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Towards a Better Understanding of SMEs’ Perception of Electronic Commerce Technology Adoption

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Abstract
The use of Electronic Commerce (EC) technologies enables Small-to-Medium sized Enterprises (SMEs) to improve their efficiency and competitive position. However, currently there has been inadequate understanding of how SMEs perceive the relevance and usefulness of EC technologies, particularly in developing countries. In addition, there is a lack of a comprehensive framework that gives a multi-faceted account for the phenomenon of EC technology adoption by SMEs. This paper therefore develops a theoretical framework of EC technologies adoption which is composed of four dimensions: perceived organisational readiness (micro level), perceived industry readiness (meso level), perceived national readiness (macro level) and the perceived environmental pressure. The usefulness of the proposed framework is demonstrated by developing a more specific research model based on the framework that may guide future studies in exploring EC technologies adoption by SMEs, particularly in developing countries.

Keywords: E-commerce, Adoption, SMEs, Readiness

1. Introduction
The emergence of electronic commerce (EC) technologies has affected many industries and organisations. EC is defined as the process of buying, selling, transferring or exchanging products, services and/or information via computer networks, including the Internet (Turban et al., 2008). Regardless of organisational size, EC offers enormous opportunities and benefits to improve business performance. Small-to-Medium sized Enterprises (SMEs) are increasingly realising the potential benefits of EC technologies
The definition of SMEs varies in different countries and studies but is usually based on employment, assets, or a combination of the two. For simplicity in this paper, SMEs are defined as organisations with less than 251 employees (Seyal et al., 2004).

The importance of SMEs has increasingly grown over the years and they have become the backbone of any country’s economy especially in developing countries. SMEs represent approximately 90% of the total number of firms across the world and they have a significant role in creating employment opportunities (Hall, 2002). In 2006, there were about 140 million SMEs around the world employing at least 60 percent of the total workforce (Kotelnikov, 2007). SMEs are generally considered to be flexible, adaptive and innovative firms and these characteristics, in turn, make them a good fit for EC (Al-Qirim, 2007; Liu, Chen and Liao, 2005). The basic EC technologies that are most likely relevant for SMEs include e-mail, Internet, Intranet, Extranet, Electronic Data Interchange (EDI), Electronic Funds Transfer (EFT) and Barcode. SMEs may use these EC technologies in a variety of ways, including: to communicate with customers and suppliers, collect market research data, promote goods and services, provide detailed information about products and services, support online ordering of goods and services and offer after sales support and assistance (Doherty and Ellis-Chadwick, 2003).

Furthermore, research also indicates that SMEs can take advantage of EC technologies in expanding their business (MacGregor et al., 2002). Thus, the use of EC technologies enables SMEs to improve their efficiency and competitive position in the marketplace.

Although EC technologies are widely adopted by large companies and organisations across the world, the deployment of EC in SMEs is considered somewhat lagging behind. A number of studies (e.g. Lee and Xia, 2006; Lee and Runge, 2001) indicate that SMEs have been generally slow in adopting EC, particularly those related to inter-organisational systems due to their size and limited resources. There are a number of factors that make the adoption slow such as: shortage of technologies tailored to SMEs needs and financial abilities, technology literacy, unavailability of good communication and legal infrastructures, short term perspectives, and shortage of in-house skills and expertises (Kotelnikov, 2007; Lee and Xia, 2006). Therefore, the adoption of EC technologies by SMEs may be different from the adoption of these technologies by large organisations.
(Sarosa and Underwood, 2005). The position of SMEs in developing countries in terms of EC adoption is even lagging behind SMEs in developed countries (Kartiwi, 2006). For example, Kartiwi and MacGregor (2007) have found that organisational barriers were the main inhibitors to EC adoption by SMEs in Indonesia. This may in turn suggest that adoption of EC technologies by SMEs in developing countries may be different from the adoption of these technologies by SMEs in developed countries too. One of the reasons for this difference may stem from the cultural differences between developing and developed countries (Sarosa and Underwood, 2005).

Although researchers have been increasingly exploring and predicting EC adoption among SMEs in both developed and developing countries (e.g. Nasco, Toledo and Mykytyn, 2008; Al-Qirim, 2007; Kendall et al., 2001; Sathye and Beal, 2001), there is still a limited understanding of the behaviour of SMEs, particularly in developing countries towards EC technologies adoption. A review by Parker and Castleman (2007) has highlighted the need for more research on EC adoption by SMEs in developing countries to better understand the potential and relevance of EC.

Therefore, the purposes of this study are:

1. To conduct an extensive review of the existing EC adoption studies to identify their trends, limitations and various factors affecting EC adoption.

2. To develop a comprehensive theoretical framework that comprises the three levels of readiness (organisational, industry and national) alongside the environmental pressure that can be applied in any context of EC adoption.

3. To classify various factors affecting EC adoption by SMEs identified from the existing literature review based on the proposed framework.

The findings of this study further demonstrate the limitations of the current knowledge related to EC adoption by SMEs. Firstly, our study shows that there has been a lack of studies on EC adoption by SMEs, especially in developing countries that can provide a complete picture of adoption factors. In this regards, most of the factors that have been investigated in the prior literature can actually be aggregated to three groups that relate to three levels of readiness: organisational, industrial and national readiness. Hence, it is suggested that SMEs’ decision to adopt EC technologies will be based on how they
perceive their readiness at these three levels to adopt EC technologies (e-readiness). The majority of the prior research on EC technologies adoption by SMEs has been concentrated towards ascertaining the organisational e-readiness (e.g. Grandon and Pearson, 2004; Tsao et al., 2004; Jeon et al., 2006; Kendall et al., 2001). In addition, there has been little research that investigates the national e-readiness and industry readiness from the perspective of SMEs, especially in developing countries (e.g. Huy and Filiatrault, 2006). Furthermore, little is known whether or not the various factors explored in previous studies have the same impact on the adoption of different EC technologies since each study considers a different set of factors and different EC technologies. Secondly, there has been no comprehensive framework that can guide studies to obtain a more complete understanding of the phenomena of EC technologies adoption to guide studies in this area. Finally, some studies (e.g. Jeon et al., 2006; MacGregor and Vrzazalic, 2005; Lee and Runge 2001) employ prior assumptions related to inhibitors and drivers of EC technologies adoption in the literature. Such studies have produced inconsistency findings which have prohibited researchers and practitioners from gaining a clear picture of the adoption experience of SMEs.

We also show in this study how the proposed framework that incorporates three levels of readiness as well as environmental pressure can be used to guide future studies of EC adoption by SMEs in developing countries through the development of a research model that can be easily operationalised. Thus, this conceptual paper sets the foundations for gaining a more holistic understanding and better predictions of the adoption of EC technologies by SMEs especially in developing countries.

In the next section, we summarize the trends and limitations of the previous studies in this area. Then we discuss the development of the conceptual framework that is likely to yield a holistic view of EC adoption experience of SMEs. We then demonstrate the usefulness of the framework by developing a specific research model that can guide future studies of EC adoption by SMEs in developing countries. In this research model, we also synthesize various factors identified in the previous studies and classify them based on our proposed theoretical framework. Finally, some implications of this study are discussed to conclude the paper.
2. Trends and Limitations of the Previous Studies

For the purpose of this study, an extensive literature review of EC technologies adoption by SMEs in both developed and developing countries was undertaken. The literature review search covered the period between 1999 and 2009 in various databases (e.g., ISI, ScienceDirect, Emerald Fulltext, Google Scholar, SpringerLink, Annual Reviews). However, this literature review is by no means exhaustive. Based on this review, two dominant trends were observed in the literature.

First, many models and frameworks have been developed and used as a basis to investigate adoption of EC technologies by SMEs such as Rogers’s Innovation Diffusion Model (Rogers, 2005), Technology acceptance Model (TAM) (Grandon and Pearson, 2004), Theory of Planned Behaviour (TPB) (Nasco et al., 2008), Perceived eReadiness Model (Tan, Tyler and Manica, 2007), and Technological, Organisational and Environmental Framework (TOE) (Kuan and Chau, 2001).

However, most of these models and frameworks have not given a comprehensive account for the phenomenon of EC technologies adoption. For example, Looi (2005) has pointed out the limitations of TAM and TPB as they tend to overlook internal and external factors that may influence the adoption decision such as cost and environmental pressure. Looi (2005) has also concluded that Rogers’s Diffusion Model is generally inadequate in explaining the factors influencing EC adoption by SMEs in Brunei. Other models and frameworks such as Perceived eReadiness Model and TOE have also overlooked and/or overlapped industrial readiness with other external factors.

Second, the literature review is that the literature on adoption of EC technologies by SMEs generally establishes prior assumptions related to inhibitors and drivers of EC technologies and then assesses the relevance of each barrier and driver in a given context. For example, Looi (2005) has pointed out that lack of IT knowledge and lack of trust have been explored as inhibitors to EC adoption.

However, this approach of investigating EC adoption on the basis of prior assumptions of drivers and inhibitors has several limitations:

i. The terminology used to describe these factors is inconsistent in the literature (Wymer and Regan, 2005). For example, researchers have used different terms to
refer to the “cost factor” such as adoption cost (Al-Qirim, 2007; Jeon et al., 2006), financial resources (Zhu et al., 2003; Sarosa and Underwood, 2005), financial commitment (Zhu and Kraemer, 2005; Kaynak et al., 2005). Thus, when the cost factor is expressed as ‘adoption cost’, it is considered as a barrier, but when it is expressed as ‘financial commitment’, it is considered as a driver. When the ‘financial resource’ term is used, it is considered a neutral factor (neither a driver nor an inhibitor).

ii. The findings from investigating these factors (as drivers and inhibitors) are also inconsistent in the literature (Wymer and Regan, 2005). For example, adoption cost was found to be significant in one study (Jeon et al. 2006) and insignificant in another (Al-Qirim, 2007).

iii. Since the adoption factors can serve as drivers and inhibitors at the same time in different contexts, the prior assumptions about a factor being an inhibitor or driver may lead to misleading conclusions regarding the validity of the conceptualised models that use these factors. For example, a researcher may conceptualise and explore a factor as an inhibitor to EC adoption in a specific context, and this factor might not be found as an inhibitor. In this case then the researcher has to reject the initial proposed hypothesis concerning this factor. However, the perception of this factor might change in the future and therefore this approach is likely yield inconsistent results because of its high dependency on the context.

Therefore, it is important to deal with these factors as neutral factors without making prior assumption (neither drivers nor inhibitors) to identify the exact influence of these factors on EC technologies adoption about each factor. In this respect, although using prior assumptions of drivers and inhibitors may help in clarifying and understanding the phenomenon of EC adoption, this approach only highlights the importance of these factors in accelerating or slowing the adoption but it does not take into account the importance of these factors in predicting the EC technologies adoption. For example, we might identify lack of IT knowledge among managers of SMEs as a factor inhibiting the adoption of EC technologies, but we could not predict that the adoption would take place in the future if their knowledge was increased. More recently, some scholars have applied
the neutral approach (e.g. Wymer and Regan, 2005) to overcome the limitations of other studies.

3. The Framework Development

Based on the literature review and in order to fill the gap in the literature, we have developed a framework that gives a comprehensive view of EC technologies adoption as a guide in this study and subsequent research. The framework is presented in Figure 1. The framework serves the following purposes (i) it provides a holistic view of potential factors that may influence the adoption of EC technologies at three levels of readiness, macro (national), meso (industrial) and micro (organisational) in addition to the environmental pressure, (ii) it links the adoption of various EC technologies with those factors influencing EC technology adoption to identify the best technologies that suit the context of organisations, (iii) it provides a way to assess the e-readiness of organisations, particularly their preparedness for EC and whether it determines the adoption decision of EC technologies, (iv) it provides a systematic approach to investigating EC technologies adoption within each level of readiness in-depth, and (v) it helps researchers aggregate adoption factors within each level of readiness that are suitable for a particular context.

The framework is composed of perceived organisational readiness (micro level), perceived industry readiness (meso level), perceived national readiness (macro level) alongside the perceived environmental pressure. National readiness (macro level) refers to the top managers’ perceptions of the availability of supporting services that promote the adoption of EC technologies. These supporting services may come from government and non-government bodies. For any country to realise the true potential of EC there has to be certain measures undertaken at the core operational level of the country’s infrastructure. These measures can be attributed to the human and physical capital development, political freedom, autonomous economic institutions, high spending on research and development, foreign direct investment, and so forth. All these determinants interplay with each other to cultivate an environment conducive for a country’s well-being and economic growth. Having a clear policy regarding the attainment of these crucial macro-economic objectives is a stepping stone towards extending the impact of EC and reaping the benefits. This is especially true in the case of developing countries,
where the main inhibitor of successful technology adoption is the under-developed core operational infrastructure. Unless there are measures adopted to redress the core operational infrastructure, technology adoption failures are likely to happen. In this regards, studies indicate that national non-readiness is the major inhibitor stalling the uptake of EC in developing countries (e.g. Kshetri and Dholakia, 2002; Tigre, 2003). This assertion is supported by the fact that many developing countries lack adequate technological, social, cultural, legal, logistical, and financial infrastructure needed to effectively adopt and implement EC technologies. This viewpoint considers the conditions of the external environment, or the macro level, as the major determinant of EC technologies adoption at the enterprise level. Therefore, perceived national readiness is included in the research framework as one of the main factors for EC adoption.

Organisational readiness (micro level) refers to the top managers’ perceptions of EC technologies and their perceptions of the availability of resources, rules and procedures within the organisation that promotes adoption of these technologies. Generally, there has been a tendency to consider EC applications as trivial appliances, rather than as complex processes of inter-networking made possible by a series of inter-linked computer networks, a compendium of hardware and software, data flows, and human agents (Pare, 2003). Failure to consider processes and rules that mobilise EC within the context of an organisation is of enormous importance. Therefore, organisational readiness (micro level) has been recognised as an important factor for EC adoption (Grandon and Pearson, 2004; Seyal et al., 2004).

In addition to the macro and micro levels, there is a middle (meso) level which signifies the readiness of industry in fostering EC technologies (Damsgaard and Lyytinen, 1998). Industrial readiness refers to the top managers’ perceptions of industry standards, and readiness of trading partners that promotes adoption of EC technologies. The industry level readiness also concentrates on inter-organisational nature of EC use. This level is dealing with interactions between adopting organisations and external institutions, their mutual dependencies and power relationships, which are generally concerned with the industry structure (Damsgaard and Lyytinen, 1998). Important characteristics at this level reflect on the industry structure, industry-wide standard of electronic data transfer, presence of coordinating bodies, level of trust among industry players, and so forth. The
The importance of this level cannot be undermined because it forms the glue that holds the macro and micro level together. Therefore, perceived industrial readiness is included in the research framework as one of the main factors for EC adoption.

Besides the three levels of readiness, environmental pressure also plays a critical role in the adoption of EC technologies and provides the impetus for complying to be ready (Ali et al., 2008; Damsgaard and Lyttinen, 1998). Such pressure is exhibited in the shape of customer, supplier, government, and market pressure or changes in external environmental which undermine the competitive position or value proposition, and organisational actions for pursuing business excellence and following innovative technology to remain ahead of competition. Therefore, environmental pressure to adopt EC technologies is an additional factor in the research framework that should be included in any study investigating the adoption of EC technologies.

In light of the above and in order to apply the conceptual framework to the context of SMEs, we have identified all adoption factors that have been studied in developed and developing countries. We then classified each factor according to the dimensions in the framework (e.g. organisation, industrial, national or environmental pressure) and identified which one was found to be significant or insignificant in determining the adoption of EC technologies (see Table 1). The adoption of EC technologies can be measured by whether or not the SMEs use any of the EC technologies (e.g. e-mail, Internet, Intranet, Extranet, EDI, EFT and Barcode) in carrying out their business operations. As shown in Table 1, although most studies have investigated factors that form the organisational readiness, a holistic view of these factors is still lacking since most studies only focus on selected factors. Also, in spite of the importance of national readiness in supporting and enabling EC technologies adoption by SMEs especially in developing countries, little research has explored factors that affect the establishment of national readiness. Moreover, existing studies have only considered the external pressures that come from the environment of a firm and little is known about the influence of internal pressure which arises from the firm itself. Finally, the industry readiness has hardly been explored in the prior literature as shown in Table 1.
4. A Proposed Model of EC Technologies Adoption by SMEs

Based on the literature review, the proposed framework (Figure 1) and Table 1, we develop a research model (see Figure 2) that captures the potential factors that influence EC technologies adoption by SMEs, particularly in developing countries. This model is composed of first order factors for each of the four dimensions shown in the theoretical framework. A more detailed list of second order factors that are included in the model is shown in Table 2. It also shows which of the first and second order factors have and have not been investigated in the existing literature. A discussion on each construct in the proposed research model is presented below.

4.1 Organizational Readiness

The existing studies of SMEs adoption (e.g. Yeh and Chang, 2007; Macgregor and Vrazlaic, 2005; Kuan and Chau, 2001) have defined organisational readiness as the availability of financial and technological resources in the SMEs, while some other studies relate organisational readiness to factors such as: organisational culture (Seyal et al., 2004), organisational resources (Huy and Filiatrault 2006), management support (Tsao et al., 2004), firm size (Kuan and Chau, 2001), compatibility (Sparling et al., 2007; Teo and Ranganathan, 2004), perceived benefits (Jeon et al., 2006; Scupola, 2003) and employees’ knowledge of IT (Scupola, 2003). In this study, we only consider three first order factors that comprise the organisational readiness: perception of technology that covers various attributes of technologies under study, perceived organisation resources and perceived governance. Top management support is excluded from the organisational readiness in the context of SMEs, because research often investigates the perceptions of SMEs’ managers and owners themselves.

4.1.1 Perception of Technology

One of the major parts that form the organisational readiness is perception of technology. This includes the identification of the traits of the innovation (Rogers, 1995) which compel the adoption process, namely: relative advantage, compatibility, complexity, trialability, and observability. It is worth noting here that some studies (e.g. Chwelos et
al., 2001; Chong and Bauer, 2000) have regarded perception of technology as an
independent variable impacting the adoption process. In this paper, we regard perception of
technology as part of organisational readiness since such technology attributes are not
inherent in the innovation per se but related to how an organisation perceives these
attributes as argued in other studies (e.g. Gibbs and Kraemer, 2004).

Perceived benefits (relative advantage) were the most investigated EC technologies trait
that promotes the adoption of these technologies (e.g. Jeon et al., 2006; Seyal et al.,
2004). Perceived benefits are defined by a set of anticipated advantages that innovation
can provide the organisation (Seyal et al., 2004). Perceived benefits describe how a
particular technology is perceived as providing benefits to an organisation. A number of
studies have shown that perceived benefits as a determinant of technology adoption (e.g.
Al-Qirim, 2007; Sparling et al., 2007; Jeon et al., 2006; Kaynak et al., 2005). However,
Tsao et al. (2004) have found that perceived benefits were insignificant contributor to EC
adoption. This may due to the fact that most of the managers in developing countries are
not sure about the benefits that can be derived from EC, and lack adequate skill or
knowledge about what technology can provide.

Another attribute of Rogers Model (Rogers, 1995) is organisational compatibility, which
refers to the extent to which a technological innovation is compatible with the way the
organisation works, in terms of its values and beliefs, previously introduced ideas, and
needs. According to Gibbs and Kramer (2004), lack of organisational compatibility may
impose constraints on the level of ecommerce use. A number of studies have also shown
that compatibility as one of most influential determinants of technology adoption (e.g.
Teo and Ranganathan, 2004; Kendall et al., 2001; Huy and Filiatrault, 2006). With
respect to other innovation attributes, studies have found significant relationships
between EC technologies adoption and some technology attributes including complexity
(e.g. Huy and Filiatrault, 2006; Jeon et al., 2006), trialability (e.g. Kendall et al., 2001)
and observability (e.g. Seyal and Rahman, 2003). In contrast, insignificant relationship
has been found in some other cases between complexity and EC technologies adoption
(Grandon and Pearson, 2004). Therefore, we hypothesise that the more positive SMEs
perceive EC technologies, the more likely they will adopt these technologies (Hypothesis
1).
4.1.2 Perceived Organisation Resources

Another major aspect of organisational readiness is related to perceived organisation resources. This factor is related to the perception of SMEs on the availability of human, financial, and technological resources of a firm (Tan et al., 2007). Human resources are concerned with the availability of technical-savvy workforce with adequate know-how to implement EC initiatives. Technological resources are concerned with the level of sophistication of IT usage in an organisation. Financial resources refer to the availability of capital to carry EC activity without any financial burden. This includes installation costs, software and hardware procurement costs, consulting costs, ongoing maintenance and so forth. Intertwined with this concept of organisation resources, firm size has also been established as an important predictor of IT adoption (Zhu et al., 2003; Doolin et al., 2003; Grandon and Pearson, 2004). In terms of human resources, Mehrtens et al. (2001) advocates that knowledge among non-IT professionals is a very significant factor for Internet adoption. A number of studies also shown that organisational resources, financial and technical resources determine the adoption of EC technologies (e.g. Tsao et al., 2004; Kuan and Chau, 2001; Huy and Filiatrault, 2006). Although a number of studies have found that some factors related to organisational resources are insignificant in determining EC technologies adoption (e.g. Jeon et al., 2006; Sarosa and Underwood, 2005), we argue that without a positive perception of organisational resources, it is less likely that any SME will adopt EC technology. Accordingly, we hypothesise that the higher SMEs perceive their organisational resources, the more likely they will adopt EC technologies (Hypothesis 2).

4.1.3 Perceived Governance

Governance encompasses strategic, tactical, and operational models that define the way organisations are structured to establish objectives, allocate resources, and make decisions (Tan et al., 2007). Research has shown that there is a relation between EC technologies adoption and a number of factors such as organisation culture and task variety (e.g. Seyal et al. 2004), organisation strategic orientation (e.g. Huy and Filiatrault, 2006; Jeon et al., 2006), integration with marketing strategy (e.g. Tsao et al., 2004). Teo
and Ranganathan (2004) in their study also found that 54.4% of EC adopters in Singapore had a formal plan and a task force dedicated to deploying EC. Although some other studies have found that this variable is insignificant in influencing EC technologies adoption (e.g. Kaynak et al., 2005; Teo and Ranganathan; Hinson and Abor, 2005), we also argue that without a positive perception of organisation governance, it is less likely that any SME will adopt EC technology. Accordingly, we hypothesise that the higher SMEs perceive their organisation governance, the more likely they will adopt EC technologies (Hypothesis 3).

4.2 Industrial Readiness

Few studies on EC technologies adoption by SMEs have explored variables that are related to the industrial readiness (meso level) such as: lack of trading partner readiness (Zhu et al., 2003), availability of partners (Wymer and Regan, 2005) and technology intensiveness of the industry (Kaynak et al., 2005). In this study, we consider three first order factors that comprise the industrial readiness in the context of SMEs: industry standards, readiness of trading partners and level of trust among industry players.

4.2.1 Perceived Industry Standards

One of the major parts that form the industrial readiness is perception of the availability of industry standards that organise the work of the firms. The perceived industry standards refer to the perception of the availability of standards, coordinating bodies, and online resources necessary for EC adoption. If the industry as a whole decides and agrees on a single standard of electronic data transfer, the chances of rapid uptake of technology are exponentially amplified. Successful EC adoption requires that various sectors and segments of the industry work systematically through coordinating bodies to resolve their concerns and project their demands (Gregor and Johnston, 2000). In concert with the standardisation of electronic data transfer, interconnectivity of EC hardware and software also acts as a major impetus for EC surge (Gregor and Johnston, 2000). If industry partners’ EC applications can easily forward and relay electronic messages back and forth without any difficulty, there is an increment in acceptance of EC. Consequently, we
hypothesise that the higher SMEs perceive the availability of industry standards, the more likely they will adopt EC technologies (Hypothesis 4).

4.2.2 Perceived Trading Partners Readiness

Firms can influence the behaviour of other firms by threats or sanctions. Especially, if there are some dominant players in the industry who enjoy a lot of power, they can force other weaker entities to follow their suit. In addition, power structure in the industry is also crucial in technology adoption. If the industry is characterized by a duopoly or oligopoly then any technology initiative by one player will be closely matched and emulated by the other. On the flip side, if the industry is monopolistic and lacks perfect competition, urgency to thrive for business excellence and constricting competition’s profits through technological innovations might not be at the top of the agenda. Recently, a number of studies have appeared that discuss how interactions with both other organisations and customers in a global economy have enforced these SMEs to adopt EC technologies (e.g. Hinson and Sorensen, 2006; Jaw and Chen, 2006; Hinson and Abor, 2005; Nirjar and Tylecote, 2005; Sarosa and Underwood, 2005). In addition, relationships between industry partners also affect the overall industry structure (Gregor and Johnston, 2000). For instance, trading relationships deal with adding value to the focal product of the industry and making it more value-intensive. Communicative relationships describe the exchange of actual or planned data and events to other industry partner to coordinate production activities. All these relationships determine the extent of competition and rivalry in the industry and play a crucial role in technology adoption. Little research has explored this variable (e.g. Wymer and Regan, 2005; Zhu et al., 2003). Thus, we hypothesise that the higher SMEs perceive trading partners’ readiness, the more likely they will adopt EC technologies (Hypothesis 5).

4.2.3 Perceived Level of Trust among Industry Players

Industry readiness is also affected by the existence of trustful relationships among firms. At least some form of trust is required in all business transactions. A trustful relationship, one in which a firm is confident that its partner will perform as expected, is particularly important in ecommerce activities. If the industry relationships are built on trust, then the
chances for greater penetration of e-commerce are higher. Byrant and Colledge (2002) also espouse the above assertion by stating that trust is an important consideration in the development and fostering of e-commerce relationships in the context of the knowledge-based economy. The promotion of trust, through appropriate relational contracting models that foster collaboration and cooperation, will facilitate the achievement of strategic e-commerce objectives. It is also the extent of compatibility and collaboration between trading partners within the industry. If the industry trading partners collaborate and are compatible, then it would facilitate EC technologies adoption (Kurnia and Johnston, 2003). Consequently, we hypothesise that the higher SMEs perceive the existence of trustful relationships within the industry, the more likely they will adopt EC technologies (Hypothesis 6).

4.3 National Readiness

The existing studies on SMEs adoption have independently explored a number of variables that are related to the national readiness (macro level) such as: regulatory environment and support (Zhu et al., 2003), support from technology vendors (Kendall et al., 2001; Doolin et al., 2003), degree of support of the government (Jeon et al., 2006) and national infrastructure (Huy and Filiatrault, 2006). However, little research has investigated such factors in developing countries (e.g. Jeon et al., 2006; Huy and Filiatrault, 2006; Seyal et al., 2004). In this study, national readiness in the context of SMEs comprises two first order factors: perceived supporting services and perceived government support.

4.3.1 Perceived Government Support

One of the major parts that form the national readiness is the perception of government support for using EC technologies. A number of studies have investigated the available legal/regulatory environment, government support and commitment, and government pressure as factors that determine the EC technologies adoption by SMEs (e.g. Jeon et al., 2006; Chang and Cheung, 2001; Grandon and Pearson, 2004; Zhu and Kraemer, 2005). Government has a considerable impact on Internet use through direct interventions. Government can also support the spread of the Internet by switching to online services
for its own transactions. Government support and readiness can also be manifested by having a clear Information and Communication Technology (ICT) policy and action plan for extending ICT benefits across the board, providing equal access to information, and improving existing ICT services. A certain minimum legal framework is required for the provision of electronic commerce. The existing rules and legislations have also to be augmented to apply to the Internet and ecommerce. The importance of a full-fledged logistics infrastructure cannot be undermined. For the sale of physical goods, there should be reliable shipping and delivery services to enable the rapid delivery of goods to consumers or business partners worldwide. Travica (2002) asserts that transportation infrastructure is one of the major bottlenecks in the growth of ecommerce in Costa Rica.

Logistics Infrastructure includes underdeveloped transportation infrastructure, limited state-run postal services, and lack of absolute/current building addresses. The logistics infrastructure should encompass express shipping and handling from any remote part of the country. Consequently, we hypothesise that the higher SMEs perceive the existence of government support, the more likely they will adopt EC technologies (Hypothesis 7).

4.3.2 Perceived Supporting Services

Supporting services refers to SMEs’ perception of the availability of supporting services in the country that promote the adoption of EC technologies. A number of studies have investigated the availability of capable technology infrastructure and availability and support of skilled labour and software/hardware vendors as factors that determine the EC technologies adoption in SMEs (e.g. Doolin et al., 2003; Srinivasan et al., 2002). In this regard, poor telecommunications limits the growth of EC. Required telecommunication facilities include transmission facilities connecting a country’s domestic network to the Internet. Technology Infrastructure readiness emphasises the availability of resources in the area of ICT within the country, community or region. Specifically, a well-rounded technology infrastructure entails abundance of software and hardware vendors and distributors dealing in web servers, databases, operating systems, web authoring tools, and so forth. Similarly, presence of big multinational companies such as Compaq and Microsoft can also spur the uptake of EC by providing reliable products and fostering indigenous ICT community and enriching them with technical expertise. Additionally, a
large pool of trained human resources in the field of ICT acts as the propellant for more EC activity. Easy and cheap access to skilful individuals provides the much-needed boost to incite the EC uptake especially in small business enterprises. Therefore, we hypothesise that the higher SMEs perceive the availability of supporting services, the more likely they will adopt EC technologies (Hypothesis 8).

4.4 Environmental Pressure

Environmental pressure in the context of SMEs may stem from the firm internally or from external parties. A firm may feel pressure when it sees more and more companies in the industry adopting the technology and therefore feels the need to adopt in order to remain competitive (Kuan and Chau, 2001). Tarafdar and Vaidya (2004) believe that another environmental pressure linked to readiness and propagation towards EC adoption is passion for business excellence. This force is reflected in having a proactive stance towards pursuance of business excellence irrespective of any external pressure by setting pioneering trends in process and product innovation. Accordingly, we hypothesise that the higher SMEs perceive the existence of internal pressure, the more likely they will adopt EC technologies (Hypothesis 9).

In other many cases, a company may adopt a technology due to influences exerted by its business partners and/or competitors (Kuan and Chau, 2001). A firm may feel pressure to adopt the technology if its business partners request or recommend it to do so. Multinational corporations, in the past, have created coercive pressures on their subsidiaries and suppliers by requiring them to use EC technologies to link to global production networks (Gibbs and Kraemer, 2004). Chong and Bauer (2000) assert that critical mass or externalities also contribute as an seminal factor for any organisation trying to adopt new technology. The usefulness of a personal computer depends on the number of people who use computers and the wide range of available software. Applying this principle of network externalities, the argument holds true for EC as well. Furthermore, Kuan and Chau (2001) also note that another driving force for small businesses to adopt IT comes from government policies. For example, within the Malaysian shipping industry, the Electronic Data Interchange (EDI) usage is high because shippers and forwarders are forced to transact with Customs Department
electronically for duty payments and import/export declaration (Ang et al., 2003). Therefore, we hypothesise that the higher SMEs perceive external pressure, the more likely they will adopt EC technologies (Hypothesis 10).

5. Conclusion

Based on an extensive literature review of EC technologies adoption in both developed and developing countries, a number of issues have been identified in the existing models and frameworks used for exploring EC adoption by SMEs. In particular, our review shows that there is a lack of a comprehensive framework that gives a multi-faceted account to the phenomenon of EC technologies adoption. This paper therefore develops a theoretical framework of EC technologies adoption which is composed of four dimensions: perceived organisational readiness (micro level), perceived industry readiness (meso level), perceived national readiness (macro level) and the perceived environmental pressure. This framework can be used to serve various purposes including creating specific research models of EC technologies adoption in a given context by aggregating potential factors that influence EC technologies adoption under each dimension in the framework. These dimensions can be investigated independently or together in order to portray a more complete picture of the phenomenon of EC technologies adoption.

In this paper, we have further used the proposed framework to develop a more specific research model as an example to show how the developed framework can be used. This model is composed of first and second order factors that comprise the four dimensions in the proposed framework and determine EC technologies adoption by SMEs. The research model is novel for the following reasons. First, it provides a holistic view of potential factors that may influence the adoption of EC technologies by SMEs. This integrated view would help in explaining the adoption or non-adoption of EC technologies by SMEs. Second, this model includes a number of first and second order factors (e.g. perceived industry standards, perceived internal pressure) that have been overlooked by most researchers that influence the EC technologies adoption by SMEs. For example, EC adoption studies need to consider the industry level because the industry plays a major role in shaping the ability of individual organisations to adopt EC technologies. Third,
this model expands the definition of perceived organisation readiness to include the perception of technology, human, financial and technological resources, the internal technological infrastructure and governance, whereas previous studies have defined organisation readiness as the availability of financial and technological resources only. This research model could in turn be used by researchers who are interested in investigating EC technologies adoption by SMEs. Moreover, the proposed research model can easily be used to produce a research instrument to guide future studies of EC adoption by SMEs in various industries in a number of developing countries. Although it has not been empirically tested, a considerable number of factors included have been empirically validated in the previous studies.
References


Figure 1: The Proposed EC Technologies Adoption Framework

Table 1: Determinants of EC technologies adoption and use by SMEs identified in the literature

<table>
<thead>
<tr>
<th>Organisational Readiness</th>
<th>Developed and Developing Countries</th>
<th>Insignificant</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Trialability</td>
<td>Ramdani (2009), Kendall et al. (2001)</td>
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<tr>
<td></td>
<td>Observability</td>
<td>Tan et al. (2009)</td>
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<tr>
<td></td>
<td>Security issues</td>
<td>Wyner and Regan (2005), Tan et al. (2009), Looi (2005)</td>
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<td></td>
<td>Technological competency</td>
<td>Alam (2009)</td>
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<tr>
<td></td>
<td>Technological opportunism</td>
<td>Sparling et al. (2007), Wu, Mahajan, and Balasubramanian (2003), Srivivasan et al. (2002)</td>
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<tr>
<td></td>
<td>Perceived need for change and technology</td>
<td>Wyner and Regan (2005)</td>
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<tr>
<td></td>
<td>Reliability of technology</td>
<td>Wyner and Regan (2005)</td>
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<tr>
<td></td>
<td>Models of successful use</td>
<td>Wyner and Regan (2005)</td>
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<tr>
<td></td>
<td>Potential performance improvements</td>
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<td></td>
<td>Technological readiness/ e-business technology</td>
<td>Sparling et al. (2007), Srivivasan et al. (2002), Jeon et al. (2006)</td>
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<td></td>
<td>Staff resistance</td>
<td>Tsao et al. (2004)</td>
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<td></td>
<td>Relative strength of SME in the industry</td>
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<td></td>
<td>Type of SME’s ownership</td>
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<td></td>
<td>Firm Scope</td>
<td>Zhu et al. (2003)</td>
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<td></td>
<td>SME’s prior experience</td>
<td>Wyner and Regan (2005)</td>
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<td></td>
<td>Managerial time</td>
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<td></td>
<td>Business type</td>
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<td>#</td>
<td>Factors</td>
<td>Developed and Developing Countries</td>
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<td>3</td>
<td>Organisational culture</td>
<td>Alam (2009), Seyal et al. (2004)</td>
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<td>4</td>
<td>Task variety</td>
<td>Seyal et al. (2004)</td>
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<tr>
<td>5</td>
<td>Integration with marketing strategy</td>
<td>Tsao et al. (2004)</td>
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<td>6</td>
<td>IS/IT investment evaluation</td>
<td>Tsao et al. (2004)</td>
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<tr>
<td>7</td>
<td>Export volumes</td>
<td></td>
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<td>8</td>
<td>Priority (of IT project)</td>
<td>Wymer and Regan (2005)</td>
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<td></td>
<td>D. Top management Support</td>
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<td></td>
<td>Organisation support (support within the organisation)</td>
<td>Sparling et al. (2007), Zhuang and Lederer (2004), Wu et al. (2003), Tsao et al. (2004), Lertwongsatien and Wongpinunwatana (2003)</td>
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<tr>
<td>3</td>
<td>CEO’s innovativeness/ Innovation champion</td>
<td>Sandberg et al. (2009), Al-Qirim (2007), Wymer and Regan (2005), Scupola (2003), Huy and Filiatrault (2006), Jeon et al. (2006)</td>
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<tr>
<td>4</td>
<td>CEO’s involvement</td>
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<td>Industrial Readiness</td>
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<td></td>
<td></td>
<td>1. Technology intensiveness of the industry</td>
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<td></td>
<td></td>
<td>Chong et al. (2009)</td>
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<td></td>
<td></td>
<td>Interorganizational relationships (Communication, collaboration and information sharing)</td>
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<td></td>
<td></td>
<td>Trust among trading partners</td>
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<td></td>
<td></td>
<td>Chong et al. (2009)</td>
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<td>2</td>
<td>Lack of trading partner readiness</td>
<td>Zhu et al. (2003)</td>
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<tr>
<td>3</td>
<td>Availability of partners</td>
<td>Wymer and Regan (2005)</td>
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<td></td>
<td>National Readiness</td>
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<td>1. Degree of support of the government</td>
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<td></td>
<td></td>
<td>Al-Qirim (2007)</td>
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<td></td>
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<td>2. Availability of and Support from technology vendors</td>
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<td></td>
<td>3. Availability of EC-related technologies</td>
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<td></td>
<td></td>
<td>Wymer and Regan (2005), Scupola (2003), Sarosa and Underwood (2005)</td>
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<td>4. National infrastructure</td>
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<td></td>
<td></td>
<td>Huy and Filiatrault (2006), Sarosa and Underwood (2005)</td>
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<td>5. Regulatory environment/ Regulatory support</td>
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<td>7. Support for the importance of technology readiness</td>
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<td>Environmental Pressure</td>
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<td></td>
<td></td>
<td>1. External pressure [Industry, competition, Government, buyers/ Consumer readiness, Organizational, suppliers]</td>
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<td></td>
<td></td>
<td>2. Owner characteristics (owner experience with computers)</td>
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<td></td>
<td></td>
<td>3. Owner/manager’s Managerial &amp; (IT) experience</td>
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<td></td>
<td>3. Managers’ knowledge of the new technologies and of e-commerce</td>
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<td>4. Subjective norm and attitude</td>
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<td>5. Decision making style for IT adoption</td>
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<td></td>
<td></td>
<td>6. Perceived behavioural control</td>
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<td></td>
<td></td>
<td>7. Owner/manager gender, age and educational level</td>
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</tbody>
</table>

Note: The highlighted parts mean that the factors have been investigated in developed countries but not in developing countries. References related to developing countries are shown in boldface.
Table 2: First and Second Order Determinants of EC Technologies Adoption by SMEs

<table>
<thead>
<tr>
<th>Dimension of the Framework</th>
<th>1st Order Factor</th>
<th>2nd Order Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisational Readiness</td>
<td>Perceived Benefits, Compatibility, Complexity, Trialability, observability, Security, Reliability, Perceived need for technology, Technological opportunism, Models of successful use, Perceived barriers and limitations, Perceived risks and opportunities</td>
<td>Perceived organisation Resources, Human resources, Financial resources, Technical and Technological resources</td>
</tr>
<tr>
<td>Perceived Organisation Resources</td>
<td>Organisational culture, Task variety, Integration with marketing strategy, Organisational strategic orientation, &quot;Having clearly defined roles, responsibilities and accountability, Having systematic process for managing change issues&quot;</td>
<td>Perceived Management Support, Top management support, Support within the organisation, Innovativeness, Innovation champion</td>
</tr>
<tr>
<td>Perceived Governance</td>
<td>Perceived Industry Standards, Availability of standards, Availability of coordinating bodies, Availability of online resources, databases and portals</td>
<td>Perceived Industry Standards, Top management support, Support within the organisation, Innovativeness, Innovation champion</td>
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<td>Perceived Industry Standards</td>
<td>Perceived Industry Standards, Availability of standards, Availability of coordinating bodies, Availability of online resources, databases and portals</td>
<td>Perceived Industry Standards, Top management support, Support within the organisation, Innovativeness, Innovation champion</td>
</tr>
<tr>
<td>Perceived Trading Partners Readiness</td>
<td>Perceived Industry Standards, Availability of standards, Availability of coordinating bodies, Availability of online resources, databases and portals</td>
<td>Perceived Industry Standards, Top management support, Support within the organisation, Innovativeness, Innovation champion</td>
</tr>
<tr>
<td>Perceived Level of Trust among Industry Players</td>
<td>Perceived Industry Standards, Availability of standards, Availability of coordinating bodies, Availability of online resources, databases and portals</td>
<td>Perceived Industry Standards, Top management support, Support within the organisation, Innovativeness, Innovation champion</td>
</tr>
<tr>
<td>National Readiness</td>
<td>Perceived Government Support, Availability of regulatory and legal environment and support, Government support and commitment, Availability of ICT policy and action plan, Support for the importance of technology readiness, Availability of national infrastructure, Availability of logistics and transport infrastructure</td>
<td>Perceived Government Support, Availability of regulatory and legal environment and support, Government support and commitment, Availability of ICT policy and action plan, Support for the importance of technology readiness, Availability of national infrastructure, Availability of logistics and transport infrastructure</td>
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<tr>
<td>Perceived Supporting Services</td>
<td>Perceived Government Support, Availability of regulatory and legal environment and support, Government support and commitment, Availability of ICT policy and action plan, Support for the importance of technology readiness, Availability of national infrastructure, Availability of logistics and transport infrastructure</td>
<td>Perceived Government Support, Availability of regulatory and legal environment and support, Government support and commitment, Availability of ICT policy and action plan, Support for the importance of technology readiness, Availability of national infrastructure, Availability of logistics and transport infrastructure</td>
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<tr>
<td>Environmental Pressure</td>
<td>Perceived Internal Pressure, Passion for business excellence, Setting pioneering trends in process and product innovation, Following innovative technology to remain ahead of competition</td>
<td>Perceived External Pressure, Pressure from business partners and/or competitors, Customer pressure, supplier pressure, Government pressure, market pressure</td>
</tr>
</tbody>
</table>

Note: Factors in boldface have not been investigated before in the context of SMEs
Evaluating employee empowerment as an important feature of successful management (The case of Jordan Ministry of Interior)

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Abstract
The study attempts to define, discuss and evaluate employee important as a best business practice. Empowerment is viewed as an important feature of successful management, as well as a way to gain competitive advantage. The paper relates empowerment to the Jordan Ministry of the Interior (JMI) where empowerment is practiced at all employees’ level practice, which has enabled the ministry to gain employee and customer satisfaction. A number of implications and recommendations are suggested.

