries use less standardized selection methods, prefer internal recruitment and make more use of references and. local companies base their selection on less objective criteria compared to MNC subsidiaries. However, interviews and CVs play an important role in employee selection in Bangladesh local garment industries.

Table 2: Recruitment and Selection

Country of origin	Bangladesh	United kingdom	United States of America
Job description and Specification	Unstructured	Well structured, well defined, in each level	Well structured in the mid and upper level, moderate structure in entry level.
Promotion from current employees	Not practiced	Observed in the mid level posts.	Happened few times but mostly outsourced
Method of advertisement	Walk-in, Referrals, Newspaper, Posters	Walk-in, Referrals, Newspaper, websites.	Walk-in, Referrals, Newspaper, websites.
Recruitment sources	Internal, external	Internal, external	Internal, external
Use of recruitment agencies	Not practiced	some times	Not practiced
Apprentices	Not practiced	some times	some times
Selection process	for entry level its walk in interview, for mid level, verbal & interview	for entry level its walk in interview, for mid level, verbal & written test & interview	for entry level its walk in interview, for mid level, verbal & written test & interview
Psychometric testing	Not practiced	For mid & high level	For mid level
References Check	Yes	Yes	Yes
Aptitude test	No	Yes	Yes
Parent company influence	Not applicable as it is a local company.	High influence in decision making	Moderate influence in decision making

Our interviews with HR managers of the MNC and local garment industries revealed that recommendations and social networking are not as important as company used to be. Moreover, Bangladeshi local garment industries emphasize on internal recruitment and less on qualifications. Such findings are an indicator of a slow shift towards the use of more objective selection criteria by the Bangladeshi local garment industries.

USA and UK based garment industries use structured recruitment methods. When it comes to managerial and professional/technical recruitment, the foreign garment industries subsidiaries tend to use ‘sent from HQ’, ‘advertise externally’, ‘competency-based interviews’, ‘use of recruitment agencies’ and ‘word of mouth’ more frequently. For clerical and manual recruitment, ‘advertise internally’, ‘word of mouth’, seem to be used by the responding subsidiaries in the Bangladesh. This reveals that MNC subsidiaries have adapted their selection methods are less on local cultural norms and values.

Training & Development:

Training and development are two of the main strategies critical to the foreign MNCs’ operational success. Table 3 has demonstrated that Bangladeshi garment industries tend to use on-the-job and off the job training programs, including professional training, to maintain advanced skills among the key employees. Outcome of the training programs is considered with high importance in designing the next training program in both US and UK garment industries. Our interviews with the US and UK garment industries subsidiaries revealed that both the MNCs are focused on ‘On-the-Job training’ host country gets priority from training location. The UK based garment industries industry is, however, both on-the-job and off-the-job training policy for their employees.

Table 3: Training & Development

Country of origin	Bangladesh	United kingdom	United States of America
Design and development	Unstructured	36 hours training is mandatory per year,	Need basis training
Training implementation	On the job training	Use both on the job and off the job training modality	More focused on the job training than that of the off the jobs
Training evaluation and outcome	No structured method found	Training outcome consider with high importance while designing the next training program	Training outcome consider with moderate importance while designing the next training program
Support for training	Depends on in-house & outsourced sources.	Both in-house & outsourced resource utilized.	In-house resource gets main focus.
Influence of parent company training strategy	Not applicable as it is a local company.	High influence observed	Moderate influence ,local subsidy is the mainly decides the training strategy
Training location	Home country	Home & Host country	Home & Host country
Coaching by supervisors	Followed sometimes depends on needs	Yes, considered as a highly effective tool	Yes, considered as a highly effective tool
Job rotation	Not practiced	Practices in the entry level	Practices in the entry level
Overseas training	Not practiced	Departments heads are send for overseas training depends upon the need	Only for the top officials it is applicable.

Techniques for employee development	Coaching by supervisors or department seniors	Coaching, apprenticeship, informal learning, Job rotation, role playing.	Coaching, informal learning, role playing.
Skill training by outside agency	Not practiced	Yes, for professional level, its applicable	Sometimes

The training strategy of UK-based industries is also highly influenced by the parent company. Coaching by supervisors is considered as a highly effective tool in foreign garment industries but what the Bangladeshi garment industries actually follow sometimes depends on their needs. But, in both the cases of MNC subsidiaries, few

selected top officials get home country or third country trainings depending on the management needs. Our interview result revealed that training strategy of the UK based garment industries is comparatively cost effective than the other two companies.

Performance Appraisal

In terms of performance appraisal system used by the responding MNC subsidiaries in Bangladesh is illustrated in Table 4. The survey results showed that key employees, managers and professional/technical staff, are most frequently appraised formally on an individual basis. The dominant purpose of performance appraisal is to ‘set personal objectives and review progress over the past objectives’ and the least important purposes include ‘give employees a chance to discuss future career move’ and ‘assess suitability for promotion or transfers’. The methods of performance appraisal are unstructured in Bangladeshi garment industries. Both the foreign companies are, however, following rating scale method.

Table 4: Performance Appraisal

Country of origin	Bangladesh	United kingdom	United States of America
Company name	Fashion BD	FCI BD	Avery Dennison
Methods of performance appraisal	Unstructured	Rating scale method is followed	Rating scale method is followed
Time interval of performance appraisal	Ones in a year	Yes, ones in a year, usually December	Yes, ones in a year, usually December/ January
Problems of performance appraisal	Didn't cover all the required factors.	360 degree feedback is not reflected	360 degree feedback is not reflected
Feedback of performance appraisal	Verbal feedback given to employee	Yes, written feedback given.	Yes, written feedback given.
Influence of parent company	Not applicable as it is a local company.	To a moderate extent, local adoption is visible.	Followed in a low extent.

The foreign companies provide written feedback to their employees whereas the local companies chose verbal feedback. Table 4 shows that both the foreign garment industries extensively integrate and utilize performance appraisal... In contrast the local companies tend to handle their performance appraisal system in a simpler way. Many Bangladeshi garment industries do not conduct formal performance appraisal system. The purpose of performance appraisal in local companies is not linked with career planning. They are reluctant to provide feedback to the employees. The measurement criteria of all companies studied are performance oriented, but the MNCs are relatively more comprehensive, standardized and job specific.

Compensation and Benefits

The results of pay and benefit practices in the survey showed that 'individual performance' based pay system is frequently used by the foreign garment industries subsidiaries in Bangladesh. 'Individual performance/output' is the dominant performance measure and 'adoption of HQ's performance measure' came next. The formula for compensation seems to be well compared with the local companies. In designing compensation strategy, all the local companies follow market trends and the foreign companies use competency-based payment system. Non-monetary benefits are also practiced by the foreign companies such as team recognition, paid vacation, overseas tours, and success celebration.

Table 5: Compensation & Benefits

Country of origin	Bangladesh	United kingdom	United States of America
Compensation Structure	Moderate	Structured	Structured
Designing of Compensation strategy	Follow market trends	Market trends, competency based payment, house rent for mid-level professionals	Market trends, competency based payment.
Non-monetary benefits	Not practiced	Team recognition, paid vacation, overseas tours for mid and high level employees.	Success celebration, paid vacation with family.
Payment system	Based on Company payroll system	Based on Company payroll system added with performance bonus.	Based on Company payroll system
Parent company Influence	Not applicable as it is a local company.	To a moderate extent, local adoption is visible.	Followed in a low extent.
Types of rewards	Monetary rewards.	Monetary & non-monetary rewards.	Monetary & non-monetary rewards.
Types of benefits	Provident fund	Health insurance, gratuity, provident fund	gratuity, provident fund
Monetary rewards	Festival bonus	Festival & Performance bonus	Festival &Performance bonus
Equal Employment opportunity	Yes, still mid and professional level posts are dominated by male	Yes, both male and female employees get equal opportunity	Yes, both male and female employees get equal opportunity
Influence of HQ	Not applicable as it is a local company.	Moderate influence of HQ	Moderate influence of HQ

Bangladeshi garment industries tend to show their preference towards seniority-based pay system. In the foreign subsidiaries, home country practices do exist in the case of compensation issue. Both the foreign companies provide monetary and non- monetary rewards to their employees. The prominent equal employment opportunity (EEO) law is practiced at both the foreign companies. However, this concept is partially practiced and many mid and professional level posts are still male-dominated. The overseas affiliates are moderately influenced by the respective headquarters. Even then, in the area of compensation and benefits, parent company influence is not visible.

Promotion Policy:

Table 6 shows that the job tenure and competence gets priority in promotion criterion for both the foreign subsidiaries.

Table No 6: Promotion Policy

Country of origin	Bangladesh	United kingdom	United States of America
Company name	Fashion BD	FCI BD	Avery Dennison
Core criteria for promotion	Job tenure along with supervisor recommendation	Technical competency	Technical competency along with supervisor recommendation
Importance of Supervisors recommendation	Highly important	Supervisor recommendation along with Technical competency count	Highly important
Importance of loyalty the company	Yes, to a high extent	loyalty along with competency counts	Loyalty is not count rather competency counts
Does Age is a promotional criteria?	To a moderate extent	No	No
Is gender is a promotional criteria?	No, gender didn’t count	No, Technical competency counts	No, gender didn’t count
Importance of right attitudes and values	Highly important	Highly important	Matters a lot
Promotion test	Not practice	Not practice	Not practice

Importance of Performance appraisal on promotion	Performance appraisal is not practiced	To a great extent	To a moderate extent
Parent company influence	Not applicable as it is a local company.	High influence in decision making regarding head count	No influence ,local subsidy is the sole authority for promotion

Job tenure is the sole promotion criterion in the case of Bangladeshi garment industries. Age is an important factor for promotion criterion for Bangladeshi garment industries. Technical competency is the core criterion for promotion at UK and US based, taking into supervisor recommendation. Importance of employee loyalty is considered with high importance in all the companies. Attitudes and values get the highest priority in all the companies.

Unlike the local companies, the foreign practice performance-based promotion to a varying degree. In regards to company influence, the UK based company has showed influence in decision making. On the other hand, the US based companies showed no influence and local subsidiary has authority to decide proportions. The quantity of effectiveness may vary due to parent company influence.

Industrial Relation:

Table 7 demonstrates that all the sample companies have maintained good relationship between the management and employees. Company rules and regulations are to be strictly followed at the local garment factories. The overseas affiliates have also followed rules and regulations properly.

Table No 7: Industrial Relations

Country of origin	Bangladesh	United Kingdom	United States of America
Company name	Fashion BD	FCI BD	Avery Dennison
Employee relations status	Moderate, entry level employees want salary increment	Good relationship between management & employees.	Good relationship between management & employees.
Rules and regulations	Strictly maintained	Maintain but human side is also taken care of	Rules and maintained with high importance.
Administrating labor agreements	Controlled by management	labor agreements are catered with proper care	Maintained with proper care.
Bargaining process	Informal	Informal	Informal
Existence of trade union	No	No	No
Influence of parent company	Not applicable as it is a local company.	No influence is observed.	No influence is observed.
Visibility of political engagement among employee within office	Not visible inside office	Not visible inside office	Not visible inside office

Administrative labor agreements are maintained with proper care at both the MNCs and in the local garment industries. All of the companies, an informal bargaining culture are established and employees are highly willing to solve the crisis if any arises. The political engagement among employees is not visible within the factory premises and corporate office at all the sample companies. Nonetheless, none of the garment industries company, regardless of their country of origin, allow trade union.

HRM Practices among the Local and Foreign Garment Industries in Bangladesh

The common HRM practices are selection, recruitment, training and development, performance appraisal, compensation and benefit etc. Bangladeshi firms spend minimum in selection process whereas the foreign firms are spending in selecting right candidate for a position. All of the firms practice on-the-job training for employee training and development. US based garment adopt individual performance based pay system plus experience, success celebration and paid vacation.

Table 8: Comparisons of HRM Practices among the Local and Foreign Garment Industries in Bangladesh

Country of origin	Bangladesh	United Kingdom	United States of America
Recruitment & Selection	Spend minimum money in selection. 'Panel interview', 'aptitude tests', 'competency-based interviews' and 'application forms' are less commonly used for all levels.	Spend more money in selecting the right employee. Managerial level: advertise externally; Professional/technical level: advertise externally; Clerical/Manual levels: advertise externally, word of mouth, reference.	Spend more money in selecting the right employee. 'Panel interview', 'aptitude tests', 'competency-based interviews' and 'application forms' are commonly used. Clerical/Manual levels: advertise externally, word of mouth, reference
Training & Development	Low in conducting training needs systematically, On-the-job training is practiced	Use both on the job and off the job training modality. But on the jobs get priority.	More focused on the job training than that of the off the jobs.
Compensation & Benefits	High in pay differentials between those at the top and those at the bottom. Non-monetary benefits are less practiced.	High in pay differentials between those at the top and those at the bottom. Team recognition, paid vacation, overseas tours for mid and high level employees.	Individual performance pays system plus experience. Success celebration, paid vacation with family for talented performers.

Performance Appraisal	Frequency: less likely used, Measure of performance : Individual performance/output; Purpose: reluctant to provide feedback	Frequency: once a year. Measure of performance: Individual performance/output. Purpose: set personal objectives and review progress again past objects, give feedback to employee on their performance	Frequency: formal and systematic used. Measure of performance: individual performance. Purpose: provide feedback
Management appointments criteria	Soft criteria such as 'emphasis on generating participation and involvement', 'a cooperative group action', 'loyalty'	Individual performance	Hard criteria such as 'bottom line delivery', 'more than one business area', 'experience in another country'
Organizational communication	Open-communication methods is less commonly used	Open-communication methods are commonly used such as 'systematic use of the management chain', 'regular newsletter', 'regular meeting', 'suggestion schemes'	No formal methods for all levels
Participatory management and Industrial relations	Less employee participation in monitoring quality. No trade union.	Moderated employee participation in decision related to execution, No trade union.	Moderated employee participation in decision related to execution No trade union.

Open-communication methods are less commonly used in Bangladeshi garment industries. In the UK based garment industries, it is commonly used such as 'systematic use of the management chain'. US based garment industries have not followed any formal methods of communication for any level. Bangladeshi garment follows soft criteria in management appointment such as 'emphasis on generating participation and involvement'. USA based firm has hard criteria such as bottom line delivery, more than one business area. The UK based firm decides management appointments by individual performance.

HRM System among the Local and Foreign Garment Industries in Bangladesh

In our study, we tried to find out the existing HRM system of the companies through interview and structured questionnaire. Through interviews with the HR managers of the foreign subsidiaries, we have discovered that the headquarter (HQ) does not consult with the subsidiaries on issues regarding HRM development and business strategy. Foreign garmnets have added that the head quarter in UK & USA hold the major decision-making authority in relation to decisions concerning workforce expansion and/or reduction. This indicates that when it comes to HR strategic issues (such as business strategy and work force expansion or reduction), the decision-making power is mainly located in the HQ in home country.

Discussion

The main concern is to keep a committed workforce that is competent in fulfilling corporate demand and look for new techniques to improve in accordance with the country origins and their respective cultural differences. The research of this study reveals that the companies are striving to address this challenge. It is observed that foreign subsidiaries of foreign garment industries in Bangladesh adopt a combination of home and host country HRM practices. Both push and pull factors are at play in operating garment industries in Bangladesh. The push force for HR practices in the home countries is evident. In determining strategic issues, expansion and reduction of workforces, push force work. The pull force is exercised for ensuring compliance to the host country's practices in HRM implementation process. Both push and pull forces are evident in most HRM practices in Bangladesh, and, in fact, a mixture of home and host country practices are exercised simultaneously. like Japanese MNCs in USA, US MNCs in China (e.g., Farley et al., 2004), German MNCs in the UK (Ferner and Varul, 1999, 2000), US MNCs in the UK (Ferner et al., 2005), UK and USA MNCs in RMG sector tend to accept a mixture of both home & host country practices.

The effect of home country is significant both in strategic and functional areas of HRM practices. in terms of the primary HRM issues, the main strategic decision-making depends on HQ in UK and USA, especially, on issues such as workforce expansions and redundancy. Thus, it seems that MNCs, having their HQ in UK and USA, adopt a 'top down' approach in managing its relationship with the local subsidiary. The MNCs also approve the business objectives without asking their local subsidiaries. Moreover, overseas UK and USA subsidiaries tend to comply with home country practices, especially in the area of employment, recruitment and training in managerial and technical jobs across their subsidiaries. It would be interesting to understand the reasons why these particular practices are strongly influenced by home country practices.

A host country effect was particularly evident in relation to a high proportion of local-hired employees, the wide use of reference check, selection techniques, individual performance pay, and promotion and reward based on individual performance. Indeed one might expect that due to strong pressure from the host country to conform to local environments, the subsidiary was more influential in relation to decisions on pay and benefits, recruitment and selection, training and development, industrial relations, health and safety. As extra local operational pressures are given, managers are bound to use host country practices. In fact, institutional influences from the host country, such as the host country legal environment and utilization of local resources are the priority for UK & USA garment industries in Bangladesh. Hence, Bangladeshi practices such as reference checking is commonly adopted by UK & USA garment industries in Bangladesh. This suggests that due to the tight budget and cost control by the HQ in UK & USA and complete vacancy fill-in task, a HR manager tends to be sensitive to minimize costs in recruiting suitable employees for operational needs. Furthermore, our results suggest that, on the surface, we have the influence of a highly individualistic society, so individual performance is widely used for rewarding and promoting employees in our country.

The behavior of MNCs in host countries may be a blend or hybrid in which host country norms reconcile the influence of the home country 'blueprint' (Innes and Morris, 1995:30) where both home country and host country effects account for the measure of individual performance. Our results suggest that both 'individual performance output' and adoption of HQ's performance measure' were commonly adopted by UK and US MNCs in Bangladesh. An implication of choice of a modified style is the influence of national culture, and. 'the middle way' approach has been implemented by the foreign companies in Bangladesh.

Table 9: HRM Adaption between Home and Host Country Effect

Table 9 : HRM Adaptation : Home & host country effect		
Company name & country of origin	UK	USA
HR Practices	Strategy followed	Strategy followed
Recruitment & Selection	Home country effect	Home country effect
Performance appraisal	Home country effect	Home country effect
Training & development	Host country effect	Host country effect
Industrial relation	Host country effect	Host country effect
Compensation & benefit	Host country effect	Host country effect
Organizational communication	Home country effect	Home country effect
Top management appointments criteria	Home country effect	Home country effect
Middle and lower level management appointments criteria	Host country effect	Host country effect
Participatory management	Home country effect	Home country effect

From Table 9, we can see that the HRM Adaptation between home and host country has revealed that the USA & UK subsidiaries operating in Bangladesh in the garment industries sector adopt a mixed strategy in Bangladesh. Both the UK and US based garment industries are inclined to focus on their home country effect in the area of selection and recruit1ment, training at development, industrial relation, compensation and benefit. These MNC's however, following their home country HRM practices in areas like organizational communication, management appointments criteria, and participatory management.

Table 10 gives us a snap shot of the level of transfer management of UK & USA subsidiaries operated in Bangladesh. Here both the subsidiaries followed a hybrid system. Both the company transfers their home country culture as well as adopt from host country. Level of parent affiliate and level of HRM adaptation is moderate in both the UK and US based garment industries. There is a high influence at the level of HRM transfer from parent country to host country. Employee commitment and satisfaction are really high in both the overseas affiliates operating in Bangladesh.

Table 10: HRM Transfer

Table 11 : HRM Transfer Management		
Company name & Country of origin	Home country UK	Home country USA
HR Practices	MNCs Strategy	
HRM system	Hybrid	Hybrid
Level of parent affiliate	Moderated	Moderated
Level of HRM adaptation	Moderated	Moderated
Level of HRM transfer from parent country	High	High
Employee Commitment	High	High
Employee satisfaction	High	High
Overall Performance	Very good	Very good

The findings show the importance of the strategic integration of balancing HR practices for achieving optimum results. These companies demonstrated concerted efforts in their HR practices. Such emphasis was observed in the foreign companies innovatively planned and integrated HR activities to strengthen the relationship between the organization and the employees.

Conclusion and Implication

In an effort to explore the distinctive features of HRM across companies with different country origins and cultural values, this study has analyzed and explored HRM strategies and practices adopted by UK and USA based companies in Bangladesh. First, HRM practices used by UK & USA MNCs in Bangladesh are identified. The results suggest that there MNCs behave differently from MNCs from countries such as Japan and Western European countries. Past research shows that MNCs from advanced economies, such as Japanese MNCs in UK, tend to transfer the ideas and practices of human resource management system. US multinationals operating businesses in the UK also completely transfer their home country practices, such as union avoidance strategy, to the UK subsidiaries. However, UK and USA MNC's in Bangladesh deliberately adopt a varied HR approaches to operate in Bangladesh due to pressure of home and host country effect.

Apart from tactical issues which are decided by HQ in home countries, other HR practices either adapt to local practices or use a mixed technique. Results indicate that certain major socio-cultural and institutional norms lead the MNCs to adjust practices conforming to local model up to a point. Besides, they set to a considerable degree of HRM transfer, which results in the use of mix HRM practices. As per our discussion, exploring the reasonable level of transfer of HRM practices as one example without distinguishing between individual groups of practices may create important differences that are unclear. We see the dispute that certain HRM practices are more restricted and affected by the host country's socio-cultural and institutional environment, while other practices are much expected to be incorporated throughout the MNC and demonstrate an advanced level of compliance to the practices of the headquarters.

The point to be noted is that the current study is centered on UK and USA MNCs which are operating in garment sector of Bangladesh. To get better insights, there are a number of opportunities to dig deeper into the research which will open up new opportunities for expatriates working for different garment industries in the same national environment. Future study of HRM strategies and practices might be extended to HQ in USA and other European countries' subsidiaries. In addition, more research about the process of various HRM strategies and practices and the reasons behind them, as chosen simultaneously by MNCs from the rising economies in advanced countries, might be required. This analysis

could be done through case study interviews, longitudinal research, documentation checking, and observation study in order to detect complex decision-making process between HQ and overseas subsidiaries of those MNCs.

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An Empirical Evidence of International Accounting Harmonization and Transparency Impact on Capital Markets: an Innovative Approach in to Efficient Accounting Reporting System in Canada\

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Abstract

In 2006 the Canadian Accounting Standards Boards (AcSB) declared its decision to replace GAAP with IFRS in Canada for Canadian Publicly Accountable Enterprises (PAEs) ("The CICA's Guide to IFRS in Canada", 2008). The CICA's Guide (2008) describes the goal of the change from GAAP to IFRS "is to improve financial reporting internationally by establishing a single set of high quality, consistent, and comparable reporting standards" (p.7). Implications of IFRS for investment companies, SMEs and corporations have been discussed by all major accounting bodies (Heffs, 2008, Ariganello, 2007).

As many Canadian companies made the transition to IFRS, in 2011, many questions still remain in whether the new model of accounting is indeed improving upon and providing a transparent, quality accounting information system. Questions also surface on whether the new method of reporting is reducing company costs of equity. The study attempts to answer these questions with empirical data collected from a small sample of Canadian companies.

Introduction

Currently, there seems to be a relatively narrow focus primarily on the *valuation usefulness* of financial reporting information that could produce unintended negative consequences, as well as impose significant costs on both investors and the economy. This concern tends to be more acute in weak investor protection countries due to the fact that financial markets in those countries are usually small and less developed and therefore investors' demand for the valuation usefulness of financial reporting is relatively lower. On the other hand, investors' demand for the *stewardship usefulness* of financial reporting is relatively higher because audited financial statements are one important corporate governance mechanism investors rely on to control for agency costs (Watts 2006).

Considering the fact that IFRS is principles-based and thus allowing managers significant discretion in financial reporting, there is an added concern that the implementation and enforcement of IFRS may engender a lower quality of the overall financial reporting standards. As a result, the quality of IFRS-based financial reports may turn out not be as high as expected either from the perspective of *valuation usefulness* or *stewardship usefulness* or maybe even both. Therefore, some commentators are even predicting that if standard setters end up ignoring the primary fundamental economic forces when proposing the implementation of the new accounting standards, severe negative consequences could result not only for investors and managers, but also for the standard setters (e.g., Watts 2006). More importantly, if mandatory IFRS adoption will end up reducing (increasing) the *stewardship usefulness* of financial reporting, which would result in ROA becoming less (more) informative as a measure of the CEO's performance, then we could definitely expect the coefficient on POST×ROA to become significantly negative (positive). Therefore, a great amount of care needs to be embedded into how these metrics will be quantified and evaluated.

One other crucial effect IFRS (particularly for SME's) has had on businesses that have used it so far, and it is assumed to continue for other SME's in the future is the issue related to implementation and the maintenance costs. Naturally there will be costs associated with any change within a system of reporting. However, for a small business – particularly one without the knowledge and the software that IFRS requires - the possibility of significant increases in cost may have the potential to factually wipe out an economic entity in its entirety. We need to acknowledge that between the expenses for a new software system, training from an IFRS expert, and the costs to either hire new personnel or properly train existing employees, certain companies will likely not be able to keep their heads above the high tides of IFRS conversion costs and thus retain economic feasibility.

Recent literature shows that *high quality accounting standards* do not automatically lead to improvements in *the quality of the accounting practices* (Ball et al., 2003, and Beuselinck et al., 2009). In fact, there are other possible key firm and institutional variables, which essential for IFRS to become beneficial to the adopting firms. Therefore, the relevant empirical question then becomes: *What factors drive incentives for firms to strategically adopt, and make a strong commitment in mandatory adoption IFRS to achieving the expected economic benefits, if any?*
If the incentive-view represents a valid proposition for mandatory IFRS adoption, then any capital market benefits accruing to firms will be unevenly distributed and dependent upon the firms' reporting incentives in exercising their transparency and disclosure strategies. In this regard, Daske et al. (2008) study the economic consequences of mandatory IFRS adoption in 26 countries. On one hand, these researchers find that market liquidity (as proxied by calculating the bid-ask spreads of common shares) improves around the mandatory IFRS adoption period; however, on the other hand, a decrease in the cost of capital and increase in equity valuations (proxied by an increase in Tobin's q) do not take effect unless firms have strong incentives to be

transparent, and the respective countries have concurrently improved the particular legal enforcement and government regimes. This study provides; therefore, a convincing case that both firm-specific factors and institutional environments provide strong incentives to transparency, similar to many European Union efforts to improve governance and enforcement, without which adopting IFRS will simply lead to the replacement one set of standards with another (Hail & Leuz, 2007).

As such, it is quite plausible that the complete conversion costs could conceivably run as high as one percent of an SME's expected revenue; therefore, the costs associated with the IFRS implementation will certainly represent a significant financial burden on most of the companies looking to implement this change. To add to this, if the SME uses LIFO in their reporting of inventory, they will be required to spend additional time in order to align their reporting structure in accordance with IFRS ruling principles and "this accounting change may potentially result in negative tax consequences" (ERRC).

Positive Aspects of IFRS Adoption and Implementation

The academic accounting community generally recognizes that even though IFRS may be of higher quality than local accounting standards (Ball et al. 2000; Ball et al. 2003; Ball 2006, Daske et al. 2007; Barth et al. 2008; Horton et al. 2008; Lopes and Walker 2008), the capital market benefits that result from the harmonization of accounting practices may still be questionable and vary due to differences in certain firm-specific and institutional characteristics.

Emenyonu and Gray, 1992; Evans & Taylor, 1982; Nair and Frank, 1981; Walton, 1992, have investigated the effects of accounting regulations on accounting practice harmony at global and regional levels. Earlier studies (Choi, 1983; Gray, 1980; Hellman, 1993) demonstrate how the relationship between accounting practice harmonization and accounting numbers, such as profit and key financial ratios, end up shaping accounting practices differences. In the future, as more countries will adopt IFRS voluntarily, international accounting research will tend to shift the focus from the association between accounting regulation harmonization via IFRS and capital market consequences, to other metrics such as the relationship between share prices and different accounting standards (Alford and Jones, 1993; Amir et al. 1993; Barth & Clinch, 1996; Harris et al.1994).

Negative Aspects of IFRS Adoption and Implementation

Beuselinck et al. (2009) argue that accounting quality does not automatically improve through mandatory IFRS adoption. In particular, Beuselinck et al. (2009) use comparability as a proxy for accounting quality, and provide evidence that even though 14 EU countries have used IFRS since 2005, the earnings comparability, proxied by accruals-cash flows association, across Europe does

not seem to improve significantly. Instead, their research findings suggest that earnings comparability is more substantially influenced by business cycles and firm-specific reporting incentives, rather than the implementation of the new mandatory accounting standards per se.
In terms of proxies of accounting quality through earnings management for targets, timely loss recognition and value relevance (similar to Barth et al., 2008) and Paananen (2008) perform empirical tests for sample firms drawn from Sweden and claim that accounting quality not only does not improve, but even have a tendency to deteriorate upon mandatory IFRS adoption. Nonetheless, it should be noted that the above-mentioned study provides evidence based on a single-country with only one year's data following the mandatory adoption period.

Instead of using a one-country sample, Ahmed et al. (2009) compare several accounting quality metrics for firms between the pre- (2002 to 2004) and post-mandatory (2005 to 2007) periods. One sample consists of more than 1,600 IFRS adopting firms in 21 countries, while the other sample is drawn from firms from 17 countries that have not yet adopted IFRS. These researchers also conclude that mandatory adoption of IFRS does not necessarily translate into an improvement in overall accounting quality; therefore, we note some consistency across different studies, regardless of the number of firms involved in such studies. Ahmed et al. (2009) find that adopting firms tend to exhibit an increase in income smoothing and a decrease in the asymmetric timeliness of loss recognition in the post adoption period for the IFRS, when compared to the non-adopter sample.

Moreover, the reporting conservatism practices do not seem to improve after the mandatory IFRS adoption, particularly when the time-lines for bad news recognition have decreased, while those for good news recognition have increased. In order to address country and institutional effects, Ahmed et al. (2009) proxy the strength of (i) legal system by the Rule of Law scores from Kaufman et al. (2007); and (ii) reporting incentives by the private control benefits (PCB) scores from Dyck and Zingales (2004). A potential problem with their paper may lie in the fact that the measurement metrics for both legal strength and reporting incentives are neither conceptually-correct nor sufficiently comprehensive in scope.

The ISAB's set of accounting and reporting stipulations, International Financial Reporting Standards (IFRS), is relatively new; however, we should note that the set of reporting laws which were created for these smaller businesses is even newer. The IASB (International Accounting Standards Board) published the 230 page IFRS for Small and Medium-sized Entities (SME) on July 9, 2009 (PwC 2) and has continued to monitor and revise the laws and limits as more countries and companies test the waters of the reporting system which had been simplified from the lengthier, more globalized set which had been originally created for entities exhibiting a global business presence.

IFRS for SMEs is simpler and more targeted towards the needs and standards of smaller entities (Moss Adams). But there continues to be negative effects and burdens which are placed on these groups, which may seem to be unnecessary and sometimes even superfluous, particularly when considering the fact that the Generally Accepted Accounting Principles (GAAP) had been working relatively well up until this point.

Furthermore, until IFRS is actually either fully adopted and implemented or entirely removed from a company's operational framework, the company's strategic partners such as suppliers, distributors, etc., as well as its clients and other companies in their network, may still continue the use of GAAP reporting, which could lead to several challenges. This could cause all entities that are in the mist of conversion to report twice (under both the GAAP and the IFRS frameworks), therefore adding a large amount of financial expenses, as well as a substantial number of hours to the sometimes monotonous labor load.

As for the actual regulations consideration and modifications to better suit SME's reporting (particularly within Europe), feedback has shown that the actual potential benefits to SME's are still not taken into full consideration. The IFRS for SME's, as well as the full IFRS, are based on a top-down-approach. This seems to be completely incompatible with the all-important "think small first"-principle currently promoted by the European legislation. Due to the large amount of SME's that exist which "dominate the business world, almost in every developed country from the economic point of view," and on the basis that a large portion of even these companies have under fifty employees (Grosu and Bostan 323), even the SME variation of IFRS does not seem worthy of being forced upon the small enterprises. The high costs of both set-up and maintenance of the new system could potentially force these smaller companies to either remove themselves from operations or it could cause them to spiral out into bankruptcy, or to eventually be acquired by larger companies that are looking to grow and expand.

To exacerbate this problem, the amount of negative feedback and evaluations from entities in countries where IFRS for SME's have been previously implemented shows that even with the modifications of its original full intent, SME's continue to struggle finding value in the cost of converting to IFRS. Overall, these large costs, which are incurred in the process, are not counteracted with sufficient beneficial outcomes.

In order for IFRS to be successful for SME's in the future, the board must constantly and consistently monitor the implementation of the specialized SME version and, at the same time, implement proper changes which will become beneficial to these smaller entities whose business and operations remaining within a single country, so that these standards can be handled within the framework enforced under the currently existing reporting system i.e. GAAP in the case of US businesses.

Also, in North America the impact is likely to have a negative tone and perception to it, predominantly due to the high costs of adoption; the superior knowledge required to understand and operate the new framework; and lastly but more importantly due to the fact that the entire transitional process will happen in spurts. Therefore, a lagging period between the adoption of the same standards by different firms could certainly be expected. This will potentially lead, as mentioned above, to a situation where firms may actually be required to submit their financial statements under both reporting structures, thus an even more exacerbated cost. Considering the negative financial burden and the economic risk undertaken by the adopting corporations through the IFRS implementation, one would have to really think hard before jumping into the newly proposed framework.

In conclusion, in order for IFRS to truly become effective globally, or at least in order for it to demonstrate some *perception of effectiveness*, a substantial amount of effort needs to be spent on explaining and clarifying the *tangible advantages* of this newly proposed system in all strata of classification, and this needs to be complemented by some type of financial support, as well as training, provided to the adopting organizations.

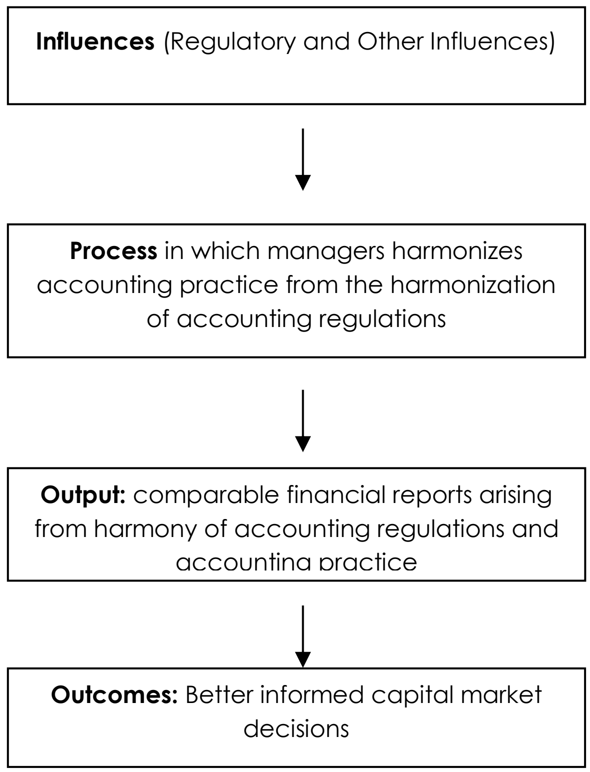
Research on International Accounting Harmonization

As accounting standards and practices are harmonized globally, researchers are refining their definitions of acceptable outcomes. Early studies like Rahman et al. (2002) introduce the concept of accounting harmonization as an inter-related and inter-dependent process. It can be characterized by four sequential and essential components; namely, *influences, process, output* and *outcome* (IPOO). Figure 1 shows the model. "Influences" refer to both regulatory influences (i.e., Statutory, Stock Exchange and Accounting Standards) and other influences such as firm- and country-specific characteristics, and international factors. "Process" means the actual accounting practice harmonization. "Output" includes comparable accounting numbers arising from accounting harmony; and finally "Outcome" equals better informed capital market decisions.

The Four Stages of Accounting Harmonization

Rahman, Perera and Ganesh (2002) introduce the concept that accounting harmonization is a process characterized by four sequential and essential components, namely, influences, process, output and outcome (IPOO). Influences are mainly consisted of regulatory and others. Regulatory influences come from statutory, stock exchange and accounting standards that foster the process of harmonization of accounting regulations. Other influences include firm characteristics, country characteristics, and international factors (namely, trade and investment agreements, international regulatory institutions and colonial influences).

Figure 1



To test this, Rahman et al. use both the Jaccard coefficient and the chi-square distribution and show that harmonization of regulations does tend to improve accounting practices. Wherever there are significant differences such as size or auditing practices between two countries,

regulations may not be sufficient to achieve such harmonization. In addition, Rahman et al. (2002) also argue that institutional differences between countries such as international trade and investment agreements, regulatory bodies and colonial influences do impact accounting practice harmony.

While the Rahmen et al. study (2002) illustrates that achieving comparable accounting numbers from the harmonization of accounting practice (i.e. output) depends primarily upon the harmonization of accounting regulations, but also on other influences. A potential drawback of this study is that it neither systematically examines other institutional factors such as the legal and investor protection mechanisms nor does it measure any specific capital market results (such as cost of equity or accounting quality).