Keywords: Empowerment, Employee and Customer, Satisfaction, Service Organizations, Jordan Ministry of the Interior (JMI).

1. Introduction
The current study attempts to evaluate employee empowerment as an important feature of successful management as applied to the Jordan Ministry of the Interior. It is widely acknowledged that the employee empowerment helps public and private organizations achieve sustainable competitive advantage, thus making clients and citizens satisfied and loyal (Batten, 1995; Kuo, et al. 2008). Kotter (1995) affirmed that a major step in transforming an organization is to empower employee to act on the organizational vision. Leaders who empower employees enable them and their organizations to deal more successfully with Mzaarke turbulence and foreseen demands of the future (Lorsch, 1995). In the service industry, empowerment is particularly important. LY et al. (2005) point out that service operations are characterized by extensive interactions between customers and providers: customer satisfaction is thus closely associated with service performance and various service encounters throughout the system. Empowerment in public service organizations enhances employees’ (citizens) (Lashley, 1995b).
As far the Jordan Ministry of the Interior, employee empowerment is an integral part of the mission of the government. Empowerment is encouraged so that citizens and service providers (Ministry’s employees) get better interactions, and this in turn will enhance the quality of the services provided. The Ministry of the Interior employee empowerment is important, and that the benefits that can be derived from this kind of empowerment include employee commitment, quality services, efficiency, responsiveness, synergy, management leverage, and citizens’ satisfaction. It should also be pointed out that upon direct instructions from His Majesty King Abdullah II, the Ministry of the Interior in particular and all other in general are demanded to follow decentralization and transparency, and this in itself encourages the pursuit of employee empowerment. The Jordan Ministry of the Interior is judged on its ability to deliver the highest quality services to citizens and people in Jordan as a whole.

2. Literature Review

Empowerment related literature can generally be grouped into four categories. Result-oriented studies have examined successful cases of empowerment (e.g., Berman, 1995, Burbidge, 1995). Operation-oriented literature has explained how empowerment is attainable through layering (e.g., Bogg, 1995, Lashley, 1995a, Nixon, 1994, Osborne, 1994). Trait-oriented research is characterized by exploring the preconditions of control and power, trust and inclusion, accountability, honesty, and risk taking (Foster-Fishman & Keys, 1995). Individual-oriented literature includes personal feelings, personal power, self-determination, and other cognitive variables of empowerment (e.g., Baird, 1994). Wall and Wall (1995) reported organizations have striven to become more competitive many have overlooked acritical element—the overall framework that could turn empowerment from an attractive concept into a competitive advantage.

Scholars have stipulated that empowerment requires a specific, operational definition. To obtain a better understanding of empowerment, it is necessary to consider organizational factors. Spreitzer (1995) suggested that a powerful test of a full empowerment model would be to tie empowerment to certain organizational initiatives in order to produce motivational changes in employees. Hart and Schlesinger (1991) point out that successful empowerment calls for a cultural shift within an organization in terms of a change in values, in the way, people work together, and in the way, people feel about participation.
and involvement. Many studies have also demonstrated that employee empowerment in public administrations is associated with client/citizen satisfaction (Kuo et al., 2008; Karsh et al., 2005). Employee empowerment has also been associated with job satisfaction. Job satisfaction is defined as the feelings an employee has about their jobs in general (Smith et al., 1985). Job satisfaction was previously treated as an employee’s overall evaluation of his or her job or the perceived quality of the work experience (Kalleberg, 1977).

3. Empowerment as a strategy in the Jordan Ministry of the Interior.

The very essence of empowerment as viewed by the Jordan Ministry of the Interior (JMI) is to affect decision making down to the lowest possible level. The organizational structure of (JMI) shows that each level of employees has its own responsibilities. Being culture-, oriented as well as citizen-oriented, employees at (JMI) are provided with a clear vision and sufficient information to achieve the goals appropriate for their positions. As employees become more comfortable with making decisions, they handle problems without management assistance and make a greater number of decisions. The primary value of empowerment as envisaged by the Minister of the Interior is that it establishes a culture or a code of ethics, which all employees are encouraged and expected to identify and suggest improvements. Such a culture enables enlightened management to sponsor and promote a proactive atmosphere that provides employees at all levels with the necessary tools to do their jobs that effectively matches the rate of business transitions. JMI reports show that empowerment has enabled the Ministry to have control over the process and the outcome, thus enabling employees and team members develop their own set of expectations. Empowerment has also enhanced employees’ feelings of self-worth and value to the Ministry and increased job satisfaction. Spreizer et al. (1997) noted that work satisfaction was one of the earliest anticipated outcomes of empowerment. Kirkman and Rosen (1999) also commented that empowered teams were more productive and proactive than traditional work teams and had higher levels of customer service and job satisfaction. As believes in citizen satisfaction, every effort is made to ensure that all service providers are satisfied also. One way of making these employees satisfied is through empowerment.
The strategy of (JMI) is based on the following pillars:

- Empowering employees at all levels
- Encouraging teamwork.
- Calling for and advocating decentralization.
- Respecting the principle of accountability.
- Viewing delegation as healthy practice to be pursued by all directors and governors.

Whenever possible, JMI governors, managers, and executives empower others through sharing decision-making and responsibility. The Minister believes that ultimately, through empowerment, motivation will increase which may lead to an increase in productivity and overall performance of a team. Citizens will be highly satisfied when their needs are met speedily and effectively.

4. Implications and Recommendations

It is quite evident that empowerment serves both the organization and its customers. To translate empowerment into an organizational competitive advantage, empowerment must be enacted as well as conceptually promoted. To avoid the rate of programmatic Holy Grail, managers must implement empowerment. Employees must feel empowerment constantly and then be able to adopt it to their daily work. Furthermore, the finding that empowering practices, empowered employees, and empowering culture are more critical empowering leaders in explaining job satisfaction under core value of matching policies and practices for the n of empowerment gains of empowerment is improved employee attitude, such as a highly motivated staff (Lashley, 1995 b, Tyson, 1994). The success of a particular initiative that claims to empower employees will be judged by the extent to which it enables the empowered to feel personally effective, able to determine outcomes, and to have a degree of control over significant aspects of their working life.
References


INDEX
System of administrative divisions No. (46) for the year 2000, as amended (1)

Article 1
This system is called system (the administrative divisions of the year 2000) and shall take effect from the date of 1/1/2001.

Article 2
Kingdom is divided administratively into the following governorates:
1. Province and its capital city of Amman.
2. Irbid Governorate and status of the city of Irbid.
5. Ma'an and status of the city of Ma'an.
8. Tafileh and status of the city of Tafila.
11. Ajloun and status of the city of Ajloun.

Article 3
Consists of the provinces and districts and brigades, as provided for in the system.

Article 4
Capital Governorate consists of brigades and districts the following:
A. Brigade rod position Abdali Amman and includes areas of the Greater Amman Municipality the following:
   5. Yarmouk district 6. Bader region
B. Brigade DEM and DEM position includes areas of Greater Amman Municipality the following:
C. Brigade Qweismeh and status Juwaida and includes areas Greater Amman Municipality the following:
   1. Qweismeh area and Juwaida and Abu Alanda and Ruaib
   2. Khraibat market area, Java and Alyadudp
   3. Area or a short, interviewers
D. The banner of the university and its status Jubaiha includes areas of the Greater Amman Municipality the following: (2)
   1. Area Jubaiha 2. Sweileh 3. Tlaa Ali and mother belong Sumac

1 - published on page 3674 of the Official Gazette No. (4455) the date of 17.09.2000, as amended by the revised system (45) published on page 3092 of the Official Gazette No. (4499) The date of 30/7/2001.
2 - This paragraph was amended under the rules of the revised (45) for the year 2001 by adding the item (6. Kemalism) to it.
E. Brigade and Wadi Seer, status and Wadi Seer and includes areas Greater Amman Municipality, cities and villages the following:
And. Brigade Sahab, Sahab position includes the following towns and villages:
G. (1) the banner of Giza, Giza and the status of cities and villages include the following:
42. Validity
(2) eliminate or lead, or lead position includes the following villages:
H. (1) the banner of the distinguished status of the distinguished and includes the cities and villages the following:
(2). Eliminate stoning Shami and status (stoned Shami West) and includes the following villages:
   1. Shami stoning West 2. Salem 3. Hashemite
10. Rabia
I. (1) the banner of Naor and Naor position includes the cities and villages the following:
11. Ameriya 12. High
(2). Eliminate or orchards, or status of the orchards and includes the following villages:
5. Ponds or 6. Masouh
(3). Elimination of the attorneys and the attorneys and the position includes the following villages:


Article 5

Irbid Governorate consists of the following brigades:

A. Brigade reed Irbid Irbid city center includes the cities and villages the following:
   26. Abigail

B. Ramtha and Ramtha position includes the following towns and villages:
   6. Alzniba

C. Al Koura and status of the town of Deir Abi Said and includes the cities and villages the following:


21. Argem 22. Askayen

D. Brigade Bani Kenana and status Sama Rousan includes towns and villages the following:
   31. Silat 33. Dar Al-Basha 34. Azwaip 35. Alborz

E. The banner of the northern Jordan Valley and the epicenter Barn North and includes the cities and villages the following:
   33. School 34. Spirh 35. The offense is 36. Auja North
   37. Auja South 38. Anchored

And. The banner of Beni Obeid and status of the fort and includes the cities and villages the following:

G. The banner of the North and its epicenter Shrine Shrine North and includes the following towns and villages.

H. The banner of the good and the good position and includes the cities and villages the following:
   6. Butter median 7. ODM Abu Ali

I. The banner of moderation and status of Kafr El-Assad and includes the cities and villages the following:
   6. Abscess 7. Shehador

Article 6

Balq Governorate consists of brigades and the following districts:
A. (1) the banner township of Salt and status of the city of Salt and includes the cities and villages the following:
   17. Prophet Joshua 18. Hazir

(2). Elimination of the bar and status Sobeihi includes the following villages: (1)

1 - Edit this item under the rules of the revised (45) for the year 2001 by adding the village (Al-Rashed Shank) mechanism number (16).

(3). Elimination of the uniforms of the status of Alan and includes the following villages:
   17. Rishouni

(4). Elimination of a caravan and Erga Erga and status includes the following villages:
   5. Magdala 6. Wholesale

B. The banner of the Southern Barn and status of the city of the Southern Barn and includes towns and villages the following:

C. The banner of Deir Alla and status of Deir Alla and includes the cities and villages the following:

D. Brigade was appointed Pasha, Pasha, was appointed position includes the following towns and villages:
   1. Ain Al-Basha 2. Safot 3. Dinars, or 4. The village of Abu Nasir
   17. Patch

E. Brigade Mahis and Fuheis and status Fuheis includes the following villages: (1)

Article 7

Karak Governorate consists of brigades and the following districts:
A. The banner of Karak and status of the city of Karak and includes the cities and villages the following:
   36. Zgrip

1 - This paragraph was amended under the rules of the revised (45) for the year 2001 by eliminating the village (luxury) ones.

B. (1) of Mazar and Mazar position includes the cities and villages the following:
   25. Cam 26. Issawiya 27. Or deer
   28. 29, Johannesburg. Mansheyat Shrine 30. Aldbake

(2). Elimination of Moab and status Husseinieh includes the following villages:

C. (1). The banner of the palace and status of minors and includes the cities and villages the following:
The Impact of Leadership Development Opportunities on Learning

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Abstract

Understanding leadership is a key to preparing people for spontaneous learning, innovation and empowerment. The same processes that resulted in a flat world for whole societies affect smaller teams and individuals today. Learning requires the ability to perceive a diversity of viewpoints before concluding. Prejudicial conclusions undermine learning. The objective of this study is to determine the immediate impact of leadership activities on learning practices. While academics are the ostensible focus of the learning process, much more than just the lecture hall experience impacts learning. This study addresses the effect of leadership opportunities and development on learning.

Keywords: Impact, Leadership Development, Opportunities, Learning

1. Introduction

Effective leadership means more than simply knowing what to do—it's knowing when, how, and why to do it. Effective leaders understand how to balance pushing for change, while, at the same time, protecting aspects of culture, values, and norms worth preserving. They know which policies, practices, resources, and incentives to align and how to align them with organizational priorities. They know how to gauge the magnitude of change they are calling for and how to tailor their leadership strategies accordingly. Finally, they understand and value the people in the educational Institution. They know when, how, and why to create learning environments that support people, connect them with one another, and provide the knowledge, skills, and resources they need to succeed. This combination of knowledge and skills is the essence of balanced leadership.

2. Educational Importance of the Study

It is important to note that not all changes represent the same order of change for each individual. What will be experienced as a "first priority" change for some may be a
"second priority" change for others. Thus, in addition to focusing leadership efforts on university practices associated with improved student's learning, leaders also must tailor their own leadership practices based on the "priority" of the change they are leading. The implications of the change for individuals, organizations, and institutions determine the priority of change.

A change becomes second priority when it is not obvious how it will make things better for people with similar interests, it requires individuals or groups to learn new approaches, or it conflicts with prevailing values and norms. Recognizing which changes are first and second priority for which individuals and groups helps leaders to select leadership practices and strategies appropriate for their initiatives. Doing so enhances the likelihood of sustainable initiatives and a positive impact on students' learning. Failing to do so will just as likely result in a negative impact on learning.

The implications of this study regarding leadership development for university students are wide-ranging. The large impact of leadership roles and leadership development on students means that, as university community members, we must work to ensure that we encourage and facilitate leadership roles for the students with whom we work. This means that we must be aware of “best practices” across universities, and also of ineffective leadership paradigms. Because no two universities are entirely alike, elements of leadership development that are successful in one setting may not necessarily be best for another, so constant re-evaluation of leadership development programs is necessary.

3. Background

Toutkoushian and Smart’s (2001) study on the impact of institutional characteristics on university students indicates that students recognize that there is more to learn in university than academic information. Within the past 40 years, studies on university impact have moved to reflect this wide source of learning.

The impact of out-of-class experiences on the university student has been documented in studies on the changes of university students (Nichols, 1967; Astin, 1968, 1993; Pascarella and Terenzini, 1991). Gradually, studies began relating leadership experiences with competencies (Kuh, 1993). Kuh discusses the effects of leadership roles in
extracurricular activities and finds that they affect the personal development areas of Practical Competence and Altruism and Estheticism.

A more specialized group of literature examines the specific impact of leadership opportunities on the development of university students. Positive career impacts, socialization impacts, and others are all extrapolated within this class of research (Cooper, Healy and Simpson, 1994; Pascarella, Ethington and Smart, 1988; Kezar and Moriarty, 2000; Terenzini, Pascarella and Blimling, 1996). Cooper, Healy, and Simpson (1994) noted that the differences between involved and uninvolved students over time became more pronounced, indicating that leadership opportunities and developmental skills are closely interrelated. Further, the impact of specific leadership development activities on the self-perceived leadership abilities is clear. Kuh, Schuh, and Whitt’s (1991) book about universities that successfully involve their students contributes to the idea that development in university is enhanced by leadership opportunities, which can be structured by universities for maximum impact. The increasing amount of research regarding student development in university indicates that the idea of working with students to develop the whole person, instead of just the academic facet, is becoming increasingly accepted.

While many studies of the impact of university on students focus on quantifiable variables (c.f. Cooper, Healy and Simpson, 1994; Pascarella and Terenzini, 1991; Kezar and Moriarty, 2000), the predetermined questions and answer categories, as Kuh asserts (1993), disregard the many different levels of meaning that students associate with their experiences in university. Rather, as Bogden and Biklen note, “Researchers in the phenomenological mode attempt to understand the meaning of events and interactions to ordinary people in particular situations… [The emphasis] is the subjective aspects of people’s behavior. They attempt to gain entry into the conceptual world of their subjects in order to understand how and what meaning they construct around events in their daily lives” (1998, p. 23). As Kuh continues, “the bulk of qualitative research about university students was conducted 25 years ago with traditional-age (18-22) students enrolled full time who lived on campus…Through the use of questionnaires, the researcher may be able to discover those aspects of university considered important by students whose
frames of reference were not taken into account when many of the current research instruments and models of university impact were developed” (1993, p. 279).

4. Methodology

4.1 The Sample

The sample of the study consisted of 200 students, 40 student affairs professionals, and 60 professors at four Jordanian public and private universities. (Jordan University-Religion Education International University- Al-Balkka University- Amman Private University), Universities that have a strong history of student involvement. The researcher used convenience sampling in selecting the subjects. The subject community has all the characteristics of the type needed for in-depth study of this topic.

4.2 Instrumentation

The instrument used in the study was a survey questionnaire which consists of 49 questions. The leadership behavior has been measured by a 27 item .The learning practices have been measured by a 15 item questionnaire originally devised by the researcher for this specific study. Of 49 questions, seven were designed to gather background information of the respondents.

4.2 Data Collection and Analysis

Two hundred questionnaires along with a covering letter were distributed among the selected sample of students and professors. It explained the purpose of the study and the importance of the participation of the students in responding to the questionnaires.

The first stage of data analysis involved computing descriptive statistics as frequencies and percentages for analyzing characteristics of the subjects. Second a reliability analysis was done to check whether the questionnaires measure the variables reliably. the alpha values were calculated for the same purpose. If the alpha values are greater than 0.5, The questionnaires measure the variables reliably. (Leadership questionnaire and learning questionnaire) third a factor analysis was performed to find out the dimensions of each variable ,how questions are grouped to dimensions, to find out whether any unwanted questions can be eliminated from the questionnaire. Finally the simple correlation analysis was performed to identify the relationship between leadership and learning.
5. Results

5.1 Questionnaire Responses and the Profile of Students

There were 185 responses from the 200 questionnaires. It is a response rate of 93%, which is at a satisfactory level. However 180 questionnaires were selected for this analysis. It shows that 60% of the respondents were male students while the rest were female students. The majority of the students appear to be within the age group of 19-22.

5.2 Reliability Analysis and Factor Analysis

A reliability analysis was done to check whether each questionnaire measures the variables reliably. The Chronbach’s Alpha value was measured for this purpose. The results reveal that the questionnaire measures the variables reliably.

Table 1: Summary of Reliability Analysis.

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>Alpha Value</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership Behavior Questionnaire</td>
<td>0.8321</td>
<td>acceptable</td>
</tr>
<tr>
<td>Learning Practices Questionnaire</td>
<td>0.7328</td>
<td>acceptable</td>
</tr>
</tbody>
</table>

Source: Survey data

Factor analysis is a statistical procedure to take a large number of constructs and reduce them to a smaller number of factors that describe this measure. A ‘factor’ is a combination of questions where shared correlation explains a certain amount of total variance. After rotation, factors are designed to demonstrate underlying similarities between groups of variables.

Three measures were considered for the analysis.

i.  Kaiser – Meyer – Olkin Measure of Sampling adequacy

KMO measure is acceptable, (KMO = 0.794) since it is higher than 0.5, the distribution of data is acceptable for performing the factor analysis.

ii. Bartlett’s test of sphericity

Bartlett’s test of sphericity: Significance = 0.000. This result is acceptable since data does not differ significantly from multivariate normal. That is the chance to differ occurs at p = 0.000 < 0.05.
iii. Component Matrix

At the beginning there were two components. But, after extracting, two variables come under one component. Therefore the entire set of questionnaire is unidimensional. It means that the questionnaire has equally measured all of the variables.

5.3 Descriptive

The Standard Error of Mean (SEM) is less than 3.5% for all variables and the highest standard Error of mean is for leadership behavior (2.6%). The practices of Learning have the highest average scores. Overall averages are above 0.30, and it implies that successfulness of all factors.

The following table shows a summary of the descriptives.

Table 2: Summary of Descriptives

<table>
<thead>
<tr>
<th>Variables Involved</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>4.34</td>
<td>0.327</td>
<td>Highest dispersion: Points scattered away from the mean</td>
</tr>
<tr>
<td>Learning Practices</td>
<td>4.67</td>
<td>0.274</td>
<td>Points scattered somewhat close to the mean.</td>
</tr>
</tbody>
</table>

Source: Survey Data

5.4 Correlation Analysis

Scatter plots were taken to identify relationship of success of Learning with the leadership. The correlation between leadership and success of Learning is positive and significant at 1% significance level since $r = 0.530$ and $P = 0.000$.

The results of the scatter plots are commented as follows.

Table 3: Comment on Scatter Plots

<table>
<thead>
<tr>
<th>Variables Involved</th>
<th>Correlation Co-efficient(r)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership-Practices of Learning</td>
<td>0.614</td>
<td>A positive correlation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The points are much scattered around a straight line</td>
</tr>
</tbody>
</table>

Source: Survey Data
5.5 Regression between Leadership Behaviour – Success of Learning

The analysis gives the following information.

1. $R = 0.572$, which means a moderate gradient regression line.
2. $R^2 = 0.327$, means 28% of the variance of success of Learning was accounted for by leadership.
3. Sum of squares figures explain a larger proportion of unexplained variance than explained variance.
4. Sag F = 0.000, which shows that a particular “F” value could occur by a chance of less than 1 in 1000.

5.6 Test of Hypothesis

The hypothesis states as follows

“Leadership behavior is positively related to the Learning Practices.”

Correlation analysis explained a positive relationship between leadership and Learning Practices ($r = 0.614$, $P = 0.000$). Regression analysis also supports this by giving a value, ($B_3 = 0.313$). Hence leadership is a predictor of Learning Practices ($F = 35.189$, 0.000). Hence the decision is, leadership behavior is a predictor of Learning Practices.

6. Discussion

The study reveals a moderate relationship between leadership and Learning Practices ($r = 0.614$, $P = 0.000$). This is significant at 1% significance level. Hence leadership is reflected on Learning Practices. The simple regression analysis describes that leadership has a positive impact on Learning Practices with the strength of $B = 0.384$ ($F = 69.423$, $P = 0.000$). The leadership behavior gives a measure of Learning Practices and it has a 28.2% accuracy of predicting. That is 28.2% of Learning Practices are accounted for, by leadership behavior.

The distribution of the leadership shows that the mean and standard deviation are at favorable levels. ($Mean = 4.0789$, standard deviation = 0.3425). The standard deviation shows that all professors’ leadership behavior is committed on the quality at plus or minus 0.3425 standard deviation level.
7. Conclusion

The theoretical literature on leadership, change, and the adoption of new ideas (including Heifitz, Fullan, Beckard, Pritchard, Hesselbein, Johnson, Kanter, Bridges, Rogers, Nadler, Shaw, and Walton) makes the case that not all change is of the same magnitude. Some changes have greater implications than others for students; student affairs staff members and professors. Although there are a variety of labels given to differing magnitudes of change.

Preliminary findings based on questionnaires with students and student affairs staff members suggest that, as students gain leadership experience on campus, they also gain the ability to reflect their opinions coherently and with respect for the opinions of others. Most importantly, they gain the knowledge that “it is okay to fail.” The differing perspectives within the realm of student affairs staff enabled the researcher to see the broad impact of leadership development, and, indeed, the broad venues for it, as well. Like the research, the questionnaires indicated that this is no easy field to research or discuss – many differing needs and perspectives mean that the impact of leadership development will also differ across individuals.

At the same time, the findings of the research echo the premise of the bulk of the research – that the effects of leadership roles for university students are wide-ranging, and contribute much to the development of students.
References


Marketing Strategy for New Banking Services and Products 
and its Effects on the Stockholders Equity. 

[Case Study: Arab Bank through Shabab Product]

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Abstract 
This study aims to discern the impact of creating and triggering new Banking Products and Services on the shareholders equity. The researcher selected Shabab Product that provided by the Arab Bank of Jordan in 2005. The Bank had implement an advanced marketing strategy to market this product for the Jordanian Citizens who are between 18-35 years. The results of the study were that, the shareholder equity increased in the end of 2005, and the net income also has increase. 

Keywords: Marketing Strategy, New Banking Services, Products , Effects , Stockholders Equity. Arab Bank , Shabab Product 

1. Introduction 
Now a days, Organizations are working within a Sharply Competitive environment, related to new terms such as information and communication revolution, the environmental diversity, technological revolution, and globalization. And because of the main goal of an organization management is to maximize the Owner's wealth, managers especially in the banking sector are working under pressure from shareholders, international financial crisis, and the central Bank regulations. Such factors affected deeply the management practices and activities. In the banking sector, triggering safety
Products can be considered as one tool in retaining the current customers and attracting new customers, this mean that bank’s managers are facing now different attitudes and behaviors in the marketing process, because the marketing manager in a company's Primary link to the customer and the competition. There for, the marketing manager must be especially concerned with the market position and marketing mix of the organization as well as with the overall reputation of the company and its products. (Weelen and Hunger, 2006, P.117)

The potential outcomes of the marketing strategy are:

i. Acquire more customers.

ii. Persuade each customer to buy more products.

iii. Persuade each customer to buy more expensive products or up selling each customer.

iv. Persuade each customer to buy more profitable products (centa business services London).

And these outcomes are working together in achieving the major purposes in increasing the market share, the net income and the shareholder equity.

This paper aims to discuss and examine the Arab Bank of Jordan's Strategy in marketing the new product "Shabab product’ and the financial results of this marketing Strategy especially on the Stockholders equity.

2. The Study Importance

The banking sector in Jordan characterized by diversity either in the nature or the number of banks working in the Jordanian market, which created a higher competition environment. Jordanian Banking Market involves now, local banks, foreign banks, and international banks, and each bank is working now within a racetrack in order to increase his market share, to maximize equity, and to attract new customers. The traditional banking services and products became not enough any more in this racing, for that, banks now have to be pioneers in innovating and providing new products and services. The importance of this study refers to its attempt to link the new product to its marketing strategy.
2. The Study Objectives

This Study aims to achieve the following objectives:

i. New banking Services and products are useful in retaining the current customers and in attracting new customers.

ii. The marketing Strategy that applied by the Arab Bank was the success key in providing Shabab Product.

3. The Study Problem and Questions

The study problem takes the following form "Failure in marketing a new baking service".

The questions of the study are:

i. Why banks tend now toward creation new products?

ii. How can banks enhance the quality of the new service through the marketing strategy.

iii. What are the factors and procedures applied by the Arab Bank of Jordan to succeed in providing Shabab product?

4. The Study Hypotheses

i. There is no relationship between triggering new banking products and the high competition in the banking market in Jordan.

ii. There is no relationship between implementing Shabab product and increasing the net income for the Arab bank of Jordan.

iii. There is no relationship between triggering new products and increasing the Shareholders equity.

5. Previous Studies

5.1. A Study by Robin Lang Ford (2009), under the title "New Mobile Banking Service Goes Live" England. A study aimed to create a kind of calm among the users about the security of their financial information. The author pointed out that "This Service works by connecting users, via the internet on a mobile phone, to a secure transactional payment system developed by txttrans."

Moreover, users pre-register a debit or credit card and receive a secure PIN to access the Mobank service from a mobile phone, so they do not have to enter card details every time a transaction is made.
The txttrans system means that no banking data, card details or PIN are stored on the mobile phone itself, so the transaction is secure, even if the mobile phone is stolen. As a result of using this system, Steve Townend, CEO and founder of mobank said: "These days, people especially the under 30s- expect to be able to run their lives on the move. Now you can run your banking, shopping and money management from it too."

Michigan City (Business Wire) (2009), under the title "Horizon Bancorp Announces an Increase in First Quarter Earnings" the study represents a report that illustrates how Horizon accomplished this increase. Craig M. Dwight, president and chief executive officer attributed this increase to many reasons, and for the purpose of this study, Stock holders equity totaled $106.4 million at March 31, 2009 compared to $103.4 million at December 31, 2008. This increase was the result of net income which affected by opening a full service branch in Gosher, Indiana on April 6, 2009, holding company serving northern Indiana and southwest Michigan. Horizon also offers mortgage-banking services throughout the Midwest.

The current study could be benefited from this study in understanding that providing new services especially in banking industry may be through new branches in new locations.

5.2. This Study by Information Builders (2009), under the title "Lacaixa Savings Bank Boots Profitability with Self-Service BI Environment": The report indicated that La caixa has become the largest Savings bank in Spain through its focus on retail banking. Banks may not create new Strategies, or services to achieve their goals, but they may develop and improve their existing services. La caixa followed this manner, where Xavier Gonzalaz Said "Instead of building a new Channel, we are enabling our well-established network of almost 5000 branch offices to address this market.

Adopting business intelligence (BI) has generated many benefits for La Caixa Bank, increasing in customer base by 9 percent in the last ten months and has dramatically increased profitability in this segment from 10 percent to 16 percent.

5.3. A study by derdack, Matthes (2009), under the title "Improving Customer Service Via Mobile Banking": The report aimed to ling new services of Oman Arab Bank
to building revenue. The report indicated that Oman Arab Bank has triggered many new services such as mobile bank, bill payment via SMS. Oman Arab Bank has shown what can be achieved by combining expert local knowledge and innovative vision of how to exploit the SMS channel and the latest technology for mobile banking to achieve revenue and customer growth.

5.4. Triggering new banking and services may take another aspect, this may be done through acquiring another bank or organization. Bradley Keoun and Takahiko Hyuga (2008) pointed out that Bank of America corporation today announced it has agreed to acquire Merrill Lynch. Co. Inc. in a $50 billion all-stock transaction that creates a company unrivalled in its breadth of financial services and global reach. One of the executives of Bank of America has expected the potential results of this process, he said "Acquiring one of the premier wealth management, Capital markets, and advisory companies is a great opportunity for our shareholders.

5.5. The study by shareholders' unit in the Arab Banking Corporation, under the title "Al-Mosahim". The study indicated that ABC Islamic Bank, and Standard Chartered Bank have provided a new service, 3 years revolving Murabaha financing facility for their client Aref investment Group. General Syndication received strong support from the regional and international syndication market and the facility was over-subscribed by more than 100%. The facility amount was increased from the initial US $100 million to US $200 million. The 27 bank syndicate comprises banks from Europe, the Far East and the Middle East. By comparing the net income of ABC Group for the years 2005, 2006, the net income was increased by 54% over the last year.

5.6. Günel, Öncel (2004), under title "Service Marketing in Banking Sector and Recent Perceptions in Marketing Thoughts of Services, Eylul University, Turkey: The study aimed to identify the reasons for marketing scope to have importance in banking and for banks to interest in marketing subject can be arranged as:
i. Change in demographic structure: Differentiation of population in the number and composition affect quality and attribute of customer whom benefits from banking services.

ii. Intense competition in financial service sector.

iii. Bank's wish for increasing profit to create new markets, to protect and develop their market shares, and to survive on the basis of intense competition and demographic change levels.

5.7. This Study by Ceylan Onay, (2003) under the title "The Impact of Internet-Banking on Bank Profitability".

The Case of Turkey:

The study aimed to describe the impact of adding the Internet technology as a new Service for e-banking on the profitability measured in terms of ROA and ROE.

The Study results showed a significant decrease in the profitability. This could be attributed to the increase in IT expenditures following the adoption of the new technology. In the second year following the adoption of the technology, the researcher indicated that there was a positive coefficient of the variable on the ROE estimation.

This study provides an important benefit to the current study in the meaning of, the negative results may happen in the beginning of employing the new service cannot considered as failure.

5.8. This study is a case study of Clariden Bank (2003), under the title "Clariden Bank Builds a Foundation for Profitability". The study aimed to discern the impact of replacing the current banking system in achieving the bank's goals. To increase customer satisfaction and lower its cost ratio the bank needed a new core solution with high flexibility, high service quality, reduced failure rate, increased efficiency in transaction processing, flexible reporting and sophisticated information aggregation and retrieval.

As a potential Solution, Clariden Bank decided to implement IBM's Order Transport Management System (OTMS).
The most important results of implementation of the new system were: efficiently supports the business processes from front to back office. It enabled Clariden Bank to achieve its main goals: to increase both sustainable and measurable client satisfaction and the bank's profitability.


This study aimed to identify the marketing strategy's steps have to be applied by a bank in order to enhance its products and services. The authors indicated that "The marketers have to begin by viewing their bank from the customer's point of view. Each of the key activities of creating, producing, selling, and delivering a product or service should be examined closely and re-tooled if necessary to deliver top-notch service that will keep customers coming back. The main outcomes of this study were: Once you have provided a higher level of service you may find additional opportunities to share the cost of your outstanding service and convenience with highly satisfied and loyal customers. That is a vital part of profit improvement. And if you are unable or unwilling to ask your customers to share in some level of that cost, then you are expecting your shareholders to bear the full burden through lower profits and returns on their investments.

6. Theoretical Background

Triggering new products and services is very important for banks especially in a high competitive environment, but the most important issue is how to market this new product or service. Banks now are highly concerned to increase their market share for present products or services in present markets through greater marketing efforts in order to overcome the effects of the international financial crisis. This marketing strategy is called market penetration strategy. (David, 2007, p. 177)

New banking products and services have to be managed through an advanced marketing strategy which must include five components: Strategy in any field, marketing, production, teaching for example must include five components which are:
a) Scope, which means breadth of strategic domain, represented by number and types of industries, product lines. Market segment. To reflect company mission and strategic intent.

b) Objectives and goals: to evaluate the success of a strategy it must include a desired level of accomplishment on one or more performance dimension and the growth victor.

c) Resources and their deployment: allocation of human, financial and other resources across business, markets, processes, etc.

d) Competitive advantage: to discern the distinctive competencies or strength relative to competitors.

e) Synergy: improving overall efficiency and effectiveness by exploiting synergies across businesses and product markets. For purpose of examining and evaluating the marketing strategy that applied by the Arab bank in marketing the new program, it is useful to recall how an organization formulate and implement a marketing strategy. Marketing strategy deals with pricing, selling and distribution a product.

When managers and marketers of the Arab Bank thought about Shabab Product, they had rely on a big opportunity related to the banking environment in Jordan, this opportunity pertains to the Jordanian population, which was in 2007, 5723 million citizen, with a structure based on age shows that:

12% of the total is between 15-19 years, 19% of the total is between 20-29 years and 13% of the total is between 30-39 years.

(Department of Statistics, Jordanian Government).

Shabab Product has been presented to the young individual who are between 18-35 years. The strategic issue here is that %19 from the population could be now current customers for Shabab Product, and three years later, about %12 will be added as potential customers.
This product was the first one in the banking services in Jordan, which is working in a high competitive environment. And this leads us to deny the first hypothesis which is "There is no relationship between triggering new banking products and the high competition in the banking market in Jordan" and to accept the alternative hypothesis "There is a relationship between triggering new banking products and the high competition in the banking market in Jordan.

The second step of the marketing strategy for Shabab Product was; defining the objectives that represents a main element in formulating and implementing marketing strategy. (x-files, 2002)

The general objectives of triggering Shabab product were:

a) To attract new layer of customers (young people).
b) To increase the bank's market share through providing special products and services to specific potential customers who need different financial services.
c) To identify profits generated from the interests and commission that derived from the product.
d) To enhance the customer relationships.
e) To increase the opportunity of selling other products and services.

The consistency of those objectives to the major objectives of the Arab Bank and its mission is very high. And these objectives lead us to deny the second hypothesis "There is no relationship between implementing Shabab Product and increasing the net income for the Arab Bank of Jordan" and to accept the alternative hypothesis "There is a relationship between implementing Shabab Product and increasing the net income for the Arab Bank of Jordan".

The financial statements of the Arab Bank shows the increase in the net income for the years 2004-2005, because Shabab Product had been applied in 2005. The net income for the year ended in December 31. 2004 was JD 148.3 million, and in the end of 2005 (200.1) million, the net income increased by 518 million which represents % 34.9 over 2004 net income. (The Annual Report (2005), Arab Bank of Jordan).

As we know, the net income is a main component of the shareholders equity, and the same annual report shows an increase in shareholder equity in 2005 compared by 2004.
Shareholders equity totaled 1640.5 million JD in 2004, and increased to JD 1859.6 million in 2005, with a positive increase of JD 219.1 million and %13.4.

This analysis deny the third nil hypothesis "There is no relationship between triggering new banking products and increasing the shareholders equity" and accept the alternative hypothesis "There is relationship between triggering new banking products and increasing the shareholders equity" products and in creasing the shareholders' equity.

As mentioned earlier, the marketing strategy for new banking products and services is the success key for the product it self.

The marketing strategy of the new product, depends on market segmentation, because this product is presented to the young people.