The first wave of the literature in international accounting studies focus on measuring the effects from institutional characteristics such as cultural and legal systems. Prior studies (Gray, 1980; Hofstede, 1980; Nobes, 1992; Perera, 1989; Radebaugh & Gray, 1995) used cluster analysis in order to examine how culture interacts with accounting practices and regulations. Other studies tended to focus on some different aspects of regulation harmonization, especially on the association between *characteristics* of listed firms and *the level of disclosure requirements* imposed by certain stock exchanges (Adhikari & Tondkar, 1992). Another stream of empirical studies focus on macro-environmental factors as influences to test the link between cultural values and the effects on accounting practice and disclosure (Gray, 1980; Jaggi, 1975; Perera, 1989; Doupnik & Salter, 1995; Zarzeski, 1996).

In particular, Hofstede (1980) develops a cultural model to demonstrate that business practices are impacted by cultural country characteristics and that these characteristics tend to correlate negatively with business practices when it comes to uncertainty avoidance and power distance, but positively when the considered dimensions are individualism and masculinity. Besides cultural values, researchers wanted to test whether any business-related variables do have significant effects on financial disclosures. For example, Zareski (1996) finds evidence that, instead of cultural values, in firms that have an international presence, it is rather the market forces which tend to influence disclosure practices.

In addition to market forces, Gray (1988) develops a model, which argues that institutional factors (such as legal systems) are more important than comprehensive accounting systems (namely accounting standards, practices and financial disclosures). Following this line of thought, La Porta et al. (1998) pioneer a study of the distinct legal roles from common and code law-based countries on firms' accounting practices and disclosures. Similarly, numerous empirical studies such as Adhikari and Tondkar, (1992); Ball, R., (1998); Ball, R., et al. (1998); Salter, 1998; Zarzeski, (1996) posit that firms in common law and code law jurisdictions tend to display significant differences and characteristics of corporate ownership (widely dispersed vs. concentrated ownership) Ivanof (2009), corporate capital structure (equity-based vs. debt-based) and capital market developments (equity markets or private lending sources). As a result, such variations will lead to different information needs by equity-holders vis-à-vis debt-holders. Consequently, it will exercise evident effects on financial accounting and disclosure practices. For instance, firms in common law countries will exercise more public disclosure due to the demand by widely-dispersed equity owners, and are perceived to be more effective in resolving information asymmetry between managers and shareholders, Ivanof (2009). However, code-law based firms rely more on private debt financing, and have more concentrated equity ownership, therefore private communication between agents and principals/debt-holders is more common. This conjecture is further supported by Jaggi and Low (2000) who find that, due to the different legal structures, financial reporting and disclosure practices will not be the same. As a result, law countries seem to be associated with higher financial disclosure than firms from code law countries. In addition, Jaggi and Low (2000) argue that globalization and internalization of businesses will eventually lessen the importance of cultural values on financial reporting and disclosure.

Some countries, such as Germany for example, have allowed firms to adopt IFRS voluntarily, before it became a mandatory requirement on January 1, 2005. Even where IFRS is not mandatory, there are numerous firms and managers who are willing to adopt it voluntarily. In the light of this, researchers have examined if such firms may have particular expectations and/or other commitments.

In summary, the early literature on international accounting research is valuable in understanding empirically the relationship between accounting regulation harmonization, its process and output. However, the literature seems to ignore the importance of ultimate outcomes (i.e., capital market consequences) of accounting regulations such as IFRS. In addition, the comprehensive relationships among the variables of the IPOO concept (Rahman et al. 2002) have not been yet properly addressed.

Voluntary Adoption of IFRS

The evidence shows that voluntary adoption of IFRS by various countries accelerated in the 1990s. More and more firms seeking capital from international sources have adopted IFRS, especially stock exchanges in Europe[1] (Soderstrom & Sun, 2007). Furthermore some national accounting regulators—such as Germany's—allowed firms to adopt IFRS even before the mandatory implementation date. This raises two empirical questions:

> (1) Does IFRS have higher quality accounting standards than the local GAAP? And here, according to the early study by Rahman et al. (2002), it does look like the accounting standard such as IFRS are among the influencing factors for firms preparing financial statements. Therefore, IFRS seem to produce a higher quality standard than the local GAAP, which leads to some firms voluntarily adopting IFRS for users, and which indicates a better influence and process, hence a better output. If early IFRS adoption produces higher quality accounting information, does that then mean that IFRS alone is sufficient? The answer is: *not necessarily*, since voluntary IFRS adopters may be different than other firms which have not adopted IFRS. We need to understand that such studies examine primarily the types of firms, the factors that drive their decision, and the particular characteristics provide the motivation for voluntary adoption, rather than the specific impact of the defined accounting standards.

[1] For example, Germany's New Market was launched in 1997 to aid small hi-tech companies in raising equity capital is required to choose either U.S. GAAP or IAS, the predecessor to IFRS.

(2) The conceptual model of IPOO (Rahman et al. 2002) contends that a higher quality of accounting output should result in better outcomes for those firms who have voluntarily adopted IFRS. Thus, whether voluntary IFRS adoption is associated with subsequent economic consequences in the capital markets could be construed as another focus for future empirical studies. In the following sections, the literature addressing these two questions will be discussed.

Research on Perceived Higher Quality of Voluntary IFRS versus Local GAAP

Research studies (Barth et al., 2008) on voluntary IFRS adoption propose that IFRS possesses a higher quality of accounting standards than domestic GAAP; therefore, providing tangible benefits to adopting companies. However, the overwhelming evidence shows that there are inconsistent and mixed results, depending on the proxies for accounting quality, sample size and measurement metrics used.

For example, Hail & Leuz, (2006) recognize that IFRS, being a principle-based accounting rule, provide managers with substantial discretion to influence how informative earnings are; however, this private managerial incentive cannot be directly observed and/or quantified. Therefore, researchers tend to rely on different metrics, such as earnings management practices, bid-ask spread, and proxies of value relevance. Empirical tests are conducted to measure if between the pre- and post-voluntary IFRS adoption periods there are differences in the metrics as a way to approximate the extent of reporting higher accounting quality.

Nevertheless, a question still remains, and that relates to “How do academic studies and researchers determine whether IFRS is indeed of higher quality”?

Here, we have evidence to support the proposed higher quality of IFRS over local GAAP as it was documented by a group of studies performed by Bartov, (2005) and Barth et al. (2008). Gassen and Sellhorn (2006) also suggest that IFRS numbers are of higher quality for German firms, for example, in a study done on the 1998 to 2004 timeframe. According to Gassen and Sellhorn (2006), significant differences in earnings quality are documented when IFRS firms have more persistent, less predictable and more conditionally conservative earnings than comparable German firms using local accountant standards (HGB). The result is empirically confirmed by testing the proxies of information asymmetry differences between IFRS and HGB firms. Specifically, they argue that higher quality is supported when IFRS adopting firms in Germany experience a decline in bid-ask spread of 70 basis points an average, 17 or more days with price changes per year, compared with more volatile stock prices for IFRS adopters.

Hence, it is evident that for a sample country such as Germany, where there are large differences between the local GAAP and IFRS, there are significant differences in earnings quality observed between the two standards. Nevertheless, given that this evidence is based on a single-country study, it may not be prudent for us to generalize the conclusion to other jurisdictions. As a result, other studies should focus on larger sample sizes to test cross-countries accounting quality.

Using a sample size of 21 countries, Barth et al. (2008) provide evidence that those countries who have adopted IFRS voluntarily do tend to perceive a higher quality of the standards in comparison with those using domestic non-US standards. Accordingly, the study argues that IFRS-adopting firms tend to have lower earnings management practices, more timely loss recognition, and more value relevance (i.e., higher association of accounting amounts with share prices and returns) than those matched sample of firms applying non-US domestic standards between the pre- and post-adoption periods. When Barth et al. examine whether the higher quality metrics of accounting are solely attributable to IFRS, the researchers control for such effects as the volatility of economic activity, information environments and incentives by using a matched sample design. Under this approach sample firms that apply domestic standards in the same country are similar to the firms that apply IFRS. Nevertheless, the researchers concede that even with the matched sample design, the study may not fully control for differences in the economic environment because IFRS is also associated with the combined effects of firms' standards, interpretation, enforcement and litigation, and incentives. On the other hand, other studies provide similar empirical evidence that even though IFRS may lead to a relatively higher quality of accounting standards, adopting IFRS alone is not going to deliver the expected higher quality, or the consistency of applied financial reporting (Ball et al. 2003; Ball, 2006**;** Leuz et al. 2003).).

Diametrically opposed to the above-mentioned results, some other studies show that voluntary IFRS adoption does not produce a higher quality accounting information. Inconsistent with the results done by Gassen and Sellhorn (2006) on the higher quality viewpoint in Germany, Hung and Subramanyam (2007) use the same proxy of accounting quality voluntarily adopting IFRS for a given period of time, and such proxy variables (i.e. the variability of book value and income) are significantly higher under IFRS than under German GAAP (HGB). Likewise, book value and income do not seem to be more relevant under IFRS than under HGB, therefore IAS does not exhibit greater conditional conservatism than the German HGB standards. Hung and Subramanyam's (2007) findings have been confirmed by Van Tendeloo and Vanstraelen (2005), who study 636 firm-year observations of German firms voluntarily adopted IFRS between 1999 and 2001. In particular, they demonstrate results that IFRS adopters do not exhibit lower earnings management compared to firms reporting under German HGB. Consequently, this implies that IFRS implementation does not necessarily bring with it a high level of accounting quality. Nevertheless, these mixed results may be attributed to the tests that conducted in the transitional period, and sample drawn from a single country (e.g. Germany).

Another study performed by Burgstahler, et al. (2006) gathers evidence from 1997 to 2003 to prove that the extent of managers' discretion depends on firm-specific characteristics (reporting incentives and operating characteristics) when less (more) earnings management in both private and public firms is associated with strong (weak) legal and enforcement systems. But private and public firms respond differently to such institutional factors as book-tax alignment, outside investor protection, and capital market structure.

In summary, research on voluntary IFRS adoption is still at an early stage and overall results have been relatively inconsistent, primarily due to the employment of different metrics for earnings management, different sample periods, and different sample countries. As a result, the hypothesis that adoption of IFRS will lead to substantial improvements in accounting quality has not yet been conclusively confirmed.

Economic Consequences Associated with Voluntary IFRS: Adopting Firms' Strong Reporting Incentives

The voluntary switch from local accounting standards to IFRS is a huge commitment by firms, especially if their local GAAP is very different from IFRS. The change includes disclosing substantial new financial and non-financial information to outsiders. Investors should be informed of the decision by firms to voluntarily adopt IFRS, which will have economic consequences which are observable in the capital markets.

Regarding the second question on economic consequences from voluntary IFRS adoption, numerous studies have examined the question of what actual benefits will accrue to firms who voluntarily adopt IFRS. The expectation of capital market benefits have been documented by early literature. Zarzeski (1996) conjectures that firms who compete for foreign resources (i.e. dependence) will be more willing to expand their financial and accounting disclosure to reduce the perceived risk to resource providers and accordingly enjoy a lower cost of resources. This concept has been supported by El-Gazzar, et al. (1999) who cites cross-border financing and listing on foreign stock exchanges as major reasons to voluntarily adopt IFRS. The high level of international market dependency, as expressed by high percentage of foreign sales, low leverage, increasing number of foreign stock exchange listings and membership of the EU, are all significant factors for firms to voluntarily adopt international accounting standards. When firms face increasing demands for transparency in financial reports and disclosures, compliance with IFRS can facilitate consistent and reliable comparisons across the international spectrum of GAAPs. Investor confidence in the integrity of IFRS helps firms access more resources internationally at lower costs.

Another metric for economic consequences include improvements in analysis. For instance, Ashbaugh and Pincus (2001) argue that voluntary IAS adoption reduces the cost of information acquisition and improves the accuracy of forecasts. After firms adopt IAS, analysts make fewer forecast errors and there are more news reports for adopter firms in the sample.

However, there is no overall consensus about economic consequences from voluntary IFRS adoption. For instance, Cuijpers and Buijink (2005), with a fairly small sample of 133 non-financial firms listed in the EU in 1999, attempt to test if the firms adopting non-local GAAP experience lower levels of information asymmetry. This study proxies' information asymmetry by the number of analysts who follow the company, cost of equity, uncertainty among analysts and investors, and forecast dispersion in stock return volatility. The results are mixed, as for those firms adopting non-local GAAP there seem to be a positive effect as documented by the analysts following those firms. However, the study fails to find concrete evidence of a lower cost of equity, and also fails to find a lower level of uncertainty among analysts and investors (which would be a highly desirable outcome). As such, when comparing early with late adopters, the two researchers conclude that it may take time for both analysts to learn how to interpret financial statements with IFRS or US GAAP, and for firms to comply with the new standards and obtain the presumed benefits.

To proxy and measure specific capital market outcomes associated with voluntary IFRS adoption, such as decreased information asymmetry, prior studies tend to measure directly whether there is a reduction in the cost of equity. However, the following section shows that prior studies on the cost of equity as economic consequences for voluntary adoption provide inconclusive results.

Measure of cost of equity as economic consequences from voluntary IFRS adoption

Concerning the cost of equity estimate, Cujipers and Buijink (2005) use the method of Easton (2004), emphasizing that this calculation does not need to explicitly define a growth rate of abnormal earnings beyond the forecast horizon. Other researchers argue that since there are different opinions about the computation of the ex-ante cost of equity, such as using an average estimate of the four methods in calculating the cost of capital (i.e. Claus & Thomas, 2001; Daske, et al., 2007; Gebhardt, Lee, & Swaminathan, 2001; Hail & Leuz, 2006; Ohlson & Juettner-Nauroth, 2005; and model by Easton, 2004), these affect the results. It is because the four models (LIST MODELS HERE,Cost of Equity by Gebhardt, Lee and Swaminathan; Cost of Equity by Claus and Thomas; Cost of Equity by Gode and Mohanram and Modified PEG ratio) provide different measures based on different accounting -based representations. This issue is not really significant in influencing the magnitude of change in cost of equity since Kim and Shi (2007) and Hail and Leuz (2006) point out that the cost of equity estimates are highly correlated and similar within a reasonable range.

Daske et al. (2007) examine the cost of equity reduction as a proxy for economic consequences of voluntary IFRS adoptions for 24 countries between 1988 and 2004. They find that, on average, firms whicho have voluntarily adopted IFRS experience only modestly lower costs of equity. However, when the study partitions voluntary adopters into label adopters firms (i.e. firms which do not have strong reporting incentives) and firms with a serious commitment to IFRS implementation, the researchers finds that only serious adopters have a significantly reduced cost of equity. While Daske et al. contribute to the extant literature that firm-specific commitment is crucial to enhance reporting incentives, it is difficult to justify the proxies of strong (weak) reporting incentives with increase (no increase) in disclosures, as proxied by the additional number of pages of annual reports between pre- and post-adoption period. In fact, the literature argues that an increase in the quantity of disclosures does not mean an increase in their quality (Bauwhede & Willekens, 2008; Botosan, 1997; Botosan & Plumlee, 2002; Botosan & Plumlee, 2005).

On the other hand, when a single country study shows that there is a direct measure of the cost of equity (from several stock valuation models), Daske (2006) fails to find any decrease in the cost of equity. Daske points out that there is a lack of supporting evidence for the proposition that on its own German firms' voluntary adoption of IFRS between 1999 and 2002 leads to significant economic consequences, such as a reduction in the cost of equity. A possible criticism is that the sampling period (just four years) is not a sufficiently long period to capture the effect of a reduced cost of equity from adopting IFRS . The results also highlight that to collect supporting evidence from testing the effects of IFRS adoption in any reduction in the cost of equity, it is important to control for other factors , such as different reporting incentives.

Instead of directly calculating the cost of equity as a proxy for economic consequences, economic theories also link the cost of equity effect between the bid-ask spread and information asymmetry. For instance, Verecchia (2001) and Glosten and Milgrom (1985) develop the conceptual link between corporate disclosure and market liquidity from the theoretical underpinning that the share price contains elements of adverse selection from information asymmetry. In fact, compared to privately or better informed counter-parties in the stock markets, uninformed or less informed investors have concerns about unfair dealings by informed investors. Therefore, they will try to protect their interests by selling (buying) by lowering (increasing) the price more than what they are willing to buy (sell). This consequence of price-protection is reflected in a wider bid-ask spread.

In addition, Leuz and Verrecchia (2000) proxy the change in the cost of capital by measuring bid-ask spreads and stock turnover ratios (as liquidity changes), because they argue that opaque information environments will reduce the demand for stocks which will result in increasing bid-ask spreads and lower stock turnover ratios. Given this, in order to attract potential investors, firms with low financial reporting quality have to sell their shares at lower prices, which in turn will be affected by the higher cost of equity . The bid-ask spreadand turnover ratios is also used by Diamond and Verrecchia, (1991). After controlling for the self-selection bias in their sample, Leuz and Verrecchia (2000) empirically document that firms voluntarily adopting IFRS or US GAAP have higher stock turnover ratios and lower bid-ask spreads.

According to Hail and Leuz (2006), firms' adoption strategies are driven by reporting incentives, and must be considered in accounting for any economic effects of switching to IFRS, especially when there is evidence that voluntary IFRS adoption is perceived to have more benefits than costs (e.g. Ball, 2006; Barth et al., 2008).

Overall, a number of empirical studies suggest a relationship between voluntary IFRS adoption and the expectation of capital market benefits. However, the direct link between voluntary IFRS adoption and actual capital market benefits is mixed. It may suggest that firms that voluntarily adopt IFRS appear to have strong reporting incentives. However, Daske et al. (2007) point out that some voluntary adopting firms may just be following others without actually having reporting incentives. It is possible that there are voluntary adopters without reporting incentives are looking for certain bonding benefits arising from voluntary IFRS adoption (Daske et al., 2007). In other words, those firms adopting IFRS voluntarily but only cosmetically believe that their voluntary adoption can mimic other adopting firms with strong reporting incentives. These mimicking firms believe that such willingness to adopt IFRS voluntarily will signal their transparency to capital markets and, as a consequence, they willreceive capital market benefits. However, if the financial reports are not prepared in accordance with IFRS requirements, the quality will not improve. As a result, those firms without strong reporting incentives will not receive capital market benefits.

Therefore, in voluntary IFRS adoption, the benefits are not uniformly distributed to all adopting firms because some firms are highly committed to adopting IFRS while others are not. Therefore, voluntary IFRS adoption may actually have differential capital market benefits, depending on whether adopters have reporting incentives (Daske et al., 2007). Thus, studies that measure economic consequences from all adopting firms without controlling for reporting incentives will produce inconclusive results.

Rahman et al. (2002) view that even though IFRS may provide a good influence, and potentially produce high quality output, firms who expect capital market benefits and have actual reporting incentives must commit to the process. This process should produce high quality financial reports as outputs which are well received by investors who may respond positively with better outcome in capital markets. This argument has been further supported by Daske (2006) who argues that IFRS adoption alone may not produce discernible economic consequences, and therefore future research should address the potential cost of the equity reducing effect from variations between firms' adopting strategy, and its corporate governance and ownership structure, as well as explore the structures in institutions both within and across countries and jurisdictions.