The strategic planning that applied by the Arab Bank, aimed firstly to explain the new product, its benefits, feature, offers, prices, and conditions.

This conducted by a lecture for tow hours in each branch for the employees especially those who are CRO.

7. Shabab Product
   i. Shabab is distinctive bundle of Banking and non banking benefits.
   ii. It was designed especially to meet the financial and non financial needs of the youth segment.

In order to accomplish the objectives through attracting new customers, the bank is concerned to provide banking and non banking benefits. The banking benefits should be highly desired by the customer, and that enhances the marketing strategy. These benefits are:
   i. Preferential interest rates on loans, 25% less.
   ii. Special loans tailored to meet youth needs i.e Shabab Tech and Shabab car.
   iii. Exemption from salary transfer.
   iv. Exemption from account minimum balance fees
   v. Exemption from standing orders fees (order/month)
   vi. A Credit card free of issuance and renewal fees.
   vii. Internet shopping card free of issuance and renewal fees.
   viii. Free Shabab card (Visa Electron).
ix. All E-channels free of subscription fee, Hala Arabic (phone banking), internet banking and SMS banking.

These benefits are working as an attractive factors in the marketing strategy because of their congruous with youth attentions. Which generally living with a low income, so they will search for cheaper products.

Also the non banking benefits are closely appropriate to the youth needs, such as:

i. Discounted offer from Mobile Com.

ii. Discounted offer from Wanadoo.

iii. Discounted offer from Wide range of shopping spots.

And these benefits considered as strengths for the strategy. Through its marketing strategy, the Arab Bank exploited other organization that participate in the implementation of the strategy and it's prosper.

The non banking benefits are provided through external actors in the market. Through coordination and functional contracts, the bank tends to accomplish its objectives through other whose objectives are accommodate with the bank objectives in meeting the customer needs and expectations, and marketers have to understand the desired services that satisfy the customer and eliminate the gap between the customer expectations and the provided services (Zenithal and banter, 2002, PP.66-67).

Mobil Com-smart offer caters the following benefits:

i. Fixing monthly bill.

ii. A discount of JD 2.00 on the bill in case of direct debit from customer's AB account (AB is Arab Bank).

iii. Three monthly subscriptions with a yearly contract credit on the 4\textsuperscript{th}, 8\textsuperscript{th}, and 13\textsuperscript{th} month from subscription date.

iv. Same rate to any destination.

v. Ability to scratch and recharge the account after that initial credit is used.

vi. Carry over any unused credit—never lose the money.

vii. International access service without having to pay a deposit.

viii. Roaming service without having to pay a deposit.

ix. An attractive handset discount.

x. Discount on mobile phones selling prices (JD 35 approx).
Those benefits would be highly appreciated by youth, and could be the success key of the marketing strategy.

The information and communication revolution influenced the lifestyle for the Jordanian citizen, especially youth, who deal and use the internet for different purposes, such as learning, e-commerce, shopping, playing games, and viewing movies etc. Also the Jordanian government now is attempting to transfer from traditional government to e-government, this aspect requires flexibility, that enables the user to pay lower charges for the services provider. The Arab Bank and through Shabab Product, can provide through Wanadoo two facilities:

- Dial up with a JD 2 directly debited from the customer account he/she will entitled of the following:
  - 35 internet hours per month.
  - Free usage between 12am-08am.

- ADSL: the customer can get discounted ADSL home-line subscription when presenting his Shabab card at Wanadoo.

Also the non-banking benefits offer includes discount spots for Shabab member in several shops and services providers, such as:

- Restaurants: Alcantina Café, chili house, dominao's Pizza, cupid café.
- Clothing: Uright, Orchestra, Givenchy, Adidas…etc.
- Furniture and home building: Bilar stores options.
- Gifts, Jewelries: Samar Optics, Gifts corner, Optikos Shami…etc.
- Movies, Bookstand Magazines: Orange DVD, Titles Book and Movies, Aramex Media,…etc.
- Training and educational centers: Arab academy for Microsoft, Amid east, School Arabia and others.
- Hotels: Movempick.
- Mobiles and computers: Maraq Tel, Ring Jordan, PC Zone and others.
- Automobiles and vehicles: Delta TV5 Scooters, Piaggio Vaspa.
- Entertainment: Race ways.
- Beauty centers: Awad Saloon.
- Gyms and Health clubs: Flex Fitness Centre.
Currier delivery: Aramex shop and ship, Aramex express shipment.

The strategy designer made links between external environment and various market actors, and he was very smart in selecting the needs that can satisfy the potential customer.

Attracting new customers through Shabab program also took place in the marketing strategy which indicated that:

- Both AB customers and non AB customer can join Shabab if they are eligible to open an AB current or saving account in JD.
- Age should range between 18-35.
- Neither there is minimum income for joining Shabab nor a minimum account opening.
- If a customer applies for a credit card or a loan the related product credit eligibility criteria shall apply.

Here the strategy defined the product and its complementary services as a basic factor of the marketing mix, also defined the resources that will be located to implement the strategy.

Promotion strategy in its large attention depends on the various actors in the market, because each organization mentioned earlier has its marketing strategy, so they will act as free of charges marketers for the Arab Bank.

8. Pricing and Financial Benefits

8.1 Pricing

- JD 2 monthly Shabab membership fees.
- JD 2 monthly Wanadoo's dialup subscription fees.
- JD 25 cash collateral:
  - This amount is blocked against any insufficient fund that is to cover Shabab monthly subscription.
  - Customer with the following may be excluded from the cash collateral:
    - Salary transfer.
    - AB credit card.
    - AB loan.
• Fees are debited on monthly basis from the customer's account on the last working day of each month.

In the marketing perspective, these prices encourage the customers to be benefited from other product like, salary transfer, AB credit card, and AB loan. Marketing strategy maintains cross-functional responsibility for marketing operations across combined effort from subunits, loan department, credit cards department, and salaries department or function.

Also pricing tackled the service prices, so the customer is eligible to get a loan he will save the following with the discount of 25% on loan interest rate

<table>
<thead>
<tr>
<th>Loan type</th>
<th>Amount</th>
<th>Tenor</th>
<th>Discount of %25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing loan</td>
<td>JD 40000</td>
<td>144</td>
<td>JD 607</td>
</tr>
<tr>
<td>Auto loan</td>
<td>JD 10000</td>
<td>60</td>
<td>JD 125</td>
</tr>
<tr>
<td>Personal loan</td>
<td>JD 5000</td>
<td>60</td>
<td>JD 35</td>
</tr>
</tbody>
</table>

It seems as an integrated batch that can play a main role in achieving the competitive advantage.

Then the strategy printed out the requirements to join Shabab, and the procedures for each complementary product.

The marketing communication that conducted by the Arab bank was the radio advertising and roads advertising. Then the cost of marketing for the bank will be lower, because the bank depends on the marketing communication by the external players. Each shop, restaurant, café, and hotel will show its own customers about Shabab program and this is a type of word of mouth in communicating with the potential customers.
6. Recommendations

After this analysis, the recommendations for the management are:

i. The current strategy used market segmentation in one issue (the age). It would be more useful if the management breakdown this layer to smaller segments, such as, universities students, employees in both private and public sector, and young doctors for example.

ii. The "Cro" employees must be motivated to persuade any individual enter the bank for any purpose.

iii. To conduct an advertising campaign for the individuals who will reach 18 years of age in the next year.

iv. To hold lectures in the schools and universities to describe the benefits of the program.

v. To put measurable goals for each branch in order to evaluate its performance in this activity.

Then we can say that triggering new banking products and services, and using an integration marketing strategy forms a main factor in increasing the shareholders equity. Because the organization with high net income will keep a good number of the net income in the retained earnings section, which increase the shareholders equity and distributed cash dividends on the stockholders to make them highly satisfied.
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Abstract

The focus of the study was to conduct the research on “Consumer attitude towards mobile advertising” Based on the literature survey the predictor variables were identified. These dimensions were User Acceptance of Advertising, User-Based Acceptance Drivers, Mobile Service Acceptance Drivers, Advertising Acceptance Drivers. The questionnaire administrated for the study was based on 23 items in which 7 items were related to personal data, and the rest of the 16 were related to identifying consumer attitude towards mobile advertising among people. The sample size of the study was 136. Any sample size above 30 tends to be normally distributed therefore; 136-sample size was found to be appropriate. According to the respondents’ opinions, the mobile service acceptance drivers were high with a mean of (3.47). On the other extreme the respondents’ opinion on service acceptance was low (3.43). The standard deviation of respondents’ opinions on service acceptance was the least (0.84), as compared to others dimensions. This indicates that there is less polarization on the respondents’ opinions on this “service acceptance” dimension. The Standard Deviation of respondents’ opinion on consumer attitude was the highest (1.15), as compared to other dimensions. This indicates that there is a high polarization of the respondents’ opinions on this “consumer attitude” dimension. The Skewness for all the determinants of Consumer attitude towards mobile advertising were negative. It was as low as (0.36) for service acceptance and as high as (0.63) for user based acceptance. The negative skewness indicates that the respondents’ opinions on the respective determinants were below average. The correlations of consumer attitude ranged between 0.30 for user based acceptance and 0.04 for mobile service acceptance drivers. This indicates that comparatively a higher degree of correlation was found user based acceptance with consumer attitude as compared to the other determinants. The correlations of the other determinants had similar trend accept service acceptance that were found to be the highest with an “r” of .50. Four different
hypotheses were developed. The results and interpretation of the hypotheses are described as: a) The hypothesis relating to a relationship of the determinant User Acceptance of Advertising with dependent variable customer attitude was accepted. b) The hypothesis relating to a relationship of the determinant User-Based Acceptance Drivers with dependent variable customer attitude was accepted. c) The hypothesis relating to a relationship of the determinant Mobile Service Acceptance Drivers with dependent variable customer attitude was accepted. d) The hypothesis relating to a relationship of the determinant Advertising Acceptance Drivers with dependent variable customer attitude was accepted.

**Keywords:** Consumer Attitude, Mobile Advertising

1. **Introduction**

Organizations today work in an environment that is characterized by constant change and an increase in competition as a result of globalization. Zyman and Brott (2002:31) suggest that the biggest change in the market place is that consumers have a greater selection with regards to products and services and those organizations should become more conscious of their advertising efforts. Organizations now view advertising as an investment and tend to value over-communication with consumers, resulting in greater budgets for advertising departments than in the past (Zyman and Brott, 2002:22-23). Technological advancements have provided various new mediums for advertising to consumers and have further allowed for organizations to better reach consumers with regards to the frequency and impact of advertising (Du Plessis, Bothma, Jordaan and Van Heerden, 2003: 339). These advances in technology, combined with the market place’s need to increase advertising to consumers, has led to the fact that “Advertising is everywhere” (Cook, 2001:1).

The rapid growth of mobile phones and other mobile devices has created an increasing demand for mobile advertising. Mobile advertising has two different meanings. First, it refers to advertisement that moves from place to place (e.g., in side or outside of buses, trucks, and trains, etc.). Second, it refers to advertisement sent to and presented on mobile devices (e.g., mobile phones; Personal Digital Assistants; other handheld devices). In this
The author studies the latter and focuses on the mobile phone advertising as the prevalent form of mobile advertising. Technological innovations in mobile phones (e.g., take photos; play games; play music; send email; access the Internet; even watch TV) enabled users to utilize it more than just communication device and attracted advertisers to use mobile phone as an advertising medium.

In addition, mobile phone enables advertisers to provide very targeted and time sensitive information to their target audience. As a result, the mobile phone emerged as one of the most important and effective advertising media today.

1.1 Literature Survey

We will start this by reflecting some theories of individual attitudes and behaviors. Afterwards are user acceptance and their drives towards mobile advertising presented that is subcategorized in four different sections.

1.1.1 The individual attitudes and behaviors

Individuals gather information, comprehend and link it to their existing knowledge, where after individuals evaluate the information as well as form attitudes and intentions whatever to constitute an action or not. Behavior is created as function of these processes Barnes, (S. J. 2002). Understanding of individual behaviors is essential in the study of attitudes that people have because attitudes and behaviors are related and influences each other. Four factors are found to influence on the individual behaviors in general. These are the individual’s cultural, social, personal and psychological factors, which further concludes of the motivations, believes, attitudes, gender, lifestyle, family and friends. All these factors are considered to influence the final individual behavior towards an action. (Kotler, P., Wong, V., Saunders, J. & Armstrong, G. 2005), The individual attitude is defined as the reality that an individual has towards an object or idea. Attitudes include to the psychological behaviors and are affected by the individual beliefs, of doing and learning.

Attitude toward an advertisement is defined as “a learned predisposition to respond in a consistently favorable or unfavorable manner toward advertising in general” (MacKenzie and Lutz, 1989). A significant correlation between favorable attitudes toward advertising
and respondents’ rating of specific advertisements as being annoying, likeable, enjoyable etc. has been observed (Bauer and Greyser, 1968). Marketing communication may predispose individuals to respond positively or negatively toward a product or brand. Such elements as the execution of the advertisement, the mood created by the advertisement, the degree to which the viewer is aroused, and even the context within which the advertisement is received (e.g. television program or magazine) may affect their feelings about the advertisement, and in turn their feelings about the product or brand (Stern and Zaichkowsky, 1991). There is clear evidence that the emotions that advertising arouse do carry over to products and brands, and studies have often shown that attitude toward the advertisement is a strong mediator of advertising effectiveness (Mitchell and Olson, 1981; Batra and Ray, 1986; MacKenzie, Lutz and Belch, 1986; Bruner and Kumar, 2000; Stevenson et al. 2000). The majority of these studies have focused on the study of attitude toward the advertisement as a causal mediating variable in the process through which advertising influences brand attitudes and purchase intentions. Furthermore, these studies have often shown a strong positive relationship between attitude toward the advertisement and brand attitude, which in turn is positively related to purchase intention.

1.1.2 Driving user acceptance of mobile advertising

The high penetration of mobile phones along with the technological development has created a whole new marketing medium for the advertisers, the mobile advertising. The success of this new marketing medium is although largely dependable on user acceptance to receiving ads into their mobile phones (Bauer, H. H., et al 2005). Therefore a study of consumer attitudes towards mobile advertising is considered to be important. To be able to judge consumer attitudes and what influence the attitudes we aim to look at user acceptance and their drivers towards this medium. We will further provide our literature findings of consumer attitudes towards mobile advertising.(Grover, V., & Teng, J. T. C.2006) is it expectable that many factors influence consumer attitudes of mobile advertising. The literature findings illustrate that User Acceptance of Advertising, User-Based Acceptance Drivers, Advertisement Acceptance Drivers, and
Mobile Service Acceptance Drivers influence on consumer attitudes towards mobile advertising.

1.1.3 User Acceptance of Advertising

In this first section we present User Acceptance of Advertising as a driver to consumer attitudes towards mobile advertising.

It is stated that consumers explore advertising as something negative and that consumers usually have negative attitudes towards advertising. TV advertising for example is explored seriously misleading as well as having a high level of ad-related communication problems (Tsang, M. M., et al 2004).

Nevertheless has Internet advertising unlike TV and other advertising channels been explored more informative and trustworthy. The value of Internet advertising has been explored higher than for regular advertising (TV, radio, and mail) and therefore increasing consumer positive attitude and interest towards the ad. The consumer explored value on advertising can thus be seen as an influencing factor on consumer attitudes towards advertising. Although the consumer attitudes towards mobile advertising have been expressed easier to change compared to consumer attitudes toward advertising in general, are they considered related to each other. Consumer attitudes towards mobile advertising are thus influenced by the explored consumer attitude towards advertising in general. (Bauer, H. H., et al 2005) In other words explained the consumer attitude towards advertising in general will influence on the persons attitude towards this new advertising medium. A user exploring advertising as annoying are more likely to have negative attitudes towards mobile advertising than a user who sees advertising as entertaining and as a part of a every day life, who instead are likely to have more positive attitudes towards mobile advertising.

1.1.4 User-Based Acceptance Drivers

In this section we identify user-based factors as an acceptance driver for mobile advertising. The factors we will present are user social norms, mode and motives, innovativeness, existing knowledge, and user information seeking behavior. Social norms refer to the influence that a person’s social environment has on his/her attitude towards an
object. It have been stated that a consumers subjective norms towards mobile communication are likely to be influenced by the consumers normative beliefs. Aspects affecting the normative beliefs are friends, family, work environment and colleagues. (Barnes, S. J. 2002) Consumer attitudes towards mobile advertising are thus considered to be influenced by the consumer’s social relationships to friends, family and work. (Barnes, S. J. 2002).

This shows that user social environments like friends and co-workers affect on the shaped consumer attitude towards this new marketing medium. Positive and negative experiences of mobile advertising can thus be seen moving from one consumer to another, in the social relationship. User social norms can therefore be seen to influences consumer attitude towards mobile advertising.

User motive defines the individual’s inner desire to fulfill a need or want. The user motives are usually initiated with a specific goal. If user goal involves any kind of information seeking that can be fulfilled with an ad the user attitudes are likely to be positive towards receiving ads into the mobile phone as well. (Barnes, S. J. 2002).

The user mode defines instead the goal-directed use of a mobile phone and what the aim of having a mobile is. Two different kinds of mobile “mode” user groups have been identified, where one group have a serious goal oriented aim of using the mobile and where the other group have a more explorative aim of using the mobile. So the users with higher explorative aim have been more positive to receive ads into their mobile. (Bauer, H. H., et al 2005).

The consideration should be to identify user goals and what the relevant information to a user is, as well as identify the user group likely to use mobile as a marketing medium. If mobile advertising can provide consumers with relevant information that helps them to fulfill their needs is it likely that mobile advertisement will receive more acceptance as a marketing channel as well.

User innovativeness refers to the consumer’s personality and how willing they are to explore new innovations on the market (Bauer, H. H., et al 2005). The consumers differ a lot in the level on innovativeness for a new upcoming good or service. Consumers with
high level of innovativeness or innovators are expressed to be very open for new upcoming objects and ideas on the market as well as they tend to make constructive usage of them. Innovator consumers are usually young adults, better educated, and have a higher income than later adapt consumers. Innovators are also explained as risk takers, and those who take use of special offers like discounts, coupons, and samples. (Kotler, P., et al. 2005).

A central aspect influencing consumer behavior has been expressed as level of the individual knowledge about a good or service (Kotler, P., et al. 2005). Consumers existing knowledge affects the final decision whatever to perform behaviour or not. This is because the existing knowledge determines the consumer’s ability to understand the features and usage of an innovation, like mobile advertising. Good knowledge about telecommunication industry will most likely provide the consumer with a higher understanding of mobile advertisement, because the telecommunication provides the basis for mobile advertising. Therefore is it stated that consumers with higher knowledge about telecommunication industry are likely to know more about mobile advertising, and that these are also the consumers with a more positive attitude towards mobile advertising (Bauer, H. H., et al 2005). To provide consumers with right knowledge of any technology can thus be considered significant.

The last aspect we discuss in this section is the user information seeking behaviors. The concept of information seeker behavior refers to the consumer’s motivation and willingness level to collect as well as to receive information from different external sources. (Ibid. 184) External sources are used when information is acquired in order to solve an immediate problem or when information is acquired for a possible later use. As advertisement information are including the external sources, consumers with a higher motivation and willingness to reach information have been explored as consumers that have a more positive attitude towards advertisement in general. (Ibid. 184).

1.1.5 Advertising Acceptance Drivers
In this section we identify advertising factors as an acceptance driver of mobile advertising.
The factors we will presents are the user perceived value and utility, ease of use, risk, trust and control of the mobile advertisement service. The explored value of advertising is stated to be one of the most critical factors in influencing the consumer attitude towards advertising. Aspects influencing the explored advertising value on mobile advertising are found to be the entertainment, in formativeness, irritation, and credibility as well as the relevancy, timeline and usefulness of the ad (Jingjun Xu, D. 2006).

Consumers have explored messages that are short and concise, funny, interactive, entertaining, relevant or with high variation level and customization to be value adding features. On the other hand irritating messages are explored offending, insulting, and overly manipulating by consumer. These qualities are therefore likely to have a negative affect on consumer explored value wile the earlier mentioned qualities likely have a positive affect. (Carroll, A., et al 2007) Because the consumer explored value is influenced by the qualities mentioned above is it also considerable that these qualities have an impact on consumer attitudes towards the whole service as well. The explored value on the mobile ads can thus be considered to influence the consumer acceptance to mobile advertising as an advertisement channel (Barnes, S. J. 2002).

Usefulness and the ease of use defines how consumers explore the usefulness and the ease of use of a new upcoming technology. Therefore, if the technology is explored useful and easy to use by the consumers, is the acceptance towards the technology likely to be positive as well (Nathwani, K., & Eason, K. 2005). The perceived usefulness and ease of use influences thereby also the consumer’s attitude towards a technology (Glassberg, B. C., Grover, V., & Teng, J. T. C. 2006).

The perceived risk refers to the level of risk or uncertainty that consumers feel are involved with an object or idea. The risks and uncertainties connected to mobile advertising have been found to be consumers concern about data manipulation, unauthorized data access, and privacy. On the one hand is mobile advertising seen as a high lucrative marketing channel by the advertisers but on the other hand is it seen as a privacy violations treat by the consumers.

The consumer perceived risk of mobile advertising have thus considered a strong influence on the final consumer attitude towards the service. A high perceived risk of
mobile advertising will therefore lead to a more negative consumer attitude towards the service. (Glassberg, B. C., Grover, V., & Tang, J. T. C. 2006)

The final aspect relating to perceived advertisement characteristics influencing on consumer attitudes towards mobile advertising is the perceived control. This refers simply to consumers control over when, where, what and how much advertising to receive into the mobile. It is stated that consumers are needy of some control in order to accept advertising into their mobiles (Carroll, A., et al 2007) It is confirmed that too many advertising messages would decrease the consumer acceptance towards the service (Varshney, U. 2003).

It is considerable that the amount of control provided to consumers to be related to the consumer explored value of the service and thus also to the consumer attitude of the service. The level of consumer perceived control can thus be seen positively related to consumer attitudes towards advertising.

1.1.6 Mobile Service Acceptance Drivers

In this last section we identify mobile service factors as an acceptance driver of mobile advertising. The factors we will presents are the precision-, permission-, incentive, and MMS based mobile advertisement services.

Precision or time and location based service refers to the time on week or day, and where the consumer is located at the time the ad is received. Researches have confirmed that consumer attitudes towards mobile advertising are influenced by the specific time and location on when the ad is received (De Reyck, B., & Degraeve, Z. 2003). The focus should therefore be to reach the consumers at this specific point, in order to receive positive consumer response and to maintain a positive consumer attitude towards the industry (Barnes, S. J. (2002).

User permission is considered very important in the mobile advertising industry. This because of the spamming that is feared to have a negative influence on consumer attitudes towards the industry. (Barwise, P. & Strong, C. 2002) In fact user permission has been discovered to be the most important factor influencing consumer attitudes towards mobile advertising and therefore it is also essential for the industry to offer permission based services. Permission based marketing is an agreement between
Permission based advertising facilitates one-to-one marketing by permitting customization and tailoring of content and user interface (Michael, A., & Salter, B. 2006) personalized advertisement channel (Lindgren, M., Jedbratt, J. & Svensson, E. 2002). Permission marketing differs further from the traditional method because it enable consumers to indicate their willingness to receive a specific ad (Tsang. M. M.2004). Permission based service is also defined to stimulate consumer acceptance towards the technology. User permission is thus considerable to be positively related to consumer attitudes towards mobile advertising.

Incentive based advertising is an approach that provides specific financial rewards to consumers who agree to receive ads into their mobile phones. For example, consumers that accept to receive ads into their mobile phone in form of picture, video or voice get free connection time alternatively get to lower their monthly subscription bill. The incentive based advertising is feasible for mobile advertising because the technology makes it possible to identify individual users. Consumer attitudes towards mobile advertising are therefore considered to be influenced by the incentive based service (Tsang. M. M., et al 2004) so these services are thus considerable to be positively related to consumer attitudes towards mobile advertising.

The final aspect relating to mobile service characteristics influencing on consumer attitudes towards mobile advertising is the advertisement form. It has been argued that mobile advertising is based on SMS messages today, while MMS messages would be the right approach to drive mobile campaigns in the future. (Kavassalis, P., et al 2003). MMS differs from the SMS because it enables also to send pictures videos and sounds in the messages to the consumers. Studies have been shown that consumers have favorable views towards MMS services.

Propositions for advertisers to attract consumer attention with their advertising have been to use the right amount of novelty, contrast, eye-catching pictures and headlines in their ads (Kotler, P., et al. (2005) . It has been found a challenge for advertisers to produce SMS ads that consumers explore eye-catching, entertaining, relevant, and effective (Barwise, P. & Strong, C. 2002).
Its considerable thus that pictures can provide more value with its entertainment qualities and therefore also posses more positive consumer attitudes of mobile advertising. The literature review has presented drivers of mobile advertising. Findings have illustrated that user acceptance of advertising, user-based acceptance drivers, advertisement acceptance drivers, and mobile service acceptance drivers are likely to influence on consumer attitudes towards mobile advertising. To support the literature findings four hypotheses have been constructed for our empirical research. These hypotheses are also constructed in order to fulfill our knowledge gap among young adult attitudes towards mobile advertising in Pakistan.

2. Research Methodology
The primary focus of this study was to examine the relationship between consumer attitude and mobile advertising associated with user acceptance of advertising, user based acceptance drivers, advertising acceptance drivers, and mobile service acceptance drivers. This study was built on the work of Michal Pietz, Lauri Storbacka by conceptualizing consumer attitude toward mobile advertising. A secondary focus of this study was to examine which levels of customer attitude form while SMS advertising.

Hypothesis 1: User Acceptance of Advertising Influence on the consumer attitude towards mobile advertising.

Hypothesis 2: User-Based Acceptance Drivers of Influence on the consumer attitude towards mobile advertising.

Hypothesis 3: Advertising Acceptance Drivers influence on the consumer attitude towards mobile advertising.

Hypothesis 4: Mobile Service Acceptance Drivers influence on the consumer attitude towards mobile advertising.

2.1 Measuring Variables
The variables used to measure the Consumer attitude towards mobile advertising in this recently conducted research are consumer attitude, user acceptance of advertising, user
based acceptance drivers, advertising acceptance drivers, mobile service acceptance drivers. Their description has been mentioned below.

2.1.1 Consumer Attitude
It is the one’s interest and trustworthiness through which a person forms his or her intention.

2.1.2 User acceptance of advertising
This variable explain the consumer attitude towards advertising in general will influence on the person attitude toward this new advertising media mean negative attitude or a positive attitude.

2.1.3 User based acceptance drivers
Under this variable the factors are user social norms, mode and motives, innovativeness, existing knowledge, end user information seeking behavior.

2.1.4 Advertising acceptance drivers
Under this variable the factors are user perceived value and utility, ease of use, risk, trust and control of mobile advertisement service. The explored value of advertising is stated to be one of the most critical factors in influencing the consumer attitude toward advertising. Aspects in influencing the explored advertising value are found to be the entertainment, in formativeness, irritation and credibility as well as the relevancy timeline and usefulness of the ads.

2.1.5 Mobile service acceptance drivers
Under this variable the factors are precision, permission, incentives and MMS based mobile advertisement services.

2.2 Sampling Methodology
The methodology adopted for the subject study is briefly discussed below.
2.2.1 Population And Sample Size

The population for the subject study is the number of households in Karachi. According to an estimate there are 0.9 million households in Karachi, excluding non-recognized colonies. If sample were to be drawn on simple random, the approximate sample size comes out to 60. However to have a better representation, about 136 samples were drawn. These were drawn non-randomly from pre-selected areas.

2.2.2 Data Collection Method

Based on the literature survey a theoretical framework and a closed-ended questionnaire were developed and were pre-tested before being launched. They were appropriately filled by the people belonging to different occupation, education and income levels living in different regions and places of Karachi. The instrument contained 23 questions of which 7 were related to personal data and the rest were related to the subject study. The questionnaire comprised of a rating scale numbering from 5 to 1.

2.2.3 Sample Characteristics

The respondents have a representation from all the demographic used for the study purpose. Some of the demographics have higher representation while the other had smaller. The characteristic of the respondents is enclosed in annexure one.
Graph 1: Sample Characteristics

2.2.4 Data Analysis Method
The data were mostly measured through the measure of central tendencies. The developed hypotheses were tested through Pearson correlation, Regression and Multiple-Regression.
3. Survey Findings
The survey findings were analyzed linearly, cross-sectionally in order to have a better comprehension and understanding of the relationship between dependent and independent variable, which are discussed below:

3.1 Measure of Central Tendencies
The respondents’ opinions on the determinants of Consumer attitude towards mobile advertising were obtained. The determinants were consumer attitude, user acceptance of advertising, user based acceptance drivers, advertising acceptance drivers, mobile service acceptance drivers. The summarized results related to measure of central tendencies and measures of dispersion are presented below:

Table 1: Measure of Central Tendencies

<table>
<thead>
<tr>
<th></th>
<th>attitude viz./Adv.</th>
<th>user acceptance</th>
<th>user based acceptance</th>
<th>service acceptance</th>
<th>mobile service acceptance drivers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.53</td>
<td>3.46</td>
<td>3.47</td>
<td>3.43</td>
<td>3.47</td>
</tr>
<tr>
<td>Standard Error</td>
<td>0.10</td>
<td>0.10</td>
<td>0.08</td>
<td>0.07</td>
<td>0.08</td>
</tr>
<tr>
<td>Median</td>
<td>4.00</td>
<td>4.00</td>
<td>3.50</td>
<td>3.50</td>
<td>3.50</td>
</tr>
<tr>
<td>Mode</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
<td>3.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>1.15</td>
<td>1.11</td>
<td>0.96</td>
<td>0.84</td>
<td>0.88</td>
</tr>
<tr>
<td>Sample Variance</td>
<td>1.32</td>
<td>1.24</td>
<td>0.91</td>
<td>0.71</td>
<td>0.77</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>(0.30)</td>
<td>(0.34)</td>
<td>0.68</td>
<td>0.48</td>
<td>0.95</td>
</tr>
<tr>
<td>Skewness</td>
<td>(0.55)</td>
<td>(0.48)</td>
<td>(0.63)</td>
<td>(0.36)</td>
<td>(0.52)</td>
</tr>
<tr>
<td>Range</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Minimum</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Maximum</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Sum</td>
<td>480.00</td>
<td>471.00</td>
<td>471.50</td>
<td>466.75</td>
<td>471.70</td>
</tr>
<tr>
<td>Count</td>
<td>136.00</td>
<td>136.00</td>
<td>136.00</td>
<td>136.00</td>
<td>136.00</td>
</tr>
</tbody>
</table>

According to the respondents’ opinions, the mobile service acceptance drivers were high with a mean of (3.47). On the other extreme the respondents’ opinion on service acceptance was low (3.43).

The standard deviation of respondents’ opinions on service acceptance was the least (0.84), as compared to others dimensions. This indicates that there is less polarization on the respondents’ opinions on this “service acceptance” dimension. The Standard Deviation of respondents’ opinion on consumer attitude was the highest (1.15), as
compared to other dimensions. This indicates that there is a high polarization of the respondents’ opinions on this “consumer attitude” dimension.

The Skewness for all the determinants of Consumer attitude towards mobile advertising were negative. It was as low as (0.36) for service acceptance and as high as (0.63) for user based acceptance. The negative skewness indicates that the respondents’ opinions on the respective determinants were below average.

3.2 Pearson Correlation

The correlation of all the determinants of Consumer attitude towards mobile advertising on one-to-one basis was worked out to find the relationships. The summarized results are presented below:

Table 2: Pearson Correlation

<table>
<thead>
<tr>
<th></th>
<th>attitude viz./ Adv.</th>
<th>user acceptance</th>
<th>user based acceptance</th>
<th>service acceptance</th>
<th>mobile service acceptance drivers</th>
</tr>
</thead>
<tbody>
<tr>
<td>attitude viz./ Adv.</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>user acceptance</td>
<td>0.19</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>user based acceptance</td>
<td>0.30</td>
<td>0.06</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>service acceptance</td>
<td>1.00</td>
<td>0.16</td>
<td>0.36</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>mobile service</td>
<td>0.04</td>
<td>0.19</td>
<td>0.35</td>
<td>0.50</td>
<td>1.00</td>
</tr>
<tr>
<td>acceptance drivers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The correlations of consumer attitude ranged between 0.30 for user based acceptance and 0.04 for mobile service acceptance drivers. This indicates that comparatively a higher degree of correlation was found user based acceptance with consumer attitude as compared to the other determinants.

The correlations of the other determinants had similar trend accept service acceptance that were found to be the highest with an “r” of .50.

3.3 Hypothesis Testing

Four different hypotheses were developed. The results and interpretation of the hypotheses are described below:
3.3.1 Multiple-Regression

The respondents’ opinions on Consumer attitude towards mobile advertising were based on determinants such as consumer attitude, user acceptance of advertising, user based acceptance drivers, advertising acceptance drivers, and mobile service acceptance drivers. The hypothesis developed in this context is presented below:

Table 3: Multiple Regressions

<table>
<thead>
<tr>
<th>Regression Statistics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple R</td>
<td>0.83</td>
</tr>
<tr>
<td>R Square</td>
<td>0.69</td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>0.69</td>
</tr>
<tr>
<td>Standard Error</td>
<td>0.64</td>
</tr>
<tr>
<td>Observations</td>
<td>136.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ANOVA</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>df</td>
<td>SS</td>
</tr>
<tr>
<td>Regression</td>
<td>4.00</td>
</tr>
<tr>
<td>Residual</td>
<td>131.00</td>
</tr>
<tr>
<td>Total</td>
<td>135.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Standard Error</th>
<th>t Stat</th>
<th>P-value</th>
<th>Lower 95%</th>
<th>Upper 95%</th>
<th>Lower 95.0%</th>
<th>Upper 95.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.01</td>
<td>0.25</td>
<td>0.04</td>
<td>0.97</td>
<td>0.50</td>
<td>(0.48)</td>
<td>0.50</td>
</tr>
<tr>
<td>User acceptance</td>
<td>0.34</td>
<td>0.08</td>
<td>4.32</td>
<td>0.00</td>
<td>0.18</td>
<td>0.50</td>
<td>0.18</td>
</tr>
<tr>
<td>User based</td>
<td>0.70</td>
<td>0.11</td>
<td>6.39</td>
<td>0.00</td>
<td>0.48</td>
<td>0.91</td>
<td>0.48</td>
</tr>
<tr>
<td>Advertisement</td>
<td>0.13</td>
<td>0.09</td>
<td>1.38</td>
<td>0.17</td>
<td>(0.06)</td>
<td>0.32</td>
<td>(0.06)</td>
</tr>
<tr>
<td>Mobile service</td>
<td>(0.15)</td>
<td>0.11</td>
<td>(1.32)</td>
<td>0.19</td>
<td>(0.38)</td>
<td>0.07</td>
<td>(0.38)</td>
</tr>
</tbody>
</table>

The r square is 0.69, which indicates that about 69% of the variations on the dependant variable is explained by the predictor variables, which is not significantly high. The slope
for user based acceptance is highest. This means that comparatively the user based acceptance has stronger relationship with the dependant variable, consumer attitude. The coefficient of determinate for user based acceptance is 0.70. This also means that an increase of one rating (On the scale of five to one) of the user based acceptance will cause the consumer attitude to increase by 0.70 rating.

3.3.2 Hypothesis One
The respondents’ opinions on Consumer attitude towards mobile advertising were based on determinants such as consumer attitude, user acceptance of advertising, user based acceptance drivers, advertising acceptance drivers, and mobile service acceptance drivers. The hypothesis developed in this context is presented below:

\[ H1_O: \text{User Acceptance of Advertising do not Influence on the consumer attitude towards mobile advertising.} \]

\[ H1_A: \text{User Acceptance of Advertising Influence on the consumer attitude towards mobile advertising.} \]

3.3.2.1 Statistical Representation
Statistical representation of the above hypothesis is presented below:

\[ H1_O: \beta_1 = 0 \]

\[ H1_A: \beta_1 \neq 0 \]

The above hypothesis was tested through simple regressions and the summarized result is presented below:

**Table 4: Simple Regressions**

<table>
<thead>
<tr>
<th>Regression Statistics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple R</td>
<td>0.75</td>
</tr>
<tr>
<td>R Square</td>
<td>0.56</td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>0.56</td>
</tr>
<tr>
<td>Standard Error</td>
<td>0.76</td>
</tr>
<tr>
<td>Observations</td>
<td>136.00</td>
</tr>
</tbody>
</table>
ANOVA

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>Significance F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1.00</td>
<td>100.16</td>
<td>100.16</td>
<td>172.68</td>
<td>0.00</td>
</tr>
<tr>
<td>Residual</td>
<td>134.00</td>
<td>77.72</td>
<td>0.58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>135.00</td>
<td>177.88</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Standard Error</th>
<th>t Stat</th>
<th>P-value</th>
<th>Lower 95%</th>
<th>Upper 95%</th>
<th>Lower 95.0%</th>
<th>Upper 95.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.85</td>
<td>0.21</td>
<td>3.99</td>
<td>0.00</td>
<td>0.43</td>
<td>1.28</td>
<td>0.43</td>
</tr>
<tr>
<td>user</td>
<td>acceptance</td>
<td>0.77</td>
<td>0.06</td>
<td>13.14</td>
<td>0.00</td>
<td>0.66</td>
<td>0.89</td>
</tr>
</tbody>
</table>

The r square is 0.56, which indicates that about 56% of the variations on the dependant variable is explained by the predictor variable user acceptance, which is not significantly high. The coefficient of determinant for user acceptance is 0.77. This also means that an increase of one rating (On the scale of five to one) of user acceptance will cause the Consumer attitude towards mobile advertising to increase by 0.77 rating, which means that the relationship between predictors variable user acceptance and Consumer attitude towards mobile advertising is not significantly strong.

There was a positive relationship between user acceptance Consumer attitudes towards mobile advertising as was suggested by the literature.

3.3.3 Hypothesis Two

The relationship of the determinant user base acceptance with dependent variable Consumer attitude was measured. The hypothesis developed in this context is presented below:

$H_2_0$: User-Based Acceptance Drivers do not Influence on the consumer attitude towards mobile advertising.

$H_2_A$: User-Based Acceptance Drivers Influence on the consumer attitude towards mobile advertising.

3.3.3.1 Statistical Representation
Statistical representation of the above hypothesis is presented below:

\[ H_{0}: \beta_1 = 0 \]

\[ H_{A}: \beta_1 \neq 0 \]

The above hypothesis was tested through simple regressions and the summarized result is presented below:

**Table 5: Simple Regressions**

<table>
<thead>
<tr>
<th>Regression Statistics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple R</td>
<td>0.80</td>
</tr>
<tr>
<td>R Square</td>
<td>0.65</td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>0.64</td>
</tr>
<tr>
<td>Standard Error</td>
<td>0.69</td>
</tr>
<tr>
<td>Observations</td>
<td>136.00</td>
</tr>
</tbody>
</table>

**ANOVA**

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>Significance F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1.00</td>
<td>114.92</td>
<td>114.92</td>
<td>244.60</td>
<td>0.00</td>
</tr>
<tr>
<td>Residual</td>
<td>134.00</td>
<td>62.96</td>
<td>0.47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>135.00</td>
<td>177.88</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Coefficients</th>
<th>Standard Error</th>
<th>t Stat</th>
<th>P- value</th>
<th>Lower 95%</th>
<th>Upper 95%</th>
<th>Lower 95.0%</th>
<th>Upper 95.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.18</td>
<td>0.22</td>
<td>0.82</td>
<td>0.41</td>
<td>(0.26)</td>
<td>0.62</td>
<td>(0.26)</td>
<td>0.62</td>
</tr>
<tr>
<td>user based</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>acceptance</td>
<td>0.97</td>
<td>0.06</td>
<td>15.64</td>
<td>0.00</td>
<td>0.84</td>
<td>1.09</td>
<td>0.84</td>
<td>1.09</td>
</tr>
</tbody>
</table>

The r square is 0.65, which indicates that about 65% of the variations on the dependant variable is explained by the predictor variable User-Based Acceptance Drivers, which is significantly high. The coefficient of determinant for materialism is 0.97. This also means that an increase of one rating (On the scale of five to one) of User-Based Acceptance Drivers will cause the Consumer attitude to increase by 0.97 rating, which
means that the relationship between predictor’s variable User-Based Acceptance Drivers and Consumer attitude is strong.

3.3.4 Hypothesis Three
The relationship of the determinant Advertising Acceptance Drivers with dependent variable consumer attitude was measured. The hypothesis developed in this context is presented below:

\(H3_0:\) Advertising Acceptance Drivers do not influence on the consumer attitude towards mobile advertising.

\(H3_A:\) Advertising Acceptance Drivers influence on the consumer attitude towards mobile advertising.

3.3.4.1 Statistical Representation
Statistical representation of the above hypothesis is presented below:

\(H3_0:\ \beta_1=0\)

\(H3_A:\ \beta_1 \neq 0\)

The above hypothesis was tested through simple regressions and the summarized result is presented below:

Table 6: Simple Regressions

<table>
<thead>
<tr>
<th>Regression Statistics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple R</td>
<td>0.54</td>
</tr>
<tr>
<td>R Square</td>
<td>0.29</td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>0.29</td>
</tr>
<tr>
<td>Standard Error</td>
<td>0.97</td>
</tr>
<tr>
<td>Observations</td>
<td>136.00</td>
</tr>
</tbody>
</table>

ANOVA

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>Significance F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1.00</td>
<td>52.46</td>
<td>52.46</td>
<td>56.05</td>
<td>0.00</td>
</tr>
<tr>
<td>Residual</td>
<td>134.00</td>
<td>125.42</td>
<td>0.94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>135.00</td>
<td>177.88</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Coefficients | Standard Error | t Stat | P-value | Lower 95% | Upper 95% | Lower 95.0% | Upper 95.0% \\
--- | --- | --- | --- | --- | --- | --- | --- \\
Intercept | 0.99 | 0.35 | 2.83 | 0.01 | 0.30 | 1.68 | 0.30 | 1.68 \\
advertisement acceptance | 0.74 | 0.10 | 7.49 | 0.00 | 0.54 | 0.94 | 0.54 | 0.94

The r square is 0.29, which indicates that about 29% of the variations on the dependant variable is explained by the predictor variable advertisement acceptance, which is significantly low. The coefficient of determinant for advertisement acceptance is 0.74. This also means that an increase of one rating (On the scale of five to one) of advertisement acceptance will cause the consumer attitude to increase by 0.74 rating, which means that the relationship between predictors variable advertisement acceptance and consumer attitude is weak.

3.3.5 Hypothesis Four

The relationship of the determinant Mobile Service Acceptance Drivers with dependent variable Consumer attitude was measured. The hypothesis developed in this context is presented below:

**H4o:** Mobile Service Acceptance Drivers do not influence on the consumer attitude towards mobile advertising.

**H4a:** Mobile Service Acceptance Drivers influence on the consumer attitude towards mobile advertising.

3.3.5.1 Statistical Representation

Statistical representation of the above hypothesis is presented below:

\[ H4o: \beta_1 = 0 \]

\[ H4a: \beta_1 \neq 0 \]

The above hypothesis was tested through simple regressions and the summarized result is presented below:
Table 7: Simple Regressions

<table>
<thead>
<tr>
<th>Regression Statistics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple R</td>
<td>0.62</td>
</tr>
<tr>
<td>R Square</td>
<td>0.38</td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>0.38</td>
</tr>
<tr>
<td>Standard Error</td>
<td>0.91</td>
</tr>
<tr>
<td>Observations</td>
<td>136.00</td>
</tr>
</tbody>
</table>

**ANOVA**

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>Significance F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1.00</td>
<td>67.98</td>
<td>67.98</td>
<td>82.88</td>
<td>0.00</td>
</tr>
<tr>
<td>Residual</td>
<td>134.00</td>
<td>109.90</td>
<td>0.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>135.00</td>
<td>177.88</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Coefficients</th>
<th>Standard Error</th>
<th>t Stat</th>
<th>P-value</th>
<th>Lower 95%</th>
<th>Upper 95%</th>
<th>Lower 95.0%</th>
<th>Upper 95.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.73</td>
<td>0.32</td>
<td>2.29</td>
<td>0.02</td>
<td>1.35</td>
<td>0.10</td>
<td>1.35</td>
<td></td>
</tr>
<tr>
<td>mobile service</td>
<td>0.81</td>
<td>0.09</td>
<td>9.10</td>
<td>0.00</td>
<td>0.63</td>
<td>0.98</td>
<td>0.63</td>
<td>0.98</td>
</tr>
<tr>
<td>acceptance drivers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The r square is 0.38, which indicates that about 38% of the variations on the dependant variable is explained by the predictor variable Mobile Service Acceptance Drivers, which is significantly low. The coefficient of determinant for Mobile Service Acceptance Drivers is 0.81. This also means that an increase of one rating (On the scale of five to one) of Mobile Service Acceptance Drivers will cause the consumer attitude to increase by 0.24 rating, which means that the relationship between predictors variable Mobile Service Acceptance Drivers and consumer attitude is significantly low.

4. Conclusions and Recommendations

The purpose of the study was to create the better understanding of mobile advertising in order to draw conclusions of factors influencing consumer attitudes toward this new marketing media. The focus has been to highlight factors driving user acceptance of mobile advertising. The problem statement for the study was to investigate.
What are young adult attitude towards mobile advertising and which factors affects them? The result from the study show that user don’t have highly positive attitude towards mobile advertising. In four of the hypotheses a weak positive relation has been identified between each other. This means that all these drivers identified earlier influence young adults attitude toward this new marketing channel to some extent so the hypothesis has been confirmed. The results underline the importance of embodying mobile advertising to young adults.

My recommendation regarding this is that in order to make mobile advertising into a lucrative business a huge consideration is to focus on to provide value for the consumers for using this service. I have identified permission and incentive based mobile advertising approaches as most significance user acceptance drivers toward this new marketing medium.
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http://www.yahoo.com

http://www.ask.com

http://www.mindpub.com

http://www.eap.partners.com
Annexure-1

Sample Characteristics

1. **Distribution by gender**

**Table-1**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percentage number</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>83.82%</td>
<td>114</td>
</tr>
<tr>
<td>Female</td>
<td>16.18%</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>100.00%</td>
<td>136</td>
</tr>
</tbody>
</table>

2. **Distribution by age**

**Table-2**

<table>
<thead>
<tr>
<th>Age</th>
<th>Percentage</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>under 20</td>
<td>1.47%</td>
<td>2</td>
</tr>
<tr>
<td>20-30</td>
<td>86.03%</td>
<td>117</td>
</tr>
<tr>
<td>30-40</td>
<td>10.29%</td>
<td>14</td>
</tr>
<tr>
<td>40-50</td>
<td>2.21%</td>
<td>3</td>
</tr>
<tr>
<td>50+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>100.00%</td>
<td>136</td>
</tr>
</tbody>
</table>

3. **Distribution by marital status**

**Table-3**

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Percentage</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>83.09%</td>
<td>113</td>
</tr>
<tr>
<td>Married</td>
<td>16.91%</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>100.00%</td>
<td>136</td>
</tr>
</tbody>
</table>

4. **Distribution by occupation**

**Table-4**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Percentage</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banker</td>
<td>10.29%</td>
<td>14</td>
</tr>
<tr>
<td>Doctor</td>
<td>2.21%</td>
<td>3</td>
</tr>
<tr>
<td>Accountant</td>
<td>8.82%</td>
<td>12</td>
</tr>
<tr>
<td>Engineer</td>
<td>11.03%</td>
<td>15</td>
</tr>
<tr>
<td>Businessman</td>
<td>4.41%</td>
<td>6</td>
</tr>
<tr>
<td>Student</td>
<td>41.18%</td>
<td>56</td>
</tr>
<tr>
<td>Other (Specify)</td>
<td>22.06%</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>100.00%</td>
<td>136</td>
</tr>
</tbody>
</table>
5. **Distribution by Income**

**Table-5**

<table>
<thead>
<tr>
<th>Income</th>
<th>Percentage</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under Rs. 15,000</td>
<td>61.76%</td>
<td>84</td>
</tr>
<tr>
<td>Rs. 15,000-25,000</td>
<td>16.91%</td>
<td>23</td>
</tr>
<tr>
<td>Rs. 25,000-35,000</td>
<td>11.76%</td>
<td>16</td>
</tr>
<tr>
<td>Rs. 35,000-45,000</td>
<td>4.41%</td>
<td>6</td>
</tr>
<tr>
<td>Rs. 45,000-55,000</td>
<td>2.21%</td>
<td>3</td>
</tr>
<tr>
<td>Rs. 55,000 +</td>
<td>2.94%</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.00%</strong></td>
<td><strong>136</strong></td>
</tr>
</tbody>
</table>

6. **Distribution by Location**

**Table-6**

<table>
<thead>
<tr>
<th>Location</th>
<th>Percentage</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clifton</td>
<td>6.62%</td>
<td>9</td>
</tr>
<tr>
<td>D.H.A</td>
<td>6.62%</td>
<td>9</td>
</tr>
<tr>
<td>P.E.C.H.S</td>
<td>11.03%</td>
<td>15</td>
</tr>
<tr>
<td>Nazimabad</td>
<td>11.03%</td>
<td>15</td>
</tr>
<tr>
<td>Gulshan-e-Iqbal</td>
<td>14.71%</td>
<td>20</td>
</tr>
<tr>
<td>Other (Specify)</td>
<td>50.00%</td>
<td>68</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.00%</strong></td>
<td><strong>136</strong></td>
</tr>
</tbody>
</table>

7. **Distribution by Education**

**Table-7**

<table>
<thead>
<tr>
<th>Education</th>
<th>Percentage</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under Matriculation</td>
<td>0%</td>
<td>-</td>
</tr>
<tr>
<td>Intermediate</td>
<td>2.94%</td>
<td>4</td>
</tr>
<tr>
<td>Graduate</td>
<td>61.76%</td>
<td>84</td>
</tr>
<tr>
<td>Post Graduate</td>
<td>25.74%</td>
<td>35</td>
</tr>
<tr>
<td>Other (Specify)</td>
<td>9.56%</td>
<td>13</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.00%</strong></td>
<td><strong>136</strong></td>
</tr>
</tbody>
</table>
Annexure-2

QUESTIONNAIRE

Personal Information

1) Gender:
   1) Male □
   2) Female □

2) Age:
   3) Under 20 □
   4) 20 - 30 □
   5) 30 - 40 □
   6) 40 - 50 □
   7) 50 + □

5) Income:
   1) Under Rs. 15,000 □
   2) Rs. 15,000 – 25,000 □
   3) Rs. 25,000 – 35,000 □
   4) Rs. 35,000 – 45,000 □
   5) Rs. 45,000 – 55,000 □
   6) Rs. 55,000 + □

3) Marital Status:
   1) Single □
   2) Married □

   4) Nazimabad □

   5) Gulshan-e-Iqbal □

   6) Other (Specify) □

4) Occupation:
   1) Banker □
   2) Doctor □
   3) Accountant □
   4) Engineer □
   5) Businessman □
   6) Student □
   7) Other (Specify) □

7) Education:
   1) Under Matriculation □
   2) Intermediate □
   3) Graduate □
   4) Post Graduate □
   5) Other (Specify) □
RATE THE FOLLOWING ON THE SCALE OF FIVE (5 Being higher part and 1 being lower part)

**CONSUMER ATTITUDE TOWARDS ADVERTISING**

8 Rate your attitude towards Mobile advertising  
5 4 3 2 1

**USER ACCEPTANCE OF ADVERTISING**

9 How receptive you are toward mobile advertisement?  
5 4 3 2 1

**USER-BASED ACCEPTANCE DRIVERS**

10 How social environment influencing your attitude towards advertising?  
5 4 3 2 1

11 Do you express the mobile a more valued marketing channel than the traditional ones?  
5 4 3 2 1

12 How much familiar you are with the expression mobile advertising since earlier?  
5 4 3 2 1

13 How good would you consider your knowledge about mobile phones to be?  
5 4 3 2 1

14 How much your knowledge affects you in a purchase decision?  
5 4 3 2 1

15 How could you consider to use your mobile phone as a tool for searching information?  
5 4 3 2 1

**ADVERTISING SERVICE ACCEPTANCE DRIVERS**

16 What is your attitude toward receiving advertisement in your mobile phone?  
5 4 3 2 1

17 How ease of use of new technology influence you toward mobile advertisement?  
5 4 3 2 1

18 How perceived risk of privacy influence you toward mobile advertisement?  
5 4 3 2 1

19 Do you find it important to control when you will receive advertisement?  
5 4 3 2 1

**MOBILE SERVICE ACCEPTANCE DRIVERS**

20 Rate your expression towards mobile advertising compared to traditional marketing mediums?  
5 4 3 2 1

21 Would your attitude towards mobile advertising change if you had the possibility to choose what kinds of ad actually receive into your phone?  
5 4 3 2 1

22 Would your attitude towards mobile advertising change if you received monetary award in form of free connection time in order to receive advertising into your phone?  
5 4 3 2 1

23 Rate the media for preference of receiving advertisement
   (a) T.V  
   5 4 3 2 1
   (b) Radio  
   5 4 3 2 1
   (c) Mobile  
   5 4 3 2 1
   (d) News paper  
   5 4 3 2 1
   (e) Internet  
   5 4 3 2 1
Exchange Rates and Stock Market Interactions: 
A Study on Emerging Asian Economies

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Assistant Professor, Faculty of Management Sciences
International Islamic University Islamabad

Dr. Tariq Javed
Associate Professor, Faculty of Business and Social Sciences
Mohammad Ali Jinnah University Islamabad

Abstract

In this paper, Granger Causality test and Johansen Cointegration Technique have been employed to investigate the causality between stock and currency markets of five Asian economies namely Pakistan, India, Indonesia, Korea and Sri Lanka. Nature of short run causality between stock and currency markets has been found different in different countries. In Pakistan, India and Indonesia, it runs from exchange rate to stock market, while feed back relationship has been found in case of Korea and Sri Lanka. However, Johansen’s cointegration negates the existence of any long run causality between stock and currency markets in all the sample economies. Our findings support traditional approach in the short run and asset market approach in the long run. Results have implications for policy makers and regulators of financial markets

Keywords: Cointegration, Granger Causality, fee back relationship

1 Introduction

Though different financial crises are associated with different factors, yet all major crises, Latin America, 1994 East Asian, 1997 Argentina, 1994 Turkey, 2001 and global financial crisis, 2000-01 have one common characteristic; that is simultaneous effect on prices of stocks and currencies. This simultaneous effect has raised a question that which one of them is the leading indicator and causes the other to move. Theoretically, no consensus
has yet been achieved on the nature and direction of association between stock market indices and exchange rate movements. Findings on the issue of causation are mixed. Some researchers like Abdalla et al (1997) found causation running from exchange rate changes to stock market returns while others found exactly the opposite one running from stock market returns to exchange rates. In the literature on relationship among different financial markets, there are three approaches. These are portfolio approach, traditional approach and assets market approach.

According to portfolio approach, the changes in stock market lead to changes in exchange rate due to portfolio adjustment made by investors. Here the portfolio adjustment refers to the process of inflow and outflow of capital. While according to traditional approach, exchange rate causes the stock prices to move. The transmission channel of traditional approach is that exchange rate changes affect the balance sheet of firms by changing their assets and liabilities, denominated in foreign currency, thus changing the competitiveness of country and its export oriented firms in the foreign markets which is ultimately, reflected in stock market. According to asset approach, the currency price is equal to the discounted future currency prices and there may not be any link between currency market and capital market. In addition to this, the feedback relationship may also exist, which is bi-directional causality running from stock market to exchange rate (Portfolio balance approach) and from exchange rate to stock market (Traditional approach).

Using Granger Causality test and Johansen’s cointegration technique, the direction of causality has been explored between stock and currency markets of five Asian economies namely Pakistan, India, Indonesia, Sri Lanka and South Korea. On the basis of empirical investigation, we document that in short run causality runs from currency market to stock market in Pakistan, India and Indonesia while feedback relationship exists in Korea and Sri Lanka. However, results of Johansen’s Cointegration negate the existence of any long-term relationship between these two markets of sample economies. The results have implications for policy makers, investors and academicians.

2. Literature Review

In literature, Frank and Young (1972) were the first, who examined the association of stock prices with exchange rates. On the basis of empirical analysis of six different
exchange rates, they concluded that no relationship existed between stock returns and exchange rates. Thus they supported asset approach and negated both traditional as well as portfolio approach.

Using different econometric techniques, Gormus (unpublished), Ratner (1993), Nieh and Lee (2001) found that stock and currency markets did not have any significant relationship. Aggarwal et al (1981) studied the relationship between stock price indices and Dollar exchange rate over a period of 1974 to 1978 and showed through simple regression that stock indices and price of Dollar have positive correlation and found this relationship more stronger in short run than in the long run. They documented that variations in exchange rates change the balance sheet of multinational firms by converting their assets and liabilities denominated in foreign currency, which induces the value of their equity to change in proportion to change in exchange rates. Thus they supported the traditional approach.

In developed economies many researchers have documented no relationship between stock market indices and exchange rates, thus supporting the asset approach. Solnik et al (1987) explored the impact of several variables like interest rate and inflation on stock indices. Using monthly data of Japan, United Kingdom, Germany, Canada, Switzerland and Belgium, he found that currency depreciation has positive but insignificant effect on the U.S stock market indices. Ong (1999) employed non-linear least square method and examined the association between exchange rate and U.S stock market indices. He suggested a very weak association between exchange rates and U.S stock market indices. He concluded that decrease in value of currency leads to rise in stock market returns and vice versa.

Amare and Mohsin (2000) employed the cointegration technique and tested the long run relationship of stock indices with changes in exchange rates in nine Asian markets. Analyzing monthly data, they found that from 1980 to 1998, stock prices of only Singapore and Philippine were positively related to exchange rates. Feridun (2007) made an attempt to identify the major determinants of currency crisis in Turkey. Analyzing Turkish data from 1980 to 2006, Feridun found that indicators of traditional currency crises had failed to provide satisfactory explanation of currency crisis in Turkey. His results have significant deviations from the traditional literature of international finance.
He found that it was financial liberalization of Turkey, which had led to financial crisis. He justified that globalization made the countries vulnerable to factor changes in the globe.

Bask (2009) presented an asset-pricing model to determine the exchange rate between two countries and concluded that both technical and fundamental analysis were used in currency trade, therefore current exchange rate was affected by both past (Chartism) as well as expected exchange rate (fundamentalism).

Hatemi and Irandoust (2002) tested causality between Swedish Krona and stock market returns using vector auto regression (VAR) approach and concluded that granger causality ran from stock prices to effective exchange rate. The findings about time varying parameters and even time varying set of explanatory variables in developed and emerging economies create need to study this phenomenon of dynamic relationship between stock markets and exchange rates in sample economies over analysis period. This relationship is at the heart of this paper

3. Data Sources

Monthly data of exchange rate has been collected from International Financial Statistics, International Monetary Fund. Analysis period starts from July 1997 to October 2009. Total monthly observations are 148 in case of each sample country. Stock indices data has been collected from Yahoo Finance. KSE 100 Index has been used in case of Pakistan while BSE 30 index, Jakarta Composite index, KOSPI composite index and Colombo All Shares Index have been used in case of India, Indonesia, Korea and Sri Lanka respectively

4. Methodology

Nature of the causality between stock markets and exchange rates is a far from settled issue in the literature of financial markets and is the focus of this paper. To study this interaction between stock market and exchange rate, two variables namely exchange rate and stock returns of sample economies have been used.
4.1 Measurement of Variables

Exchange rates and stock returns have been measured as follows

4.1.1 Measurement of Exchange Rate

There are three main issues in the measurement of exchange rate.

i. The first issue is to decide whether to use real or nominal exchange rate? The difference between real and nominal exchange rate may matter in principle but from perspective of their statistical use, there is little difference between the two as both are strongly correlated. In this research, nominal exchange rates have been used.

ii. Whether to use exchange rate in direct or indirect quotations is the second issue in the measurement of exchange rate. In economic sense, both are same while interpretation of exchange rate coefficient becomes opposite. Reason of different interpretation is that in case of direct quotation increase in exchange rate digits is the appreciation of foreign currency and depreciation of local currency and vice versa.

iii. Third issue is whether to use bilateral or weighted basket exchange rates? One approach is to use U.S Dollar as base currency as has been used in the literature extensively. Second approach is to use exchange rate as the price of weighted basket of all major currencies. In this study, bilateral exchange rates have been used, in which United States Dollar acts as foreign currency in case of each sample country.

For empirical testing, natural log of exchange rate measured in the form of direct quotation has been used in this study

4.1.2 Measurement of Stock Returns

Natural log of KSE 100 Index, BSE 30 index, Jakarta Composite index, KOSPI composite index and Colombo All Shares Index have been used in case of India, Indonesia, Korea and Sri Lanka respectively
4.2 Unit Root Investigation

In this study, two tests have been employed to find the unit root in the series under consideration. These are Augmented Dickey Fuller test and Phillip Peron’s test.

4.2.1 Augmented Dickey Fuller Test

Results of the regression may be spurious if we assume that the time series data is stationary, when it is not. Spurious correlation is more likely to exist in developing markets because each nominal variable, which is unadjusted for inflation has big inflationary component in it. As a result of this, these nominal variables appear to be strongly correlated. This spurious correlation inflates the values of $R^2$ and t-statistics.

ADF test works as under. ADF works as under

$$X_t = \alpha X_{t-1} + \epsilon_t$$  \hspace{1cm} (I)

The above autoregressive model is called stationary, if value of alpha is less than 1. Subtracting $X_{t-1}$ from both sides of equation (I) results in

$$(X_t - X_{t-1}) = \alpha X_{t-1} - X_{t-1} + \epsilon_t$$ \hspace{1cm} (II)

Taking $X_{t-1}$ as common from right hand side of equation (II) results in

$$(X_t - X_{t-1}) = (\alpha - 1)X_{t-1} + \epsilon_t$$ \hspace{1cm} (III)

$$\Delta X_t = \beta_1 X_{t-1} + \epsilon_t$$ \hspace{1cm} (IV)

Where $\beta_1$ is equal to $(\alpha - 1)$. This is how the Dickey Fuller tests works. The null hypothesis is

$H_0$: $\beta_1 = 0$

$H_1$: $\beta_1 < 0$

When $\beta_1$ is zero, $\alpha$ will be 1 and we conclude that there is unit root in the series under consideration. The rejection of null hypothesis is the rejection of existence of unit root in the series.
4.2.2 Phillip Peron Test

This is also used to test the existence of unit root in the series. Null hypothesis of Phillip Peron test is the same as that of ADF, which states that there is unit root in the series. ADF test is different from PP test in a sense that the former offers comparatively better size properties while the latter contains better power. Secondly, PP test also adjusts the heteroscedasticity of covariance as well as possible autocorrelation. Interpretation of both ADF and PP test is similar. Unlike ADF, PP test is non parametric and it tests for the existence of higher order serial correlation unlike ADF, which tests for first order serial correlation.

4.3 Granger Causality Test

To test whether there is any association between stock and currency markets, Granger Causality test has been used. Granger Causality test is used when we know that some relationship exists between two variables but we do not know which variable causes the other to move. As in our case, same timing of stock and currency market crisis tells us that there are related. But whether this causation runs from stock market to currency market or from currency market to stock market is the question, which Granger Causality test answers. This test runs following two simultaneous

\[ E_t = \beta_0 + \beta_1 E_{t-1} + \cdots + \beta_p E_{t-p} + \alpha_1 S_{t-1} + \cdots + \alpha_p S_{t-p} + \epsilon_t \] (V)

\[ S_t = \beta_0 + \beta_1 S_{t-1} + \cdots + \beta_p S_{t-p} + \alpha_1 E_{t-1} + \cdots + \alpha_p E_{t-p} + \epsilon_t \] (VI)

Equation (V) is test of causation running from stock market to currency market and equation (VI) is causation test running from exchange market to stock market

Null hypothesis of Granger Causality test is that coefficient of \( S (\alpha s) \) in equation (V) and coefficients of \( E (\alpha s) \) in equation (VI) are jointly zero. Rejection of null hypothesis in equation (V) means stock market granger causes exchange market while rejection of null hypothesis in equation (VI) means that causation runs from exchange market to stock market.
4.4 Johansen’s Cointegration

Cointegration technique is employed to test whether two series move together or not over time. If two series are cointegrated, it means that long-term relationship exists between them. When individual variables are found to be non-stationary, it is possible for their linear combination to be stationary or cointegrated. Johansen’s cointegration is based on Eigen Values and trace Statistics. It is explained as follows

\[ x_t = \alpha_0 + \sum_{j=1}^{k} \beta_j x_{t-j} + \epsilon_t \]  

(VII)

Where \( \alpha_0 \) is n x 1 vector of constants, \( x_t \) is n x 1 vector of variables, which contain unit root and are stationary at first difference, \( k \) is number of lags, \( \beta_j \) is vector of coefficients and \( \epsilon_t \) is vector of Gaussian error terms. The above equation is reformulated into a vector error correction model as under

\[ \Delta x_t = \alpha_0 + \sum_{j=1}^{k} \beta_j \Delta x_{t-j} + \delta \Delta x_{t-k} + \epsilon_t \]  

(VIII)

Where \( \delta = -I + \sum_{i=j+1}^{k} \beta_j \)  

(IX)

\( \Delta \) is first difference operator and \( I \) is an n x n identity matrix. Maximum Eigen value is applied to count the number of characteristic roots that insignificantly different from unit.

5. Results and Discussion

5.1 Descriptive Statistics

Descriptive statistics of stock returns and exchange rates of sample countries are reported in Table 1

Table 1 reports that over the analysis period, KSE 100 returns are higher than those of BSE 30 index, Jakarta Composite Index, KOSPI composite index and Colombo All Shares Index. Although on mean return basis Korea is at fifth number but its monthly maximum value is 39.76%, which is highest among all the sample economies.

Maximum decline of stock market in one month is of KSE 100 Index. It is -44.88%. This occurred in November 2008, when KSE 100 Index fell from 9187 to 5865 just in one
month. Standard deviation of Karachi Stock Exchange is highest of all. It is 10.35% against 8.09% of India, 9.81% of Indonesia, 9.96% of Korea and 7.57% of Sri Lanka.

Exchange rate returns have been calculated by taking the first difference of the natural log of direct quotations of exchange rates of sample countries. Table 1 reports exchange rate of all the sample countries have positive values, which indicates that over the analysis period, all the five currencies have depreciated against United States Dollar.

Indonesian Rupiah has experienced highest mean depreciation against Dollar. It has mean monthly depreciation of 0.89% from July 1997 to October 2009. Second highest depreciation has been observed in Pakistan Rupee, which has the mean value of 0.49%. Sri Lankan Rupee ranks third with mean value of 0.45%. South Korean Won lies at number four with mean value of 0.20% while Indian Rupee has experienced least depreciation in comparison with other sample countries with mean value of 0.19% from July 1997 to October 2009.

5.2. Results of ADF and Phillip Peron Tests of Unit Root

Table 2 reports the results of Augmented Dickey Fuller test as well as Phillip Perron test of unit root. These tests have been applied on stock indices as well as on exchange rates of sample countries. Furthermore, these have been applied at levels as well as in the first difference form. Fourth column of table 2 reports the results of test statistics while column 5 and column 6 report McKinnon 1% and 5% critical values respectively.

In Table 2 ADF statistics reports that stock indices of all sample countries contain unit root in them at level, as ADF statistics does not exceed 1% as well as 5% critical values. The same is supported by results of Phillip Perron test on stock indices of all the five countries. However, PP test on Indian Rupee at level indicates that it does not contain unit root at 5% critical value as PP statistic is -3.046072 against 5% critical value of -2.8811, however the series contains unit root according to ADF statistics at level at both 1% as well as 5% critical values. Some sort of similar result is found for Korean Won. ADF reports that it contains unit root at level at 1% as well as 5% critical values while PP reports that it does not contain unit root at 5% critical value, however, PP supports the existence of unit root at level at 1% critical value. Both ADF and PP report that both
stock indices as well as exchange rates of sample countries become stationary at first difference.

5.3 Results of Granger Causality Test

Table 3 reports the results of Granger Causality test at lag 2, lag 4 and lag 5. Column 2 reports the level of lag, column 3 states the null hypotheses, column 4 reports the F statistics, column 5 reports the probability values while last column of causation narrates the existence or non-existence of causation between stock indices and exchange rates.

Table 3 reports that no causality runs from stock market to exchange rate or from exchange rate to stock market in case of Pakistan at lag 2 as well as at Lag 4 because P values of null hypotheses of no granger causality are above 0.10 and null hypotheses can not be rejected. However, when applied at lag 5, Granger Causality test fails to accept the null hypothesis of no granger causality and hence test indicates causality running from exchange rate to stock market. Similarly, No causality has been found running from stock market to exchange rate in India at all the three reported levels of lags. However, test supports the existence of causality running from exchange rate to stock market at lag 2 as well as lag 4. Similar policy recommendations are made in case of India as well. In case of Indonesia, null hypothesis of no granger causality running from stock market to exchange rate cannot be rejected at all the three lags in these three economies because Probability values of this hypothesis are 0.27351, 0.15163 and 0.19355 at lag 2, 4 and 5 respectively. As far as causality from exchange rate to stock market is concerned, test reports the existence of this causality in case of Indonesia at lag 4 only. Results of Granger Causality running from exchange rate to stock market are somewhat similar in Pakistan, India and Indonesia except the lag differences. Table 3 supports the existence of bi directional causality in case of Korea, where null hypothesis of no granger causality running from stock market to exchange rate or running from exchange rate to stock market cannot be accepted at all the three levels of lags. Granger Causality results of Sri Lanka are quite similar to those of Korea for both types of causality. The only difference in the results of Korea and Sri Lanka is that in the latter, null hypothesis of no granger causality running from stock market to exchange has probability value of 0.16068 at lag
5, which is higher than 0.10. This documents that at lag 5, granger causality running from stock market to exchange rate does not exist in case of Sri Lanka.

5.4 Results of Johansen’s Cointegration Test on Exchange Rate and Stock Indices

Cointegration has been used to determine the long run relationship between stock markets and exchange rates of sample economies. Granger causality test is run to gauge the short run relationship while Johansen Cointegration technique is used to measure long run relationship (Lee.C and Boon.H.T, 2007). Johansen Cointegration technique has been applied on stock indices and exchange rates of four economies with lag interval of 1 to 4 under the test assumption of linear deterministic trend in the data. As likelihood ratio has not exceeded the 5% critical value or 1% critical value, therefore, Johansen Cointegration rejects any cointegrating relation between stock market indices and exchange rates of sample economies. Thus, Table 4 reports that stock market indices and exchange rates do not move together over long time. Our findings are in line with those of Lee and Boon (2007), who found short run linear causality between stock market and exchange rate but no long run relationship between them. Because both stock market returns and exchange rates of all the sample economies are not cointegrated, therefore, causality between them can be explored by applying vector autoregressive technique with out incorporating error correction component. Error correction component is added in case variables under considerations are cointegrated.

6. Conclusion

In this paper, short run and long run relationship between stock market indices and exchange rates has been empirically investigated. To explore the short run linear relationship, Granger Causality test has been used, while to check for the existence of long run relationship between stock market and exchange rate, Johansen Cointegration technique has been applied. Empirical investigation of monthly stock index values and exchange rates, starting from July 1997 to October 2009, indicate that there is no granger causality running from stock market to exchange rate in the Pakistan, India and Indonesia, however, short run causality, though at different levels, has been found running from exchange rate to stock market in these three economies. Thus these three
economies support the transmission channel of traditional approach in the short run. However, in case of Korea and Sri Lanka, feedback relationship has been gauged between stock market and exchange rates. This feedback relationship is consistent with the findings of Ajayi and Mougoue (1996). Thus short run causation running from exchange rate to stock market has been found in all the sample economies.

This empirical investigation indicates that causation should be necessary part of designing exchange rate policies as in all the five economies. Then risk management process may also consider the linkage between stock market and exchange rates. Another practical application of these findings is that investors may use this linkage between stock market and foreign exchange market in hedging their open exposure arising due to changes in currency rate. However, in the long run, our empirical investigation neither supports traditional approach nor portfolio approach towards relationship of stock market and exchange rates. In the long run, it supports asset approach, which says that there may not be any link between stock market and exchange rate market in the long run. These findings are consistent with those documented by Ratner (1993) and Nieh and Lee (2001).

The findings of this study provide policy recommendation to regulators of these markets that in the long run, exchange rate volatility cannot be controlled through stock market regulations. However, Granger Causality has been found running from exchange rate to stock market in all the sample economies. These results are helpful for investors in making investment decisions. In addition, these provide guidance in designing exchange rate policy. Further research can be conducted to find out the other economic factors, which might affect the movement of exchange rates in these economies.
References


Annexure 1

Table 1: Descriptive Statistics of Stock Market and Exchange Rate Returns in Sample Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Variable</th>
<th>Mean</th>
<th>Med</th>
<th>Max</th>
<th>Min</th>
<th>S.D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan</td>
<td>Stock Returns (KSE 100)</td>
<td>1.04%</td>
<td>1.27%</td>
<td>24.11%</td>
<td>-44.88%</td>
<td>10.35%</td>
</tr>
<tr>
<td></td>
<td>Exchange Rate</td>
<td>0.49%</td>
<td>0.02%</td>
<td>12.07%</td>
<td>-3.49%</td>
<td>1.90%</td>
</tr>
<tr>
<td>India</td>
<td>Stock Returns (BSE 30)</td>
<td>0.89%</td>
<td>1.48%</td>
<td>24.89%</td>
<td>-27.30%</td>
<td>8.09%</td>
</tr>
<tr>
<td></td>
<td>Exchange Rate</td>
<td>0.19%</td>
<td>0.06%</td>
<td>6.95%</td>
<td>-6.02%</td>
<td>1.69%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Stock Returns (Jakarta comp)</td>
<td>0.81%</td>
<td>2.14%</td>
<td>25.02%</td>
<td>-37.86%</td>
<td>9.81%</td>
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<tr>
<td></td>
<td>Exchange Rate</td>
<td>0.89%</td>
<td>0.07%</td>
<td>80.25%</td>
<td>-34.87%</td>
<td>10.14%</td>
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<tr>
<td>South Korea</td>
<td>Stock Returns (Kospi comp)</td>
<td>0.53%</td>
<td>0.66%</td>
<td>39.76%</td>
<td>-31.81%</td>
<td>9.96%</td>
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<td></td>
<td>Exchange Rate</td>
<td>0.20%</td>
<td>-0.13%</td>
<td>37.60%</td>
<td>-16.62%</td>
<td>5.30%</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>Stock Returns (Colombo All)</td>
<td>0.84%</td>
<td>0.77%</td>
<td>22.52%</td>
<td>-18.42%</td>
<td>7.57%</td>
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<tr>
<td></td>
<td>Exchange Rate</td>
<td>0.45%</td>
<td>0.27%</td>
<td>62.23%</td>
<td>-59.73%</td>
<td>7.26%</td>
</tr>
</tbody>
</table>

Table 2: Results of Unit Root Investigation (ADF and PP test)

<table>
<thead>
<tr>
<th>Country</th>
<th>Variable</th>
<th>Test for Unit Root in</th>
<th>Test Stat</th>
<th>1% Critical Value</th>
<th>5% Critical Value</th>
</tr>
</thead>
<tbody>
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<td>Pakistan</td>
<td>KSE 100</td>
<td>ADF Test</td>
<td>At levels</td>
<td>-0.593489</td>
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</tr>
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<tr>
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<td></td>
<td>PP Test</td>
<td>At levels</td>
<td>-0.502893</td>
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</tr>
<tr>
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<td>-3.4761</td>
</tr>
<tr>
<td>Pak Rs.</td>
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<td>ADF Test</td>
<td>At levels</td>
<td>-0.367071</td>
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<td>First Difference</td>
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<td>-3.4761</td>
</tr>
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<td>India</td>
<td>BSE 30</td>
<td>ADF Test</td>
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<td>-0.625385</td>
<td>-3.477</td>
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<td>ADF Test</td>
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<td>Indonesia</td>
<td>Jakarta Comp</td>
<td>ADF Test</td>
<td>At levels</td>
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<td>At levels</td>
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<td>Indo. Rupiah</td>
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<td>Exchange Rate</td>
<td>PP Test</td>
<td>ADF Test</td>
<td>Null Hypothesis</td>
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</tr>
<tr>
<td>Korea</td>
<td>KOSPI Comp</td>
<td>Korean Won</td>
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</tr>
<tr>
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<td></td>
<td></td>
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<td>First Difference</td>
<td>No causality from E to S</td>
</tr>
<tr>
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</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td>First Difference</td>
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Table 3: Results of Granger Causality Test between Stock Market Returns and Exchange Rates
No causality from S to E  
No causality from E to S

<table>
<thead>
<tr>
<th>Lag</th>
<th>No causality from S to E</th>
<th>L. R Stat</th>
<th>5 % Critical Values</th>
<th>1 % Critical Values</th>
<th>Number Of CE(s)</th>
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<tr>
<td>5</td>
<td>2.614</td>
<td>0.0274</td>
<td>Yes</td>
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</tr>
<tr>
<td>4.9105</td>
<td>0.00037</td>
<td>Yes</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2</td>
<td>No causality from S to E</td>
<td>2.7824</td>
<td>0.06529</td>
<td>Yes</td>
<td></td>
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<tr>
<td>5.2457</td>
<td>0.00635</td>
<td>Yes</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>4</td>
<td>No causality from S to E</td>
<td>2.1211</td>
<td>0.08155</td>
<td>Yes</td>
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<tr>
<td>3.2789</td>
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<td>No causality from S to E</td>
<td>1.6138</td>
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<td>2.469</td>
<td>0.0357</td>
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</tr>
</tbody>
</table>

Note:
S is stock market index of sample countries and
E is exchange rate of sample economies

Table 4: Results of Johansen’s Cointegration Test on Exchange Rates and Stock Indices
Link Between Organizational Justice and Employee Job Performance in the Work Place

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Abstract
The purpose of this study was to examine whether employee perceptions of justice are related to their performance at work place. Result showed that distributive, procedural, and interactional justice perceptions are strongly related to employee’s performance in an organization. In this research paper we run the simple linear regression model with two different numbers of observations to see whether increase in sample size will make results more significant or they will remain the same. The sample with 113 observations gives us the significant results. The correlation result shows that there is significant correlation at the 0.01 level among the employee performance and the organization justice, procedural justice and interaction justice. Individual results of Spearman correlation indicate that distributive justice has more influence on job performance as compared to other dimensions of justice. The overall result shows that correlation is significant at 0.05 level among the job performance and the other three dimensions. About 45% of the variations in employee performance are explained by the explanatory variable. The second result with 229 observations gives us the significant t-ratio, thus indicating that one unit change in organization justice will increase employee performance by 0.19 units. The R-square indicates that 76% of the variation in employee performance is explained by the organization justice. The results uncover that justice plays a significant role in affecting employees’ performance and that employees satisfied
from organizational justice are higher performers than the less satisfied. Further if we increase the sample size the results will become more significant.