Mandatory IFRS Adoption

Since January 1st, 2005, firms in the EU have been required to adopt IFRS[2]. Therefore, the literature in IFRS studies turns its attention to examining the two empirical questions in this mandated setting. First, when voluntary IFRS adoption cannot support the higher quality viewpoint, is it different when there is mandatory IFRS adoption? Second, while voluntary IFRS adopters may have higher expectations of capital market benefits and stronger reporting incentives, is this the case for mandatory IFRS adopters? Hail and Leuz (2007) point out that the empirical evidence supported by voluntary adoption cannot be directly transferred to mandatory adoption, because voluntary adopting firms seem to have more incentives to implement the new standards. Moreover, when all firms implement IFRS, the accompanying effects from bonding and network will no longer apply to firms' signaling their commitment to transparency to the capital markets (Coffee, 2002). Therefore, mandatory IFRS adopters may find it challenging to realize higher accounting quality or economic consequences without a strong reporting incentive.

In addition to the difference in reporting incentives, institutional environments also differ. In supporting mandatory IFRS adoption, jurisdictions have been improving their legal enforcement, investor protections and other institutional factors (Daske et al. 2007). Accounting scholars have found evidence of an association between institutional effect and firms' reporting incentives, leading to differential capital market consequences. In addition, accounting scandals in recent years show the urgent need for both firm directors and national regulators to strengthen corporate governance mechanisms.

Subsequent to the mandatory date for adopting IFRS, researchers have been gathering empirical evidence to determine the validity of the high quality and incentive viewpoints, as well as any economic consequences resulting from mandatory IFRS adoption.

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[2] On June 6th 2002, the Council of Ministers of the EU issued an official statement to require that all publicly listed companies in the EU to adopt International Accounting Standards (IAS) in their consolidated or simple accounts for the fiscal year beginning January 1st 2005 (Soderstrom and Sun, 2007)

Accounting Standard View: Mandatory IFRS Adoption results in High Quality of Accounting Information

Proponents for the view that higher accounting quality can be derived from accounting standards claim that overall it will benefit stakeholders in two ways. The first way is primarily related to IFRS convergence benefits that:

a. Disclosing more relevant information about the economic performance and positions of entities will make financial reporting more transparent; and
b. Enhance financial information comparability and reduce the cost of preparing and comparing multi-national business financial reports.

The second benefit is that mandatory IFRS adoption requires greater financial disclosure and transparency than most domestic accounting standards (Aksu, 2006; Ashbaugh & Pincus, 2001; Bae et al., 2007; Daske & Gebhardt, 2006) This will translate into higher quality accounting information.

However, opponents express serious concern about the inherent flexibility in principles-based standards and that mandatory IFRS may give managers too much room to make judgment calls in its application. For instance, Sunder (2009) is concerned that the underlying differences in business, industry and country level may further complicate the interpretations of IFRS principles, giving rise to greater variability in international financial reporting, instead of comparability. In addition, it may also create greater opportunities for managers to exercise their earnings management techniques. Switching from a rules-based to principle-based set of standards may allow various manipulations in financial position and performance measurement, with the consequence that accounting quality will be reduced by adopting IFRS. Therefore, whether mandatory IFRS adoption will bring in higher quality of accounting information becomes an empirical question for research studies. There has been a wave of literature examining the impact of mandatory IFRS adoption since 2005.

Dobler (2008) conjectures that when the German local accounting standard (HGB) has been converted into IFRS, earnings management practices do not necessarily decrease. Following the same argument, Aussenegg et al. (2008) also argue that accounting quality does not improve when earning management practices do not change. Their study tests and document evidence from using comprehensive earnings management metrics (15 different proxies in measuring earnings management) in 17 European countries using more than 18,000 firm-year observations. However, the study only focuses on the transitional period for countries adopting IFRS. It is possible that the effect of unchanged earnings management could be short-term only and will change as IFRS becomes embedded over time.

Further, there are studies that show mixed results in accounting quality when mandatory adoption takes place. Guenther et al. (2009a) use Germany as a single-country study on the relation between IFRS and earnings quality. They conclude that the tested results of earnings management proxies such as a decrease in income smoothing have been recorded by voluntary, but not for mandatory IFRS adopters. They present results showing no decrease in discretionary accruals

under voluntary, but decreases for mandatory IFRS adopting firms. Thus, empirical results concerning accounting quality have been mixed when comparing voluntary and mandatory IFRS adopters in Germany.

Guenther et al. (2009b), who use the sample period from 1998 to 2008, examines the relative accounting quality between voluntary and mandatory adoption. They report ambiguous evidence on earnings management when income smoothing effect decreases, and conditional conservatism increases under voluntary, but not under mandatory adopters. For discretionary accruals, mandatory adopters exhibit some decreases, but not voluntary adopters. While they try to overcome the common issue of a limited time period (from 2005 to 2007), the study only uses Germany data, which implies that their empirical results may be unique to the German settingrather than generalizable to a wider diverse institutional environment like the EU.

Chen et al. (2009) find that using the five most important indicators to proxy earnings management to measure 15 European Union countries before and after the full adoption of IFRS produces mixed results, even though the overall accounting quality has been marginally improved. They comment that with IFRS adoption, opportunistic behavior may be restricted, but it does not imply any reduction in incentives to manage earnings. Merely changing the accounting

standards will not necessarily enhance higher accounting quality. If IFRS cannot bring along capital market benefits to investors, transparency of financial information through accounting numbers is still weak due to the lack of sufficient disclosure, and financial reports would not reflect the firms' economic performance and position accurately.

Using incremental value relevance as another metric of accounting quality, Gordon et al. (2008) examine a sample of 83 cross-listed firms to analyze the associated effects of firms' earnings as reported by local GAAP, IFRS and US GAAP with stock returns to firms' operating cash flows before (2004) and after (2005) the mandatory adoption of IFRS. In 2004, local GAAP earnings and accruals recorded the highest explanatory power for stock returns. In 2005, after mandatory IFRS adoption, the reconciliation between U.S. GAAP and IFRS suggests that U.S. GAAP exhibit both incremental and relative value relevance, while IFRS-reconciled earnings show only incremental value relevance. Researchers argue that even earnings attributes are comparable under both U.S. GAAP and IFRS; IFRS does not produce higher quality of financial information.

Following the Barth et al. (2008) study of accounting quality with voluntary adoption in using US firms as the matched sample; Giner and Iniguez (2007) examine and compare the earnings quality of 119 cross-listed firms in the US reporting IFRS in the EU. When the earnings quality proxies are used as per prior studies (Lang et al., 2006a; Lang et al., 2006b; Leuz et al., 2003), Giner and Iniguez (2007) could not measure any identified differences in earnings quality between IFRS and US GAAP, but the results appear to be preliminary and suggestive due to data limitations.

However, given different opinions concerning the accounting quality in the literature, recent studies have sought to extend the quality of the analysis. Chen et al. (2010) examine five proxies for accounting qualities for the EU, comparing the pre- and post-mandatory periods and conclude that most of the accounting quality indicators improved after the mandatory adoption of IFRS in 2005. Specifically, accounting quality is higher when researchers can measure significantly less targeted earnings management, lower magnitude of absolute discretionary accruals, and higher accruals quality. Another study performed by Chen et al. (2009) measures the mean scores of six indices from institutional environments, (namely, regulatory quality index (RQI), rule of law index (RLI), control of corruption index (CCI), voice and accountability index (VAI), political stability and absence of violence index (PVI), and government effectiveness index (GEI)) to proxy financial reporting environment associated with managerial incentives.

In the post- (2005 to 2007) relative to the pre-adoption (2000 to 2004) period, they do not find any statistically significant differences, implying that improvement in accounting quality is not associated with any improvement in managerial incentives from mandatory IFRS adoption. While data availability is improved and measurements on earnings managements have been more comprehensive in this study, it is questionable if it is theoretically sound to use these six macro-level indices (similar to legal enforcement characteristics) to proxy managerial incentive, and to draw any empirical conclusion when firm-specific characteristics are totally ignored.

Horton, et al. (2008) examine the effects of mandatory IFRS on firms' information environments, represented by analyst forecast accuracy (proxies by the accuracy of analyst forecasts, number of analysts following, dispersion of forecasts and volatility of revisions) by comparing between voluntary adopters, mandatory adopters and non-adopters. This study provides evidence on improvements in information environments for non-financial firms. Besides the study by Horton et al. (2008), other value-relevance studies defending the higher quality view produce different results. Morais and Curto (2007) argue that financial reporting under mandatory IFRS adoption increases the value relevance of accounting numbers of EU firms. Their evidence is further supported by Bellas et al. (2007) who document evidence that compared to earnings prepared by Greek GAAP; IFRS earnings have higher value relevance.

Similar to studies for voluntary IFRS adoption, prior empirical results of mandatory IFRS adoption still need more work because the extant literature is limited by its sample size and the data available. For instance, Christensen et al. (2008) examine if there is less income smoothing, and more timely loss recognition for both voluntary and mandatory IFRS adopters. The study concludes that voluntary IFRS adopters have higher incentives than mandatory adopters, and therefore dominate the effect of accounting standards in determining accounting quality. However, this study only covers Germany from 1993 to 2006, with mostly voluntary adopters and only a few mandatory firms in the sample.

Meanwhile, when Perramon and Amat (2006) argue that IFRS adoption would be costly for German companies domiciled in code-law regimes, it is possible that any significant economic consequences and improvements in accounting quality from such relatively weak legal and investor protection mechanisms will not be material in the preliminary transition period. This learning curve effect for some countries adopting IFRS is also supported by other literature (Cuijpers and Buijink, 2005). In other words, empirical conclusions drawn from evidence gathered around the transition period of IFRS adoption is not necessarily going to be conclusive, suggesting that more time post adoption is needed to give meaningful results.

Several prior studies try to address whether reporting incentives play a role in mandatory IFRS adoption to influence managers' commitment in the process and receive desirable outcomes from the capital market, . However, what differs from the voluntary IFRS adoption stage is that researchers begin to understand by consensus that, equivalent to the IPOO model by Rahman et al. (2002), that maybe the influence component is more than just mandatory IFRS. Other importance influences may also have an effect on managers' incentives in mandatory reporting. In other words, IFRS adoption alone is not sufficient, but requires other significant factors to enhance reporting incentives, which in turn determine whether there are discernible economic consequences (outcomes). In the following section, the literature on reporting incentives in IFRS adoption will be discussed.

Incentive View: Economic Consequences of Mandatory IFRS Adoption Driven by Reporting Incentives

Prior studies (Hail & Leuz, 2006) recognize that IFRS, being a principle-based accounting rule, provides managers with substantial discretion to influence information about earnings, but this private incentive cannot be observed directly. Incentive-view proponents contend that IFRS involves a considerable level of managerial judgment and the use of private information (e.g., in exercising the fair values versus impairment of goodwill, and property, plant and equipment). To what extent firms apply this discretionary judgment into their IFRS adoption and disclosure strategy likely depends on their reporting incentives, which are shaped by many factors (Daske et al., 2008).

Moreover, Krivogorsky, Chang and Black (2010) argue that as long as firms can recognize that the potential benefits of adopting IFRS will outweigh the costs of adoption and compliance, more firms and countries will use IFRS as their international reporting strategy. According to economic theory, the network effect will expand these net benefits to more participants. As more and more players participate, more firms will gain more benefits. However, receiving the net benefits depends on the firms having strong commitment incentives to convergence to IFRS. Therefore, researchers like Ball, Robin, and Wu (2003), Burgstahler, et al. (2006), Cairns (1999), and Street and Gray (2001), document evidence that there are substantial non-compliances with IFRS among firms who have purportedly adopted IFR. It highlights the fact that because some firms adopting IFRS do not have the reporting incentives to do so; it is possible that mandatory IFRS adoption may not lead to uniform quality of accounting reports across firms.

Christensen et al. (2007) study the economic consequences for UK firms in mandatorily adopting IFRS in 2005. Using the variables of voluntary adopting firms in Germany as the proxy for UK firms' willingness to adopt IFRS, this study empirically proves that the intended proxy of commitment to adopt IFRS in Germany predicts cross-sectional differences in both the short-run market reactions and the long-run changes in the cost of equity of U.K. The results suggest that mandatory IFRS adoption does not benefit all firms in a uniform way, but results in relative winners and losers. This study notes that where the literature generally suggests that the relative reductions in cost of capital are associated with the quality of the legal framework, in fact, firm-specific factors of reporting incentives (i.e., willingness and commitments to adopt IFRS) can explain some of the relative benefits.

In addition, even though Daske et al. (2007) do not find any significant changes in the cost of equity for mandatory IFRS adoption, firms with higher reporting incentives have a significantly lower cost of equity than those firms with lower reporting incentives.

While a single-country study does not provide conclusive empirical support for the incentive-view, the extant literature following mandatory IFRS adoption has in turn focused on testing samples from a cross-country perspective. Some of these studies document positive economic consequences; however, others have given mixed results. For instance, Daske et al. (2008) examine a variety of economic implications for 26 countries (18 are in the European Union) following the mandatory adoption of IFRS for the period between 2001 and 2005, but find mixed evidence on the effect of cost of equity. Similar research conducted over a longer time may find different results but when Li (2010) undertakes identical research covering an two additional years (i.e., 2005 and 2006), Daske et al extends only until 2005, Li documents a significantly lower cost of equity for mandatory adopters (48 basis points) when comparing to the pre-adoption period (1995 to 2004).

Consistent with the finding of short-lived benefits for voluntary IFRS adopters, Li (2010) provides evidence that voluntary adopters could benefit from a lower cost of equity compared to mandatory adopters, but only in the pre-mandatory adoption period, and this difference becomes insignificant after mandatory adoption. In fact, voluntary adopters experience no significant change in the cost of equity after the mandatory period. However, it should be noted that Li's study covers only a two-year post-mandatory period. A longer period following the transition might provide different results. Also, Li (2010) finds that the reduced cost of equity is present only in jurisdictions with strong legal enforcement, increased disclosures and better information comparability.

Overall, while there is growing conjecture that mandatory IFRS adoption alone does not contribute to significant capital markets effects, it is apparent from the empirical evidence of prior studies that the incentive-view may be more convincing than the quality-view. However it is still too early to assess the negative link between reporting incentive effects and the cost of equity, since there is, as yet, no strong consensus. To gain a better understanding about the determinants and consequences of reporting incentives and the relationship to the cost of equity comprehensively, it is useful to consider reporting incentives as the "Influences" of the IPOO model (Rahman et al. 2002). In the next section the literature on the roles of institutional-specific (macro) factors, firm-specific (micro) characteristics in both business and corporate governances, and their joint effects to any association with subsequent capital market consequences is reviewed.

Research Hypotheses and Questions

This research study examined the following hypothesis:

Hypotheses #1:

Ho: Disclosure of transparent financial information, consistent with global standards via IFRS will make financial information less reliable and credible for investors, operating managers and cause better harmonization and streamlining;

Ha: Disclosure of transparent financial information, consistent with global standards via IFRS will make financial information more reliable and credible for investors, operating managers and cause better harmonization and streamlining;

Hypotheses #2:

Ho: Enhanced IFRS based financial information will not reduce the cost of preparing Ha: and comparing multi-national business financial reports and thus reduce cost of capital;

Ha: Enhanced IFRS based financial information will reduce the cost of preparing and comparing multi-national business financial reports and thus reduce cost of capital;

Sample Selection

The survey instrument was distributed to one hundred Lower Mainland and Vancouver companies, private and public. The financial officers in charge of financial reporting were asked to fill the survey. Response rate n= 34 and as such represents a small sample size. Although it is rather difficult to generalize from a small sample, the key findings still indicate some key outcomes.

The Model and Empirical Proxies

Consistent with the hypothesis to be tested, we formulated two separate measurement models. Model #1 considered lower cost of capital as the dependent variable, predicted by a number of independent variables. In order to reduce the number of predictors, principal component analysis model was run where the Eigen extraction value was set at 1. Table 1 shows the extracted variables with extraction values of close to Eigen value criteria of 1. Table 2 shows that four factor components extracted account for 79 % of the total variance. Further, Figure1 confirms the four component selection on Scree test criteria. Barlett's test of sphericity was found to be significant ($p<.01$), indicating sufficient correlation between variables to proceed with this model.

Using the four key components extracted from the principal component analysis model, we then completed a stepwise regression application where the dependent variable is IFRS Lower Cost of Capital. Table 3 shows descriptive statistics of the variables extracted with principal components analysis.

Table 1: Communalities

	Initial	Extraction
Investors Benefitted From FRS?	1.000	.741
Comparable Reports from IFRS?	1.000	.838
IFRS Increased Earnings Volatility?	1.000	.818
IFRS-Better Reporting Transparency By More Disclosures	1.000	.748
Improved Quality & amp; Timeliness Of Information	1.000	.725
IFRS-Greater Access To Capital?	1.000	.783
IFRS-Lower Cost Of Capital?	1.000	.865
IFRS-Increased Cross- border Investments?	1.000	.827
IFRS-Better Comparability With Others	1.000	.681
Harmonization & Streamline-Internal/ External Reporting	1.000	.914
IFRS-Global Acceptance?	1.000	.758
Complete IFRS Convergence NOT Likely?	1.000	.808

Extraction Method: Principal Component Analysis.

Table 2: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.602	46.685	46.685	5.602	46.685	46.685	3.940	32.831	32.831
2	1.568	13.068	59.753	1.568	13.068	59.753	2.576	21.465	54.296
3	1.319	10.988	70.741	1.319	10.988	70.741	1.547	12.895	67.191
4	1.019	8.488	79.229	1.019	8.488	79.229	1.445	12.038	79.229
5	.844	7.034	86.263						
6	.539	4.488	90.751						
7	.386	3.218	93.969						
8	.332	2.770	96.739						
9	.237	1.977	98.716						
10	.079	.659	99.375						
11	.045	.376	99.751						
12	.030	.249	100.000						

Extraction Method: Principal Component Analysis.