Keywords: Link, Organizational Justice, Employee Job Performance, Work Place

1. Introduction

The concept of organizational justice has been driven from different perspective by different writers. Most researchers agree that it is "a dominating theme in organizational life" (Cremer, 2005, p. 4). The employees’ behavior is affected by what do they think about fairness in all organizational processes and activities. The most of researchers tend to agree on the multifaceted nature of this construct, and three main factors are discussed.

1.1 Procedural Justice:

This factor is related to the fairness of procedures involved in decision making. If the processes involved in decision making treat employees equally and with respect then they will easily accept even the out comes that they dislike. It is viewed (e.g. Tang and Sarsfield-Baldwin, 1996; Mossholder et al., 1998) as one of the most important factors in today's workplace.

According to Lin and Tyler (1988, p. 61) the organizations that do not give importance to procedural justice will face employee behavioral problems like negative attitude towards their organization, disagreement with the organizational decisions made through such processes, negative attitude towards the rules and regulations of their organization i.e they will not follow them and finally it will have a negative impact on employees’ performance. Perceptions of procedural justice have consistently been shown to affect different Outcome variables. McDowall and Fletcher (2004, p. 9) postulated: "characteristics of Any review and development system are related to both an overall supportive feedback And communication structure and to changes in attitudinal measures". Tyler and Belliveau (1995) argued that fair procedures tend to have an effect of one’s loyalty towards his team or group, help to accept the authority of leaders and increase his willingness to follow the rules.

Generally the procedural justice in organizational decision making processes has a positive impact on decisions made by employees and their emotional and behavioral aspects. This then increases employee commitment with the organization, helps in
increasing interpersonal trust in organization and increases employee satisfaction.

1.2. Distributive Justice

This factor is concerned with employees' satisfaction with their work outcomes. In his Theory of Justice, Rawls (1999) claims that an individual’s place of birth, family background and social status are things that are because of his luck so the benefits that an individual receive in his life should not have any link with it. He said that the job of distributive justice is to ensure that the influence of luck is reduced and the distribution of goods is fair. Most of the researchers agree that distributive justice helps in increasing organizational effectiveness (Tang and Sarsfield-Baldwin, 1996, p. 25). Employees’ thinking of distributive justice is largely based on their comparisons with other employees in the organization. For example, co-workers may compare their Salaries, working hours and other benefits. If the comparison gives them the positive result they will have positive feelings for the system. However, if the comparison gives them a negative result they are going to have negative feelings for the system being followed by the organization and will effect their performance negatively and sometimes even resist against the unfair system. Systems with unfair distribution of resources can become quite prone to disputes, mistrust, disrespect and other social problems.

1.3. Interactional Justice:

This component of organizational justice refers to that which sort of relationships the employees and their supervisors have. Fairness is one of the most important factors of work environment that influence manager-employee relationships, employee-employee relationships and the organization-employee relationship. The employee's perception of fairness in the organizations' procedures and processes is assumed to influence his/her relationships with the organization, co-workers and managers, which in turn affect his/her behavior and work outcomes. Cottringer (1999, p. 13), for example, argued that to develop and manage fair organizational environment has a link with employees’ performance.
2. Literature Review

A study by Darwaish A. Yousef (1997) examines the role of satisfaction with job performance in predicting the organization commitment. This study finds the factors which determine the variations in satisfaction with job security.

Jill Cook (2004) concluded the there is no difference in levels of satisfaction which is related to a person’s role in performance appraisal system in an organization. Job satisfaction and service performance constructs are broad and complex to be explained by any single model or theory. It concludes that job satisfaction may not necessarily result in technical or quantitative service performance. Job satisfaction plays critical role in organization efforts to provide quality services to both internal and external customers (Wilson and frimpong). There is a two way interaction between expectations and performance. Whenever the difference between expectation and performance is small, people perceive performance better than expected. This is out come of such situations where people expect a short mean response time. When the difference between expectation and performance was large people were dissatisfied from the performance (Wirtz, E.G. Bateson, 1998).

A study by David De Cremer (2005) concludes that when ever there is a strong sense of affiliation of employees with their organization there is always an interaction between procedural and distributive justice. Richard Eberlin and B. Charles (2004) explored that accountability connects biases with organizational justice. Employees of an organization always have strong sense of justice, so the leaders of organization must consider these feelings and perceptions while making and decision. Leaders if do not consider these perceptions when making decisions have high risk of turnover, absenteeism, job dissatisfaction and poor performance.

Another study by Alina Ileana Rob Simmons investigates the effects of HRM practices on workers’ overall job satisfaction and their satisfaction with pay. It concludes that HRM practices have a great effect on job satisfaction and employee’s satisfaction with pay. Workers enjoy job autonomy and on going learning. Workers do not like close supervision but some visual supervision is accepted as supervision is required. Furthermore employee involvement schemes have a positive effect on job satisfaction.
Managers who hold regular meetings with employees so they may express their views about work are able to raise job satisfaction.

A study by Monica Forret and Mary Sue Love (2007) stats to promote healthy coworker relationships, organizations need to consider how justice perceptions are related to the ability of employees to work well with one another. Employees who notice that how they are treated and the rewards they receive do not cooperate well with their co-workers. Research shows that justice perceptions may influence the attitudes of employees towards their co-workers. The purpose of this study was to examine whether employee perceptions of justice are related to trust in coworkers. Result showed that distributive, procedural, and interactional justice perceptions are strongly related to health coworker relationship in an organization.

Another study by Mary A. Lemons and Coy A. Jones (2000) support the hypothesis that procedural justice in decision making affects organizational commitment in employee.

3. Research Methodology

For the purpose of this research paper we make the use of convenient sampling and thus collected the data through questionnaire survey. All the respondents were taken from private sector organizations. In this survey we have also increased the sample size from 113 to 229. Significant results were obtained with simple linear regression model for both the sample size. The correlation among the variables was identified through Pearson Correlation Coefficient and spearman correlation coefficient. The responses were gathered with the help of Likert Scale, using the scale from 1 to 5. But in order to increase the responses we reduce the scale from 5 to 3 (downscaling) I-e scale then used was from 1 to 3.

Out of the 250 questionnaires distributed by the researchers only 229 were collected back, representing a response rate of 91.6 per cent.

3.1 Hypotheses

H1. Organizational justice and its factors will significantly influence employees’ job performance.
4. Results

4.1 Regression

Variables Entered/Removed (b)

<table>
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<tr>
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<th>Variables Entered</th>
<th>Variables Removed</th>
<th>Method</th>
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<tbody>
<tr>
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<td>J(a)</td>
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</table>

An All requested variables entered.
B Dependent Variable: JP

Model Summary

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<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
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<td>.31055</td>
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Predictors: (Constant), J

ANOVA (b)

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<td></td>
<td>Total</td>
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Predictors: (Constant), J
B Dependent Variable: JP

Coefficients (a)

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A Dependent Variable: JP
4.2 Correlations

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<th>PJ</th>
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<tr>
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<td>.612(**)</td>
<td>.525(**)</td>
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<td>.000</td>
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<tr>
<td>N</td>
<td>229</td>
<td>229</td>
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<tr>
<td>Pearson Correlation</td>
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<td>1</td>
<td>.556(**)</td>
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<tr>
<td>Pearson Correlation</td>
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<tr>
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** Correlation is significant at the 0.01 level (2-tailed).

**Correlations**

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

**Correlations**

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### Correlations

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|       | .182**   | 1.000    |
|       | Sig. (2-tailed) | .   | .    |
|       | N        | 228    | 228    |

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

### Correlations

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|       | .223**   | 1.000    |
|       | Sig. (2-tailed) | .   | .    |
|       | N        | 228    | 228    |

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

### Correlations

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|       | .285**   | 1.000    |
|       | Sig. (2-tailed) | .   | .    |
|       | N        | 228    | 228    |

**. Correlation is significant at the 0.01 level (2-tailed).
5. Results and Discussions

In order to do the regression analysis we make the use of simple linear regression model and Pearson correlation for the purpose of identifying the correlation among the variables. Along with simple linear regression and Pearson correlation researchers also make the use of Spearman correlation coefficient for identifying degree of variation in dependent variable. Here in this research paper we run the simple linear regression model with two different numbers of observations. First run the regression with 113 observations also gives us the significant results. The t-ratio is significant showing that one unit change in organization justice will also increase employee performance by 0.19 units. About 45% of the variations in employee performance are explained by the explanatory variable. In the model F-test also gives significant result. The correlation result shows that there is significant correlation at the 0.01 level among the employee performance and the organization justice, procedural justice and interaction justice. Researcher also runs Spearman correlation for three dimensions of organizational justice to show which dimension is influencing the job performance more. Individual results of Spearman correlation indicates that distributive justice has more influence on job performance as compared to other dimensions of justice. The overall results shows that correlation is significant at 0.05 level among the job performance and the other three dimensions.

The second result with 229 observations gives us the significant t-ratio, thus indicating that one unit change in organization justice will increase employee performance by 0.19 units. The R-square indicates that 76% of the variation in employee performance is explained by the organization justice. Which shows as we increase the sample size the result become more significant?

As individually correlation coefficient shows almost equal result so we are taking them as equally weighted.

6. Conclusion

This study has explored the role of organizational justice in influencing employees’ performance. The Organizational justice has three dimensions, in which the first dimension procedural justice shows the fairness of the processes by which decisions are
made. Generally the procedural justice in organizational decision making processes has a positive impact on decisions made by employees and their emotional and behavioral aspects. This then increases employee commitment with the organization, helps in increasing interpersonal trust in organization and increases employee satisfaction.

Whereas the second dimension is concerned with employees' satisfaction with their work outcomes. The third dimension Interactional justice refers to that which sort of relationships the employees and their supervisors have. Fairness is one of the most important factors of work environment that influence manager-employee relationships, employee-employee relationships and the organization-employee relationship. The overall results show that correlation is significant at 0.05 level among the job performance and the other three dimensions. At first the sample size was 113 then researcher increased the sample size and it is now 229.

The results uncover that justice plays a significant role in affecting employees’ performance and that employees satisfied from organizational justice are higher performers than the less satisfied. Further if we increase the sample size the results will become more significant.
References


Richard Eberlin and B. Charles, Organizational justice and decision making When good intentions are not enough, Management Decision, Vol. 43 No. 7/8, 2005, pp. 1040-1048.


User's Factors Affecting an Enterprise Resource Planning Systems (ERPs) Implementation Success in Jordan
“A Study in Alhassan Industrial City”

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Irbid Private University

Dr. Mohamad. Noor Al-jedaiah
Management Information Systems Department
Amman Private University

Abstract
The aim of this study is to measure and analyze the effects of critical factors affecting ERPs implementation success in Jordan, the study was applied in Alhassan Industrial City (AIC), (293) questionnaires was distributed to ERP users, (8) questionnaires was excluded and (102) analyzed that represent (35%) of distributed questionnaires. The descriptive and analytical statistical tools were used in analyzing the collected data. The important results of this study was: 75% of the sample were males, 50% less than 30 year age, 54% from the middle level management, and 875 holding a bachelor degree. The study shows that there is a positive relationship between ERPs implementation success and employee’s satisfaction, also there is a statistical relationship between enhancement and ERPs success, weak relationship between ERPs success and easy of use and training factors as well as most of these companies depended on the internet.

Keywords: ERPs, Management Information Systems (MIS), Enhancement, Users Factors.

1. Introduction
Over the last decade organizations used to apply a modern Information Systems (ISs) to achieve it's mission in a proper way, one of the most important systems are ERPs which let these organizations stay cooperated and in a good condition for competitive advantage.

ERPs is a software package used to apply data and it's transformation of information is to provide these organizations with their supply chain and the flow of materials from the upstream to the inventory then to the internal phase, then back again to inventory in some
cases then to the down stream which means from suppliers until it reaches the consumer, also managing Human Resources (HR) in the companies and by this exclusives ERPs, companies will reduce inventory costs, better arrangements of business process in an accurate and quick way resulting a better job for these organizations to achieve it's goals and objectives (Christopher, 2006).

ERPs ties all the separate Information Systems (ISs) used in the departments of the companies in one integrated system resulting a better understanding of the whole job of the organizations through sharing information and communications among users. Separate systems did the job properly in a good way but there is no co operations to know about the transaction and it's process like the amount, date to be achieved, updates of the process, financial matter, time to market, but with the ERPs every one in any department can know all of the processors of the transaction on time and keep the process in better way, (Christopher and Koh, 2003) mentioned that organization, doesn’t have to buy the whole ERPs package as a condition to achieve it's mission, but these companies may buy a separate package of ERPs like two or more, not all which means flexibility for these organization to choose the better ERPs resulting in saving more money and no more costs.

1.2 Importance of the Study
The importance of this study comes from discussing the critical factors affecting ERPs implementation success in Jordanian business organizations, since it used newly beginning and the researchers are trying to find out the reasons behind the factors which affect the proper use of it. Since ERP(s) is used newly in the Jordanian business organizations so the study is trying to enrich the studies in ERP implementation. Also, the importance of the study comes from the benefits and outcomes expected to be done by ERPs (Wah, 2000), like construction by improving efficiencies through computerization, enhancing decision making by providing accurate and timely enterprise-wide information.

ERPs brings lots of these benefits to the organization through integrating the sub systems in one system resulting in cost reduction and supporting decision making, as well as user’s and customer’s satisfaction.
(Elisabeth & Michael, 2006) stated that ERPs implementation is not a technical project but it's a people project so the study will concentrate on how people can be a critical factor in ERPs implementation success and at the same time individuals are one of the information systems elements.

1.3. Research Objectives

The study aims to measure and analyze the effects of critical factors affecting ERPs implementation success in Jordan. Stating a theoretical framework and developing a contribution related to the variables of the study through reviewing the related literature and examined the factors that impact ERP system’s implementation success from the system users’ perspectives. Also the other research objectives are:

i. Investigating the real use of ERPs in Jordanian business organizations.

ii. Developing a conceptual model with the suggested critical success factors that may affect ERPs implementation success in Jordan.

iii. Discussing how these systems work over seas because the organizations at Alhassan Industrial City (AIC) have a business relation out doors.

1.4 Problem Statement

For almost every organization, there are obstacles to be overcome during ERP implementation process, also there are limited firms in number applying this new technology of the information systems in developing countries addressed to several reasons, so this study will explore and analyze the critical factors affecting the implementation success process of ERPs in Alhassan Industrial City companies in Jordan.

Since Alhassan Industrial City (AIC) is the biggest city of the Qualified Industrial Zones (QIZ) there is lack of information on the real use of ERPs in these organizations because these cities are a good example of applying the World Trade Organizations (WTO) and (FTA) between Jordan and the united states, which means that the order is put down by the customer from out doors and crude materials from another country and even Human Resources (HR) from outside Jordan also.
1.5 Research Hypotheses

**Ho:** There Is No Significant Impact of The user's factors on ERPs implementation success.

**Ho (1):** There is no significant impact of user’s satisfaction on ERPs implementation success.

**Ho (2):** There is no significant impact of user’s perception of ease of use on ERPs implementation success.

**Ho (3):** There is no significant impact of training on ERP implementation success.

2. Research Methodology

2.1 Research Population

The study research population was all the professional workers from different levels who work in Alhassan Industrial Zone which apply ERPs in their companies.

2.2 Research Sample

The sample of this study was drawn randomly from all professional workers in these companies.

2.3 Instruments

A survey

A questionnaire was designed and tested then distributed to the targeted sample based on the conceptual model.

3. Enterprise Resource Planning systems (ERPs)

3.1 The Concept of ERPs, Benefits

3.1.1 The Concept of ERPs

The idea behind the enterprise resource planning systems (ERPs) comes from a need to an exclusive system which brings to business organizations better solutions to run it's job in proper, speed, accurate way, designed to leverage it's efficiency and profit as well, based on modern computer applications.
ERPs defined as asset of combination of software (SW) programs based on business organization’s need and tying all the separate systems in one system, one screen, so it ties the systems of human resources (HR), accountant, finance, inventory, production, marketing, all in one system that facilitates the job’s run, and raises the efficiency of employees, and giving more reliability, flexibility, saving time and effort of all the people and managers who work in the organization, and it will be really a better way to run job in the turbulence environment, also being ready for receiving and development of the coming future, in parallel with the development of information technology which is also changing from time to time (Karen, 2007).

Literature of information systems is full of definitions of ERPs stated by different authors, (Zhang, 2005) defines ERPs as software which integrates all of the activities among functional departments, and it may include modules for applications, for finance, HR, business aspects and accounting.

(Kumar and Hillegersberg, 2000) define enterprise resource planning as "configurable information system packages that integrate information and information-based processes within and across functional areas in an organization". They added that these systems built on one database one application across the whole enterprise. But (O’Leary, 2000), defines ERPs as a packaged software designed according to a client server environment (Frank & others, 2006).

Another definition of ERPs stated by (Brown & Vessey, 1999) "online interactive system that can provide 'total' solution to an organization's information systems needs by addressing a large proportion of business functions" (Jenine, and others, 2001).

The researchers define ERPs as integrated software used as a whole or partially in business organization to facilitate function's best of use to put the business organizations in a good position and to achieve it's goals in flexibility, accuracy and speed.

3.2 ERPs Benefits

From the above definitions of ERPs the reader can get several benefits of ERPs and it is for sure created for a benefit of business organizations in purpose, authors stated several benefits of ERPs (Zhang et al, 2002).

i. For the improvement of customer service.
ii. Better way for Production scheduling.

iii. Manufacturing cost reduction.

### 3.3 ERPs Limitation

There is no doubt that ERPs brings some limitations while applying this system in business organizations. Many authors and researchers notice that ERPs has several limitations, (Jenine Beekhauy and others, 2001) stated the following limitations according to several authors:

i. ERPs has a negative effect in working practices as well as culture.

ii. Prior of actual use of ERPs there should be a special support called technical support.

iii. A need for consulting component for ERPs customization for increasing acceptance of this new system.

iv. Need of time as trial use for about eight months in average to see ERPs benefits first.

v. To some extent ERPs implementation is nearly a costly matter which means organizations will avoid applying this system especially in its beginnings.

### 3.4 Researchers added the following expected limitations

i. ERPs implementation may need in some cases a sever for re-engineering and business organizations which are not always can do it because of several reasons.

ii. Once business organizations working overseas, it will be not applicable to depend upon internet.

iii. Continuous training needed by the system requires more expenditure by organizations.

### 3.5 The Evolution of ERPs

Nearly most authors and researchers like (Fang, 2005) mentioned that ERP early derived from the expression called Material Requirement Planning (MRP) then developed from MRPI to MRPII.
The early use of categories of enterprise software are Customer Relationship Management (CRM) and Supply Chain Management (SCM) that are used in corporations of the public sector as well as private sectors (Zhang, 2005), more to say CRM enhances the relationship with the customers and SCM found to ease and facilitate relationship between suppliers and the organization, as well as producers and distributors, But ERPs invented to improve the process of the transaction within the organization; it is evolved from it's early implementation to a flexible one, spreaded out from 1960s till 1990s as follows: (Zhang, 2005).

In 1960(s) the system called inventory management and control, which consists of information technology and business process which concentrates on inventory matters like requirements and supply.

In 1970(s) the system called as mentioned above Material Requirement Planning I (MRPI) which is a soft ware used for arranging production process, raw material and inventory matters as well.

In 1980(s) the system called Material Requirement Planning II (MRPII) which is a developed issue of MRPI with concentration on coordinating of the manufacturing process.

In 1990(s) the system becomes Enterprise Resource Planning (ERP) which is a development of the previous systems with new concepts like using multi-module application, this system comes with a new concept which is integration of the business activities for the functional departments, also having an application modules to support almost all organizational functions.

4. ERPs Implementation Issues

ERPs implementation is a way or a method to use ERPs in the organizations; either it is fixed for the first time or the updating of the legacy system or constructing the system for the first time.

(Krantz, 2005) defines ERPs implementation as a complex issue because it consumes time to achieve it and will result in a valuable changes in the organization once implementing it as it is an integrated way of business processes.
5. Significance of ERPs implementation

First of all, companies should know all the information about ERPs which is going to be implemented before applying it, also companies should know the speed’s factor when applying the system. ERPs automate nearly all of the tasks in the organization which are involved in achieving and run business. (Slater, 1999)

The researchers notice the significance of ERPs implementation as a very important issue because of the implementation process which is nearly the last phase in decision making and as Simon stated the implementation phase as a third phase. Business intelligence, Design, Choices, and Implementation, so this phase comes after the third phase choices, company chooses the suitable ERPs for the best use in the organization, but the most important issue is how to architect and how to put this system in use.

6. ERPs Implementation Stages

(Ross and Vital, 2000) stated five stages of ERP implementation as follows:

(i) Design Stage: In this stage, selection of the right system, consultants, discussion of the related business issues.

(ii) Implementation: Describes aspects of real implementations or real use of ERPs, also consists of software and the managerial issues.

(iii) Stabilization: Manager's familiarity with, the new software, reports of operational effect.

(iv) Continuous improvement: Through adding more functions like new modules or third party vendors.

(v) Transformation: Planning for expected upgrades also building additional technical skills.

7. Critical Factors of ERPs Implementation

ERPs implementation is an integrative process, needs more time to be in effective place, needs several parties in the organization to cooperate and coordinate properly, so it is not a matter of a snapshot, all of these issues are seen differently from different authors who study ERPs implementation’s success, some of them study two factors, others add several factors until it reached twenty issues or more (Seddan et al, 2003)

The researchers chose two categories of these factors; each contains three selected factors to be investigated in this study because of different reasons appeared as the most effective
factors especially for the organizations’ work in our environment which is the developing countries environments, the two categories are the organizational factors and the user’s factors.

8. User's Factors
The study adopts the second major factor affecting ERPs implementation success called user's factors, because the researchers believe that this factor with it's three sub factors may have an important role in applying ERPs in business organization.

As we know information systems consist of five major components which are Data, Software, Hardware and communication, and individuals or what's called users, this means people who work on information systems are a main part of these systems especially once we deal with systems in the middle level management where we use risk systems for risk expectations in this level of management and also going up to the upper level management, to go back to middle level management we find that Decision Support System (DSS) supports this level and one component of the DSS is user and user's screen as the user interacts with the system to get a better use of these information systems. (Turban, 2005).

The study has chosen three sub factors of the user's factors which are: user’s satisfaction, user ‘s perception of ease of use, and training as a matter of concerning with people who want to train on the ERPs that is used in the organization.

9. User Satisfaction
User satisfaction is a very important factor reflexes the real involvement of user and it is important because users must understand the new system and be convinced with it first if we want to real and success application of ERPs, also this system may have upgrades in the coming future and user must go along with the new amendments of the upgraded system, more to say once user is not satisfied with the ERPs and it's capabilities then the usage issue will be in vain (Christopher, 2006).

10. User Perception of Ease of Use
User should also know and convinced by the ERPs that is used by the organization, the image about information systems in general is known as an easy way to do job, so once
organization wants to use a new ERPs system or upgrade the old one or a legacy system it should be done or developed in an easy way to be easy for training and usable by users to get better benefit of this new technology. Otherwise it will be a difficult issue, and because the user is a very important pole of ERPs implementation’s success issue, managers should pay attention to this factor as well as ERPs developing systems for a better use by users in different organizations, more to say these systems are western made and it will need efforts to be translated and how to use these systems ,this will also consume more money, time and well selection with more conditions for individuals who will work on these systems (Zhang, 2005).

11. User Training
Once organization wants to apply a new system or any new developments on any part of the organization that needs to train their employees on a new system to get better use and effectiveness, regarding this matter applying ERPs system imported for the first time to the organization need training by the invented company on how to use these systems properly.

As we know training is divided into two major types: off- the- job training conducting outside organizations and the second one is on-the-job training which conducted inside organizations also followed by what's called refreshment training. ERPs need the two types of training for the first time when applying system which done outside the organization as stated earlier or inwards through inviting experts to the organization called consultant to train people, then these employees will train each other, and once they are ready and get better understanding of the system they will reduce the contract days of the consultant resulting less money to pay by the organization (Bhatti, 2005).

12. ERPs Debated Issues
12.1 User Involvement
The study discussed the user’s involvement and his behavior when applying ERPs, as these systems cost organizations a lot of money.

The study also concentrated on the role of user's involvement as they are apart of change, and the importance of behavior intention of users that may affect the use of ERPs. Researcher conducted a mail survey to collect data from the organizations that implement ERPs, (571) responses were received and were also analyzed.

The result of the study indicated that there is a major role of user’s factors in applying ERPs, like perceived usefulness, ease of use of technology and level of intrinsic involvement increase the user's perceptions of the usefulness, and all of these factors will contribute in success implementation of ERPs.


The study stated that not every organization must achieve success, but others concentrate on implementation projects.

The study aimed to measure the implementation of ERPs, Took place in Australian, the researcher chose (53) organizations, he developed a survey with (65) items, pilot tested was achieved for reliability and creditability wise, then he distributed the final survey in November-December, 2003.

Targeted sample were from workers who had experience in ERPs implementation of their organization, the researcher used e-mail to the targeted organizations, (53) usable surveys were received with response rate (11%) and through using Likert-scale.

Results were a definition of a new constructs associated with the ERPs implementation, developing a new multi item measurement scale with seven point scale for measuring constructs, differentiation of other prior ERPs research, took a grounded theory for ERPs experts.

This study discussed the user’s participation and his involvement in ERPs as ERPs have complexity in high level and need a different methodology. Researchers distributed (355) questionnaires in the targeted organizations, also researchers request project managers to distribute the questionnaires to the users who log in identification (ID) and pass word for the ERP. Researchers received (123) usable responses from various functional areas, these responses included responses from (89) non management respondents like; store superintendents, inventory clerks, purchasing officers, order entry clerks, accountants, quality supervisors, accountants, etc.

Twenty participants were from deputy managers, eight senior managers, and six general managers.

Results of this study showed that developing a theoretical model explains user’s behavior participation and involvement, also results showed discrepancies in ERPs implementation which was demonstrated by the research model.

12.2 Cultural Issues

(i) M. H. Rasmy, Assem Tharwat, Sondoss Ashraf, (2004), Enterprise Resource Planning (ERP) Implementation in Egypt Organizations

The study took place in Egypt, one of the developing countries, and because of low success rate of applying ERPs in this country, researchers put ERPs implementation success as a dependent variable.

The study was an explanatory study tried to see the impact of several critical success factors on ERPs implementation success, they develop a research model using American customer’s satisfaction index.

The conceptual model was tested empirically through a survey involving (45) Egyptian organizations adopting ERPs. Researchers collected data and analyzed it using Partial Least Squares (PLS) technique.

The result show that the critical issues should be considered to ensure a good implementation of ERPs, and the study paid attention to cultural issues when applying ERPs, and finally the study presented a self assessment tool for ERPs users in Egypt, this tool is targeted to serve people who implement ERPs.

This study took place in China, and discussed the relation between critical success factors and the implementation success focusing on generic and some unique factors. Researchers used to collect data and analyzed it using a survey methodology, also through using an equation modeling technique. The aim of the study was to improve understanding of critics factors affecting ERPs in China.

Researchers used a pilot study, (47) applicable responses returned with response rate (34%), and then they used statistical package for social sciences (SPSS) to analyze data. Six respondents are subsidiaries of foreign companies with ratio (12.8%), indicated validity of Chinese organizational culture. The users of ERPs are from industries of electronics products, and mechanical and transport equipments, with (68.1%) ratio of total respondents, most of the people who completed the questionnaire are from manufacturing departments, material management, information technology (IT), procurement and accounting.

The researcher developed a scale to test the proposed model, which has two independent variables of business process reengineering (BPR) and organizational culture which the researcher assumes it as important factors in ERPs implementation in China. They faced several limitations in the generalization of the research results addressed to the large population; they stated that many researchers conduct a case study only to discover the problems of ERPs implementation because there is a lot of complex factors may affect ERPs implementation.

### 13. Methodology

#### 13.1 Data Collection

13.1.1 Research Population

Research population was the professional workers from different levels who work in Alhassan Industrial City (AIC) which applies ERPs in their companies.
13.2 Research Sample.

Research sample was drawn randomly from all professional workers in these companies, who use ERPs in their companies.

13.3 Instruments

A survey: Questionnaire was designed and tested then distributed to the targeted sample based on the conceptual model. The researchers chose a sample of managers who worked in the companies implementing ERPs at Alhassan Industrial city. So (293) questionnaires were distributed and (110) were received and after canceling (8) questionnaires, (102) questionnaires were analyzed with ration (34.81) %, which is sufficient, table (1) shows the number of the respondents to the survey.

<table>
<thead>
<tr>
<th>Number</th>
<th>Organization's Name</th>
<th>Number of Surveys Sent</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Century Company</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>2.</td>
<td>Century Miracle Company</td>
<td>104</td>
<td>42</td>
</tr>
<tr>
<td>3.</td>
<td>Century Suite Company</td>
<td>51</td>
<td>20</td>
</tr>
<tr>
<td>4.</td>
<td>American Jordan Company (jordash)</td>
<td>59</td>
<td>18</td>
</tr>
<tr>
<td>5.</td>
<td>Almaseera Company</td>
<td>29</td>
<td>11</td>
</tr>
<tr>
<td>6.</td>
<td>Century for Medical Wear Company</td>
<td>25</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>293</td>
<td>110</td>
</tr>
</tbody>
</table>

13.4 Questionnaire Developing Phases

The measurement tool was a questionnaire which has passed several steps until reaches the current one in order to achieve the research goals, so the development phases were as follows:

After reviewing literature related to ERPs the researchers stated and organized the research questions annex (A) after putting down the main dimensions according to the research model, which are independent factors critical factors CFs and dependent factor ERPs implementation, the researchers distributed the questionnaire to several specialists instructors from public and private universities to get their valuable notes and most of these notes were regarded, see annex (F).
13.4.1 The Questionnaire Consists of Two Parts

**Part 1**: Personnel general information for the sample, so it includes gender, age, and education, it is important to state this information in because individuals are one of the main components of management information systems.

**Part 2**: Aims to measure the critical factors affecting ERPs implementations through a group of questions (1-68) measure the main hypotheses and the researchers try to stay away from the routine questions in order to get better answers for the accuracy of the measurement tool.

13.4.2 Likert Scale Adopted As Follows

<table>
<thead>
<tr>
<th>Scale</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>1</td>
</tr>
<tr>
<td>Disagree</td>
<td>2</td>
</tr>
<tr>
<td>Undecided or neutral</td>
<td>3</td>
</tr>
<tr>
<td>Agree</td>
<td>4</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>5</td>
</tr>
</tbody>
</table>

Means, and standard deviations were adopted by researchers for the reply of the sample on questionnaire’s questions in order to pinpoint the degree of practice according to the impact of CFs on ERPs implementation success.

13.5 Means for The Sample Reply Classified as Follows

* High level practice: if mean (3.51-4).
* Middle level practice: if mean (2.51-3.50).
* Low level practice: if mean (1-2.50).

13.6 Questionnaire Special Test

13.6.1 Instrument Validity

This test aimed to be sure that the measure used in this study measures what is needed to be measured (Zikmond, 1994) and in order to be sure of the researchers distributing the questionnaire to the targeted sample which called (face validity).
13.6.2 Instrument Reliability

Instrument reliability is one of the important tests which mean necessity to get the same information, even when using the questionnaire more than one time, also means fixed results out of questionnaire at the same level through using Statistical Package for Social Science (SPSS) to get cronbach alpha for all the questionnaire factors and it is high in assuring the accuracy.

Table 2: Initial Cronbach Alpha Values for All the Questionnaire Factors

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>Number of paragraphs</th>
<th>Alpha value</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>User satisfaction</td>
<td>10</td>
<td>.8904</td>
</tr>
<tr>
<td>5</td>
<td>User perception of ease of use</td>
<td>10</td>
<td>.9293</td>
</tr>
<tr>
<td>6</td>
<td>Training</td>
<td>10</td>
<td>.8544</td>
</tr>
<tr>
<td>8</td>
<td>User's factors</td>
<td>30</td>
<td>.9472</td>
</tr>
<tr>
<td>10</td>
<td>ERPs implementation success</td>
<td>8</td>
<td>.7708</td>
</tr>
</tbody>
</table>

13.7 Questionnaire Distribution

After being sure of face validity of the research tool the (questionnaire) was distributed to the targeted research sample professional workers in the organizations from different levels using ERPs, (102) questionnaires were analyzed.

13.8 Statistical Methods Used

Statistical Package for Social and Scientific (SPSS) was used in analyzing data, the suitable methods used in analyzing data depend upon the type of data and the purpose of analysis, in this study the researchers used different methods for the benefit of the research, the following methods were used:

13.9 Reliability Test

This test was used in order to measure the amount of internal consistency of the measurement tool. As an indicator for its consistency, this method is one of the most methods that is used to be sure of the method consistency which includes several elements, in this test; cronbach coefficient calculated which resulted from questionnaire element’s analysis. When ever the values of cronbach alpha have high degree of internal consistency there will be high and acceptable indicator on the consistency of the measurement tool.
14 Descriptive Statistical Methods: (Descriptive Statistical Techniques).

The researchers used descriptive statistical methods in general to obtain readings overview of the characteristics and features of the structure or composition of a school and distribution, as it was the use of the technique to compare the different groups that constitute a society or a sample study, including descriptive statistical methods using iterative distribution and dispersion measurements and percentages, and measurements of central tendency.

14.1 Factor Analysis

Factor analysis is a statistical method used in analyzing data for the purpose of clarifying relations among variables giving newly supposed variables called factors, the main mission of the factor analysis is to analyze variables data in two ways: first to reduce the original variables number called factors, second the number of factors produced from the characteristics among relations.

There are two types of factor analysis, first exploratory factor analysis (EFA) which is used when the relation among variables and factors are unknown, which will be suitable for this study, the second type is confirmatory factor analysis (CFA) which is used to test assumed relations among variables. (Field, 2005).

14.2 Exploratory Factor Analysis (EFA)

Exploratory Factor Analysis is a statistical method used when the relations among variables are unknown to identify the number of factors. Exploratory Factor Analysis is used to determine the number of variables that are needed for correlation explanation among a set of observed variables, in other words EFA reveals patterns among the inter-relationship of the items. (Coughlin & knight, 2007).

Table 3: KMO Values and the Degree of Common Values

<table>
<thead>
<tr>
<th>KMO Value</th>
<th>Degree of Common Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.90 to 1.00</td>
<td>Marvelous</td>
</tr>
<tr>
<td>0.80 to 0.89</td>
<td>Meritorious</td>
</tr>
</tbody>
</table>
KMO is a procedure for determining the suitability of the correlation matrix in order to measure sampling adequacy. KMO is an index for comparing the magnitude of the observed correlation coefficient when the KMO approaches (1.0), the sum of the correlation coefficient between all pairs is small, but when KMO is less than (.50), this indicates that the correlation matrix is not suitable for factor analysis. (Ledakis, 1999).

Table (3) shows interpretations of the KMO results and the degree of values.

<table>
<thead>
<tr>
<th>KMO Value Range</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.70 to 0.79</td>
<td>Middling</td>
</tr>
<tr>
<td>0.60 to 0.69</td>
<td>Mediocre</td>
</tr>
<tr>
<td>0.50 to 0.59</td>
<td>Miserable</td>
</tr>
<tr>
<td>0.00 to 0.49</td>
<td>Don't Factor</td>
</tr>
</tbody>
</table>

Source: (Field, 2005)

14.3 Bartlett’s Test of Sphericity
Bartlett’s Test of Sphericity is a test of Null hypothesis, which stated that variables in correlation matrix are not related. When the value of the test increases and the associated significance level decreases, the Null hypothesis can be rejected and the alternative hypothesis is accepted. (Field, 2005).

14.4 Multiple Regressions
Regression is a mathematical formula expresses the relation between two variables like (X & Y), Regression is used to predict the future relation based on the well known values to reach the future values.

There are two ways of regression analysis one is simple regression and the other one is used in multiple regression, the two ways used in this study and the most important one was the second one which is the multiple regression analysis because the study uses six factors which affecting the dependent variable and this way also is known as stepwise method which means once the six variables entered so this technique shows the stepwise effect from the independent variable to the dependent variable, also it is supported by the researchers’ comments as well.
15. Model Operationalization and Data Analysis

15.1 Analysis and Discussion of the Study Variables

Sample’s intended behavior towards CFs affecting ERPs implementation success, the researchers stated several factors which are chosen from several factors studied by different researchers in different areas of the world, and the study’s factors are chosen according to the developing countries environment and grouped in (68) questions as shown in the research questionnaire included to answer the research questions through chosen the suitable analysis method for this purpose with grouping these variables in categories according to the correlation relation between these factors.

Each group formed a factor to measure the relation between CFS and ERPs implementation success, the researchers used exploratory factor analysis method as it's the appropriate method for this sake.

Results show that the (68) questions explain (.407) % total variance, researchers grouped these questions in seven factors, according to the variables in questionnaire, tables will contain means and standard deviation values for each variable to show the degree of practice by research sample, finally after conducting factor analysis through using exploratory factor analysis, (19) questions were excluded from the analysis, (49) questions were considered in the research’s analysis due to the following factor analysis because of extracted less than (.50) %, loaded on more than one factor, and loaded uniquely on one factor.(Field, 2005).

16. Organizational Factors Analysis

16.1 User’s Factors Analysis

16.1.1 User’s Satisfaction

User’s satisfaction factor consists of ten variables, measures the concept of user’s satisfaction which is one of the important organizational factor that is chosen by the researchers to be included in this study to understand IS applications, after conducting (EFA) this factor is divided into two factors which are user's satisfaction and enhancement, three variables were excluded which are (31, 32, 39) because it is not suitability to the satisfaction’s fact (see annex A).
Table (4) shows the mean average & standard deviation scores of sample's intended behavior consistency value was variable number (33) which was high indicator of consistency which concerns ERPs in the company contribute in increasing credibility by customers, shows the high level of practice with means (3.84), and variable no (40) was moderate in the degree of practice with (3.39) concerning the company assessing in developing employees sharing in decision making, user’s satisfaction average mean was (3.65) with (1.04) standard deviation and it is a high level practice.

Table 4: The Mean Average & Standard Deviation Scores of Sample’s Intended Behavior towards User’s Satisfaction

<table>
<thead>
<tr>
<th>Question No</th>
<th>Question</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>33.</td>
<td>ERPs in our company contribute in increasing credibility by customers.</td>
<td>3.84</td>
<td>.93</td>
<td>.709</td>
</tr>
<tr>
<td>36.</td>
<td>ERPs in our company are less cost and maintenance in comparing with the old system.</td>
<td></td>
<td></td>
<td>.699</td>
</tr>
<tr>
<td>37.</td>
<td>ERPs in our company contribute in enhancing the ability to innovate, learning, and acquiring new skills.</td>
<td>3.65</td>
<td>1.01</td>
<td>.738</td>
</tr>
<tr>
<td>38.</td>
<td>ERPs in our company present information for the managers in order to predict the future tends at the right moment.</td>
<td>3.75</td>
<td>1.02</td>
<td>.674</td>
</tr>
<tr>
<td>40.</td>
<td>ERPs in our company assessing in developing employees sharing in decision making.</td>
<td>3.39</td>
<td>1.22</td>
<td>.813</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td></td>
<td><strong>3.65</strong></td>
<td><strong>1.04</strong></td>
<td><strong>0.72</strong></td>
</tr>
</tbody>
</table>

16.1.2 Enhancement

Table (5) shows the mean average & standard deviation scores of sample’s intended behavior, variable number (35) which was high indicator of consistency which concerns ERPs in the company contribute in enhancing the institutional work, shows the high level of practice with means (3.77), and variable no (34) was moderate in the degree of practice with (3.55) concerning ERPs in the company contribute in enhancing the degree of stake holder’s confidence, average mean was (3.66) with (0.87) standard deviation and it is a high level practice.
Table 5: The Mean Average & Standard Deviation Scores of Sample’s Intended Behavior towards Enhancement

<table>
<thead>
<tr>
<th>Question No</th>
<th>Question</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>34.</td>
<td>ERPs in our company contribute in enhancing the degree of stake holder’s confidence.</td>
<td>3.55</td>
<td>.90</td>
<td>.880</td>
</tr>
<tr>
<td>35.</td>
<td>ERPs in our company contribute in enhancing the institutional work.</td>
<td>3.77</td>
<td>.84</td>
<td>.853</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>3.66</td>
<td>0.87</td>
<td>0.86</td>
</tr>
</tbody>
</table>

Table (6 ) shows Kaiser-Meyer- Olkin (KMO) & Bartlett’s of Sphericity Measures value for the variables relating to the user’s satisfaction and KMO was (.811) which reflects the degree of common variance and it was (Meritorious) which indicates significance and the patterns of correlations are reliable factors.

Also the table shows Bartlett’s of Sphericity value which was (289.371) and it is significant for all values relating to this factor, which specify the existence of relationships among variables, and therefore the factor analysis is appropriate.

Table 6

<table>
<thead>
<tr>
<th>KMO and Bartlett's Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</td>
</tr>
<tr>
<td>Bartlett's Test of Sphericity</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

16.2 User’s Perception of Ease of Use

User’s perception of ease of use factor consists of ten variables, measures the concept of user’s perception of ease of use. Table ( 7 ) shows the mean average & standard deviation scores of sample’s intended behavior, all variables included after conducting (EFA) because of the suitability to measure this factor as well as the clear role of ERPs as an easy system to work on by the sample. (See annex A).
Variable no (49) concerning ERPs in our company are easy to be learned shows high practice with mean (3.96) which means that the research sample was familiar with ease of use of ERPs and variable no (43) was also high in the degree of practice with (3.61) but moderate regarding the other variables concerning ERPs in the company contribute in the ease of beneficiary of the information technology in order to facilitates work procedures.

User’s perception of ease of use average mean was (3.82) with (1.00) standard deviation and it is a high level practice.

Table 7: The Mean Average & Standard Deviation Scores of Sample’s Intended Behavior towards User’s Perception of Ease of Use

<table>
<thead>
<tr>
<th>Question No</th>
<th>Question</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>Our employees found no difficulties in dealing with the ERPs in order to get the accurate and suitable information.</td>
<td>3.85</td>
<td>.93</td>
<td>.613</td>
</tr>
<tr>
<td>42</td>
<td>ERPs in our company are easy to be understood because of its capabilities and the way of use.</td>
<td>3.77</td>
<td>.92</td>
<td>.826</td>
</tr>
<tr>
<td>43</td>
<td>ERPs in our company contribute in the ease of beneficiary of the information technology in order to facilitate work procedures.</td>
<td>3.61</td>
<td>1.00</td>
<td>.771</td>
</tr>
<tr>
<td>44</td>
<td>The ERPs in our company is flexible.</td>
<td>3.62</td>
<td>1.18</td>
<td>.820</td>
</tr>
<tr>
<td>45</td>
<td>The ERPs in our company is easy to be reached.</td>
<td>3.85</td>
<td>.97</td>
<td>.744</td>
</tr>
<tr>
<td>46</td>
<td>The ERPs in our company assessing in the ease of tracking the transaction’s operations from any department at any time.</td>
<td>3.94</td>
<td>1.02</td>
<td>.771</td>
</tr>
<tr>
<td>47</td>
<td>Our company has skills and highly technical abilities in order to use the ERPs easily.</td>
<td>3.92</td>
<td>1.06</td>
<td>.806</td>
</tr>
<tr>
<td>48</td>
<td>ERPs in our company are easy to be understood.</td>
<td>3.80</td>
<td>1.05</td>
<td>.824</td>
</tr>
<tr>
<td>49</td>
<td>ERPs in our company are easy to be learned.</td>
<td>3.96</td>
<td>.95</td>
<td>.846</td>
</tr>
<tr>
<td>50</td>
<td>ERPs in our company are easy to be highly sensitive to the customer’s needs and instant inserting the request to the system.</td>
<td>3.92</td>
<td>.93</td>
<td>.806</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>3.82</td>
<td>1.00</td>
<td>.78</td>
</tr>
</tbody>
</table>

Table (8) shows Kaiser-Meyer-Olkin (KMO) & Bartlett’s of Sphericity Measures value for the variables relating to the user’s perception of ease of use and KMO was (.760) which reflects the degree of common variance and it was (Middling) which indicates significance and the patterns of correlations are reliable factors.
Also the table shows Bartlett’s of Sphericity value which was (787.448) and it is significant for all values relating to this factor, which specify the existence of relationships among variables, and therefore the factor analysis is appropriate.

Table 8
KMO and Bartlett's Test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy | .760 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 787.448 |
| df | 45 |
| Sig. | .000 |

16.3 Training

Training factor consists of four variables measure the concept of the most important factors after conducting (EFA) as the companies in the developing countries, six variables were excluded, (51, 52, 53, 58, 59, 60) because of the inability to measure this factor and the concentration of the support needed by this factor, (see annex A).

Table (9) shows the mean average & standard deviation scores of sample’s intended behavior, Variable no (54) concerning capability of the training programs affecting the degree of ERPs success shows high practice with mean (3.79) which means that training ERPs users are capable in dealing with the training programs which affect positively the application of the success use of ERPs.

Variable no (56) was moderate in the degree of practice with mean (3.16) concerning the special sets and soft wares to train the employees on ERPs. Training average mean was (3.46) with (1.1) standard deviation and it is a high level practice.
Table 9: The Mean Average & Standard Deviation Scores of Sample’s Intended Behavior towards Training

<table>
<thead>
<tr>
<th>Question No</th>
<th>Question</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>54.</td>
<td>Capability of the training programs affecting the degree of ERPs success.</td>
<td>3.97</td>
<td>.99</td>
<td>.744</td>
</tr>
<tr>
<td>55.</td>
<td>We have a comprehensive training plan to train our employees on using the system.</td>
<td>3.22</td>
<td>1.22</td>
<td>.899</td>
</tr>
<tr>
<td>56.</td>
<td>We have special sets and softwares to train our employees on ERPs.</td>
<td>3.16</td>
<td>1.13</td>
<td>.900</td>
</tr>
<tr>
<td>57.</td>
<td>The ERPs in our company is simple and assessing users to self-training on the system through following procedures.</td>
<td>3.49</td>
<td>1.06</td>
<td>.747</td>
</tr>
</tbody>
</table>

Average   | 3.46  | 1.1    | 0.82               |

Table (10) shows Kaiser-Meyer-Olkin (KMO) & Bartlett’s of Sphericity Measures value for the variables relating to the training and KMO was (.745) which reflects the degree of common variance and it was (Middling) which indicates significance and the patterns of correlations are reliable factors, also the table shows Bartlett’s of Sphericity value which was (192.937) and it is significant for all values relating to this factor, which specify the existence of relationships among variables, and therefore the factor analysis is appropriate.

Table 10

KMO and Bartlett’s Test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy | .745 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 192.937 |
|                                 | df          | 6     |
|                                 | Sig.        | .000  |

16.4 ERPs Implementation Success

ERPs implementation success factor consist of eight variables, measures the concept organizational function is important organizational factor to understand IS applications, after conducting (EFA) only three variables entered analysis, and five variables removed
which are (61,62,63,65,67) because of dealing with the success in details which were not suitable in measuring this factor.

Table (11) shows the mean average & standard deviation scores of sample’s intended behavior towards ERPs implementation, variable no (68) concerning ERPs applied in our company contributes in supporting and success of the decision making process in all the organization departments through presenting needed information with mean (4.12), and variable no (66) was moderate in the degree of practice comparing with the other factors with mean (3.57) concerning the ERPs applied in the companies contribute in low average in supporting ERP process through presenting required and needed information because of not knowing the whole system and they use their access according to their need for their specialization, ERPs implementation’s success factor average mean was (3.84) with (1.06) standard deviation and it is a high level practice.

<table>
<thead>
<tr>
<th>Question No</th>
<th>Question</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>64.</td>
<td>ERPs applied in our company contribute in the ease of sharing process and exchanging of information among all of users working in the company.</td>
<td>3.83</td>
<td>1.00</td>
<td>.840</td>
</tr>
<tr>
<td>66.</td>
<td>ERPs applied in our company contribute in supporting ERP process through presenting required &amp; needed information.</td>
<td>3.57</td>
<td>1.25</td>
<td>.853</td>
</tr>
<tr>
<td>68.</td>
<td>ERPs applied in our company contributes in supporting and success of the decision making process in all the organization departments through presenting information needs.</td>
<td>4.12</td>
<td>.93</td>
<td>.698</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>3.84</td>
<td>1.06</td>
<td>0.79</td>
</tr>
</tbody>
</table>

variables relating to the ERPs implementation

Table (12) shows Kaiser-Meyer- Olkin (KMO) & Bartlett’s of Sphericity Measures value for the success and KMO was (.635) which reflects the degree of common variance and it was (Mediocre) which indicates significance and the patterns of correlations are reliable factors, also
the table shows Bartlett’s of Sphericity value which was (65.346) and it is significant for all values relating to this factor, which specify the existence of relationships among variables, and therefore the factor analysis is appropriate.

Table 12

KMO and Bartlett's Test

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</th>
<th>.635</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bartlett's Test of Sphericity Approx. Chi-Square df</td>
<td>65.346, 3</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

17. Data Analysis

17.1 Sample Characteristics Description

Table (13) showed sample distribution according to the personal and occupation characteristics (gender, age, educational level, occupation and experience), it shows that males represent (73.0) % but females represent (26.5) %.

Table 13: Sample’s characteristics variables (n = 102)

<table>
<thead>
<tr>
<th>No</th>
<th>Characteristics variables</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>75</td>
<td>73.5</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>27</td>
<td>26.5</td>
</tr>
<tr>
<td>2.</td>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Less than 30 years</td>
<td>38</td>
<td>37.3</td>
</tr>
<tr>
<td></td>
<td>30-39 years</td>
<td>51</td>
<td>50.0</td>
</tr>
<tr>
<td></td>
<td>40 – 49 years</td>
<td>13</td>
<td>12.7</td>
</tr>
<tr>
<td>3.</td>
<td>Educational level</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Higher Diploma &amp; less BC</td>
<td>7</td>
<td>6.9</td>
</tr>
<tr>
<td></td>
<td>MA</td>
<td>6</td>
<td>5.9</td>
</tr>
<tr>
<td>4.</td>
<td>Current Occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Top level management</td>
<td>18</td>
<td>17.6</td>
</tr>
<tr>
<td></td>
<td>Middle management</td>
<td>55</td>
<td>53.9</td>
</tr>
<tr>
<td></td>
<td>Low level management</td>
<td>29</td>
<td>28.4</td>
</tr>
<tr>
<td>5.</td>
<td>Experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Less than one year</td>
<td>20</td>
<td>19.6</td>
</tr>
<tr>
<td></td>
<td>1-5 years</td>
<td>34</td>
<td>33.3</td>
</tr>
<tr>
<td></td>
<td>6-10 years</td>
<td>40</td>
<td>39.2</td>
</tr>
<tr>
<td></td>
<td>11 years and more</td>
<td>8</td>
<td>7.8</td>
</tr>
</tbody>
</table>

This result matches most of the studies discussing personal characteristics in the same climate in the developing countries because the males mainly go to work more than
females who still thinks that females must get married and being a house keeper, that’s why the researchers found that males were (73.5)% and females working in the same companies were(26.5)%.

Sample distribution according to their age, results refers that (38) persons from people who work on QIZ companies their age were less than 30 years old with (37.3)% ratio, (30-39) were (51) person with (50)% ratio this class represent the highest within age variable once we take the two classes it becomes (87.3) which means that the most of people work at this age, class (40-49) were (13) persons with (12.7)% ratio who are the lowest class because of early retirement and leaving service for several administrative reasons, and that’s why the study did not find any person in the class (50 – and more).

Educational level results refers that the majority of research’s sample who hold BC were (89) with ratio (87.3)% which reflects the importance of the job conducted by the ERPs users which needs more qualifications, also means that these companies need this ratio to run the managerial work and some professional IT managers, research’s sample who has MA were (6) with (5.9)% ratio, the reason might be companies intention to develop it's personnel through hiring highly educated people to occupy the senior management positions.

Regarding the current occupation researchers classified research’s sample in three classes top level management, middle management, and low level management sample studied distributed as It shown in table (13), results shows that (18) persons with (17.6)% ratio were in top level management class (55) persons with middle level management with ratio (53.9), and finally (29) persons with (28.4)% ratio from low level management. These results refers to the concentration of research sample in the middle which was a normal distribution as the majority of the employees in any organization will fall in this class, the concentration of this class was in the middle management because of the distribution of middle managers on the different department of the organizations.

Regarding years of experience the study found that (20) persons were having (less than one year) service with (19.6)% ratio, in (1-5) years were (34) persons with (33.3)% ratio, (6-10) years (40) with (39.2)% ratio, and finally (8) persons with (7.8)% ratio.
Experience shows that most of persons were classified in class (6-10) years because of the company's age of QIZ which started less than 10 years ago and people started their job nearly at the same time of companies age QIZ.

18. Multiple Regression Analysis

18.1 Research Hypotheses

18.1.1 User’s Factors

Testing the main second main hypothesis including the three sub hypotheses which are as follows:

**Ho:** There Is No Significant Impact of the User's Factors on ERPs Implementation success.

- **Ho (1):** There is no significant impact of User’s Satisfaction on ERPs implementation success
- **Ho (2):** There is no significant impact of Enhancement on ERPs implementation success
- **Ho (3):** There is no significant impact of User’s Perception of Ease of Use on ERPs implementation success.
- **Ho (4):** There is no significant impact of Training on ERP implementation success.

For showing the impact of User’s factors on ERPs implementation success analysis done through using multiple regressions (stepwise) and results was as follows:

Table (14) shows all the variables entered analysis, which means all the variables have an effect except the factor regarding training.

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables entered</th>
<th>Variable removed</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Satisfaction</td>
<td></td>
<td>Stepwise</td>
</tr>
<tr>
<td>2.</td>
<td>Enhancement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent Variable: ERPs Implementation Success

Table (15) shows multiple regression in the impact of User’s factors on ERPs implementation success, two factors out of the four variables entered which is User’s
satisfaction, and enhancement but ease of use and training showed no valuable effect also the table shows stepwise method, User satisfaction explains (.780) of the total variables, and enhancement explains (.798) out of the total variables.

Table 15: Regression Results for the Impact of User’s Factors on ERPs Implementation Success

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Independent variable</th>
<th>Beta</th>
<th>Sig Beta</th>
<th>T</th>
<th>Sig T</th>
<th>R²</th>
<th>F</th>
<th>Sig F</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERPs Implementation Success</td>
<td>Satisfaction</td>
<td>.676</td>
<td>.000</td>
<td>9.437</td>
<td>.000</td>
<td>.780</td>
<td>155.816</td>
<td>.000</td>
</tr>
<tr>
<td>ERPs Implementation Success</td>
<td>Enhancement</td>
<td>.195</td>
<td>.000</td>
<td>2.718</td>
<td>.000</td>
<td>.798</td>
<td>86.581</td>
<td>.000</td>
</tr>
</tbody>
</table>

Results from table (15) showed that the variable concerning of enhancement has a strong relationship with the dependent variable and the table also shows that $R = (.798)$ and $R^2 = (.636)$ which means that (.798) comes from this factor, and table (5.25) shows $F= (155.816)$ with (0.000) significance, and user satisfaction shows $F$ value (86.581) which means the high effect of the enhancement on the ERPs implementation success and also means that any increase of the enhancement will increase the success of the ERPs implementation.

From the results presented before there is a significance impact from the users’ factors on ERPs implementation success and this will reject the negative hypothesis and accept the alternative one witch stated that there is a significant impact of user’s factors on ERPs implementation success, but accepting the hypothesis regarding training factor and ease of use, Ho (3) & Ho (4), as it showed no valuable effects on ERPs implementation success.

Table (16) shows the excluded variables of the user’s factors and (t) value and sig (t) for ease of use, and training, which means that these factors have no valuable effects on ERPs implementation success.
Table 16: Excluded Variables of the User's Factors

<table>
<thead>
<tr>
<th>Model</th>
<th>T</th>
<th>Sig t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ease of use</td>
<td>1.213</td>
<td>.228</td>
</tr>
<tr>
<td>Training</td>
<td>-.209</td>
<td>.835</td>
</tr>
</tbody>
</table>

19. Findings Discussion & Recommendations

19.1 Results From The Personal Characteristics

i. Results showed from studying gender category that (75) of research’s sample were males with ratio (73.5)% but the remainder were (27) females with ratio (26.5)% because of the nature of Jordan society because most of the workers were males especially in the industrial sector.

ii. Results showed from studying the age category that (38) with ratio (37.3)% of research sample were from the age category (less than 30 years), (51) with ratio (50)% from the class (30-39) years, (13) with ratio (12.7)% from the class (40-49) years, the majority were from class less than 30 years old because most of people go to work after finishing the first university degree and this result interpret the age of the QIZ companies which matches the class of age found by the study.

iii. Results showed from studying educational level category that (7) with ratio (6.9) higher diploma and less, (89) with ratio (87.3)% from the class BC, (6) with ratio (5.9)% from class MA, and no one has a PhD level of education, the reason behind this result is the need of the higher education level to run the job especially when using such a marvelous systems like ERPs.

iv. Results showed from studying occupation category that (18) with ratio (17.6)% were from the class top level managers, (55) with ratio (53.9)% from middle management class, and (29) with ratio (28.4)% from the class of low level management, the majority were from the middle management class because of the nature of the services presented by the ERPs which developed to support the systems in middle level management, so users from this level should be from this category.

v. Results showed that the maximum sample experience were from the class (6-10) years were (40) with ratio (39.2)% and the minimum were from the class (11)
years and more, were (8) persons with ratio (7.8)%. And in between were the class from (1-5) years (34) persons with ratio (33.3)%, this result matches the result concerning the age of the sample as well as the age of the companies work in QIZ and they began working at these companies after finishing the first university degree, so that is why the majority were from this category.

19.2 Results From Testing Hypothesis

i. Results showed there was a significance impact from the user's satisfaction on ERPs implementation success and this will reject the negative hypothesis and accept the alternative ones witch stated that there is a significant impact of user’s satisfaction on ERPs implementation success, which means users were satisfied in using ERPs properly especially because they used to run their jobs from their sections, this result on the contrary of the study by (Walter, 2001) it might be addressed to the environment reasons.

ii. Results showed there was a significance impact from enhancement factor on ERPs implementation success and this will reject the negative hypothesis and accept the alternative ones which stated that there is a significant impact of enhancement on ERPs implementation success, which means users were familiar in the enhancement processed by ERPs while using ERPs properly, the result matches the study by (Robin, 1998).

iii. Results showed that there was no significance impact from the ease of use on ERPs implementation success and this will accept the negative hypothesis and reject the alternative one which stated that there is a significant impact of the ease of use on ERPs implementation success, because of the other problems facing users like the systems at (QIZ) depended generally on the internet because it has mainly an outward operations and because of the language problems in dealing with the system, this study comes on the contrary with (Kwasi, 2007).

iv. Results showed that there was no significance impact from the training on ERPs implementation success and this will accept the negative hypothesis and reject the alternative one witch stated that there is a significant impact of the training on ERPs implementation success, because of several reasons like the cost of the training.
issues and the business organizations avoid these costs because it need a special sets and arrangements, and some times sending users outdoors to be trained on any development in the legacy systems, as well as on the job training costs, this study matches the results by (Jiang, 2005).

v. Results showed that the most effective factor from the nine factors using the stepwise method was the organizational function because ERPs is a very easy system to be used, as well as the great benefits of these systems in running all of the organizational functions.

vi. Results show that most of the ERPs used in Alhassan industrial city are internet oriented and depend upon the internet and once the communication interrupted for any reason the system will be out of order.

vii. Results show that the mother companies controls the ERPs and the system imposed by the mother company.

viii. Results show that companies applies ERPs do not use the system totally but it used some systems to support the main ERPs, like using the Human Recourse Information System (HRIS) separate on the system and they don’t integrate these systems because of the high cost to upgrade the ERPs.

ix. Results show that there is a positive effect of the CFs on ERPs implementation success because these factors are chosen to reflect the real use of numerous ERPs implementation success used by several researchers, secondly the research questionnaire were designed and well translated to take an accurate reflection to measure the reality of ERPs practice, regardless a prejudice actions, and this was clear from testing relation coefficient between research dependent and independent factors.

20 Recommendations

i. Top level management should pay their attention to the support needed from their side to the change management and they should not regard only how this new technology cost.
ii. Companies should concentrate on training, and do not train their employees for the first time, they should believe on both sides of the training process on the job training and off the job training as well.

iii. Companies should use integrated ERPs as a whole and they have not to divide it in small parts and integration of the systems should become as a whole.

iv. Companies should rejuvenate the legacy systems they use and upgrade their systems from time to time as the development of the IT technology accelerates constantly.

v. 5. Companies should concentrate on the scientific research, because this matter will develop new methods of doing job very well and pave the way to new technologies to be seen in the coming future.

vi. Companies should pay their attention to the organizational culture because it is very important for the ERPs implementation success and to the teamwork and the responsibility of every one in the organization.

vii. Companies should try to search for solutions as an alternative way of the internet to do their job i.e., an alternative way to the internet is the intranet.
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Testing the Catering Theory of Dividends: The Case of the Japanese Chemicals Industry

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Abstract

We test the catering theory of dividends using data from firms in the Japanese chemicals industry. Our empirical investigations reveal that, in the Japanese chemicals industry, corporate managers do not consider catering behavior in either their dividend initiation decisions or their continuation decisions. This result is particularly important because it is different from existing evidence for the US. We also find that one of the most important determinants of dividend initiations among Japanese chemicals industry firms is the value-weighted dividend yield in the industry. Namely, we find that after the value-weighted dividend yield declines, Japanese firms in the industry tend to initiate or continue dividend payments.

Keywords: Catering Theory of Dividends, Dividend policy, Imperfect market, Inefficient market.

1. Introduction

Miller and Modigliani (MM) (1961) proved that dividend policy is irrelevant to share value in perfect and efficient capital markets. After the proof was published, many researchers criticized it using various approaches (Note 1). Recently, a new theory called the “catering theory of dividends” was developed by Baker and Wurgler (BW) (2004a). Relaxing the assumption of perfect markets and efficient markets (Note 2) undertaken in MM (1961) and considering psychological and institutional reasons, BW (2004a) suggested the following by constructing a simple theoretical model. First, some investors have an uninformed and perhaps time-varying demand for dividend-paying stocks. Second, arbitrage fails to prevent this demand from driving apart the prices of dividend payers and nonpayers. Third, managers rationally
cater to investor demand—they pay dividends when investors put higher prices on payers, and they do not pay when investors prefer nonpayers.

As far as we know, this new theory has not been tested for Japan; thus, testing catering theory using Japanese data is an objective of this paper. More precisely, we test the catering theory of dividends in the Japanese chemicals industry, one of the most important industries in Japan.

The results derived in this paper are as follows. First, our investigations reveal that the dividend initiation decisions of Japanese chemicals industry firms have no predictive power for the relative future returns of payers over nonpayers. While BW (2004a) documented that US firms’ dividend decisions for both initiations and continuations have strong predictive power for relative negative future returns, our results are different from them.

Second, regarding the determinants of the dividend initiations, the first difference between the US and Japan is that the value-weighted dividend yield and the book value-weighted nonpayers’ market-to-book ratio are the determinants of one-year-ahead dividend initiations in the Japanese chemicals industry firms. Most importantly, the dividend premium is not a determinant of the dividend initiations of the Japanese chemicals industry firms. This means that these firms do not behave as predicted by catering theory.

Moreover, regarding the dividend continuation decisions, in contrast to the US case, the dividend premium has again no relation with the dividend continuation decisions in the case of the Japanese chemicals industry firms. Instead, the value-weighted dividend yield is a determinant of one-year-ahead dividend continuations in the Japanese chemicals industry firms. Hence, again, our empirical evidence suggests that these firms do not behave as predicted by catering theory.

The rest of the paper is organized as follows. Section 2 summarizes BW’s (2004a) catering theory of dividends, Section 3 explains the data, Section 4 describes the empirical results, Section 5 performs alternative tests, Section 6 interprets the results, and Section 7 concludes the paper.
2. Catering Theory

The catering theory of dividends, developed by BW (2004a), suggests that real financial markets are imperfect and inefficient, and corporations decide their dividend initiation and continuation decisions by catering to investors’ demands for dividends.

Typically, in BW (2004a), investors’ demands for dividends can be captured by the difference between payers’ M/Bs and nonpayers’ M/Bs, which corporate managers can observe through financial markets. Hence, catering theory predicts that if the difference between payers’ M/Bs and nonpayers’ M/Bs increases, corporate managers decide on dividend initiations or dividend continuations by catering to investors’ dividend demands.

3. Data

Our dividend payment measures follow BW (2004a). All data in this study are from QUICK Corp. Our full sample period is from 1986 to 2006, and our focus in this study is on the firms in the Japanese chemicals industry. The industry is important for Japan because the second largest number of firms of the industry is included in the NIKKEI 500 Index as at the end of December 2009. In accordance with BW (2004a), we count a firm as a payer if it has positive dividends per share by the ex date, or else it is a nonpayer. To aggregate this firm-level data into useful time series data, we use two aggregate identities following BW (2004a):

\[ \text{Payers}_t = \text{New Payers}_t + \text{Old Payers}_t + \text{List Payers}_t, \]  \quad (1)  

\[ \text{Old Payers}_t = \text{Payers}_{t-1} - \text{New Nonpayers}_t - \text{Delist Payers}_t. \]  \quad (2)

The first identity defines the number of payers and the second describes the evolution. Payers is the total number of payers; New Payers is the number of initiators among last year’s nonpayers; Old Payers is the number of payers that also paid last year; List Payers is the number of payers this year that were not in the sample last year; New Nonpayers is the number of nonpayers among last year’s payers; and Delist Payers is the number of last year’s payers not in the sample this year. Note that lists and delists refer to companies added to and removed from the Tokyo Stock Exchange First Section, respectively.
We then define three variables to capture the dividend payment dynamics as in BW (2004a):

\[ \text{Initiate}_t = \frac{\text{New Payers}_t}{\text{Nonpayers}_{t-1} - \text{Delist Nonpayers}_t}, \]  

(3)

\[ \text{Continue}_t = \frac{\text{Old Payers}_t}{\text{Payers}_{t-1} - \text{Delist Payers}_t}, \]  

(4)

\[ \text{Listpay}_t = \frac{\text{List Payers}_t}{\text{List Payers}_t + \text{List Nonpayers}_t}. \]  

(5)

In words, the rate of initiation \text{Initiate} is the fraction of surviving nonpayers that become new payers. The rate at which firms continue paying \text{Continue} is the fraction of surviving payers that continue paying. The rate at which new lists in the sample pay \text{Listpay} is payers as a percentage of new lists at time \( t \). These variables capture the decision whether to pay dividends, not how much to pay.

Table 1 lists the aggregate totals and the dividend payment variables for the Japanese chemicals industry. The initiation rate increases around the 1990, and then falls. After that, it rebounds in the middle and late 1990s, decreases again in 1999 and 2002, and increases again around the end of the sample. The rate at which firms continue paying varies less, as expected. Note that the rate at which lists pay is always high, in contrast with the case of BW (2004a) where \text{Listpay} varies significantly.

Next are the stock market dividend premium variables. Namely, we relate dividend payment choices to several stock-market-based measures of the uninformed demand for dividend-paying shares (i.e., the dividend premium) as BW (2004a) suggested.

Conceptually, it is important to measure the difference between the market prices of firms with the same investment policy and different dividend policies, because in the frictionless and efficient markets of MM (1961), this price difference should be zero. However, with limits to arbitrage, BW (1961) suggested that the uninformed demand for dividend-paying shares causes a price difference, which may vary over time.

Table 1: Measures of Dividend Payment

<table>
<thead>
<tr>
<th>Year</th>
<th>Payers Total</th>
<th>Payers New</th>
<th>Payers Old</th>
<th>Payers List</th>
<th>Nonpayers Total</th>
<th>Nonpayers New</th>
<th>Nonpayers Old</th>
<th>Nonpayers List</th>
<th>Payment Rates (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>New</td>
<td>Old</td>
<td>List</td>
<td>Total</td>
<td>New</td>
<td>Old</td>
<td>List</td>
<td>Initiate</td>
</tr>
<tr>
<td>1987</td>
<td>75</td>
<td>4</td>
<td>68</td>
<td>3</td>
<td>12</td>
<td>1</td>
<td>11</td>
<td>0</td>
<td>26.67</td>
</tr>
<tr>
<td>1988</td>
<td>79</td>
<td>1</td>
<td>74</td>
<td>4</td>
<td>12</td>
<td>1</td>
<td>11</td>
<td>0</td>
<td>8.33</td>
</tr>
<tr>
<td>1989</td>
<td>86</td>
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<td>2003</td>
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<td>2</td>
<td>5</td>
<td>0</td>
<td>16.67</td>
</tr>
</tbody>
</table>

Notes: A firm is defined as a dividend payer at time $t$ if it has positive dividends per share by the ex date. A firm is defined as a new dividend payer at time $t$ if it has positive dividends per share by the ex date at time $t$ and zero dividends per share by the ex date at time $t - 1$. A firm is defined as an old payer at time $t$ if it has positive dividends per share by the ex date at time $t$ and positive dividends per share by the ex date at time $t - 1$. A firm is defined as a new list payer if it has positive dividends per share by the ex date at time $t$ and is not in the sample at time $t - 1$. A firm is defined as a nonpayer at time $t$ if it does not have positive dividends per share by the ex date. New nonpayers are firms who were payers at time $t - 1$ but not at $t$. Old nonpayers are firms who were nonpayers in both $t - 1$ and $t$. New list nonpayers are nonpayers at $t$ who were not in the sample at $t - 1$. The initiation rate Initiate expresses payers as a percentage of surviving nonpayers from $t - 1$. The rate at which firms continue paying dividends Continue expresses payers as a percentage of surviving payers from $t - 1$. The rate at which lists pay Listpay expresses payers as a percentage of new lists at $t$.

More precisely, we take equal- and (book) value-weighted averages of the market-to-book ratios separately for payers and nonpayers in each year. Then we construct the final dividend premium series as the difference of the logs of these averages. These series are listed in Table 2 and the value-weighted series of payers’ and nonpayers’ M/B ratios and the value-weighted dividend premium are plotted in panels A and B of Figure 1, respectively. The figure shows that the dividend premium increases after 1997. This is because some of the larger companies in the Japanese chemicals industry are valued highly in the Japanese stock market.
Our second measure of the relative stock market valuation of dividend payers is the difference between the future (book) value-weighted returns of payers and nonpayers. According to the model of BW (2004a), managers *rationally* initiate dividends to exploit an apparent market mispricing. BW (2004a) suggested that if this is literally the case, a high rate of initiations should forecast low returns on payers relative to nonpayers as the relative overpricing of payers reverses.

Table 2: The Dividend Premium

<table>
<thead>
<tr>
<th>Year</th>
<th>Payers</th>
<th>Nonpayers</th>
<th>Dividend Premium ($P_{ND}^{D-ND}$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EWM/B</td>
<td>VWM/B</td>
<td>EWM/B</td>
</tr>
<tr>
<td>1986</td>
<td>1.72</td>
<td>1.56</td>
<td>1.55</td>
</tr>
<tr>
<td>1987</td>
<td>1.82</td>
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</tr>
<tr>
<td>1991</td>
<td>1.72</td>
<td>1.63</td>
<td>1.81</td>
</tr>
<tr>
<td>1992</td>
<td>1.45</td>
<td>1.43</td>
<td>1.43</td>
</tr>
<tr>
<td>1993</td>
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<td>1.32</td>
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<td>1995</td>
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<td>1.27</td>
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<tr>
<td>2003</td>
<td>1.09</td>
<td>1.24</td>
<td>1.04</td>
</tr>
<tr>
<td>2004</td>
<td>1.27</td>
<td>1.44</td>
<td>1.26</td>
</tr>
<tr>
<td>2005</td>
<td>1.37</td>
<td>1.43</td>
<td>1.28</td>
</tr>
<tr>
<td>2006</td>
<td>1.66</td>
<td>1.79</td>
<td>1.27</td>
</tr>
</tbody>
</table>

Notes: A firm is defined as a dividend payer at time $t$ if it has positive dividends per share by the ex date. The market-to-book ratio is the ratio of the market value of the firm to its book value. The market-to-book ratio reported is an equal-weighted (EW) or value-weighted (VW) average, by book value across dividend payers and nonpayers. These ratios are calculated for the entire sample and for new lists. A firm is defined as a new list if it is not in the sample at time $t − 1$. The dividend premium $P_{ND}^{D-ND}$ is the difference between the logs of the dividend payers' and nonpayers' average market-to-book ratios.

Table 3 reports the correlations among dividend premiums $P_{ND}^{D-ND}$ and future returns. The excess return on payers over nonpayers in year $t + 1$ is denoted as $r_{D^{t+1}} − r_{ND^{t+1}}$ and the cumulative excess return on payers over nonpayers from years $t + 1$ through $t + 3$ is denoted as $R_{D^{t+3}} − R_{ND^{t+3}}$. The table indicates that both equally weighted and value-weighted dividend premiums are negatively correlated with the excess return on payers over nonpayers in year $t + 1$. These negative correlations imply that, after dividend payers are overvalued, their market values mean-revert and, as a result, future one-year excess returns on payers over nonpayers drop. Hence, the implications of these negative correlations might be the possibility of market inefficiency in the Japanese stock market differently from the setting of market efficiency in MM (1961).
Figure 1: Valuation of dividend payers and Non Payers and the dividend premium

The (book) value-weighted average market-to-book ratio for dividend payers and nonpayers and the dividend premium (the log difference in average market-to-book ratios) is displayed. A firm is defined as a dividend payer at time $t$ if it has positive dividends per share by the ex date. The market-to-book ratio is the ratio of the market value of the firm to its book value. The average market-to-book ratios are constructed by value-weighting (by book value) across dividend payers and nonpayers and are plotted in Panel A. Panel B plots the value weighted dividend premium of the Japanese chemicals industry.

Table 3: Correlation Coefficients among Dividend Premium and Future Returns

<table>
<thead>
<tr>
<th>Dividend Premium</th>
<th>Future Returns</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VW</td>
</tr>
<tr>
<td>VW $P_{D-ND}$</td>
<td>1.00</td>
</tr>
<tr>
<td>EW $P_{D-ND}$</td>
<td>0.89</td>
</tr>
<tr>
<td>$r_{D</td>
<td>t+1}$</td>
</tr>
<tr>
<td>$R_{D</td>
<td>t+3}$</td>
</tr>
</tbody>
</table>

Notes: The table shows the correlations among the variables. The dividend premium $P_{D-ND}$ is the difference between the logs of the EW and VW market-to-book ratios for dividend payers and nonpayers. Future relative returns $r_{D|t+1}$ and $r_{ND|t+1}$ are the difference in returns for (book) value-weighted indexes of dividend payers and nonpayers in year $t+1$. Future relative returns $R_{D|t+3}$ and $R_{ND|t+3}$ is the cumulative difference in future returns from year $t+1$ through $t+3$. Correlation coefficients displayed are those among raw variables.
4. Empirical Tests

Here we check the relation between dividend payments and the stock market measures of dividend demand. Figure 2 seems to show a positive relation between the dividend premium and the raw rate of dividend initiation in the following year.

![Figure 2: The dividend premium and the rate of dividend initiation](image)

The log difference in the market-to-book ratio of dividend payers and nonpayers and one-year-ahead rate of dividend initiations are displayed. A firm is defined as a dividend payer at time $t$ if it has positive dividends per share by the ex date. The initiation rate $Initiate$ in $t+1$ is defined as the percentage rate of new dividend payers at time $t+1$ among surviving nonpayers from $t$.

**Table 4: Dividend Payment and Demand for Dividends: Basic Relationships**

<table>
<thead>
<tr>
<th></th>
<th>Panel A: $Initiate_t$</th>
<th>Panel B: $Continue_t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>$VWP_{t-1}$</td>
<td>1.81 [0.31]</td>
<td>-0.01 [0.97]</td>
</tr>
<tr>
<td>$EWP_{t-1}$</td>
<td>1.68 [0.62]</td>
<td>0.32 [0.47]</td>
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<tr>
<td>$N$</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>$Adj. R^2$</td>
<td>-0.04</td>
<td>-0.05</td>
</tr>
</tbody>
</table>

**Notes:** Regressions of dividend initiation and continuation rates on measures of the dividend premium. For example, the initiation rate is modeled in Panel A as: $Initiate_t = \mu + \chi P_{t-1}^{ND} + \eta_t$. The initiation rate $Initiate$ expresses payers as a percentage of surviving nonpayers from $t-1$. The continuation rate $Continue$ expresses payers as a percentage of surviving payers from $t-1$. The dividend premium $P_{t-1}^{ND}$ is the difference between the logs of the EW and VW market-to-book ratios for dividend payers and nonpayers. The independent variables are standardized to have unit variance. $p$-values in [ ] are robust to heteroskedasticity and serial correlation because the method of Newey and West (1987) is used. $N$ is the number of sample and $Adj. R^2$ is the adjusted $R$-squared value.
Table 5: Dividend Payment and Demand for Dividends: Predicting Returns

<table>
<thead>
<tr>
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<th>( \text{Initiate}_t )</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>( N )</td>
<td>Coefficients</td>
</tr>
<tr>
<td>( r_{NDt+1} - r_{NDt-1} )</td>
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<td>0.43</td>
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<tr>
<td>( r_{NDt+2} - r_{NDt+1} )</td>
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<td>-0.14</td>
</tr>
<tr>
<td>( r_{NDt+3} - r_{NDt+2} )</td>
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<td>2.51</td>
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<tr>
<td>( R_{NDt+3} - R_{NDt+2} )</td>
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Panel A: Relative Returns

<table>
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<tr>
<td>( r_{Dt+1} )</td>
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<td>( r_{Dt+3} )</td>
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<td>( R_{Dt+3} )</td>
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<td>0.62</td>
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Panel B: Payer Returns

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>( r_{NDt+1} )</td>
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<td>( r_{NDt+3} )</td>
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</tr>
<tr>
<td>( R_{NDt+3} )</td>
<td>20</td>
<td>2.02</td>
</tr>
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</table>

Panel C: Nonpayer Returns

Notes: Univariate regressions of future excess returns of dividend payers over nonpayers on the initiation rate and the continuation rate. The dependent variables in Panel A are the differences in returns between dividend payers \( r_D \) and nonpayers \( r_{ND} \). The dependent variables in Panel B are returns of dividend payers \( r_D \). The dependent variables in Panel C are the returns of nonpayers \( r_{ND} \). \( r_{ND} \) denotes cumulative returns from \( t+1 \) through \( t+k \). The initiation rate \( \text{Initiate} \) expresses new payers as a percentage of surviving nonpayers from \( t-1 \). The continuation rate \( \text{Continue} \) expresses continuing payers as a percentage of surviving payers from \( t-1 \). The independent variables are standardized to have unit variance. \( p \)-values are robust to heteroskedasticity and serial correlation because the method of Newey and West (1987) is used. \( N \) is the number of sample and \( \text{Adj.} R^2 \) is the adjusted R-squared value.* denotes statistical significance at the 10% level and ** denotes statistical significance at the 5% level.