Figure 2

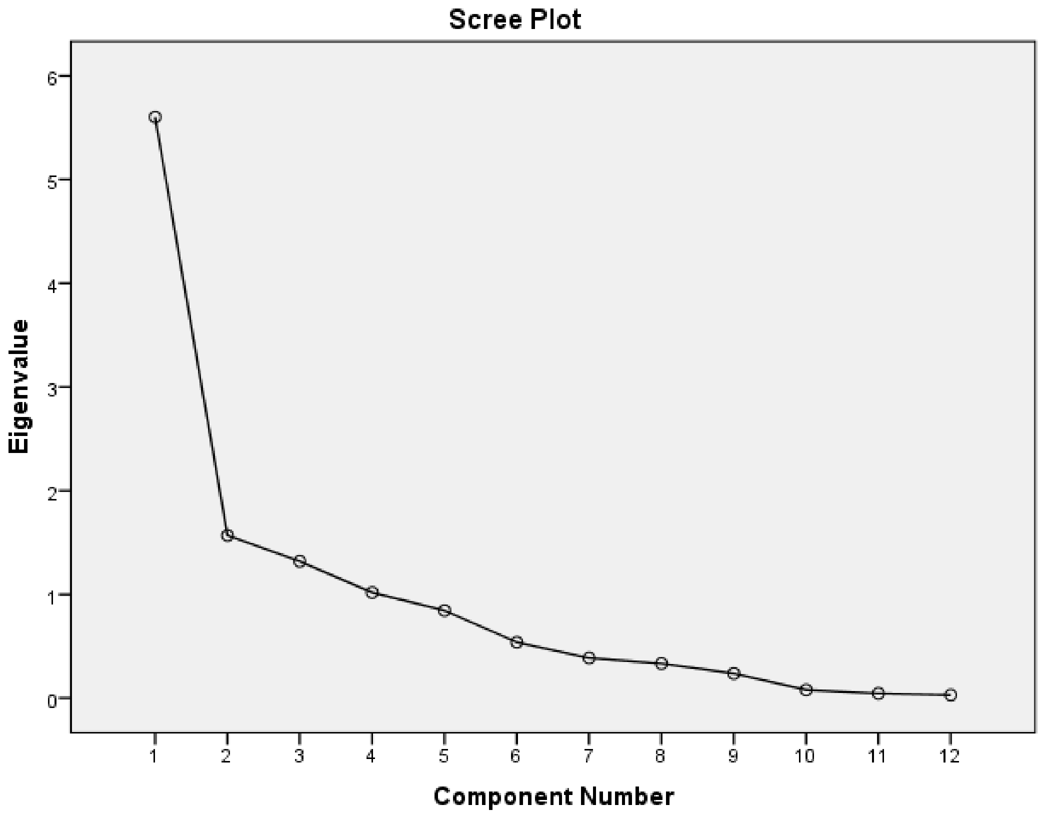
Scree Plot
Eigenvalue
0
1
2
3
4
5
6
Component Number
1
2
3
4
5
6
7
8
9
10
11
12

Table 4: Variables Entered/ Removed [a]

Model	Variables Entered	Variables Removed	Method
1	IFRS-Increased Cross-border Investments?	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

a. Dependent Variable: IFRS-Lower Cost Of Capital?

Table 3: Descriptive Statistics

	Mean	Std. Deviation	N
IFRS-Lower Cost Of Capital?	1.76	.944	21
Comparable Reports from I FRS?	3.33	1.278	21
IFRS-Better Reporting Transparency By More Disclosures	3.48	1.250	21
IFRS- Increased Cross-border Investments?	2.10	1.136	21
Harmonization & amp; Streamline-Internal /External Reporting	2.14	1.315	21
Complete IFRS Convergence NOT Likely?	3.52	1.250	21

Table 4 shows the steps followed by the stepwise regression for inclusion and exclusion of predictor variables to complete the regression run

Table 5: Model Summary

Model	R	R Square	Adj. R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.629[a]	.395	.363	.753	.395	12.410	1	19	.002

a. Predictors: (Constant), IFRS-Increased Cross-border Investments?

Table 5 shows the r^2 value at .395 and adjusted r^2 square value of .363 at F value of significance of 12.410 (df=1, 19). The overall model fit is shown on Table 6, with p<.05, providing strong evidence of rejecting Ho:

Hypotheses # 1:

> Ho: Enhanced IFRS based financial information will not reduce the cost of preparing Ha: and comparing multi-national business financial reports and thus reduce cost of capital;
>
> Ha: Enhanced IFRS based financial information will reduce the cost of preparing and comparing multi-national business financial reports and thus reduce cost of capital;

IFRS's ability to streamlines international disclosure of financial information is bound to increase cross border shopping opportunities, making a higher level of access to capital markets and investors, thus an opportunity to seek lower cost of capital for corporations which are heavily involved in global trade.

Table 6: ANOVA [a]

Model		Sum of Squares	D f	Mean Square	F	Sig.
	Regression	7.036	1	7.036	12.410	.002[b]
1	Residual	10.773	19	.567		
	Total	17.810	20			

a. Dependent Variable: IFRS- Lower Cost of Capital?

b. Predictors: (Constant), IFRS-Increased Cross –border Investments?

By using the same extracted principal components as shown on Table 1, we have then devised a second pairwise regression model. The dependent variable used was: Improved Quality & amp; Timeliness of Information, as predicted by
The following independent variables:

Comparable Reports from I FRS?
IFRS-Better Reporting Transparency By More Disclosures
IFRS- Increased Cross-border Investments?
Harmonization & amp; Streamline-Internal /External Reporting
Complete IFRS Convergence NOT Likely?

Table 7: Descriptive Statistics

	Mean	Std. Deviation	N
Improved Quality & Timeliness Of Information	2.10	1.294	20
Comparable Reports from IFRS?	3.30	1.302	20
IFRS-Better Reporting Transparency By More Disclosures	3.45	1.276	20
IFRS –Increased Cross-border Investments?	2.05	1.146	20
Harmonization & Streamline-Internal /External Reporting	2.20	1.322	20
Complete IFRS Convergence NOT Likely?	3.60	1.231	20

Table 7 shows the descriptive statistics obtained with the new set of variables for Model 2.

Table 8: Variables Entered/ Removed [a]

Model	Variables Entered	Variables Removed	Method
1	Harmonization & Streamline-Internal /External Reporting	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

a. Dependent Variable: Improved Quality & amp; Timeliness Of Information

Tables 8 and 9 show the final model 2 included variables and the overall model fit. Table 9 shows good fit with r^2 of .722 and adjusted r^2 of .706, with p <.05 level of significance, F= 46.638 (df= 1, 18). Table 10 also validates a good model fit with p<.05, level of significance.

Table 9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.849[a]	.722	.706	.701	.722	46.638	1	18	.000

a. Predictors: (Constant), Harmonization & amp; Streamline- Internal/ External Reporting

Table 10: ANOVA [a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	22.945	1	22.945	46.638	.000[b]
1	Residual	8.855	18	.492		
	Total	31.800	19			

a. Dependent Variable: Improved Quality & amp; Timeliness Of Information

b. Predictors: (Constant), Harmonization & Streamline-Internal/ External Reporting

We therefore have strong evidence to reject Ho and indicate that financial reporting harmonized by use of IFRS for both internal and external reporting indeed improves quality and timeliness of financial reporting, thus Ho is rejected.

Ho: Disclosure of transparent financial information, consistent with global standards via IFRS will make financial information less reliable and credible for investors, operating managers and cause better harmonization and streamlining;

Ha: Disclosure of transparent financial information, consistent with global standards via IFRS will make financial information more reliable and credible for investors, operating managers and cause better harmonization and streamlining.

Summary and Conclusions

In conclusion, most prior studies do not support the view that higher accounting quality is associated with, or stems from mandatory IFRS adoption. Some studies seem to exhibit hopelessly mixed results, while others conclude that there is indeed a potential link. Overall, the empirical studies on accounting quality effects from mandatory IFRS adoption are still inconclusive (Daske et al., 2007), and are probably confined to measuring the transition effect with the limited data available (i.e. with only one or two years following mandatory adoption) and have a limited sample size. As the mixed and inconclusive empirical results of mandatory IFRS adoption suffer the same issues as voluntary IFRS adoption, the present research applies the IPOO model to test whether the influence of IFRS adoption alone s can produce higher quality accounting output.

It is possible that reporting incentives influence the process of adoption of accounting standards, which ultimately determines the accounting quality that lead to better outcome. However this will continue to be a major area of examination as most studies performed to date have yet to prove a conclusive conclusion.

We would; therefore, further recommend that supplementary studies should be performed, as more countries and firms embark on the IFRS adoption, in order to validate the relationship between IFRS convergence levels, and financial reporting transparency and the cost of common equity. Given the complexity of global trade and investors' level of sophistication, as well as the tremendous diversity of the capital markets, a greater and more homogenous sample of global companies seem to be required in order to attain a better assessment of IFRS adoption and its consequences.

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Antecedents of Career Progression and Moderating Role of Gender in Financial Sector of Pakistan

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Abstract

Women represent more than 50% of work force and their representation in the top management does not commensurate with this statistics. This highlights that the organization recruiting and promoting individuals for top positions are not taking advantage of the full talent pool. Since half of the individuals are females a number of questions are posed; despite doing all the right stuff (getting a similar education as the men, working in similar industries, not moving in and out of the work force, not removing their names from consideration for a transfer more often) and also outstanding in their fields, they are unable to climb up the corporate ladder. Consequently, their career progression is unlike those of their male colleagues.

Keywords: *Glass Ceiling, Social Capital Measures, Leadership, Institutional Factors, Gender diversity, Gender.*

Introduction

A career is broadly defined as a lifelong process of work-related activities that includes both objective and subjective aspects (Hall, 2001). The career progression also refers to an upward movement or advancement made by individuals in a particular job within the organizational world (Abraham, 2011). Furthermore, individual career development on the other hand is an on-going series of stages characterized by unique concerns, themes and tasks (Greenhaus et al., 2009). In other words individual managing his/her own career within or between two or more organizations.

The 21st century has witnessed women empowerment and gender equality and Women Career Advancement (WCA) is a buzz word and a topic which is deeply studied and promoted in developed economies. In line with this is the Millennium Development Goal (MDG) number 3 which states to promote gender equality and empower women by 2015. The 55th session of the Commission of Status of Women (CSW) who meets every year in USA, with an agenda to address all the issues of women globally, has in their conference agreed to the conclusion last year (2011) that there be access and participation of women and girls in education, training, science and technology, including for the promotion of women's equal access to full employment and decent work. Even now it has been almost seven decades since the establishment of CSW and the world at large is still demanding gender equality and breaking the Glass ceiling barriers which prevent the women to move up from the corporate ladder. The question arises why this issue has not been addressed in the last 70 years.

The issues related to career progression and women have been empirically investigated specifically in developed economies of North American and Europe. However, in Asian countries not many studies conducted in this. In this study we have developed a holistic model of career progression while integrating different important variables i.e. of Social Capital Measures; Leadership Traits and Institutional factors and by taking gender as moderating variable. Little work has been done regarding the integration of social capital measures, leadership traits and institutional factors that provide support for women's upward progress through management levels. The present study may provide clarity for organizational leaders to identify growth barriers existing in their organizations, leading their women employees towards a glass ceiling and to determine what relationship of these factors have with the number of women at the top positions.

The literature review has spelled out many studies that have undertaken many variables individually e.g. networking (Noe, 1998) or mentoring (Derher and Ash, 190; Ragins, 1989) etc. affect alone on the career progression. The career progression is mainly discussed about in terms of male individuals for their career success (Melamed, 1995) and the missing elements for career progression as far as female individuals is concerned (Cross and Linehan, 2006; Melamed, 1995) is the missing link has been identified in the present study. Little evidence is their so as to support the same for female gender. This study is unique in respect that it attempts to signify the importance of the integrative and individual affects of glass ceiling factors which are social capital measures, leadership traits and institutional factors on women's career progression to top echelons of the organizational management.

Gender and Career Progression

The concept of glass ceiling (GC) is not new in the discipline of Human Resource Management – but the issue of Gender equality still remains unresolved. It has its roots since the beginning when women folk started working at all levels in the organization. The term was, however, coined in 1986 when the writers of the Wall Street Journal described the GC metaphor. It is unseen by the naked eye and constitutes an invisible barrier for not only women but minority groups, preventing them from moving up the corporate ladder (Carli and Eagly 2001; Ridgeway 2001; Townsend

1997). Many writers have tried to explain this phenomenon. Oakley (2000) however, had explained the barriers that produce GC possibly following into the following three categories:

a) Corporate practices such as recruitment, retention and promotion;
b) Behavioral and cultural causes such as stereotyping and preferred leadership; and
c) Structural and cultural explanations rooted in feminist theory.

The review of literature shows the two dominant theories which are i.e. social role theory (Eagly 1987) and expectations state theory (Berger et al. 1980) - well known in the structural and cultural explanations phenomenon. At the heart of these both theories lies the fact that men and women are assigned different roles in the society due to their sexual characteristics. Men and women are assumed to possess traits that identify them with preconceived roles that they occupy (Eagly and Karau 1991). In relation to these social roles there are explicit expectations that are identified with the individuals holding a particular position of a detailed social role category (Eagly et al. 2003). Expectation states theory predicts parallel effects of actions and assessment as social role theory (Ridgeway 2001). Based on these views the present study intends to explore the glass ceiling factors (e.g. social capital measures, leadership traits and institutional factors) which flow or derived from the social role theory and expectations state theory.

An extensive review of literature indicates a number of factors e.g. role of social capital measure, institutional and leadership traits plays a significant role to address the issue of Glass ceiling in case of women career progression in the corporate world (Kottke and Agars, 2005; Terjesen, 2005; Davey, 2008; O'Neil and Bilimoria, 2005).The omission of women from positions in top management indicates the presence of a glass ceiling: a barrier that appears invisible but is strong enough to hold women back from top-level corporate jobs (Jackson, 2001). This lack of advancement happens merely because these managers are women and not because these female managers lack job-relevant skills, education, or experience (Goodman, Fields, & Blum, 2003; Insch et al., 2008).

The human capital theory posits that the glass ceiling is justified because women have fewer investments (e.g., education, experience) in their careers than men. Secondly organization or systemic barriers, such as women working in less advantageous positions with fewer opportunities for advancement develops barriers to career progress. Thirdly men and women have different management styles. Women are thought to be too concerned with the feelings of others, submissive, and too emotional to be successful managers. (Tokunaga and Graham, 1996).

The glass ceiling may cause lower advancement rates for women and the contributory justification for low female advancement rates may include: (a) discrimination, (b) education, (c) motivation, (d) social conditioning, and (e) personality traits (Cutler & Jackson, 2002). Some systemic barriers that contribute to the glass ceiling include: (a) dual labor markets for men and women, (b) dominance of white males in management, and (c) lack of mentors and role models for women in many organizations (Goodman, Fields, & Blum, 2003). Bell, McLaughlin, and Sequeira (2002) observed that organizational barriers include: (a) gender stereotypes, (b) lack of executive management commitment to gender equality, and (c) lack of opportunities for women to gain necessary job experiences for advancement.

The glass ceiling as an invisible organizational barrier that prevents women from obtaining top positions in the corporate management (Powell and Graves, 2003). The most important and highest-paying jobs in a corporation are in the top echelons (Bellinger, 1996; Jordon, Clark, & Waldron, 2007). Because the organizations are hierarchically in nature, there are fewer top management positions. For this very reason, only a handful of either men or women will reach these top levels. Traditionally these positions are belonged to men (Bellinger, 1996; Jordon, Clark, & Waldron, 2007). Now the business' challenge is to enlarge these high-level leadership opportunities for minorities and women.

A survey study conducted by Townsend (1997) of Fortune 1000 companies where he collected data from 1200 women and concludes that obstacles to women are not intentional. An extensive review of literature revealed that gender seems to be the most detrimental factor affecting the women career progression (Melamed, 1995). Towards this end, different theories and models accounting for the emergence of gender related behaviors in organizations and consequently the creation of GC, fall in to three categories:

a) Biological explanations;
b) Socialization explanations; and
c) Structural and cultural explanations (Lueptow et al., 2001)

It is asserted that career progressions of an individual in developing countries as well as developed countries are no different except in terms of the progress made by either gender (Ismail & Ibrahim 2008; Evans 2002). An extensive literature review highlights that females path of career progression is different from males career progression in various organizational setting (Ismail 2003; Theranou 1997; Greenhaus & Parasuraman 1993). This is substantiated by the fact that females have been given or have assumed the task to maintain balance between work and family (Loder 2005) e.g., to bear child rearing responsibilities (Edson, 1981) and looking after elders (Smith 2004). In a subtle way, it is directing towards adopting or giving less to no priority to career progression.

Now the question arises as to how these high level leadership opportunities might be achieved? One of the answers might be the integrated and individual impact of social capital measures (which include mentoring, coaching, training and networking), institutional factors (which includes organizational culture (gender discrimination, sexual harassment policy, exclusion from informal system support etc.), and organizational structure (social norms, cultural norms etc.) and leadership traits (drive to lead, self-confidence, integrity etc.). These three components combined and individually might have a better prospect to overcoming the obstacles that were previously considered a hurdle will no longer be seen as obstacles and the females will be able to reach the top echelon positions in the corporate world, setting of any organization more easily and smoothly.