To examine this relationship formally, in Table 4 we show the results of regressing dividend payment measures on the lagged demand for dividends measures. More precisely, we estimate:

\[
\text{Initiate}_t = \mu + \xi \delta^{D-ND}_{t-1} + \eta_t, 
\]

\[
\text{Continue}_t = \mu + \xi \delta^{D-ND}_{t-1} + \eta_t, 
\]

where \( \text{Initiate} \) is the rate of initiation, \( \text{Continue} \) is the rate of continuation, and \( \delta^{D-ND} \) is the market dividend premium (value-weighted or equally weighted). In the tables, all independent variables are standardized to have unit variance and all standard errors are robust to heteroskedasticity and serial correlation using the procedure of Newey and West (1987).

Panel A of Table 4 reports that neither an increase in the value-weighted market dividend premium nor an increase in the equally weighted market dividend premium is associated with an increase in the dividend initiation rate in the following year. Similarly, neither an increase in the value-weighted market dividend premium nor an increase in the equally weighted market dividend premium is associated with an increase in the dividend continuation rate in the following year. To sum up, in contrast with the US case in BW
judging by the dividend premium measure, the dividend policies of the Japanese chemicals industry firms do not cater to investor dividend demand.

Next, Table 5 shows the relationship between dividend policy and the second dividend demand proxy: future excess returns of payers over nonpayers. In panel A, the dependent variables are the differences between the returns on the value-weighted indexes of payers and nonpayers. Panels B and C look at the returns on payers and nonpayers, respectively, to examine whether the results for relative returns are indeed a result of the difference in returns, which the theory emphasizes, or payer or nonpayer returns alone. Each panel examines one-, two-, and three-year-ahead returns, and cumulative three-year returns. The table reports ordinary least-squares coefficients.

BW (2004a) documented that US firms’ dividend decisions both for initiations and continuations have strong predictive power for relative negative future returns. However, in contrast with the results of BW (2004a), panel A of Table 5 indicates that the dividend initiation and continuation decisions of the Japanese chemicals industry firms do not predict the negative relative future returns. In Panels B and C of Table 5, similar unclear relations between dividend policy and future returns of payers and nonpayers are seen. Therefore, we again cannot find the evidence that is consistent with the prediction of the catering theory.

5. Alternative Tests

BW (2004a) suggested that the catering explanation for US dividend policy is robust and that dividend payments are, to some extent, a rational managerial response to investor demand pressures that cause a stock market mispricing. However, in the Japanese chemicals industry, this is not the case.

Therefore, this section provides an alternative explanation using the following kinds of model:

\[
Initiate_t = \alpha + \delta_1 VWNPayer_{t-1} + \delta_2 VWNonpayerM / B_{t-1} + \delta_3 VWD_{t-1} + \delta_4 Tax_{t-1} + \delta_5 Year_{t-1} + \tau_t,
\]

\[
Continue_t = \alpha + \delta_1 VWNPayer_{t-1} + \delta_2 VWPayerM / B_{t-1} + \delta_3 VWD_{t-1} + \delta_4 Tax_{t-1} + \delta_5 Year_{t-1} + \tau_t,
\]
where $VWP_{D-ND}$ is the book value-weighted dividend premium, $VW_{NonpayerM/B}$ is the book value-weighted nonpayers’ market-to-book ratio, $VWPayerM/B$ denotes the book value-weighted payers’ market-to-book ratio, $VWD/P$ denotes the book value-weighted dividend-yield, $Year$ is an annual time trend variable, and $Tax$ denotes the ratio of after-tax income from dividends relative to after-tax income from capital gains. Hence, the variable $Tax$ measures the favorability of dividends in comparison with capital gains from a viewpoint of the Japanese tax system.

Table 6 displays the results of various regressions, which are in contrast with those of BW (2004a). The results suggest that, for the Japanese chemicals industry firms (1), the value-weighted dividend yield and the book value-weighted nonpayers’ market-to-book ratio are the determinants of one-year-ahead dividend initiations, (2) the value-weighted dividend yield is also a determinant of one-year-ahead dividend continuations, and (3) in contrast to the US case, the dividend premium is neither related to the dividend initiations nor the dividend continuations in the Japanese chemicals industry.

Table 6: Determinants on the Dividend Payments

<table>
<thead>
<tr>
<th></th>
<th>Panel A: Initiate,</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>$VWP_{D-ND}$</td>
<td>$VW\ Nonpayer M/B_{t-1}$</td>
<td>$VW\ D/P_{t-1}$</td>
<td>$Tax_{t-1}$</td>
<td>$Year_{t-1}$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.81 [0.31]</td>
<td>4.90* [0.09]</td>
<td>$-5.85^* [0.08]$</td>
<td>$-1.53 [0.42]$</td>
<td>$-0.29 [0.63]$</td>
</tr>
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<td></td>
<td>$-0.04$</td>
<td>0.04</td>
<td>0.09</td>
<td>$-0.05$</td>
<td>0.04</td>
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<tr>
<td></td>
<td></td>
<td>$-1.53 [0.42]$</td>
<td>$-6.57^* [0.06]$</td>
<td>$1.71 [0.37]$</td>
<td>$-2.78 [0.51]$</td>
<td>$1.42 [0.20]$</td>
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<td>$VW\ Payer M/B_{t-1}$</td>
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Notes: Regressions of dividend payment rates on measures of the dividend premium, growth opportunities, dividend yield, the personal tax advantage of dividends versus capital gains, and a time trend are performed. For example, the
The initiation rate is modeled in Panel A as:

\[ \text{Initiate}_t = \alpha + \theta_1 \text{VWP}^{D \rightarrow ND}_{t-1} + \theta_2 \text{VWNonpayer} \frac{M/B_{t-1}}{P_{t-1}} + \theta_3 \text{VWD/P}_{t-1} + \theta_4 \text{Tax}_{t-1} + \theta_5 \text{Year}_{t-1} + \epsilon_t. \]

The initiation rate \( \text{Initiate} \) expresses payers as a percentage of surviving nonpayers from \( t-1 \). The continuation rate \( \text{Continue} \) expresses payers as a percentage of surviving payers from \( t-1 \). The dividend premium \( \text{PDND} \) is the difference between the logs of the book value-weighted market-to-book ratios for dividend payers and nonpayers. \( \text{Tax} \) is the ratio of after-tax income from a yen in dividends to after-tax income from a yen in long-term capital gains. \( \text{Year} \) is the calendar year. All independent variables but \( \text{Year} \) are standardized to unit variance. \( p \)-values are derived by using the method of Newey and West (1987), hence they are robust to heteroskedasticity and serial correlation. \( N \) is the number of sample and \( \text{Adj. } R^2 \) is the adjusted \( R \)-squared value. * denotes statistical significance at the 10% level and ** denotes statistical significance at the 5% level.

6. Interpretations

How can we interpret our empirical results? First, in the context of catering theory, corporations in the Japanese chemicals industry decide their dividend initiation and continuation without catering for the investors’ demands for dividends.

Based on the results of the statistical significance of the value-weighted dividend yields with negative sign for the dividend initiations and continuations, corporations in the Japanese chemicals industry decide their dividend initiation and continuations by considering their own industry’s valuation in the markets. Because the level of dividends is generally not volatile in Japan, changes in the dividend yields mainly come from changes in the stock price. According to our results, the Japanese chemicals industry firms initiate or continue dividends when the value of the industry in the stock market is high. Hence, the payers and nonpayers in the industry take into account their industry’s total value in the stock market in their decision regarding dividend initiations or continuations. The basis of this type of corporate behavior might be the recognition of high industry values as the time to fulfill the firm’s responsibility to their shareholders. However, this is difficult to confirm without collecting information using questionnaires from Chief Financial Officers.

7. Summary and Conclusions

This paper tested catering theory of dividends in the Japanese chemicals industry. We found the following new interesting evidence.

i. Our results revealed that the dividend initiation decisions of Japanese chemicals industry firms have no predictive power for relative future negative returns of payers over nonpayers. This evidence is inconsistent with the suggestions of catering theory of dividends by BW (2004a).
ii. Most importantly, with regard to the dividend initiations and continuations of the Japanese chemicals industry firms, the dividend premium is not a determinant. This means that the chemicals industry firms in Japan do not behave according to the prediction of catering theory.

iii. Instead, in contrast to the US case, regarding dividend initiations, the value-weighted dividend yield and the book value-weighted nonpayers’ market-to-book ratio are the determinants of one-year-ahead dividend initiations in the Japanese chemicals industry firms. This can be interpreted such as a type of market timing behavior related to dividend initiation by the industry’s corporations.

As indicated above, the new evidence presented in this paper contributes to important issues in dividend policy in corporate finance. Future academic studies with large datasets of Japanese firms using additional information would be valuable. These studies may produce stronger and more comprehensive conclusions, and this is our future objective.

Acknowledgement

We thank the Japan Society for the Promotion of Science, the Zengin Foundation for Studies on Economics and Finance, and Nihon Housei Gakkai for their generous financial assistance for this research. Finally, we greatly appreciate the invitation of the Editors to write for this journal.
References


**Notes**


Note 2. Evidence of inefficient markets was recently presented in studies such as Shleifer (2000) and Stein (1989, 1996).
Attracting Shoppers to Shopping Malls:
The Malaysian Perspective

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Abstract

Competition among shopping malls has led retailers to consider key factors of motivating patrons to shop at their malls and stay longer. The purpose of this study is to assess the factors that influence Malaysians to visit shopping malls. A survey was conducted to assess mall-directed shopping habits and patrons’ shopping motivation. A total of 317 respondents took part in the survey in the shopping malls located in Kuala Lumpur, the capital city of Malaysia. A structured questionnaire was used as the main instrument in this survey. The results show that Malaysian shoppers are motivated to visit malls because of the ambience, interior design of the malls, convenience, accessibility and promotion. Evidence shows that there is a strong relationship between shopping mall characteristics and actual action of shoppers in visiting shopping malls. In summary, the results of the study have several implications that will be beneficial for retail industry, especially shopping mall retailers.

Keywords: Consumer behaviour, Retailing, Shopping, Malaysia,

1. Introduction

Many studies have explored factors that affect a shopping mall’s overall image, such as location, nature and quality of product assortment, prices, services, physical attributes, and atmosphere (Babin et al., 1994; Beatty et al., 1996; Bloch et al., 1994; Elena and Howard, 2007). In general, the mixture of services and products offered by shopping malls are similar to each other (Wakefield and Baker, 1998). Therefore, shopping malls have to compete among themselves, especially when the shopping malls are located in
close proximity. It is important that the retailers understand shopper behaviour so that they can attract more shoppers to visit and eventually spend money at the shopping mall.

However, consumers’ motives and attitudes towards shopping often vary significantly. Furthermore, their shopping behaviours are context-specific (Dholakia, 1999). For example, the motives and behaviour of a consumer who shops for gifts are not the same as a consumer shopping for groceries. For some consumers, shopping at the malls provides an opportunity to interact socially with other people or simply an opportunity for a welcome break from a tedious routine. On the other hand, one may find that shopping is a burden or tedious activity (Reid and Brown, 1996). Hence, consumers’ attitudes towards shopping at malls differ and are somewhat unpredictable.

This paper explores factors that attract patrons visiting shopping malls in Malaysia. Given the fact of limited studies on shopping malls in Malaysia (Ahmed et al., 2007), a more empirical understanding of consumer perception based on research can assist retailers to better position themselves and develop marketing strategy to obtain competitive advantage.

2. Research Background

In some developed countries retail industry is operating in an increasingly competitive environment characterized by chronic overcapacity and declining customers (Shim and Eastlick, 1988; Prendergast et al., 1998; Wakefield and Baker, 1998; Kotler and Armstrong, 2006). Dramatic growth in Malaysian economy and population offers potential for various forms of retail investments. Among those investment forms, development of shopping malls has become popular thus increasing the competition in this aspect. The retail scene is gearing up for intense competition with more new players and expansion plans undertaken by foreign players. Some retailers have managed to address the competition by focusing on locations (e.g. suburban residential areas) and targeting certain segments (middle-income groups). As a result number of shopping malls in Malaysia is growing rapidly.
Shopping malls are constantly being upgraded to cater to the increasingly fast-paced and cosmopolitan lifestyle of the Malaysian people. Among the top three largest malls in Malaysia, namely Mid-Valley Megamall, Sunway Pyramid and 1-Utama. The shopping malls not long completed in Kuala Lumpur (KL), the capital of Malaysia are The Pavillion, Suria KLCC, Berjaya Times Square (with the largest indoor children’s theme park), Ikano Power Centre (key anchor tenants like IKEA, Harvey Norman), The Curve, KL Sentral and South City Plaza.

As consumers become more cautious with their spending, retailers have had to become extremely competitive. For instance, the price war among major shopping malls continues to have an adverse effect on the small retailers, who may not be able to compete at lower prices. However, the intense competition posed by foreign players will provide additional drive for Malaysian retailers to leverage on shopping mall features and characteristics to better understand consumer purchasing behavior. This positive growth is due to increase in time pressure on consumers, developments in e-business facilities, decrease in the enjoyment level of shopping, and scarcity of unique merchandise (Wakefield and Baker, 1998).

By definition a shopping mall is “a group of retail business planned, developed, owned, and managed as a unit” (Kotler and Armstrong, 2006, pp. 407). In spite of their sizes, all shopping malls are attraction centers for people to come together to socialize, carry out leisure activities, and do the shopping. In general malls are critical retail venue that contributes to consumer experience (Haytko and Baker, 2004) and they are among the most frequently visited retailers (Dholakia, 1999). Consequently, choice of shopping site is a topic receiving increasing attention (Tabak et al., 2006). Shopping mall image is critical for consumer decision and so loyalty. Image refers to how a retailer is perceived by customers and others. To be successful, a retailer must communicate a distinctive, clear and consistent image. Many factors contribute to a shopping mall’s image, such as its attributes or characteristics which forms an overall image (Berman and Evans, 2004). The characteristics of shopping malls are important to attract shoppers to frequently visit them.

Current studies on shopping behaviour seems to suggest that key elements to attract and retain customers of shopping malls are, accessibility/location, external and internal mall
design, the assortment of retailers, leisure attractions, the communication mix, the cost of access, the customer services provided, and the interaction between, centre, store and customer participants (Kirkup and Rafiq, 1999). Looking at these elements, this study has identified four main factors related to shopping mall characteristics that shaped shoppers selection of the favourite malls; aesthetics, convenience, merchandising and promotions.

### 3. Conceptual Model

The characteristics of shopping malls are important to attract shoppers to frequent them. The essential characteristics that affect the shoppers’ actual action in visiting shopping malls include aesthetics, convenience, merchandising and promotions.

#### 3.1 Aesthetics

Aesthetics refers to the physical environment of shopping malls or the commonly used term ‘atmospherics’ (Frasquet et al., 2001). The five common atmospheric items measured for shopping malls are ambience, color, decoration, music and layout. The architectural design has the strongest positive influence on the mall’s excitement, while interior decoration has the strongest positive effect on getting the shoppers to stay. The mall’s environment not only entails shaping architectural design and interior layout, but also includes the colours, aromas and sound in the malls (Wakefield and Baker, 1998). In general, consumers will visit the shopping malls and stay longer when the ambiances of the malls are perceived as being very comfortable.

#### 3.2 Convenience

Convenience is another factor that attracts shoppers to the malls (Zafar et al., 2006). For example, shopping malls that are located near a bus or train station are likely to enjoy more exposure and draw greater traffic volume than stores that are not easily accessible (Doreen and Benjamin, 2002). All other things being equal, malls that provide easy accessibility are more likely to be selected by consumers (Eppli and Shilling, 2005).

#### 3.3 Merchandising

Merchandising refers to the quality, selection or assortment, styling and fashion of merchandise (Lindquist, 1974). A variety of merchandise mix provides consumers with a wider choice of products and services and enhances the ability of the stores to fulfill the
customers’ needs and wants. It also helps to reduce the possibility of their subsequent visits to other competing malls to satisfy any unfulfilled needs (Beatty et al., 1996). This means that a larger-size mall has an advantage over the smaller ones. Thus, malls that are perceived as having variety and superior merchandising are likely to be preferred by consumers.

3.4 Promotions

Promotions or special sales help to create public awareness of the activities of the stores and increase the likelihood of patronage (Bagozzi et al., 1998). Past studies have established that shoppers view malls as a source of entertainment, with many people visiting malls for the excitement of the experience. Findings indicate that people typically shop for hedonic and utilitarian reasons, creating a marketplace where promotional activities not only help to differentiate the malls but to attract repeat visits by patrons (Roys, 1994).

In addition to the characteristics of the shopping malls, consumers’ attitudes, perceptions and motivations are also an important factor impacting on the success or failure of strategies used by the shopping malls. Armstrong and Kotler (2000) note that a person’s buying choices are influenced by four major psychological factors, i.e. motivation, perception, learning and attitude. These are the tools that people use to recognise their feelings, gather and analyze information, formulate thoughts and opinions and take action.

3.5 Attitudes

Attitudes are developed from personal experiences and learning from diverse sources, as well as information from friends, salespeople, relatives and news media. They are also derived from both direct and indirect experiences in life (Loudon and Bitta, 1993). The attitudes of shoppers influence decision-making. In this context, decision refers to the actual action of the shoppers in visiting shopping malls. It serves as a bridge between the shopping mall characteristics and the shoppers’ actual action. It is important to understand the relation between attitude and the shopping mall characteristics in influencing the shopper decision-making in regard to going to a mall.
The purpose of the study is to understand the relationship between shopping mall characteristic variables and the shoppers’ actual action in visiting shopping malls, in addition to the influence of shopper attitude. In this shopping context, consumers may be influenced by the shopping mall’s characteristics (i.e. aesthetics, convenience, merchandising and promotions) when deciding to go to a mall. It is thus important to study whether the decision made by the consumers to visit a mall is mediated by shopper attitudes.

Based on the related theories and literature presented above, a conceptual framework has been developed, consisting of independent variables of shopping mall characteristics, a mediating variable of shopper attitude in visiting the shopping malls and the dependent variable of actual shopper action in going to a mall.

I insert Figure 1 here.

4. Research Design

A structured questionnaire was used as the main instrument in this survey. It was employed to measure the factors that affect the shoppers’ actual action of visiting shopping malls and determine whether the attitude factor plays a mediating role in influencing the shoppers’ actual action. The 20 items of the independent variables were measured based on a five-point Likert-type scale, ranging from “strongly disagree”, “disagree”, “neutral” and “agree” to “strongly agree”. Subjects were asked to express agreement or disagreement on a five-point scale. All the scales used in the questionnaire were carefully selected from the previously established scales utilised in the same context (Sekaran, 2003). However, the scales were modified to render them more appropriate for the local context.

5. Results and Discussions

A total of 317 people took part in the survey which was done at the shopping malls within Kuala Lumpur, the capital city of Malaysia. There were 55.5% male and 44.5% female respondents; more than 50% of the respondents were between 25 to 30 years old. 40.4% of the respondents were single, while 30% of the respondents were married without children and 28.4% were married with children. It is not surprising to observe
that young shoppers play an important role in this retail industry as they shop more frequently than older consumers.

The residence of the majority of the respondents (56.2%) was located in the urban area within the Kuala Lumpur (KL) city limits. Another 42.9% lived in suburban areas located within a radius of 20 km from the KL city centre. As both areas are well-developed with good accessibility and a comprehensive network of public transport, this finding is not surprising. In relation to the frequency of the respondents in visiting shopping malls in a year, the study found that most of the respondents visit shopping malls more than eleven times in a year. This means that Malaysians go to the shopping malls quite often averaging at least once a month.

Most of the respondents spent two to three hours in shopping malls (76.7%), while another 13.6% of the respondents spent four to five hours there; the remainder (8.2%) stayed for one hour or less in a shopping mall. This indicates that a significant proportion of shoppers spend quite substantial time at a mall, especially during the weekends and public holidays. Most shopping malls in Kuala Lumpur offer convenience, a comfortable and enjoyable place to shop and entertain family members and children such as cinemas, bowling, ice-skating and other indoor entertainment.

In this study, all the Cronbach’s alpha coefficients showed value higher than 0.80. By common convention, a lenient cut-off of 0.60 is acceptable in exploratory research; alpha should be at least 0.70 or higher to retain an item in an "adequate" scale; and many researchers require a cut-off of 0.80 for a "good scale" (Tabachnick & Fidell, 1996). In our study context, we have a good scale for further analysis of data. This can be explained in that all the items carefully selected from the previous literature are reasonably representative.

- Insert Table 1 here –

Table 1 shows that three out of four independent variables, i.e. aesthetics, convenience and promotions have a significant linear relationship. However, merchandising was found not to be statistically significant. It indicates that aesthetics, convenience and promotions are important factors that influence consumers to go to shopping malls. This result is
expected because most shopping malls in major cities in Malaysia have applied the same approach, i.e. they offer a variety of products and services. They aim to fulfill the different needs and wants of the shoppers, especially those with special interests in visiting malls. The number of products offered by merchandisers does not influence shoppers in their decision to visit shopping malls. That is because shoppers can readily obtain similar products elsewhere from other outlets in other shopping malls which are not distant and easily accessible by car or public transport.

From the regression analysis, three out of four factors are statistically significant at 1% level. The convenience factor has the highest coefficient (0.159), reflecting its superior position in determining the actual action of shopping. It means that convenience has a greater impact than the other independent variables in our study. The second most important factor is aesthetics (0.153), followed by promotion (0.068).

According to Baron and Kenny (1986), and MacKinnon, Warsi and Dwyer (1995), the Sobel test is developed to test whether a mediator carries the influence of an independent variable to a dependent variable. The test checks whether the indirect effect of an independent variable (IV) on dependent variable (DV) via a mediator is significantly different from zero. A mediator is considered to have an effect if a) the IV significantly affects the mediator, b) the IV significantly affects the DV in the absence of the mediator, c) the mediator has a significant unique effect on the DV, and d) the effect of the IV on the DV shrinks upon the addition of the mediator to the model (Preacher and Leornadelli, 2003). Tests were conducted using the web-based online calculator with the input value of coefficient and standard errors of the coefficients between the path of IV and mediator and between mediator and DV.

- Insert Table 2 here –

Table 2 shows the results of mediation tests. It indicates that shoppers’ attitude has a significant effect in mediating the relationship between shopping mall characteristics and the actual action of visiting shopping malls (p<0.00). This suggests that aesthetics, convenience and promotions have a positive relation with the actual action by shoppers in visiting shopping malls, especially among shoppers who generally have positive attitudes towards shopping.
In summary, the results are mixed. Three out of four factors are statistically significant. Nevertheless, the results are consistent with the findings from previous research such as Wakefield and Baker (1998) on mall ambience; Eppli and Shilling (2005) on the easy accessibility of shopping malls; Kaufman (1996) on good tenant mix and Fairhurst (2000) on promotional activities inside shopping malls. It is an indication that the retailers should look into the location and accessibility of shopping malls in order to attract more shoppers to visit their malls.

The study also found that shopper attitude mediates the relationship between shopping mall characteristics and the actual action of shoppers in visiting shopping malls. Shoppers’ attitudes influence their decision to visit a shopping mall or not. In other words, shoppers may not take action to visit the malls, regardless of the ambience, easy accessibility, a variety of store types and organised sales promotions, if they are not interested in shopping.

6. Implications and Conclusion

There are several implications that spring from the study. First, the retailers must give due consideration to designing various strategies such as providing convenience, easy accessibility and plenty of parking spaces, in order to fulfill shopper expectations and to further attract consumers to repeat visits to the malls. That entails a strategy where retailers should engage and consult with the local authorities involved in city planning, public transport and other public facilities. Views of the local authority should be ascertained and taken into due consideration before making any critical decision. Second, the retailers have to be selective in choosing tenants so that there are a variety of products and services offered by the mall. Third, the retailers must be critical in the design of a new shopping mall, in order to ensure that shoppers will be interested in regularly visiting the shopping mall.

Although this study provides meaningful implications for retailers, it has some limitations and thus has further research issues. First, all shopping mall characteristic variables are based on the perceived value of shoppers, which are subjective and may be influenced by each visitor’s individual characteristics such as lifestyle, locations, social class, price
sensitivity and buying situations. Different results may be obtained if the above variables are included in evaluating the actual behaviour of the shoppers.

Second, this study focuses solely on the shopping mall characteristics domain. The effect of the branding aspect of the malls may have an effect on shoppers’ preference. This is another interesting venue for research area. Future research can also consider other intrinsic measures of shoppers’ beliefs to better understand the shoppers behaviours for visiting various types of shopping malls.

In conclusion, this study is of benefit to both practitioners and researchers in the field of retail industry in Malaysia as well as for foreign investors. It can shed light on aspects of consumer behaviour which motivate shoppers to seek out and spend money at the shopping malls.
References


Annexure

Figure 1: Conceptual Framework

![Conceptual Framework Diagram](image)

Table 1: Equation for Regression Analysis

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a Dependent Variable: Action

Table 2: Mediating Effect : Sobel/ Aroian/ Goodman Tests of Shoppers’ Attitude

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<td>(Sig.)</td>
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<td>Promotions</td>
<td>2.170**</td>
<td>2.153**</td>
<td>2.188**</td>
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<tr>
<td>(Sig.)</td>
<td>(0.030)</td>
<td>(0.031)</td>
<td>(0.029)</td>
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note: *** significant at 1% level, ** significant at 5% level
Sustainable Rural Transportation in Nigeria through Public-Private Partnerships

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Abstract
The purpose of this paper is to examine some issues pertaining to implementing sustainable mass transit for rural dwellers through public-private partnership scheme and to proffer solution for sustainable rural transportation in Nigeria. The finding is that majority of Nigerians live in rural areas and experience significant disadvantage in terms of equitable access to transport services owing to inadequate provision of transport facilities. However, public-private partnership approach is employed in Botswana, Europe and Canada in order to provide adequate facilities. In similar vein, it is concluded that affordable accessibility should be provided for rural dwellers using public-private partnerships scheme. The success of the scheme will to a large extent depend on establishment of strategic framework comprising a clear guiding policy, appropriate legal instruments, institutional and administrative set ups. Therefore, it is recommended that partnership agency should be created to promote and stimulate the implementation of public-private partnerships scheme in Nigeria.

Key words: Nigeria, Sustainable, Rural, Transportation, Public-private Partnership, Scheme.

1. Introduction
Sustainable transportation is defined as a strategy which achieves improvements in inefficiency and accessibility without degrading the environment or increasing the accident toll (May, 1997). This is in most cases considered a big city issue. But in order to maintain economic and environmental health, and ensure equitable access to key public services
such as employment, educational institutions and medical services and of course, to other rural activities including water and firewood fetching, farming and moving of farm produce, rural communities in Nigeria, also, need to find solutions, to increase mobility options for their local people. The need to increase mobility options in rural settings is necessitated by the fact that over 75 percent of the people, in developing countries including Nigeria, live in the rural areas and need positive and relevant attentions in their daily activities (Harande, 2009).

Yahya Ibrahim Harande further, argues, that lack of development has a positive correlation with the neglect of rural areas. Also, negative consequences such as exodus of rural dwellers to urban areas are owing to rural neglects, with resulting problems of unemployment, crimes, prostitutions, child labour, insecurity, money laundering, bribery, poverty, increased shanty living areas, spread of diseases, and overstretching of the facilities and infrastructures in the urban areas (Harande, 2009).

Moreover, conservative estimates conclude that one out of every four Africans is a Nigerian and more than 20 percent of the World’s black population lives in Nigeria; also 42.3 percent of the population, is between 0-14 years of age, while 54.6 percent is between 15-65 years old. Birth rate in Nigeria is significantly higher than death rate at 40.4 and 16.9 per 1000 people respectively (Wikipedia, 2001).

In the same vein, most urban dwellers in Nigeria have access to some form of sustainable transportation provided by the states mass transit system. The same cannot be said for rural dwellers, who are majority of the Nigerian citizens, many of which are not well served, if at all, by the states transit system. In addition, as Nigeria continues to urbanize, for instance, the urban population is expected to reach 55.5 percent by 2015 Globallis (2001), and many services such as health and social services, educational institutions, shopping areas and employment are often located to serve urban and high density areas. Apparently, this result to inequitable access to these services by the rural dwellers.

Arguably, owing to paucity of funds and in order to encourage the private sector to use their ingenuity and capital, in the public infrastructure provision and service delivery; the trend in many countries of the world, in last two decades is to employ joint efforts; through capital inflow and technological and managerial innovativeness, from the private sector and socio economic and implementation facilitations, through regulatory and enforcement
mechanisms, from the public sector (i.e. the government) (Deoja, Adhikari and Pande, 2005). Furthermore, Pricewaterhouse Coopers (PWC) asserts that public-private partnership (PPPs) are growing elements of public sector procurement across Europe in order to ensure that infrastructure is delivered efficiently and cost effectively as possible (PWC, n.d.). Moreover, Rao and Vokolkova (n.d.) assert that, one of the key elements of development strategies, is to achieve sustained economic growth by encouraging the private sector to increase and improve transport investments and operations, with a view to providing an appropriate and affordable accessibility to locations of importance of daily life.

Invariably, the answer to sustainable mass transit for rural dwellers, therefore, lies in private sector participation in provision of rural transport operations and management with governments as regulatory and enforcement agencies. Consequently, the development of public-private partnerships (PPPs) scheme in rural mass transit will increase mobility options for rural dwellers. The public-Private Partnership (PPP) is defined as any arrangement between a government and the private sector in which partially or traditionally public activities are performed by the private sector (Deoja, Adhikari and Pande, 2005).

Similarly, Public-Private partnership in transportation field, is generally defined, as a contractual agreement between public and private sectors aimed at better delivery of transportation projects (Rao and Vokolkova, n.d.). To this end therefore, this paper will attempt to examine some issues pertaining to implementing sustainable transportation in rural areas in Nigeria through public-private partnerships (PPPs) scheme. The paper will also cite some existing public-private partnerships scheme in road transport in Botswana, and Canada with a view to proffering solution to sustainable rural transportation in Nigeria.

2. Literature Review

2.1. Sustainable Transportation

- There is no universally agreed definition of sustainability, sustainable development or sustainable transport (Beatley, 1995). For example, Brundtland commission, (1997) defines sustainability, as a system, that meets the needs of the present, without compromising the ability of future generations to meet their own needs. Transport
Canada (2000) argues that the goal of sustainable transportation is to ensure that environment, social and economic considerations are incorporated into decisions affecting transport activity. Richardson (1999) views sustainable transport system as one in which fuel consumption, vehicle emissions, safety, congestion, and social and economic access are of such levels that they can be sustained into indefinite future without causing great or irreparable harm to future generations of people throughout the world. Transportation Research Board (TRB) (1997) defines sustainability in contrast, saying that sustainability is not about threat analysis, sustainability is about system analysis; specifically, it is about how environmental, economic, and social systems interact to their mutual advantage or disadvantage at various space-based scales of operation. Organization for Economic Cooperation and Development (OECD) (2001) adopts environmental perspective and argues that environmental sustainable transport is transportation which does not endanger public health or ecosystems and that meets needs for access consistent with: use of renewable resources, that are below their rates of development of regeneration and – use of none-renewable resources below the rates of development of renewable substitutes. Litman (2005) has planning viewpoint about sustainable transportation and contends that sustainable planning is all about ensuring that local, short-term decisions are consistent with strategic, regional and global long-term goals.

However, Victoria Transport Policy Institute (VTPI) (2006) includes a range of issues in the definition of sustainability as shown in table 2.1 appendix 1. The table 2.1 appendix 1, implies that each factor fits into a specific category, in practice they often overlap, for example, pollution prevention is an environmental concern, but it also protects human health (a social issue) and is important for fishing and tourism industries (economic issues).

Similarly, the World Bank refers to these ranges of issues as the three pillars of sustainable transport (World resources Institute, 2004). The three pillars of sustainable transport are: economic and financial sustainability, environmental sustainability and social sustainability.
2.1.1 Economic and financial sustainability:
This is concerned with economically and financially sustainable transport cost-effective and continuously responsive to changing demands.

2.1.2 Environmental Sustainability:
This assumes that transport has significant effects on the environment and these effects should be addressed explicitly in the design of programmes and the systems in general. This entails making better use of reliability and costs, cost effective technology but not in itself sufficient. Thus, more strategic actions is also required in form of better-directed planning of land use and stricter management of demand, the use of pollution and congestion changes to correct the relative prices of private and public transport.

2.1.3 Social Sustainability:
This is concerned with equity. It seeks transport strategies that provide the poor with better physical services.
In addition, consumer satisfaction is ingredient in creating a socially sustainable transport system.
Nevertheless, transportation activities have so many impacts on sustainability and these impacts are presented in table 2.2 appendix 2. Transportation facilities and activities have significant sustainability impacts. As a result, strategies that increase transportation system efficiency and reduce negative impacts from transportation are among the most effective ways to make progress towards sustainability objectives. Because transportation activities affect sustainability, it is important to identify strategies that help achieve multiple objectives and avoid those that solve one transportation problem but exacerbate others. For example, a policy that reduces traffic congestion, but increases crashes and consumer costs is not necessarily a sustainable strategy. A typical example is the use of motorcycles popularly known as ‘Okada’, as a means of public transportation in Nigeria. The mode promotes accessibility but increases crashes, hence is not sustainable transport strategy. The most sustainable strategies are those that simultaneously help reduce traffic congestion, pollution, crashes and consumer costs, increase mobility options for non-
drivers, and encourages more efficient land use patterns, or at least avoid contradicting these objectives (VTPI, 2006).

2.2. Public-Private Partnership

There are several definitions of the Public-Private Partnership. The Canadian council for Public-Private Partnership defines Public-Private Partnership as a cooperative venture between the public and private sectors built on the expertise of each partner that best meets clearly defined public needs through the appropriate allocation of resources, risks and rewards. (The Province of New Brunswick, n.d.). According to BNET it is a partnership between government and the private sector for the purpose of more effectively providing services and infrastructure traditionally provided by the public sector (BNET Business Dictionary, n.d.). Wikipedia (2010) describes public–private partnership as a government service or private business venture which is funded and operated through a partnership between government and one or more private sector companies. The concept is often referred to as PPP, P3 or P³. The essence of a public-private partnership arrangement is firstly to provide public services or public infrastructure and secondly to share risks among the partners. Apparently any arrangement that does not include these two concepts of provision of public services and transferring of risks are not technically public-private partnership(P3 or PPP) (Partnerships British Columbia, 2003).

2.2.1. Objectives of Public-Private Partnership

In general the aim of every public-private partnership endeavour is to ensure best value for money and other social benefits such as education and health based on an allocation of risk factors to the participants who are in a good position to manage those risks and thus minimize costs and improve performance.

However, in Province of New Brunswick in Canada, for example, the followings are the objectives of public-private partnership scheme.
- To ensure government services are in the most economical effective and efficient way.
To create opportunities for growth in private sector and stimulate competitiveness and initiative; and invariably contribute to the overall economic development of New Brunswick.

- To ensure best interest of stakeholders- the public, the business sector and the community are served through an appropriate allocation of risks and returns among the partners (Province of New Brunswick, n.d.). Going by these objectives the public-private partnership scheme is aimed at optimum delivery of services, stimulating competitiveness and ensuring the best interests of the society are met.

2.2.2. Models of Public-Private Partnership.

According to the Canadian Council for Public Private Partnership (n.d.) there are several types of partnership agreements in Canada:-

- Design-Build (DB). In this case private sector designs and builds infrastructures to meet public sector performance specifications often for a fixed price. This is not considered by many to be within the PPPs spectrum.

- Operation and Maintenance Contract (O&M). This is where a private operator under contract, operates a publicly-owned asset for a specified period. Ownership of the asset remains with the public entity.

- Design –Build-Finance-Operate (DBFO). This is where the private sector designs, finances and constructs a new facility under a long term lease and operates the facility for the period specified in the lease. The private organization transfers the new facility to the public entity at the end of the term lease.

- Build-Own-Operate (BOO). This is another type of public-private partnership where the private sector finances, builds, owns and operates a facility or service in perpetuity.

- Build-Own-Operate -Transfer (BOOT). In this case a private sector receives a franchise to finance, design, build and operate a facility for a specified period, after which the facility is transferred to the public sector. The private sector is allowed to charge user fees for the period it operates the facility.

- Buy-Build-Operate (BBO). This is where a public asset is transferred to a private or quasi-public organization, under contract that the assets are to be upgraded and operated for a specified period.
- Operation License (OL). This is where a private company receives a license or right to operate a public service for a specified term.

- Finance Only (FO). In this case a private organization usually finance company, funds a project, directly or uses various mechanisms such as a long term lease or bond issue.

Partnerships British Columbia (2003) argues that public–private partnership takes a variety of forms with varying degrees of public and private sector involvement. It further contends that risk transfer from the public to private entity is a critical factor of all public–private partnerships, aimed at combining the best capabilities of the public and private sectors for mutual benefits. For example, if a private organization assumed responsibility for finance, build, operate and maintain a highway project, it also assume responsibility for related risks such as interest rates, (cost of fund) increase in labour and construction cost which might happen due to delays. Other related risks are costs increases in highway operation and maintenance which can arise from low traffic volumes, mudslids, soil erosion and accidents causing obstruction to the highway.

2.2.3. Importance of Public-Private Partnership
The private sector is seen to offer better alternatives and opportunities in terms of project appraisals, rigorous risk analysis and whole lot of issues concerning almost all aspects of projects in transport sector.

According to the Southern African Development Community (SADC) protocol, a number of factors are strategically important to secure greater involvement from private sector in transport projects. These include:

- Poor performance of pubic owned enterprises. In many cases, public owned companies in Africa are no longer sustainable because they run frequently suffer losses.

- Constraints on traditional sources of funds. Owing to budgets limitation in government companies, partnerships are seen as a useful way in bridging the gap between the enormous requirement for public investments and limited budgets.