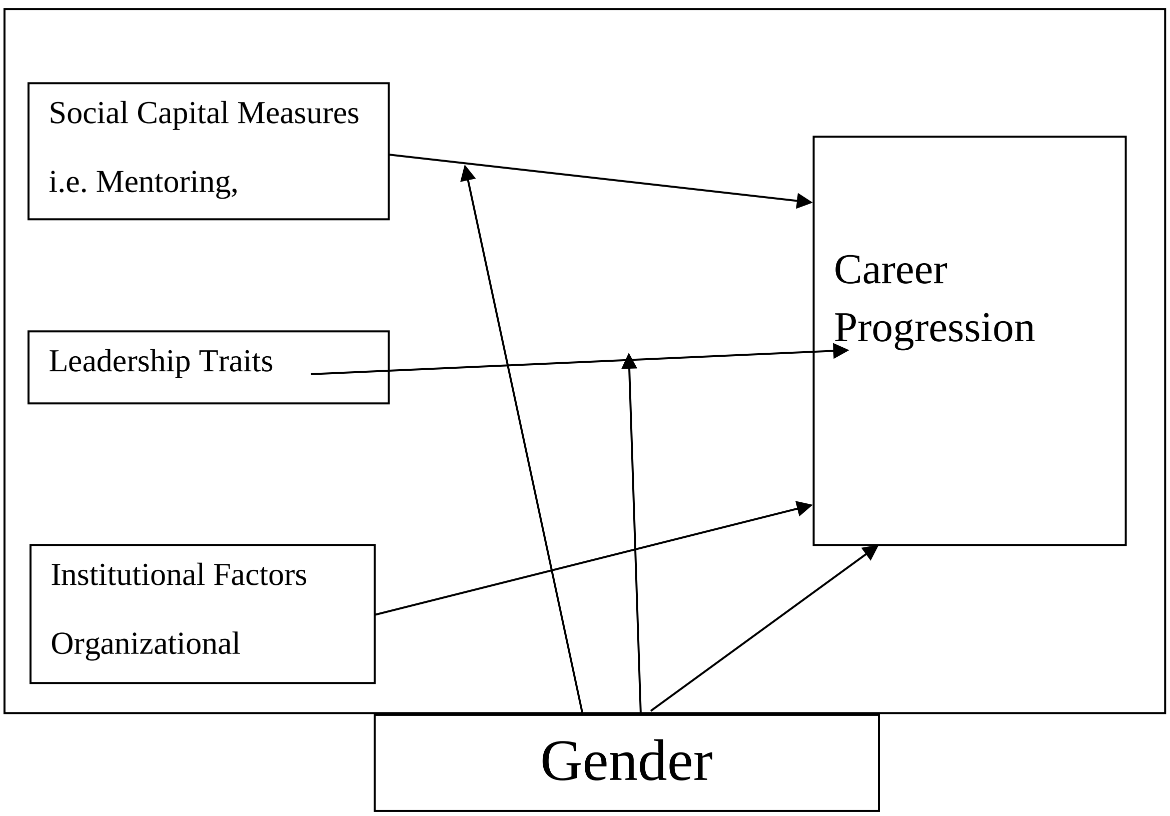

Figure No. 1: Antecedent of Career Progression

Gender and Social Capital Measures

Previous studies have shed little light to the social capital factors independently that drives an individual to climb the corporate ladder and becomes successful as part of the top management of an organization. Although several studies have discussed the importance of these social capital measures with reference to career advancement especially from the male perspective i.e. networking (Noe 1988); mentoring (Derher and Ash, 1990; Ragins 1989 1990); executive coaching (Zomorrodian, 2000) and training (Thernou et. al 1994); The authors in their studies point to a direct relationship between each of these above mentioned social capital measure and career progression individually. According to them, all of these measures on their own alone enhances the prospects of an individual to progress and become part of the top management. There are studies that have taken account of integration of mentoring and career success (Burke & McKeen, 1997) and hence there is a generous gap in the body of literature for taking into account the integration of these measures and therefore based on the above studies and the argumentation, following preposition is developed:

Preposition 1: The Social capital measures positively affect the career progression of an individual

A common bias against women appears to happen with approximately equal strength at all levels of organizations. Bases on responsibilities to shoulder, females are also left behind in terms of coaching (Zomorrodian, 2000), mentoring (Derher & ash, 1990), networking (Noe, 1988) and training within the organization (Thernou et al., 1994). The shortage of female corporate officers is the result of lack of networking, mentoring and training that has operated at all levels, and is not evidence of a particular obstacle to advancement as women draw near the top. Consequently, the problem may not be a glass ceiling (Eagly & Carli, 2007b).

A number of studies have been conducted to examine the impact of networking, mentoring, coaching, training, leadership traits and styles of individuals and institutional factors of organizations for career success. For male these relationships hold true (Chandler & Kram, 2004; Krewson, 2004; Zomorrodian, 2000; Hunt, 1983) but for females there is formidable challenges to take advantages of these measures for their career advancement (Valerio, 2009; Schipani et al., 2009). Interventions, such as networking, mentoring and traning of females will help in increasing their number in the management ranks, they have an important role to play and are not counterproductive. Based on above findings following preposition is developed

Preposition 2: The Social Capital measures and the Career Progression of an individual relationship will be moderated by Gender.

Gender and Leadership Traits

Theoretical justification for the continuing importance of trait research in leadership comes especially from attraction-selection-attrition (ASA) theory (Schneider, 1987). ASA theory suggests that, over time, organizational members tend to become homogeneous over time in terms of values and other personal traits. This leads to increasing selection of similar people and attrition of dissimilar individuals. A number of studies confirm that leaders' own traits provide substantial direction in the common values adopted (Giberson et al., 2005; Schneider et al., 1998).

Leadership Trait continues to be an area of considerable importance in organizational theory. This is especially true for developing economies where issues such as severe skills shortages and historical divides between societal groups lend particular weight to effective leadership (April and April, 2007; Denton and Vloeberghs, 2003; Finestone and Snyman, 2005). Researchers have never abandoned trait research (Zaccaro, 2007). Subsequent literature improved in method, found that traits such as emotional intelligence, integrity, self-efficacy, resilience to stress, positive attitudes towards authority, a protestant work ethic, and need for socialized power or achievement but low need for affiliation (Bass, 1990; Judge et al., 2002; Lord et al., 1986; McClelland and Boyatzis, 1982; Yukl, 1998) may facilitate leader effectiveness or the emergence of leaders. The leadership traits help career progression of individuals and on bases of above argument following preposition is proposed

Preposition 3: Leadership traits are positively related with Career Progression of an individual.

What is behind gender discrimination, and confirmed by many studies, is that people associate women and men with different traits and associate men with more of the traits that denote traditional leadership (Brown, 2010). According to psychologists, this is a conflict between communal and agentic. The women are linked with communal qualities such as helpful, friendly, and compassionate. Men are linked with agentic qualities such as aggressive, dominant, self-reliant, and assertive. The agentic traits are also linked with effective leadership (Eagly & Carli, 2007b). Further research by Eagly and Carli (2007a) indicated that the psychological portrayal of good leaders is neither feminine nor masculine but includes traits from both the agentic and communal domains in approximately equal measure.

Eagly (1987) noted that the viewpoint held by a majority of people about the differences between women and men can be summarized in terms of two aspects, the communal and the agentic, both of which define positive personal attributes. Behaviors such as assertiveness, which attract praise in male leaders, are interpreted in less favorable terms when exhibited by female leaders. Gender stereotyping causes women's leadership to be seen differently than men's leadership, even when both genders are demonstrating exactly the same behavior. Because leaders are thought to have more agentic than communal qualities, stereotypes about leaders resemble stereotypes of men. Consequently, men seem more natural in leadership roles, placing women at a disadvantage (Eagly, 2007). On bases of above finding following preposition is proposed

Preposition 4: Leadership traits and Career Progression of an individual relationship will be moderated by Gender.

Gender and Institutional Factors

Social norms, cultural stereotypes and power and privilege in organizations provide the 'invisible foundations' for organizational decisions about which jobs and how much opportunity are suitable for certain types of workers (Tomaskovik-Devey 1993; Acker 1990; Roos and Reskin 1984). These decisions determine the ways that complex organizations structure works, creating barriers for women. Employers use administrative rules and procedures to regulate hiring, promotions, and wage systems in the 'internal labour market' (ILM) of organizations (Osterman 1984; Doeringer and Piore 1971). The ILM theory is useful in analyzing more formally and precisely the notion of 'pipeline' for career advancement (Harlan and Berheide 1994). The institutional factors affect the career progression of individuals and on the bases of above argument following preposition is proposed

Preposition 5: Institutional factors are related to Career Progression of an individual.

There seem to be no easy solutions to the problems of increasing opportunities for gender equality in leadership. Some of the barriers are institutional (organizational structure), some cultural (organizational culture) and some historical. Women's self-perceptions may also be problematic if capable women cannot imagine themselves in leadership roles, or are confused about what leadership characteristics they should exhibit. The masculine organizational culture is also one of the key barriers as an institutional factor for the persistence of the glass ceiling phenomenon. The organizational culture is based on norms and beliefs, which are more frequently adhered to by men and women (Vianen & Fischer, 2002). Consequently, these masculine organizational cultures consist of "hidden assumptions, tacit norms and organizational practices that promote forms of communication, views of self, approaches to conflict, images of leadership, organizational values, definitions of success and of good management, which are stereotypically masculine" (Vianen & Fischer, 2002: 316). The following preposition is developed, based on the above discussion and the argumentation:

Preposition 6: Institutional Factors and Career Progression of an individual relationship will moderated by gender

Table 1: Dimensions of the variables of the proposed study

Social Capital Measures (DV)	**Leadership Traits (DV)**	**Institutional Factors (DV)**	**Gender (Moderator)**	**Career Progression (DV)**
Networking (NW) Training (TRG) Coaching (C) Mentoring (M)	Drive (D) Leadership Motivation (LM) Integrity (I) Self Confidence (SC) Knowledge of Business (KOB)	Organizational Culture (OC): a. Sexual Harassment (SH) b. Exclusion from informal system of support Organizational Structure (OS): 1) Social norms 2) Cultural norms 3) Power and privilege in organizations	Male Female	Heading an organization / Part of the top team management

Conclusions

The glass ceiling is described as an absolute barrier at an exact level within the organizations. However, there is a general bias against women that appears to operate with equal strength at all levels of the organization (Eagly, 2007). This contention provides the wrong notion about the gender equality in the organizational setting. Commonly, the decision and policy makers present the rational by arguing females chief executive officers, state governors, and college presidents, the glass ceiling metaphor is no longer accurate. This rational is exposed in the corporate sector and thanks to the information technology revolution. The shortage of female executive officers is the sum of discrimination that has existed at all levels of the organization, not evidence of a particular obstacle to advancement as women approach the top. By portraying a single, unchanging barrier, the glass ceiling fails to incorporate the complex and diverse challenges that women face in their pursuit of leadership positions (Eagly & Carli, 2007b).

Eagly and Carli (2007b) posited that if corporations want to see more women in their executive suites, they should perform the following twelve actions.

1) The first action is to increase people's understanding of the psychological drivers of prejudice toward female leaders.
2) The second action would be to change the long-hours standard.
3) The third action would be to increase the objectivity of performance appraisals.
4) The fourth action is to use open-recruitment instruments such as employment agencies, instead of informal social networks.
5) The fifth action is to ensure a critical mass of women in executive positions and not just token representation.
6) The sixth action is to avoid having a solitary female member on any team.
7) The seventh action is to increase social capital.
8) The eighth action is to prepare women for line management with appropriately demanding assignments.
9) The ninth action is to create family-friendly human resources practices.
10) The tenth action is to allow employees, who have significant parental responsibility, more time to prove themselves deserving of a promotion.
11) The eleventh action is to provide high-performing women who leave the workforce an opportunity to return to responsible positions when their circumstances change.
12) Finally, the twelfth action is to encourage male participation in family-friendly benefits.

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The Effect of Employee Skills, Behavior and Human Resource Practices Flexibility on Firm Performance: Perceived Data from FMCG Industries

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Abstract

This paper aims to show the effect of flexibilities of employee skills, employee behavior and human resource practices on firm performance in context of fast moving consumer goods (FMCG) companies. Total 420 questionnaires were distributed among the respondents of 50 FMG industries in Bangladesh and received data was analyzed using AMOS. Structural Equation Modeling (SEM) analyses were performed for testing hypothesis. The study described employee skill flexibility, employee behavior flexibility and human resource practice flexibility has positive effect on firm performance. It explains how employees' skill, flexibility and human resource practice flexibility enhances firm performance and eventually results in greater productivity. The relationship of employee skill flexibility and productivity observed in this study indicates that to achieve higher productivity and greater firm performance, companies need to focus more on training employees with better skills and shape their behavior into a positive attitude towards work and performance. The results indicate employee skill and behavior along with human resource practices highly influences firm performance and the productivity of the employees as well. This study has also identified a very important relationship regarding attitude and skill of employee. Organizations can put more emphasis on these factors to improve employee skill pool and behavior which will eventually increase firm performance and can help firm to improve their competitiveness. Before generalizing the findings, the limited scope of this research should be noted. However, a comparative study, including foreign MNCs and local companies, could be undertaken to observe the effect of employee skills and behavior in firm performance and employees' productivity.

Keywords: *Employee skill flexibility, Employee behavior flexibility, HRM practices flexibility, firm performance, FMGC industries, Structural equation modeling*

Introduction

Human resources are one important source of competitive advantage in a rapidly changing competitive business environment. In today's dynamic and challenging business world, it is one of the core activities of the organizations to remain competitive, enjoy maximum profitability, sustainability and greater market share (Lee, Lee, & Wu, 2010). One of the key elements to drive value and achieve optimization in business is maximization of performance of the employees. Human resource management strategies, now a day, has become the ultimate challenge to perform sustaining in the global economy. However, it can contribute to sustain competitive advantage through facilitating the development of competencies that are firm specific.

The business experiences a changing environment in the knowledge economy and has made acceptance of human resource practices vital for gaining competitive advantage (Khan, 2010). The economic environment is changing rapidly and this change is characterized by the phenomena of globalization, changing customer and investor demands, and ever-increasing product-market competition. In order to compete successfully in this environment, organizations need to improve their performance by innovating products and processes, reducing costs and improving quality, and productivity and product distribution. HRM aims to ensure that the organization obtains and retains the skilled, committed and well-motivated workforce it needs (Calfskin, 2010).

Human resource flexibility is a dynamic capability of the firms, which involves a set of organizational routines that act upon a firm's human capital so as to reconfigure, expand, or contract the human resources and processes according to changes in business configuration. (Bhattacharya, 2005). Flexibility is about an employee and an employer in order to make changes to when, where and how a person will work to better meet both business as well as individual needs. According to (Zollo & Winter, 2002), a dynamic capability is a learned and stable pattern of collective activity through which the organization systematically generates and modifies its operating routines in pursuit of improved effectiveness. Flexibility in human practices enables both individual and business needs to be met through making changes to the time, place and manner in which an employee works.

The objectives of this study are:

1) To measure the effectiveness of employee skill, employee behavior and human resource practice flexibilities on the firm performance,
2) To value the employees knowledge, skill and behavior to changing environmental conditions
3) To analyze the values of an effective human resource flexibility and effects on the firms productivity and performance

Rationally of the Study

Human resource (HR) flexibility in particular is a valuable firm capability and researches have been done on examining the interaction effects of employment mode, environmental dynamism, the employment flexibility and firm performance (Lepak, Takeuchi, & Snell, 2003). Although researchers have shown that flexibility in other functional areas of the firm, such as operational flexibility, product customization and resource flexibility is related to increased firm performance (Bhattacharya, Gibson, & Doty, 2005); (Garud & Kotha, 1994); (MacDuffie, 1995); (Rangan, 1998) human resource flexibility and its possible contribution to firm performance and competitive advantage has not been examined empirically.

Human resource flexibility is a dynamic capability of the firm (Eisenhardt & Martin, 2000); (Teece, Pisano, & Shuen, 1997); (Zollo & Winter, 2002) in the sense that it is focused on adapting employee attributes- knowledge, skills and behaviors- to changing environmental conditions (Wright, Dunford, & Snell, 2001); (Wright & Snell, 1998). Flexibility of employees gives the organization the ability to transform and amend current practices in responses to changes in the environment. As proposed by (Wright & Snell, 1998); (Bhattacharya, Gibson, & Doty, 2005), human resource is composed of three dimensions: employee skill flexibility, employee behavior flexibility and human resource flexibility. The following report is based on the analysis on the degree of which the proposed dimensions are distinctive and the degree to which its effects the firm performance.

In order to maximize the firm performance, it is important to study the employee skill flexibility, employee behavior flexibility and human resource practice flexibility and its effects on the employees' effectiveness. As a result of increased competitiveness, the firms are looking for developing the HR practices so that not only the firm itself enjoys profitability but also the employees as well as the stakeholders and society gains maximum advantage from the process of the effective human resource practices.

Bangladesh, a developing nation and like other developing and developed countries. The business sector has been flourishing. Fast Moving Consumer Goods (FMCG) is one of the most familiar business sectors of Bangladesh. There are plenty of local and multinational organizations involved in this sector. They are producing huge amount of products. The consumer purchasing rate is high too. But, in Bangladesh, the MNCs have a strong and effective HR department, where local companies have just the opposite. The HR functions of multinational and local companies are similar but not same. Recruitment & Selection, Compensation and Benefit (Remuneration), Reassignments, Performance Appraisal and review, Policy and strategy developing and implementation, HRIS, Position Classification, Training & Development, Leave, Canteen and transport management etc are the core functions of HR that are performed in Bangladesh. Most of the companies arrange training sessions to train employees for to increase efficiency.

Theoretical Relevance

Dimension of Human Resource Flexibility

In order to enjoy maximum profitability, sustainability and greater market share business are to remain competitive. In an uncertain market scenario, the degree supposed to competition increases within the sector often. The firms are constantly bringing innovation and build strategies, in order to sustain in the market, enjoy benefit and become the market leader. Human resource flexibility is the capability of inviting change is readiness to adapt to new business relationships, rapid growth in sales and new product offerings. Human resources flexibility is an

internal trait or characteristic of the firm that can be addressed through three conceptual concepts: employee skills, employee behaviors and human resource practices (Wright & Snell, 1998) (Bhattacharya, Gibson, & Doty, 2005).

HR Flexibility and Firm Performance

Human resource flexibility is the ability of the firm to respond to changes in terms of firms resources in respect to the changes in the environment. The research on human resources flexibility and firm performance have suggested that the firms with higher levels of capabilities have higher levels of performance (Jaiswal & Saxena, 2012) (Saraf, Langdon, & al, 2007). As (Wright & Snell, 1998) have suggested, human resource flexibility is the extent to which the firm's human resources possess skills and behavioral repertories that can give a firm options for pursuing strategic alternatives in the firm's competitive environment, as well as the extent to which the necessary human resource management practices can be identified, developed, and implemented quickly to maximize the flexibilities inherent in those human resources.

Employee Skill Flexibility and Firm Performance

According to (Bhattacharya, 2005); (Theodore & Peck, 2002) employee skill flexibility is the ability to access specialized skills and capacities on a selective and discontinuous basis. Firms with greater pool of skilled employees and their ability to shift into various skills are tending to have greater productivity. With employee skill flexibility, firms have the capability for the employees can fulfill different tasks and activities to meet changes in their work requirements (Bhattacharya, 2005) (Van der Berg & Van der Velde, 2005). This enables firms to gain maximum output from employees and have greater productivity which will result in higher profitability for the organization. According to (Bhattacharya, Gibson, & Doty, 2005), skill flexibility can be created in two different ways. One of the ways is that, firms can have their employees' poses a set of broad-based skills and have the ability to utilize them under various demand situations, where broad-based skills are important as they generate output flow for existing requirements and are also capable of producing output for probable alternative requirements. The other way of skill flexibility is that, firms can recruit employee with a wide range of specialist people, who have specialized skills in specific sectors, the employees who provide flexibility by allocating the firm to reconfigure skill profiles to meet up the changing needs (Bhattacharya, Gibson, & Doty, 2005).

Skill flexibility will enable firm to recognize its employees, when the need arise, and then the employee as well as firm can achieve the desired skill profile to fit in along with the changing demand (Bhattacharya, Gibson, & Doty, 2005). A firm can develop skill flexibility by job rotation, project-based work arrangements and cross-functional teams, all of these generate broad skill configuration specific to the firm that are not easily copied or replicable. With firm's higher skill flexibility, it can be deduced that the employees will have greater productivity and thus result in a higher performance of the firm. It can therefore be hypothesized that:

H_1: Employee skill flexibility is positively associated with firm performance

Employee Behavior Flexibility and Firm Performance

Employee behavior flexibility, in simplest terms, is described as the willingness to be flexible in order to learn and get trainings (Van der Berg & Van der Velde, 2005). The behavior flexibility is the capability of an employee to adapt to a changing situation or a changing environment and demonstrate proper attitudes under different circumstances. The employee behavior flexibility is different from employee skill flexibility in the sense that an employee may be skilled in different type of jobs and possess a variety of broad-based skills, however, the employees may lack in the ability and the willingness to adapt to a changing environment and situation. On the other hand, employees may be highly motivated to adjust and adapt to a changing environment whereas they may in lack the skill and the flexibility in gaining the skill that is required to implement and adapt the changing environment. In order to remain flexible, firms can recruit and motivate employee where they show greater adaptability.

As (Bhattacharya, Gibson, & Doty, 2005) have suggested that behavioral flexibility creates value in two ways. First, an employee's ability and willingness to deal with different situations creates value in the sense that the cost of non-adjustments to a changing situation remains unused. Employees will have the capability to adapt and adjust to the complexities and changing environment (Lepine, Colquitt, & Erez, 2000). Secondly, behavioral flexibility at the organization level creates value and it enables the firm to deal with a variety of situations and facilities to a changing implementation. With higher employee behavior flexibility where the organizational culture has adaptability to a changing environment, it is likely to conclude that the employees will result in greater productivity and hence bring in greater firm performance. It can therefore be hypothesized that:

H_2: Employee behavior flexibility is positively associated with firm performance

HR Practice Flexibility and Firm Performance

Human resource flexibility is the extent to which the firm's human resource practices can be applied on the employees and adapted within the firm, and at different units and divisions of the organization. The human resource practice flexibility refers to the degree of how fast the employees can adapt and apply to the changing human resource practices. According to (Bhattacharya, Gibson, & Doty, 2005), human resource flexibility creates value in several ways.

At first, with human resource flexibility, the firm is more readily able to adapt to changing situations or environments. Next, flexibility in human resource practices may invite flexible employee behaviors. Also, human resource practice flexibility allocates the firm to maintain similar human resource practices across the different units of the firm. Achieving strategic consistency and adapting factors which meet the local concerns. In this way, firms can assign and reconstruct the skills of the employees (Bhattacharya, Gibson, & Doty, 2005). If there are differences in the compensation and benefits of the employee, then it might become difficult to reallocate and rotate employees from one unit to another. So with the human resource practice flexibility, it will be easier for firms to relocate employees. Human resource practice flexibility create an ability that is complex to emulate and will respond more dynamically to the changing environment and situation and eventually raise the productivity and have greater firm performance.

H_3: Human resource flexibility is positively associated with firm performance

Methodology

Sampling and Data Collection

The purpose of the study was to scrutinize influence of employee skill, behavior and resource flexibility on firm performance of FMCG industries in Bangladesh. In order to accomplish the objective of this research the researchers adopted a quantitative approach. The researchers argue that quantitative research methods may hold some merit with respect to deducing real time information on different HRM practices of FMCG industries, but such display past and longitudinal information, as is the characteristic of quantitative methods, will prove to be of little help in accepting and comprehending the development process and the flexibility HRM practices. Moreover, according to Martin and Beaumont (1998) quantitative methods are considered lacking in robustness to provide comprehensive and convincing descriptions of HRM development processes.

Researchers selected fifty FMCG industries for this study. Five hundred copies of designed structured questionnaire were distributed among fifty industries in Bangladesh to collect data over 6 months. The managers HR were contacted first to get official appointments, for distributing the questionnaires and for face to face interviews among the employees of different organizations.

Data was primarily collected from HRM related officers and managers, and specific emphasis was placed on those who were directly related to the HRM practices and policies. The purpose of the study was explained to the respondents prior to the visits. A total of four hundred twenty (420) respondents finally completed their responses to the questionnaires from the fifty FMCG industries.

In order to appropriately contrast the findings, similarity of research methods and research administration at the data collection stage were measured. Moreover, to take the method dynamics of the ongoing evolution with distributed questionnaire into account, exposition and synchronized data in the discussion meeting were also collected. The researchers' categorized data in distinct groups (e.g. related to flexibility of employee, skill and HR issues, and firm performance issues) based on theoretical assumptions.

Measures

The study we developed research instrument considered three areas of HRM practices with firm performance. The three HRM items were adopted from research carried out by Bhattacharya, Gibson, & Doty", (2005). Survey items were completed on 5-point Likert scale ranging from '1' (representing strong disagreement) to '5' (representing strong agreement). The employee skill flexibility consisted of seven items. The question in employee skill flexibility sample is: 1) "our firms can shift employees to different jobs when needed." The 'Employee Behavior Flexibility' consisted of eight items. The items included example: The flexibility in our employees' work habits helps us to change according to market demands etc. The 'Employee HR Practices Flexibility' measured seven items. The sample items for 'Employee HR Practices Flexibility' included for example (1) Flexibility of our HR practices helps us to adjust to the changing demands of the environment.

Another scale used by Miah and Bird (2007) was adopted for 'Organizational Performance.' It consisted of seven items which measure the firm's performance. These items are: company profit, employees working efficiency, growth in sales, company's growth, market share increase, service quality to customer and ability to adapt market changes. Each organizational performance item was measured with a 5-point Likert scale, where '1' represented strong disagreement and '5' represented strong agreement.

Causal Research: Multi-item Test

A 5 point Likert scale was used to question the respondents. The respondents were asked to rate on the scale from Strongly Disagree, Disagree, Neutral, Agree and Strongly Agree.

We designed tested the dependent variables- firm performance based on the independent variables. For the independent variables these are the questions designed to test each factors from every angle. In total there were 29 questions. Employee Skill Flexibility = 7; Employee Behavior

Flexibility = 8; Human Resource Practice Flexibility = 7; Firm Performance = 7; the sources of the research questions are derived from an earlier research “Bhattacharya, Gibson, & Doty”, 2005.

Measurement Method

Purification and reliability of the measurement variables

To purify the measurement scales and identify their dimensionality, principal component factor analysis with varimax rotation was applied to condense the collected data into certain factors. After factor analysis has been done, item-to-total correlation and internal consistency analysis (Cronbach’s alpha) were testified to confirm the reliability of each research factor.

Table 1: Reliability: Factor and all Variable Analysis

Variable	Factor Loading		Variance	Alpha	Factor Item	df	$\chi2$	P Value	$\chi2$ /df	GFI	AGFI	CFI	IFI	RMR	RMSEA
ES	5	.817	29.17	.646	.252	2.007	9.956	.000	4.978	.989	.945	.972	.972	.039	.097
	6	.807			.584										
	1	.528			.080										
	7	.442			-										
	2	.433			.050										
	Residual Item														
	3	.195			-										
	4	.155			-										
EB	5	.746	33.639	.724	.250	2.444	1.625	.000	.812	.998	.991	1.000	1.001	.020	.000
	6	.690			.142										
	2	.689			-										
	4	.658			.191										
	1	.567			.058										
	Residual Item														
	7	.618			-										
	8	.156			-										
	3	.151			-										
HF	1	.801	28.630	.674	.151	0				1		1	1	.000	
	2	.782			.166										
	7	.638			.022										
	Residual Item				-										
	5	.377			-										
	3	.335			-										
	4	.280			-										
	6	.100			-										
FP	1	.705	31.679	.651	.091	2.004	10.870	.000	5.435	.987	.934	.945	.946	.039	.103
	2	.662			.060										
	6	.622			-										
	5	.601			-										
	3	.585			.079										
	4	.430			.020										
	Residual Item				-										
	7	.077			-										

In this study, measurement items with a factor loading greater than 0.60 were selected as the member of a specific factor. The criteria of chi-square divided by degree of freedom, GFI, AGFI, CFI, IFI, RMR and RMSEA were used to evaluate the overall goodness-of-fit of the model. The first one is the ration of chi-square/degree of freedom. If chi-square/ degree of freedom (d.f.) is less than 3, it is considered as a good fit to the data. The second criteria is GFI (goodness-of-fit index), and third criteria is AGFI (adjusted goodness-of-fit index). The values of those indices should be greater than 0.90. The fourth and fifth criteria are CFI (comparative fit index) and IFI (incremental fit index) for which the values should be greater than 0.95. The sixth criterion is RMR (root-mean-square residual). The smaller the RMR is, the better the fit of the model. A value of less than 0.05 indicates a close fit. The last index is RMSEA (root mean square error of approximation). The RMSEA is acceptable when the value is less than 0.08 (Lee, Lee, & Wu, 2010).

Results

Factor analysis and reliability testing result

For all variables, the explanatory factor analysis is performed and leaving the residual items, the confirmatory factor analysis is performed. For the employee skill flexibility variable, the factor loading for ES5 is 0.817, ES6 is 0.807, ES1 is 0.528, ES7 is 0.442 and ES2 is 0.433. The residual item is ES3 and ES4 with factor loading value of 0.195 and 0.155 respectively. The variance is 29.17 and alpha is 0.646. After performing the confirmatory factor analysis, the factor loading for ES5 is 0.252, ES6 is 0.584, ES1 is 0.080 and ES2 is 0.050. For the employee behavior flexibility variable, the factor loading for ES5 is 0.746, ES6 is 0.690, ES2 is 0.689, ES4 is 0.658 and ES1 is 0.567. The residual item is ES7, ES8, and ES3 with factor loading value of 0.618, 0.156 and 0.151 respectively. The variance is 33.639 and alpha is 0.724. After performing the confirmatory factor analysis, the factor loading for ES5 is 0.250, ES6 is 0.142, ES4 is 0.191 and ES1 is 0.058.

For the human resource practice flexibility variable, the factor loading for ES1 is 0.801, ES2 is 0.782, and ES7 is 0.638. The residual item ES5 is 0.377, ES3 is 0.335, ES4 is 0.280 and ES6 is 0.100. The variance is 28.630 and alpha is 0.674. After performing the confirmatory factor analysis, the factor loading for ES1 is 0.151, ES2 is 0.166 and ES7 is 0.022. For the firm performance variable, the factor loading for ES1 is 0.705, ES2 is 0.662, ES6 is 0.622, ES5 is 0.601, ES3 is 0.585 and ES4 is 0.430. The residual item ES7 is 0.077. The variance is 31.679 and alpha is 0.651. After performing the confirmatory factor analysis, the factor loading for ES1 is 0.091, ES2 is 0.060, ES3 is 0.079 and ES4 is 0.020.

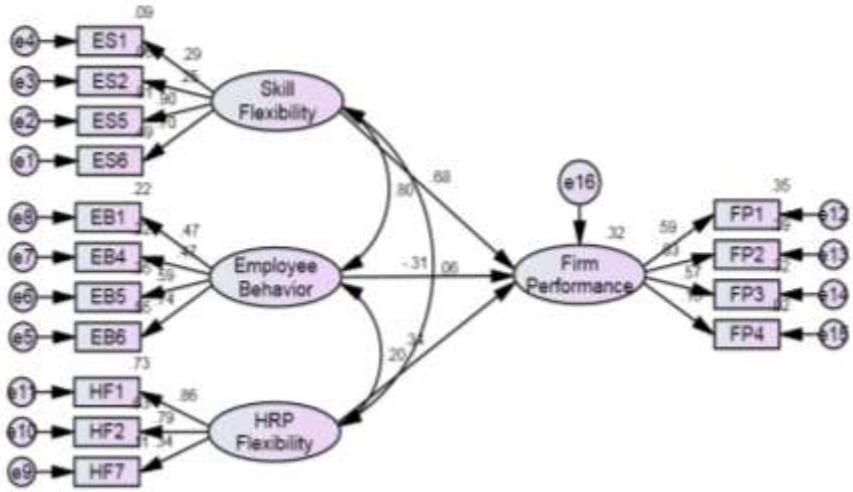
Table 1 represents the results of factor loadings for measurements of employee skill flexibility, employee behavior flexibility, human resource practice flexibility and firm performance. The table shows that a total of 29 variables (and 10 variables, mentioned as residual item which have low loading scores) have significantly high loading scores (higher than 0.6). The internal consistencies of all three constructs are also presented. It is shown that those variables within a factor tend to have a high coefficient of item-to-total correlation (higher than 0.5) that suggests a high degree of internal consistency for each dimension. In addition, Cronbach's alpha for the factors exceeds the generally accepted guideline of 0.7 (Wu 2005), which further confirms the reliability of the measurement items (Lee, Lee, & Wu, 2010).

The Hypothesis Testing

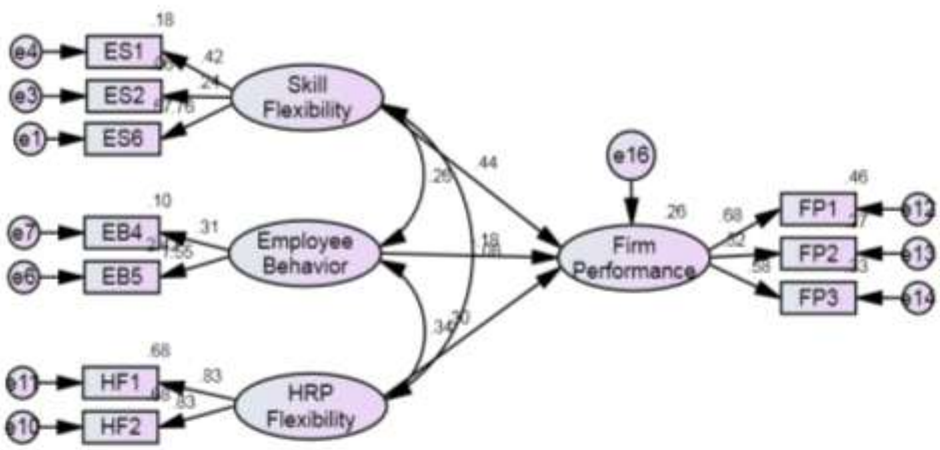
The hypotheses 1, 2 and 3 were tested by Structured Equation Model (SEM). SEM encompasses an entire family of models known by names, among them are covariance structure analysis, latent variable analysis, confirmatory factor analysis and often simply AMOS analysis (Lee, Lee, & Wu, 2010). SEM can also be used as a means of estimating other multivariate models, including regression, principal components, canonical correlation. The Amos 7.0 package software was used to analyze the relationships in the entire research model to find out the relationships among the variables in this model. The criteria of chi-square divided by degree of freedom, GFI, AGFI, CFI, IFI, RMR and RMSEA were used to evaluate the overall goodness of fit of the model. The first one is the ration of chi-square/degree of freedom. If chi-square/ degree of freedom (d.f.) is less than 3, it is considered as a good fit to the data. The second criteria is GFI (goodness-of-fit index), and third criteria is AGFI (adjusted goodness-of-fit index). The values of those indices should be greater than 0.9. The fourth and fifth criteria are CFI (comparative fit index) and IFI (incremental fit index) for which the values should be greater than 0.95. The sixth criterion is RMR (root-mean-square residual). The smaller the RMR is, the better the fit of the model. A value of less than 0.05 indicates a close fit. The last index is RMSEA (root mean square error of approximation). The RMSEA is acceptable when the value is less than 0.08 (Lee, Lee, & Wu, 2010).

Table 2: Evaluation of Goodness of Fit for SEM Study				
Goodness of Fit Indexes	**Cut-off Value**	**Casual Model**	**Fit Model**	**Note**
Chi Square χ2	5 to as low as 2 – Adjusts for sample sixe	856.410	88.50	
Relative χ2 (χ2 /df)	2:1 (Tabachnik and Fidell, 2007) 3:1 (Kline, 2005)- Adjusts for sample size	10.195	3.052	Good Fit
GFI	Values greater than 0.95	.792	.962	Good Fit
AGFI	Values greater than 0.95	.703	.927	Good Fit
CFI	Values greater than 0.95	.607	.931	Good Fit
IFI	Values greater than 0.95	.611	.932	Good Fit
RMR	Good models have small RMR (Tabachnik and Fidell, 2007)	.130	.062	Good Fit
RMSEA	Value 0.08 or below is accepted Less than 0.05 is a good fit Below 0.03 represents excellent fit	.148	.070	Accepted

The result from the casual model shows that the chi-square value is 856.410 and relative chi-square is 10.195. The other indices GFI is 0.792, AGFI is 0.703, CFI is 0.607, IFI is 0.611, RMR is 0.130 and RMSEA is 0.148 are beyond the cut-off value for the goodness of fit test. So the model was modified to build the fit model where the chi-square value is 88.50 and relative chi-square is 3.052 and is a good fit. The criteria GFI (goodness-of-fit index), and criteria is AGFI (adjusted goodness-of-fit index) is 0.962 and 0.927 respectively are values of those indices should be greater than 0.9 and so is a good fit. The next criteria are CFI (comparative fit index) and IFI (incremental fit index) is 0.931 and 0.932 for which the values should be greater than 0.95 and is a good fit. The criterion is RMR (root-mean-square residual). The smaller the RMR is, the better the fit of the model and the 0.062 and is a good fit. The last index is RMSEA (root mean square error of approximation) The RMSEA is 0.070 and is acceptable when the value is less than 0.08 and so it is accepted.



Casual Model



Fit Model

From the above results, we have the following conclusions:

The relationship between employee skill flexibilities and firm performance is positive and significant. The hypothesis 1 is accepted. The result found in the analysis are consistent with the previous studies, which concluded that firms with greater pool of skilled employees with the abilities to shift into various expertise are tending to have greater productivity (Bhattacharya, Gibson, & Doty, 2005). With employee skill flexibility, firms have the capability for the employees can fulfill different tasks and activities to meet changes in their work requirements (Bhattacharya, 2005) (Van der Berg & Van der Velde, 2005). The study also concludes that with firm's higher skill flexibility, the employees will have greater productivity and thus result in a higher performance of the firm.

Table 3: Correlations

Variable	**Mean**	**SD**	**1**	**2**	**3**	**4**
Firm Performance	.93	.18	1			
Employee Skill	2.66	1.08	.268**	1		
Employee Behavior	2.02	.58	.093	.467**	1	
Human Resource Practice Flexibility	1.24	.30	.222**	.061	.237**	1

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

Table 4: Path Analysis table of Fit Model

Path	Estimates (β)	S.E	C.R	Significance
Firm performance ← Employee Behavior	-.178	.031	-2.002	*
Firm performance ← HRP Flexibility	.303	.063	3.954	***
Firm performance ← Skill Flexibility	.437	.070	4.110	***

The result found in this analysis is positive but not significant and so it can be concluded that the hypothesis 2 is not supported. Employee behavior flexibility is negatively associated with firm performance. The result found in the analysis is inconsistent with previous studies, such as Lepine, Colquitt, & Erez, (2000) who concluded that employees will have the capability to adapt and adjust to the complexities and changing environment and that behavioral flexibility, at the organization level, creates value as it enables the firm to deal with a variety of situations and facilities to a changing implementation. According to Bhattacharya (2005), the behavior flexibility of the employee is the capability of an employee to adapt to a changing situation or a changing environment and demonstrate proper behavior attitudes under different circumstances. The result can thus conclude that employee behavior flexibility is different from employee skill flexibility in this sense that, an employee may be skilled in different types of job and possess a variety of broad-based skills as well; however, the employees may lack in the ability and the willingness to adapt to a changing environment and situation.

The result found in the analysis is positively significant and so it can be concluded that the hypothesis 3 is supported. It can be stated that human resource flexibility is positively associated with firm performance. The result found in the analysis is consistent with previous studies, such as Bhattacharya, Gibson, & Doty (2005), human resource flexibility of the firm is more readily able to adapt to changing situations or environments. Also flexibility in human resource practices may bring on flexible employee behaviors and human resource practice flexibility allocates the firm to maintain similar human resource practices across the different units of the firm, so as to by achieving strategic consistency and so adapting factors which meets the local concerns (Bhattacharya, 2005). The study can therefore conclude that human resource practice flexibility create the ability that is complex to emulate and will respond more dynamically to the changing environment and situation and eventually raise the productivity and have greater firm performance.

Theoretical Implication

Employee skill flexibility is the ability to access specialized skills and capacities on a selective and discontinuous basis (Bhattacharya, 2005); (Theodore & Peck, 2002). With employee skill flexibility, firms have the capability for the employees can fulfill different tasks and activities to meet changes in their work requirements (Bhattacharya, 2005) (Van der Berg & Van der Velde, 2005). This enables firms to gain maximum output from employees and have greater productivity which will result in higher profitability for the organization. Employee behavior flexibility is as the willingness to be flexible (Van der Berg & Van der Velde, 2005) and the capability of an employee to adapt to a changing situation or a changing environment and demonstrate proper behavior attitudes under different circumstances. Employees will have the capability to adapt and adjust to the complexities and changing environment (Lepine, Colquitt, & Erez, 2000).

Practical implication

The study reveals three significant indicators of factors affecting firm performance. Government agencies and many private firms should create employee skill flexibility by having their employees' poses a set of broad-based skills and the ability to utilize them under various demand situations. This can be applied where broad-based skills are important as they generate output flow for existing requirements and are also capable of producing output for probable alternative requirements (Bhattacharya, 2005). Another way of creating skill flexibility is that, firms can recruit employee with a wide range of specialist people, in specific sectors. The employees who provide flexibility by allocating the firm to reconfigure skill profiles to meet up the changing needs (Bhattacharya, Gibson, & Doty, 2005).

This flexibility will enable firm to recognize its employees, whenever the need arise, and then the employee as well as firm can achieve the desired skill profile to fit in along with the changing demand. The employee skill flexibility will create better consciousness of the benefits of HRM practices to increase higher rate of retaining of the employees in the business (Abdullah , Ahsan, & Alam, 2009). The firms should create a close link with all business organization and get constant response from the employees in order to find the problem sectors and take required engagements to resolve them. Another way to enhance the possibility to use HRM is by enhancing the employee's ability and willingness to deal with different situations by behavioral flexibilities of the employees. It will create value in the sense that the cost of non-adjustments to a changing situation remains unused. Employees will have the capability to adapt and adjust to the complexities and changing environment (Lepine, Colquitt, & Erez, 2000).

Secondly, behavioral flexibility, at the organization level, creates value as it enables the firm to deal with a variety of situations and facilities to a changing implementation. Management of private businesses should provide human resource practice flexibility which will create the ability that is complex to emulate. It will respond more dynamically to the changing environment and situation and eventually raise the productivity and have greater firm performance.

Managerial implication

The study evaluated the association between employee skill flexibility, employee behavior flexibility and human resource practice flexibility on FMG firm performance. The study identified that the employee skill flexibility and HRM practices has positive and significant influence on the firm performance. The empirical results indicate the business firms are incorporating HRM practices in order to improve business performance and stay competitive. Management should understand the importance of employee skill flexibility along with the employee behavior flexibility so that the human resource practice flexibility can be practiced to gain greater firm performance.

The management should comprehend human resource functions as a strategic partner and the business should integrate human resource practice flexibility input in strategic decision making (Abdullah , Ahsan, & Alam, 2009). Another implication to invest in human resource for managers is that the practice should not be dedicated in order to estimate on what employee skills will be required so to provide future strategic and technological changes. in fact, the management should rather emphasis on having sufficient diversity in the skills and behaviors of the employees (Bhattacharya, Gibson, & Doty, 2005). This will bring about a greater chance of adjusting to change that cannot be anticipated.

Future contribution

Future researchers should try to verify the findings for employees from several firms consisting in a single industry to get a more. Future research based on case studies could also provide rich data and would be especially valuable in exploring whether and how skill, behavior and human resource flexibility can combine and effect on the firm performance. Recognizing this limitation future research may refine both our conceptual definitions and the measurement model scales for the constructs. Future research can have several variables like the operational flexibility, product customization and resource flexibility which can also have impact on human resource practice which can result in increased firm performance and employee work efficiency while this study only selected three independent variables.

Limitation

The entire research will be conducted using maximum effort to enhance the content of the report and also to prepare a comprehensive analysis on the study of the impacts of employee skill flexibility, employee behavior flexibility and human resource practice flexibility on the firm performance. However, there are always some limitations which may be faced while the research work will be carried out. One of the limitations can arise from data insufficiency as there are restrictions on the access of internal information when it comes to the human resources department. Also, the outcomes from the questionnaire can be too generalized and so the finding from the primary sources may turn out to be less effective.

Moreover, the data analysis technique which will be used may be very sensitive to outliers and lack in providing accurate estimates. In addition, the indicators that I have chosen, i.e. employee skill flexibility, employee behavior flexibility and human resource practice flexibility, may not be the only four indicators which will have impact on the human resource practices of a firm. . The questionnaire only included some items extracted from previous studies from Bhattacharya, Gibson, & Doty (2005). This study only selected three independent variables out of a wide range of possible human resource practices and considered human resource practice flexibility as a whole. There can be many other untapped indicators like operational flexibility, product customization and resource flexibility which can also have impact on human resource practice which can result in increased firm performance and employee work efficiency.

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Globalization, Sustainable Development and the Environmental Safety

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Abstract

Sustainable development is the key to the future of the global economy. However, researchers often forget to include environmental indicators to show the real state of the economy and to foresee its future. The main goal if the sustainable development economy is to improve well-being and to lower the expolitation of global resources at the same time. The economy of a sustainable development is a key to the future development of nations in the globalization era.

The main goal of the article is to select an accurate method to measure the sustainability of the economy in the era of globalization. First part of the study describes the link between globalization and the sustainable development. Second part puts an emphasis to include environmental information in the economic research to show the real state of the nation's economy. The last part of the study is an attempt to find an answer if achieving the sustainable development is possible.

***Keywords**:sustainable development, environmental protection, globalization*

Introduction

There are two key elements to a healthy economy in the era of globalization: happiness and environmental protection. A sustainable development is a state of the economy where these elements are fullfilled. All three elements should be happy: citizens, businesses and environment. Is this possible? This study is an attempt to answer the question. Nowadays, it is extremely important to link economic development together with the loss to the eco-system. The most popular economic indicators are not linking all of these elements and are not a correct tool to reveal the real state of the economy. Resources are becoming more scarce, and are not used in an efficient way.Therefore economists should be more careful in their research.

To answer the question a data analysis was performed, next the results were subjected to critical analysis. The last step was to formulate conclusions and an attempt to find an answer if the achievement of the sustainable development in practice is possible.

Globalization and the Economy of the Sustainable Development

Nowadays researchers very often accuse globalization for the imperfections of the markets. This leads to a very dangerous philosophy to eliminate globalization and to create the new world's order (deglobalization)[i]for the better economic, cultural and environmental safety[ii] . Unlike, some economists state that globalization together with the free market may lead to the economic growth and sustainable development[iii].

Globalization is the process of spreading transplanetary and supraterritorial relationships between people[iv], who are living on Earth[v]. Globalization lacks territorial boundries, it is transplanetary and supraterritorial. Globalization[vi] is also closer integration of people and countries due to the reduction of transportation and communication costs and removal of artficial barriers to the flows of goods, services, capital, knowledge and people[vii]. It may also be a process where production and markets are becoming increasingly interdependent due to the dynamics of a large exchange of goods and services and flows of capital and technology,[viii] and a process of strong economic integration between global markets[ix].

There is a clear link between globalization and the economy of the sustainable development (ESD). It is thoroughly described in the postulates of the ESD, which state that globalization may help development if common goals are set.

Previously, the issue of sustainable development focused around environmental economics[x] and ecological economics[xi], which proposed policies to environmental protection. Nowadays, an economics of sustainable development may be a good tool of the correct market functioning in the era of globalization.

A proposal to distinguish an ESD as a seperate scientific discipline arose at the beginning of the XXI century[xii]. Since the conference in Johannesburg in 2002 an ESD broadens a scope of issues, thus it may be a solving solution for problems such as: poverty, malnutrition, hunger, discrimination, income inequalities, democratization. Therefore, the policy should be interpreted as a social-economical sustainable development with the inclusion of the environmental needs[xiii].

A few of the ESD postulates refer directly to the problems of today's global economy:

a) the need to increase the level of the fair resource management,
b) engagement in the functioning of markets (government interventionism) [xiv]
c) common global economic, social and environmental policies [xv].

Still, there is an issue how the ESD should be conducted in different parts of the world in consideration to the three levels of implementation:

a) Household.
b) Businesses.
c) Economic policy.

Creation of ESD idicators is one of the most complicated problems of the ESD. Sustainable development evaluation processes measurement demands various indicators, therefore creation of the precise indicator may not even be feasible[xvi]. The ESD indicators should include four categories of indicators:

a) economic,
b) environmental,
c) social,
d) institutional.[xvii]

This study tries to find a correct indicator to measure the sustainable development of the chosen developing nations and to answer the question if such development is possible

Sustainable Development and the Environment

Researchers very often forget to include environmental loss in their studies. It is because some of the indicators are chosen to be more important than the others. However, it is not possible to measure the state of the economy without an inclusion of the biogradation. Future generations, if left with ecological disaters, are not able to achieve sustainable development.

As mentioned in the previous section, measurement of sustainability demands a lot of indicators and summarizing all into a sufficient one may even not be possible. However, comparision of sustainability indicators may bring interesting outcomes and suggest solutions to overcome economic problems in achieving economic sustainability in the era of globalization.

Some of the chosen sustainability indicators are shown in the Table 1. It is only an attepmpt to summarize all necessary indicators into a synthetic one. However, it is a good tool to udnerstand the picture of today's global economy.

Table 1. A Sample of Sustainability Indicators

Indicator	Description
Gross Domestic Product (GDP)	Includes information about nation's consumption, investments, governement spendings, export and import. Main indicator of the national welfare.
Gross Domestic Product per capita	Includes information about the nation well-being: income, taxes
Sustainable Society Index (SSI)	Includes economic, human and environmental well-being.
Living Planet Index (LPI)	Includes information about the biological diversity
Happy Planet Index (HPI)	Includes human well-being and environmental impact
Adjusted Net Savings (ANS)	Includes information about the national welfare and the environment
Index of Sustainable Welfare (ISEW)	Includes information about consumption, goods distribution and environmental degradation

Source: self-elaboration based on Śleszyński J., Obrona syntetycznych wskaźników rozwoju trwałego, Ekonomia zrównoważonego rozwoju w świetle kanonów nauki, edited Poskrobko B., Białystok 2011, pp. 85-93 and Gajda-Kantorowska M., Kontrowersje wokół pomiaru stabilności wzorstu gospodarczego, e.Sokołowski J., Rękas M., Węgrzyn G., Economy,Wrocław University Research Papers, 2012, pp. 55-64.

The problem with the GDP indicator is that it is the main and the most important indicator of short and middle-term economic activity, but it does not include information about the long-term economic and social progress and the information about the loss to the environment. Although, GDP per capita gives more information about the income of each person, it does not include information about income distribution and the environmental loss due to the economic development. Table 2. shows GDP per capita of chosen developing and developed nations.

Table 2. GDP per capita in current US$ of chosen developing and developed nations.

Country	**GDP per capita**
Norway	85,389
Kuwait	41,365
Israel	28,506
Barbados	14,998
Estonia	14,341
Venezuela	13,590
Poland	12,294
Brazil	10,710
Costa Rica	7,691
Belarus	5,765
Namibia	5,331
Ghana	1,325
Congo Dem. Rep.	199

Source: World Bank eAtlas of Global Development. Data for 2010.

Because neither GDP or GDP per capita are not the correct indicators of the sustainable development, other indicators were created. In 1989 H. Daly and J.B. Cobb[xviii] presented the Index of Sustainable Economic Welfare, which bases on the Measure of Economic Welfare.[xix] ISEW informs that there is a certain border of economic activity where marginal costs are greater than marginal benefits.

The most common indicator to measure human well-being is the Human Development Index (HDI). It gathers three aspects of the well-being: society health, level of education and income. HDI divides nations into four categories of development: from high to low human development.

It is prooved that an increase in human development corresponds to the environmental degradation and future forecasts are not promising: 2050 global HDI would be 8 percent lower than in the baseline in an "environmental challenge" scenerio that captures the adverse effects of global warming on agricultural production, on access to clean water and improved sanitation and on pollution (and 12 percent lower in South Asia and Sub-Saharan Africa). Under an even more adverse "environmental disaster" scenario, which envisions vast deforestation and land degradation, dramatic declines in biodiversity and accelerated extreme weather events, the global HDI would be some 15 percent below the projected baseline.[xx]

Table 3. Human Development Index. 2011.

Country	**HDI value**	**Rank**
Norway	0,94	Very high
Kuwait	0,76	high
Israel	0,88	Very high
Barbados	0,79	Very high
Estonia	0,83	Very high
Venezuela	0,73	High
Poland	0,81	Very high
Brazil	0,71	High
Costa Rica	0,74	high
Belarus	0,75	High
Namibia	0,62	Medium
Ghana	0,54	Medium
Congo Dem. Rep.	0,28	low

Source: Human Development Report 2011. Sustainability and Equity. A Better Future for All, United Nations Development Programme, 2011.

An interesting indicator to measure sustainability is an Adjusted Net Savings Indicator, nevertheless still deficient. It captures the changes in the level of the national welfare including different capital resources[xxi]. A positive result informs about a stability of a nation and its economic development in the future, opposed to the negative result. The ANS ranks nations in a completely different way than GDP (see Table 2 and Table 4). A very high level for Kuwait results from a very high national savings, but still a very high energy depletion. A very low level for Ghana results from a very low level of national savings and mineral depletion. Even the indicator informs about the future of the economy and the level of the environment degradation, it is very difficult to find all the necessary data for the calculation and many of the numbers are based on arbitrary assumptions. However, it is a reflection to an economy state with the inclusion of net and gross savings, education costs and pollution. On top of that, it is a very interesting tool to foresee the future for the next generations and what will they be left with: high GDP, environmental damage or sustainability?

Another methods to estimate the sustainability are the Happy Planet Index (HPI) and the Living Planet Index (LPI). These indicators include the factor of the degradation of the biodiversity due to the economic development. Therefore, one may suggest that the higher the economic development (and stronger globalization process), the higher environmental protection. A terrifying may be that the LPI between 1970 and 2008 decreased by 30 per cent. The outcome is, the more country is developed, the more it uses from its natural resources and the more it ruins the environment. The more economy is open to trade, to foreign investment, the more it damages the environment: higher deforestation, higher CO2 usage, more cropland used and increased ecological footprint. High income countries have an ecological footprint five times higher than that of low countries. Poor people feel the biodiversity degradation directly: no access to water, no cropland, desertation etc. The Living Planet index for high-income countries has increased by 60 per cent in the years 1970-2008, comparing to 6 per cent in low income ones. That is because high-income countries are able to import additional resources.“If all of humanity lived like an average resident of Indonesia, only two-thirds of the planet’s biocapacity would be used; if everyone lived like an average Argentinean, humanity would demand more than half an additional planet; and if everyone lived like an average resident of the USA, a total of four Earths be required to regenerate humanity’s annual demand on nature”[xxii].

Table 4: Adjusted Net Savings for 2008.

Country	**ANS**
Norway	16,22
Kuwait	21,08
Israel	11,29
Barbados	No data available
Estonia	9,02
Venezuela	6,47
Poland	9,22
Brazil	5,23
Costa Rica	9,12
Belarus	19,77
Namibia	9,87
Ghana	-6,55
Congo Dem. Rep.	-57,11

Source: worldbank.org

A Happy Planet Index measures the "happiness" of people by combining life expectancy, experienced well-being and the ecological footprint. The highest result is 100 and that implies the perfect harmony between people, their needs and environment. The results are shown in Table 5 together with the LPI and they suggest that Earth in not a happy place.

Table 5. Happy Planet Index (2010) and Living Planet Index (2008).

Country	**HPI**	**LPI (global hectares per person)**	
		ECOLOGICAL FOOTPRINT	**TOTAL BIOCAPACITY**
Norway	51,4	4,77	5,4
Kuwait	27,1	9,72	0,43
Israel	55,2	3,96	0,29
Barbados	No data available	No data available	No data available
Estonia	34,9	4,73	8,73
Venezuela	56,9	3,02	3,00
Poland	42,6	3,94	2,00
Brazil	52,9	2,93	9,63
Costa Rica	64,0	2,52	1,60
Belarus	37,4	3,99	3,40
Namibia	38,9	2,03	7,18
Ghana	40,3	1,74	1,28
Congo Dem. Rep.	30,6	0,76	3,10

Source: happyplanetindex.org and Living Planet Report 2012.

Conclusion

The methods showed in the study proves that there is an open space to an economic research to formulate a formula to an economic sustainable development indicator. Present indicators are giving researchers only a fragmentary outcome of a globalized world. However, they should be used more often to become more popular and to give an idea what the real situation is. As shown, global economy is in a poor condition. GDP numbers are an empty fact without an iformation about the environmental degradation. Shuffling only with the GDP numbers will not bring the sustainable development.

The world is going through a dramatic change towards a global development. There is no sustaianble development achieved yet. And it seems not to be possible in the near future. Sustainable development should include all aspects of life: income, well-being and environmental degradation. All commonly used indicators are not informing the society about the global environmental degradation. If world is divided into poor nations of the South and rich nations of the North, a compromise is not available. All negotiations between countries to achieve sustainable development should be based on honesty and not on private benefits. The Millenium Development Goals, themselves, are not able to solve all of the global problems. Only honesty, transparency and common goals, not private interests, are the way to achieve sustainability. Sustainability equals the loss to the rich ones. Sustainability brings the reduction in overexploitation of the Earth. The question remains whether any corporations are willing to loose their dollars.

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[vi] There is no one definition of globalization and that leads to disagreemnts in the understanding of the process. Even Google displays over 47 million results. One may find all in the world may be global: “Globalize Jesus”, “global food”, “global reduction of cellulite”, “global USA”. These examples are a proof globalization is not often comprehended. The fact remains, globalization is very popular among researchers,

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