- Non-financial benefits. Partnerships offer non-financial benefits such as private sector management style, cost recovery, whilst allowing the public sector a degree of control over the projects.
- Rigorous risk analysis. The private sectors have ability to ensure rigorous risk analysis including identification, assessment and allocation of risks and strategies to deal with the risks.
- Joint ventures capabilities. The private sectors has capabilities to enter into joint ventures with related benefits, in terms of sharing risks and capacity building.
- New and innovative approaches. The private sectors have the capacity to introduce new and innovative approaches and facilitate increased efficiency in transport operations.
- Condition of agreement and allocation of responsibilities. Private sectors have the ability to adhere to condition of agreement and allocation of responsibilities, time, cost frameworks as well as associated standard and specifications.
- Operations and maintenance of assets. Private sectors have the ability to make proper arrangements and commitments to the operations and maintenance of created assets. Rao and Vokolkova (n.d.)

Similarly, public-private partnership scheme offers a number of benefits for stakeholders (governments, corporate bodies, individuals and society). Partnerships British Columbia (2003) outlines some of the benefits: improves services delivery, cost effectiveness and budget certainty; increases investment in public infrastructure; reduces public sector risks; enhances optimum use of assets and faster delivery of capital projects.

Going by these assertions, public-private partnerships approach enhances efficiency and effectiveness in projects execution to a reasonable extent by allowing the partners to do what they do best, while government takes responsibility for policy formulation and regulatory aspects. Because of private sector involvement, investments in infrastructure are increased and government capital costs reduced in such projects like hospitals, schools and highways. The scheme also transfers risk to the private partner who are better positioned than government to manage risks associated with the projects. For example a private partner in an attempt to maximize returns on investment are motivated to fully use the facilities and make most of commercial opportunities.
2.2.4. Public Private Partnership Constraints.
Deoja, Adhikari and Pande (2005) identify four areas of constraints facing public Private Partnership in transport sector. The constraints are:-

- Policy
- Legal
- Institutional and
- Administrative constraints.

a-Political Constraints
Lack of comprehensive policy to deal with all aspects of the public private Partnership is a threat to successful Public–Private Partnership projects.

In order to encourage the private sector to use their ingenuity and financial resource in the public infrastructure provision and services delivery whether at national level or state or local government or rural levels or mega or small, it is necessary to develop a comprehensive policy framework covering all types and forms of Public-Private partnership projects, outlining specifications of the each project in terms of regulatory financial, institutional, technological and procurement aspects, indicating clearly the commitment of the government and facilities to be extended to the private sector and the role expected of the private sector. The policy should also stipulate incentives such subsidy, tax relief, available to private sector for undertaking a particular project.

b- Legal Instruments
Inadequate legal instrument to guide the Public-Private partnership contracts constitute a threat to Public- Private Partnership scheme. To ensure soundness in the operation of the project, the legal instrument basically built upon the principle of transparency and competition should be on ground. The legal instrument has to provide for the minimization of risks to the private sectors through provisions of government assistance on acquisition of land, grant of foreign exchange facility and protection against nationalization. Tax rebate, customs exemptions and other financial incentives should be provided in the legal instrument. Contract act should be modified to adequately cover local settings and
regular training for officials of Public–Private Partnership on legal provisions of the Private-Public Partnership, should be organized by public sector agencies.

c- Institutional Constraints
The major institutional constraint for the Public –Private Partnership is lack of structure and expertise of the committee members and their commitment. Therefore, the Public-Private Partnership policy and legal provisions should provide for members of the Public-Private Partnership co-ordinating committees. There is a need for a full time Public-Private Partnership committee at ministry involved in the Public Private Partnership projects. For effective co-ordination of the Public-Private Partnership projects the committee should comprise members with adequate expertise and technical background needed for such work. The commitment of the government, and other members of Public-Private Partnership committee should be clear and the policies should also be clearly defined and the procurement process must be well established and transparent. Lack of structure for the Public-Private Partnership is one of the drawbacks in projects, so appropriate structure must be provided for effective operations.

d- Administrative Constraint
Lack of annual planning and budgeting of Public-Private Partnership projects is the first constrains facing Public-Private Partnership projects. The others are lack of detailed regulations, guideline and standard tender document for evaluating and awarding Public-Private Partnership projects and lack of monitoring mechanism to review the progress of the project. Therefore, for effectiveness these constraints should be minimized as much as possible.

2.3. Public-Private Partnerships in Botswana
The SADC protocol further, contend that member counties of Southern African Development Community, have recognized, that, private sectors possess the finance, skills and technology required to turn around the transport sector and consequently adopt Public Private Partnership in provision, maintenance, operations, management and ownership of infrastructures, services and facilities.
The government of Botswana is one of the SADC countries that has entered into partnership with private sectors in socio-economic areas and is in the process of engaging the private partnership in road transport sub-sector to maximize benefits from the partnership with the following objectives in mind.

- To achieve efficiency: The government of Bostwana felt that efficiency in terms of use of resources in road transport sub-sector can be optimally be achieved by promoting competition among providers of road transport services.
- To provide appropriate and affordable accessibility. The government of Botswana envisaged to provide appropriate and affordable standard of accessibility to workplaces, commercial and social services by road transportation.
- To minimize the disadvantage experience by rural dwellers. The Botswana living in rural areas experience significant disadvantage in terms of access to transport services and to overcome this drawback the government has introduced a mechanism which encourages rural people to be part of government initiatives.

In this regard the Botswana government employed these strategies:

- Introduction of rural subsidy: In order to promote rural mass transit the government of Botswana introduced a scheme called rural subsidy to support rural transport operators. This is, short term tool to attain social objective. with a view to: involving private partnerships service sector and empowering the people to be small time entrepreneurs.
- Fostering of economic development: The Botswana government long term strategy to minimize inequitable access to transport service in rural areas, is to foster economic development in the areas where the disadvantaged people live, reduce travel distances, and aiming at integrating rural Botswana into developing urban areas of the country.

2.4. *Barriers to Implementing Sustainable Transportation in Canadian Rural Areas*

Transport Canada (TC) (2008) outlines three barriers to implementing sustainable transportation in rural communities. The barriers are:-

- Finance
- Population density and
- Access to technology

a- Finance

No matter the population of the community, funding sustainable transportation is always a serious issue. With costs ranging from staff and other human resources, vehicles replacement, fuel, insurance etc it can be cost prohibitive for smaller community to implement a full-time mass transit system. As a result public transit in most Canadian communities are funded through a partnership between the municipal and other levels of government. In some cases, local governments are also able to partner with other organizations such as services agencies or employers to develop transportation options for specific population or specific needs.

A good example comes from Rabbit Transit in York, Pennsylvania. Working in partnership with area employers, the transit company offers special all day routes that serve the community’s largest employer (a regional hospital) and shuttle services at specific times of the day to support smaller employers. Employers pick the bulk of the costs for these routes but routes are available to the general public. Consequently Rabbit Transit has a more diversified and sustainable revenue base.

b- Population Density

In some cases small and rural communities cover a larger geographic area than urban centres do and as such have lower population densities. With fewer people, smaller communities may not be able to reach the economies of scale necessary for certain types of sustainable transportation infrastructure such as mass transit.

c- Access to Technology.

Increasing access to computer technology and high speed internet services in rural and small communities generally reduce the need for people to travel to jobs and training facilities while simultaneously increasing the opportunities for employment and education via tele work or “e-learning”. However, this is not the case in developing country like Nigeria where rural people have little access to computer technology and internet services.
2.5. Measures For Effective Rural Mass Transit Operations

Roa, and Vokolkova (n.d.) suggest a number of measures to achieve effective transport operations. The measures include among others:

- Improved and flexible transportation routes. Public transportation routes and systems should be improved and made more flexible to increase households’ mobility and thus provide access to wider labour markets and opportunities.

- Public Private partnerships: Public Transportation should be provided through Public-Private Partnership arrangements to relief government of budgetary constraints.

- Provision of subsidy and tax relief: Government should provide subsidy and tax relief to encourage wider participation of people in transport operations.

- Analysis of commuters demand: Planning and allocation of public transport routes should be based on analysis of commuters demand.

- Traffic demand: Selection of bus types should be based on traffic demand from point of view of economy of operations and reduction on road congestions.

- Provision of information: Information on transport routes, schedules and interval should be made available to general public.

- Manpower development: Both the owners and operators should be trained on management skills and public relations.

- Developments of rural transport scheme: Rural passenger transportation requires a serious consideration in the national context. An assessment of possibilities of rural transport subsidy scheme for the purpose of social justice should be considered. In the long run the emphasis might shift to rail based public transport which has capacity to meet the transportation requirements beyond the Federal government of Nigeria (FGN) vision 20:20.

3. Summary and Conclusion

Public Private Partnership is a new concept employed by most countries of the world to ensure that the lives of its people are better than what they were especially in implementing sustainable transport in rural communities. A number of drawbacks were identified, finance, population density and access to technology. In general, policy, legal, institutional
and administrative issues pose threat to successful implementation of public-private partnerships scheme.

On the other hand, public-private partnership offers several benefits for stakeholders. The benefits include: improves service delivery, cost effectiveness, budget certainty, increases investment in infrastructures, reduces public sector risk, enhances optimum use of assets and faster delivery of capital projects. The benefits that accrue with such ventures are not always directly measurable in quantitative terms such as management style and costs recovery.

Nigeria has a lot to gain from the Public-Private Partnership scheme, but success will therefore depend to a large extent on establishment of a strategic framework comprising of a clear guiding policy, appropriate legal provisions, and institutional and administrative set ups capable of efficient implementation of the public–private partnership scheme and procedural guidelines to be followed in implementing such scheme. One of the best alternatives to establish strategic framework capable of efficient implementation of public partnership scheme is creation of partnership agency at government levels with primary responsibility for promoting and stimulating the implementation mechanism of public-partnership projects.
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Appendix

Table 2.1. Sustainable Issues

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<th>Economic</th>
<th>Social</th>
<th>Environmental</th>
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<td>Affordability</td>
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<td>Resources efficiency,</td>
<td>Human health</td>
<td>Climate protection</td>
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<td>Cost Internalization,</td>
<td>Education</td>
<td>Biodiversity</td>
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<tr>
<td>Trade and Business activities</td>
<td>Community Quality of life</td>
<td>Precautionary action</td>
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<td>Employment</td>
<td>Public participation</td>
<td>Avoidance of irreversibility</td>
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<td>Productivity, and Tax burden</td>
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<td>Habitat preservation</td>
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<td>Aesthetics</td>
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Source V.T.P.I 2006: P4 TDM Encyclopedia

Table 2.2 Transportation Impacts on Sustainability

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<th>ECONOMIC</th>
<th>SOCIAL</th>
<th>ENVIRONMENTAL</th>
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<tr>
<td>Traffic congestion,</td>
<td>Inequality of Impacts,</td>
<td>Air pollution</td>
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<td>Mobility barriers,</td>
<td>Mobility,</td>
<td>Climate change</td>
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<td>Crash damages,</td>
<td>Disadvantaged,</td>
<td>Habit loss</td>
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<td>Transportation facilities cost,</td>
<td>Human health,</td>
<td>Water pollution</td>
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<td>Consumer transportation</td>
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<td>Noise pollution</td>
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<td>Costs, and Depletion of non-renewable</td>
<td>Community livability and</td>
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<td>resources</td>
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Source: VTPI (2006:p.7) TDM Encyclopedia
Natural Resource Management: An option for sustainable Development in Nigeria.

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Abstract

Natural resources in Nigeria needs sound management for their sustainability and development of the country. The realization that more needs to be done to translate the potential benefits of natural resources into broad-based socio-economic development of Nigeria motivated this study. Despite this realization, the necessary policies and concrete actions are not integrated at present. Indeed, natural resources constitute the base for the infrastructure and energy needs of society, the industrial sector, urban development and social well being of the people. However, these contributions are contingent on the fulfillment of critical conditions, chiefly, improving governance and transparency, and eliminating corruption. This paper using various sampled data from government officials organized private sector, donor agencies and rural dwellers examines the relationship between natural resources management and sustainable development. The data acquired were analyzed using scores percentage comparison and explanatory notes coupled with the spearman’s rank order correlation coefficient (Ŷs) and the t – test. Findings Revealed that despite the strong link between natural resource management and sustainable growth, its exploitations are yet to impact positively on the socio-economic and infrastructural...
needs of the people. The paper concludes with recommendations geared toward effective management of natural resources of sustainable development in Nigeria.

**Keywords:** Natural resource; Exploitation; Management; Sustainable development; Socio-economic wellbeing; Nigeria.

1. **Introduction**

The importance of natural resources in Nigeria’s development process cannot be over-emphasized. These resources have become more important than ever before as the country seeks additional sources of development financing in order to progress towards the Millennium Development Goals (MDGs). Even so, the fact remains that Nigeria has failed to tap the potential for its natural resources wealth to serve as a driver for industrialization, economic growth, poverty reduction and sustainable development. Indeed, Nigeria is rich in natural resources, but this has not always been a blessing. This has become a persistent challenge for sustainable development and natural resource management in Nigeria. The country is endowed with natural resources, which it needs for its own development, but which other countries also want. Furthermore, the country’s several decades of resource exploitation have not translated into economic growth or improve the livelihoods and welfare of their growing population.

Nigeria’s record of poor management of its natural resources has been a recurring theme in recent debates on the “natural resource curse”. Although natural resource wealth contributes to economic development in some resource-rich countries due to effective management, the story is different in Nigeria. Over the years, the exploitation of natural resources has been pursued without adequate regard for its sustainability. This has resulted in unacceptable levels of environmental degradation. The unsustainable natural resource use pattern is made more precarious by the fact that majority of the poor of our society depend on natural resources for their livelihood (Okonkwo, 2007).

So why is natural resources management in Nigeria important, and why is it important at this time? The reasons are several: first, *the volatility of resource revenue*. The huge revenues from Nigeria’s commodity exports are volatile and are subject to price fluctuations in global markets. These revenues are often temporary and thus require sound fiscal policies to ensure good investment in human capital development and in the development of long-term production capacity. This has proved to be a challenging task.
One of the key challenges is how to transform temporary resources revenues into productive capital that will induce and sustain growth over the long-term.

Second, because of the *undiversified economy*, Nigeria is prone to real exchange rate appreciation induced by rising resource export revenues. This hampers the prospects of non-resources export in the country. Indeed, the sheer volume of resource revenues diverts attention from export diversification. This result in the neglect of labor-intensive manufacturing exports and the import of more goods and services using resource windfalls, at the expense of local production of import substitutes. Furthermore, the recent rise of China and India has created new challenges that make it even more difficult for Nigeria to carve a niche in labor-intensive manufacturing exports.

Third, natural resource management has re-emerged as critical in Nigeria because of the challenges of *transparency and accountability*, which remains crucial for harnessing natural resource wealth for economic growth. Against a backdrop of inadequate checks and balances, resource revenues have induced rent seeking and corruption on a massive scale. This undermines the quality of institutions and of governance in Nigeria. Transparency in allocating exploitation rights and in controlling revenues and how they are spent are major concerns. Indeed, policy-makers and development practitioners have extractions that has not led to sustainable increase in socio-economic development of the resource-rich countries in Africa (Nigeria inclusive), contrary to rational economic expectation. Instead natural resources are being depleted faster than the rates at which other real assets are being built up (African Development Report, 2007). Lastly, natural resource management is crucial given that resource mismanagement serves as a recipe for protracted civil conflicts, which do not only debilitate economies, but also lead to state of fragility and institutional collapse.

The renewed interest in natural resources and sustainable development clearly focuses attention on two critical questions: How can Nigeria use its resource to foster economic growth and poverty alleviation, given the aforementioned complexities and trade-offs? Where can natural resources take Nigeria-towards resource dependence or can the resources serve as a springboard for sustained economic development? The search for answers to these questions makes natural resource management a key concern in Nigeria sustainable development.
In the light of the above, this study has the objective of defining the contextual meaning of natural resources and how they relate to sustainable development and social outcomes. The key object is to propose concrete suggestions on how the various stakeholders involved in natural resource exploitation (at the local and national levels) can help improve public policies and governance in Nigeria.

2. Theoretical Framework

2.1 Natural Resources and Sustainable Management.

Conceptually, natural resources are stocks of physical assets that are not produced goods and that are valuable to humans. A resource may be considered valuable because of its sheer existence, or it produces a flow of services or benefits that can be used in production, trade, or consumption. (African Development Report, 2007). Natural resources are classified as follows:

(i) Raw Material (renewable, semi, renewable, and non-renewable minerals, fossil energy) carriers, metal ores, and biomes, which are needed for most human activities. Fossil energy carriers, metal ores, and minerals such as gypsum and China clay are considered non-renewable because their stocks are finite (on a human time scale). In contrast, biomass, which includes quickly renewable resources such as agricultural crops and slowly renewable such as timber is, in principle, renewable within the human timeframe. However, biological resources that are used as raw materials can be exhausted if they are overexploited. This is an acute threat to commercially fish marine species, for example.

(ii) Environmental Media – such as air, water, and soil-sustain life on Earth and produce biological resources. In contrast with raw materials, their declining quality is the main concern: the issue is not how much there is, but what state they are in. For example, the quantities of air and water on earth do not change within human time scales, but their quality is often poor because of pollution. Moreover, the resources are of great importance.

(iii) Renewable resources may have a permanent character (for example, solar and wind energy) and are then labeled flow resources. Flow resources cannot be depleted but
they need other inputs or resources to be exploited. For example energy, materials and space are needed to build wind turbines or solar cells.

(iv) Physical Space is needed to produce or sustain all the above mentioned resources. Land-use, for human settlements, infrastructure, industry, mineral extraction, agriculture and forestry, is an example. Table 1.1 presents a broad classification of natural resources.

**Table 1.1: Broad Classification of Natural Resources**

<table>
<thead>
<tr>
<th>Resource</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renewable Raw</td>
<td>Living</td>
<td>Living resources that can re-stock/renew themselves, e.g. fish, forests.</td>
</tr>
<tr>
<td>Materials</td>
<td>Non-Living</td>
<td>Resources that can renew themselves, but are non-livings e.g., soil and water.</td>
</tr>
<tr>
<td>Non-Renewable</td>
<td>Metals</td>
<td>Include, non-ferrous, base and precious metals</td>
</tr>
<tr>
<td></td>
<td>Non-Metals</td>
<td>e.g., ferrous, non-ferrous minerals and industrial minerals as well as precious stones and uranium.</td>
</tr>
<tr>
<td></td>
<td>Fossil Fuels</td>
<td>Coal, oil and natural gas.</td>
</tr>
<tr>
<td>Environmental Media</td>
<td>Air</td>
<td>General “biological” reproducing resources but could be polluted or degraded.</td>
</tr>
<tr>
<td></td>
<td>Water</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Soil</td>
<td></td>
</tr>
<tr>
<td>Space</td>
<td>Land Area</td>
<td>Includes space for human settlement, infrastructure, industry, mineral extraction, agriculture and forestry.</td>
</tr>
<tr>
<td>Flow Resources</td>
<td>Geothermal</td>
<td>Renewable resources that do not need regeneration.</td>
</tr>
<tr>
<td></td>
<td>Wind Energy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tides</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Solar Energy</td>
<td></td>
</tr>
</tbody>
</table>

**Source: Adapted from EEA (2005).**

Natural resources are further classified according to their rate of regeneration as renewable, semi-renewable, or non-renewable. Renewable resources are resources that are regenerated on a human time scale and renewed periodically in the context of ecological cycles. Their use can only be increased to a certain extent, otherwise ever exploitation will occur. However, as long as exploitation is not exhaustive, renewable resources can be used for an infinite period. Therefore, for resources use to be sustainable, the consumption rate should remain within the capacity of the natural system to regenerate (or renew) in a human relevant period. Examples of renewable resources
are water, fisheries, wildlife, and forests. These types of resources are often interconnected within ecological systems; for example, water is needed for forest growth and fisheries. Semi-renewable resources are in an intermediate stage of their possibility to renew or to deplete.

Non-renewable resources have a regeneration rate of zero or regenerate over a very long period (Lujala, 2003). Non-renewable resources can be recyclable (for example, minerals, and oils used in plastics) or non-recyclable (for example, oils used as fossil fuel). They are less likely to participate in the circular flows of the ecosystem, and exploitation of one resource usually does not affect the availability of other resources (as long as extraction does not destroy the other resources). The use of these resources to provide material and energy leads to depletion of the Earth’s reserves since these resources do not renew in human relevant periods. Table 1.2 presents a summary of resources based on their regeneration rates (Steiner et al 2000).

Natural resources may also be classified in terms of their use values based on whether they are extractive (natural services). Extractive resources are subject to some process of physical removal from their natural surroundings and extractive resources are resources that yield services without being removed from their natural setting.

**Table 1.2 : Classification of Natural Resources Based on Regeneration Rate**

<table>
<thead>
<tr>
<th></th>
<th>Time for Regeneration</th>
<th>Environmental Resources</th>
<th>Energy Resources</th>
<th>Mineral Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Renewable</strong></td>
<td>&lt;1 year, controllable by humans</td>
<td>Agricultural products (non permanent) pollution of water and air.</td>
<td>Solar energy, water, ethanol</td>
<td>Salt</td>
</tr>
<tr>
<td><strong>Semi-renewable</strong></td>
<td>1-20 years, on human influence</td>
<td>Fish, forests, ground water, (permanent) pollution of water and air</td>
<td>Geothermal energy, water, firewood</td>
<td>Soil</td>
</tr>
<tr>
<td><strong>Non-renewable</strong></td>
<td>No economic relevance</td>
<td>Ozone, endangered fauna and flora</td>
<td>Oil, gas, coal, uranium</td>
<td>Minerals.</td>
</tr>
</tbody>
</table>

Another strand of literature defines natural resources according to their geographical concentration and “lootability” (Lujala, 2003). In this context, natural resources are defined according to their geographic concentration when the question relates to whether they are diffuse or point. In other words, is the availability of the resources restricted to geographically small areas or does it span larger areas? For example, forests cover wide areas and are therefore considered to be diffuse resources. Point resources are highly concentrated and do not cover a significant area on a map. For example, many minerals occur in small areas, and these deposits are represented as points on a map. Point resources are commonly associated with higher rents than diffuse resources and thus provide incentives for rent seeking. In literature, abundant point resources are often associated with higher risk of conflict (Addison et al, 2001).

Ross (2002) defines natural resources according to their “lootability”, “obstructability” and “legality” and forms hypotheses on how these three resources characteristics affect civil war. Ross defines lootability in terms of the case of resource extraction and transportation. As such, lootable resources include alluvial gemstones, agricultural products and timber, gas are not. Ross also differentiates between the case of transporting the natural resources product and the case of blocking the available mode of transportation (that is, it’s obstructability). For example, diamonds or drugs that are flown from a production area are not obstructable, while resources that are transported by trains or trucks are moderately obstructable. Resources transported by pipe lines (such as oil and gas) are the most obstructable.

Natural resources are natural capital assets and are not provided by human activity, but their quality and capacity to yield goods and services, and therefore their value as productive inputs, are affected by human activity. In many case, for example, agricultural land, the relevant input into production, can best be viewed as a combination of natural elements (soil and water) and man-made components (irrigation and transport infrastructure, and so on). Renewable capital produces a flow of goods and services. Goods produced from renewable natural capital include timber and non-timber forest products and wild caught fish. Goods produced from non-renewable natural resources are mainly oils and minerals. Some of these goods are traded in formal markets and are therefore accounted for in national economic statistics, including timber and fish...
harvested by formal-sector operators as well as by local inhabitants, including wild fruits, mushrooms or herbs, wild fish caught by small-scale fishermen, “bush meat”, palm, timber, and non-timber forest products. Services produced from natural capital include water filtration and purification services provided by watersheds. These services are generally not marketed and are invisible in standard economic statistics.

2.2 Natural Resources Management (NRM)
This is a broad concept that involves integrating efficient resources use and preventing adverse environmental impacts. It also concerns the use and distribution of resources for the sustainable economic development of all levels of government and for the benefit of the citizenry. NRM also involves the management of resource extraction or imports, production and consumption, and the resultant financial resources, wastes and emissions (African Development Report, 2007).

2.3 The key objectives of such NRM include
i. Ensuring adequate supply of, and efficient use of, natural resources for the creation of wealth and well-being in industry and society;
ii. Avoiding overloading or destroying nature’s capacities for reproduction and regeneration of resources and absorption of residuals;
iii. Securing the co-existence of society and nature;
iv. Minimizing risks related to national and international insecurity and economic turmoil due to dependence on natural resources;
v. Driving technological and institutional change in a way and towards a direction that provides economic and social benefits to all stakeholders.

The concept “sustainable development” was first introduced in 1987 in the Brundtland Report as “development that meets the need of the present generation without compromising the ability of future generations to meet their own need”. This definition implies two equally important specific concepts: intra-generational equity (the requirement to meet the needs of the present) and inter-generational equity (the requirement not to compromise the satisfaction of the needs of the future generations. Ideally, sustainable development should be development that generates optimal economic
and social returns without impairing the long-term life-supporting capacities of ecosystems or reducing the chances of future generations to satisfy their own needs (Eurowatch, 2002).

This definition can be broken down into four conditions for sustainable development:

i. Materials need, and other needs, for a better quality of life have to be fulfilled for people of this generation,

ii. As equitable as possible,

iii. While respecting ecosystem limits and

iv. Building the basis on which future generations can meet their own needs.

Furthermore, sustainable development has four pillars: the economic, environmental, social, and governance pillars, with the fourth pillar fostering the integration of the first three. Therefore if the natural resources sector is to contribute positively to sustainable development, it needs to demonstrate continuous improvement of its social, economic and environmental contribution, with new and evolving governance systems.

Sustainable development also relates to the notion that boosting economic growth, protecting natural resources, and ensuring social justice can be complementary goals. Its key purpose is to help the poor live healthier lives on their own terms. Sustainable development also means development that combines economic growth with poverty reduction and protection of the environment. In other words, it involves achieving “economic growth and social development without degrading the potential of it conditionally renewable natural resources “(Young and Ryan, 1995). The role of natural resources in ensuring sustainable development in Nigeria is critical given that economic growth and social progress depend on the natural resource base. This natural resource base cannot be conserved in light of the pervasive poverty in rural Nigeria (Paul, 2007). In addition, Nigeria is a country where the population is growing faster than the economy. Thus, people (especially the rural poor) over-exploit some natural resources in order to survive while many governments mismanage natural resources wealth-this complicates the issue of sustainable development in Nigeria. Efficient and effective natural resource management is therefore an imperative that will lay the foundation for sustainable development in Nigeria by producing maximum sustainable wealth that can
generate an investible surplus for economy-wide growth as well as adequate resources to combat poverty and under-development.

3. Research Methodology

Data were collected from reconnaissance survey, interview and administration of questionnaires. Also from sources like textbooks, journals and internet search. The questionnaires designed to address the problems identified in the study. A total of 15 questions were designed to assess the response of the various stakeholders in the issue under discussion.

4. Data Analysis Techniques

The questionnaire items were analyzed using scores percentage comparison and explanatory notes. Spearman’s Rank Order Coefficient of correlation was used to test the relationship between natural resource management and sustainable development.

Hence, the formula is given as: $(\hat{\gamma}_s) = 1 - \frac{6 \sum d^2}{n(n^2-1)}$

where, $\hat{\gamma}_s$ is the spearman’s rank order correlation coefficient

$\sum d^2$ is the sum of the squared differences in the ranking of the two variables

n is the sampled population.

4.1 Test of Significance

The t – test will be used to test the significance of the relationship.

Thus, the t- statistic; $t = \frac{n-2}{\hat{\gamma}_s \sqrt{1-\hat{\gamma}_s^2}}$ with n – 2 degrees of freedom.

4.2 Decision Rule

$H_0$ is accepted at the 5% and 1% significant level if $|t| \leq t_{\alpha/2} (n - 2)$. Otherwise, $H_A$ is accepted while $H_0$ is rejected.

5. Results and Discussion

A total 125 questionnaires were administered in 4 states in Nigeria namely; Imo, Rivers, Ogun, and Niger. A total of 50 questionnaires were administered to the government officials, 20 to the private sector organizations, 15 to donor agencies and 40 to the rural
dwellers. A total of 112 questionnaires were retrieved, and representing a percentage of 82%.

(a) Resources Exploitation and its impact on the economic welfare of the people is one of the areas investigated. The result of the survey is shown in table 1.3 below.

**Table 1.3: Impact of Resource Exploitation on the economic welfare of the people**

<table>
<thead>
<tr>
<th>Level of impact</th>
<th>Respondents</th>
<th>Frequency in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>16</td>
<td>14.5</td>
</tr>
<tr>
<td>Moderate</td>
<td>36</td>
<td>32.1</td>
</tr>
<tr>
<td>Low</td>
<td>60</td>
<td>53.4</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2009

Across the sampled states, the level of impact of exploitation of natural resources is low (53.4%). The implication is that plans should be put in place by the various players in natural resource management to enhance the economic welfare of the people through employment and provision of infrastructure to ease the suffering faced due resource exploitation.

(b) Another area investigated was the level of exploitation with regards to its sustainability. A fairly worrisome discovery n the course of the study reveals that government and private sector organizations who are supposed to be knowledgeable in resource exploitation and its sustainability shows that 74% of this group never really considered sustainability of these resources they exploit. This accounts for the high level of environmental degradation witnessed in most parts of the country.

(c) Also when the study researched into the level of labour-intensive manufacturing exports, it was observed that the level is high (68%) with its attendant dependence on the importation of goods and services. This high dependence on foreign countries (like China and India recently) for goods and services, which are suppose to be manufactured in Nigeria, accounts for the high level of capital flight and low level of industrialization seen in the country. This hampers sustainable development and affects the Gross Domestic Product (GDP) of Nigeria.
(d) The study also tried to investigate whether there is proper accountability and transparency of natural resource wealth for sustainable growth. The result of the people investigated is revealed in Table 1.4 below;

**Table 1.4: Whether or not there is proper accountability and transparency of natural resource wealth for sustainable development.**

<table>
<thead>
<tr>
<th>Question</th>
<th>Respondents</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>No</td>
<td>92</td>
<td>82</td>
</tr>
</tbody>
</table>

**Source: Field Survey, 2009**

82% of the population sampled responded “No “to proper accountability and transparency of natural resources wealth for long-term development. This is not divorced from the fact that corruption has denied and is still denying Nigeria of its sustainable growth in the midst of abundant wealth from her natural resources.

(e) The level of civil conflicts as a result of mismanagement of natural resources wealth. The result is revealed in table 1.5 below;

<table>
<thead>
<tr>
<th>Level of Conflict</th>
<th>Respondents</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>96</td>
<td>86</td>
</tr>
<tr>
<td>Low</td>
<td>16</td>
<td>14</td>
</tr>
</tbody>
</table>

**Source: Field Survey, 2009.**

The result indicated that there is a very high level of conflicts (86%) in many parts of the country resulting from mismanagement of natural resources wealth. It is believed that this is the reason why there are restiveness, kidnapping, destruction of properties and incessant strikes and lock-outs witnessed in many parts of the country today.

(f) The Relationship between Natural Resource Management and Sustainable Development:
In assessing if there is any relationship between natural resource Management and sustainable development, the following hypothesis were set and subjected to paired sample test.

**Null hypothesis (Ho):** There is no relationship between natural resource management and sustainable development.

With the data collected, the hypothesis was put to test in *appendix II* and the results show a strong positive relationship of 75%. Testing for the significance of the relationship using the t-test at 0.05 and 0.01. The calculated t-value is 11.895 while the tabulated t-values at $t_{0.975}$ and $t_{0.995}$ are 1.96 and 2.576, meaning that the null hypothesis (Ho) is rejected and the alternative ($H_A$) accepted. This proves that there is statistical relationship between natural resource management and sustainable development at both 95% and 99% confidence level. This result was confirmed by Okonkwo, (2007). “The unsustainable natural resource use pattern is made more precarious by the fact that majority of the poor of our society depend on natural resources for their livelihood. There is, therefore, a very strong linkage between sustainable development and natural resource management”.

6. **Conclusion**

Based on current evidence Nigeria has not managed her natural resources in ways that have benefited the majority of their population. In most cases, however, natural resource wealth seems to end up in the hands of a few, with limited visible benefits for the poor. This has been resulting in instability and state fragility in the country. Rekindled attention to natural resource management in Nigeria is an imperative, given the discovery by many African countries of new and extractable resources and the pervasive experience of what is now termed the *natural resource curse*.

In the light of the above analysis, it is clear that careful use and management of resources is the basis for sustainable development. This conclusion has gained international recognition, for example, at the recent World Summit on Sustainable Development (WSSD) in Johannesburg, it was agreed that “Protecting and managing the natural resource base of economic and social development are overarching objectives of, and essential requirements for, sustainable development”. Good management of natural resources is therefore important for economic, social-political, and environmental
For Nigeria’s natural resources to serve as a springboard for sustained economic development, the following recommendations are made.

7. Recommendations

Based on the observations and analysis made, the study recommends the following:

That certain initiatives be put in place to promote transparency in natural resource management. These include the Extractive Industries Transparency Initiative (EITI), the Publish-What-You-Pay Initiative and the Open Society Initiative, all aimed at addressing problems limiting the contribution of the natural resources sector to economic growth and poverty reduction. In the past, African countries like Botswana, Namibia and South Africa have implemented such solid economic reforms successfully. They were aimed at managing the proceeds and utilizing the resources accruing from the extractive industries.

That local industries be established and old ones revived to produce such goods imported from foreign countries. This will reduce the massive importation of goods and services from Asian countries and minimize the problem of capital flight experienced in the country, thus promoting sustainable development through proper income redistribution. This will also solve the problem of civil conflicts witnessed today.

Since better natural resource management is one of the most direct routes to reversing Nigeria’s poverty and economic malaise. This report posits that better management must translate into more inclusive processes for making decision about natural resources, and institutions must adequately integrate natural resource issues and concern into their policies and decisions. So in the light of “Vision 20-20-20”, Nigeria should urgently implement, the recommendations made above for sustainable development through proper natural resource management.
References

   www.africanbank.org.

Eurowatch (2002): sustainable development for developing countries; www.eurowatch.eu

   www.africanbank.org.


   A publication of LEEMP. Vol. 1, No 1, May, pp .23


   www.en.wikipedia.org/wiki/natural_resource_management

Appendix I

Questionnaire

TOPIC OF INVESTIGATION: Natural Resources Management; An Option for Sustainable Development in Nigeria.

INSTRUCTION: Please we kindly request you to spare us some minutes of yours to answer the following questions to the best of your knowledge. Your responds will be strictly used for the research purpose.

1. Name of your organization…………………………………………………………
2. Designation/ Rank……………………………………………………………………
3. Highest academic qualification……………………………………………………
4. Are you aware of ‘Natural Resources Management’ in Nigeria? 
   Yes [  ]     No [  ]
5. Do you think that Nigeria has managed her natural resources effectively? 
   Yes [  ] No [  ]
6. Do you think that there is accountability and transparency in the exploitation and allocation of natural resources wealth in Nigeria?  
   Yes [  ] No [  ]
7. At what level does natural resources exploitation influence the economic well being of the people?
   High [  ]     Moderate [  ]        Low [  ]
8. Has sustainability been considered in resource exploitation in Nigeria?  
   Yes [  ] No [  ] Not aware [  ]
9. At what level do you think that resource exploitation has encouraged labour-intensive manufacturing of export commodities? 
   High [  ]     Moderate [  ]        Low [  ]
10. Can the mismanagement of natural resources wealth result in civil conflict? 
    Yes [  ] No [  ]
11. If yes, what level of conflict can it cause? 
   High [  ]     Moderate [  ]        Low [  ]
12. In your own opinion, do you think there is any relationship between natural resources management and sustainable development? Yes [  ] No [  ]
14. Please, indicate your level of agreement or disagreement with your opinion; 
   5=Strongly agree [  ] 4=Agree [  ] 3=Neutral [  ] 2=Disagree [  ] 1=Strongly disagree [  ].
Indicate your level of agreement or disagreement to the following statements;
15. Natural resources wealth is capable of transforming the wellbeing of the citizens and foster sustainable development in Nigeria, if properly managed; 
   5=Strongly agree [  ] 4=Agree [  ] 3=Neutral [  ] 2=Disagree [  ] 1=Strongly disagree [  ].
Appendix II

Respondents’ Scores and Determination of Spearman’s Rank Correlation Coefficient for the Level of Natural Resource Management and Sustainable Development.

<table>
<thead>
<tr>
<th>Level of Natural Resource Management (X)</th>
<th>Sustainable Development (Y)</th>
<th>Rank (Rx)</th>
<th>Rank (Ry)</th>
<th>Rx-Ry (D)</th>
<th>D²</th>
<th>Respondents</th>
</tr>
</thead>
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<td>4</td>
<td>18</td>
<td>39</td>
<td>-21</td>
<td>441</td>
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Total \[\sum=58581\]
Using the spearman’s rank order correlation coefficient \( r_s = 1 - \frac{6 \sum d^2}{n(n^2-1)} \)

so, \( r_s = 0.7498 \)

The rank order correlation coefficient of 0.75 indicate a strong correlation between natural resource management and sustainable development.

Testing for the Significance of this positive correlation using the t – test (t)

\[
t = \sqrt{\frac{n-2}{1 - r^2}} = 11.895
\]

so, \( t \text{ calculated} = 11.895 \)

Degrees of freedom = \( n - 2 = 112 - 2 = 110 \)

The critical value of t for \( \alpha = 0.05 \) and 110 degrees of freedom is 1.96.

Also, the critical value of t for \( \alpha = 0.01 \) at 110 degrees of freedom is 2.576

**Decision Rule:** \( H_0 \) is accepted at the 5% and 1% significant level if \( |t| \leq t \alpha/2 \) (n-2). Otherwise, \( H_A \) is accepted while \( H_0 \) is rejected.

Based on the above analysis, the \( |t| \) is greater than \( t \alpha/2 \) (n-2) implying that \( H_0 \) is rejected while \( H_A \) is accepted.
Do Rational Speculative Financial Bubbles Exist in the Nigerian Stock Market?

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Abstract
This study sets out to investigate whether rational speculative price bubbles exist in the Nigerian stock market. This investigation is necessary as the existence of price bubbles in the market provides an essential implication for both investors and policy makers. To carry out this study, the researcher employed the duration dependence test using the Weibull Hazard model. The result shows that the actual hazard rates tend to adopt no obvious pattern that is increasing or decreasing as to be consistent with rational speculative bubbles for both runs of positive and negative abnormal returns. Thus, there is no evidence of rational speculative price bubbles in the Nigerian stock market. This implies that the Nigeria stock market is devoid of imperfections emanating from trading speculation excesses.

Keywords: Rational Speculative Bubbles, Duration Dependence Test, Hazard Rates, Speculation Excesses, Abnormal Returns.

1. Introduction
A financial bubble is defined as deviations in the stocks price from the fundamental value. In other words, it is the asset price movement that is unexplainable by the fundamentals (Garbar, 1990, Ali, Nassitrr, Hassan, Abidin (2009). According to Kindlerbeger (1978) a bubble can also be identified as a sharp rise in price of an asset in a continuous process. On the other hand, rational speculative bubbles have to do with an attempt to identify the behaviour of investors who act irrationally such as when herding occurs (Cuthbertson, 1996). The irrationality of the investors in their trading behaviour is instigated by their personal motives of making abnormal profit. They know quite alright that share prices exceed their fundamental value or that the price of stock is over valued but they still believe that there is a high probability that the bubble will continue to
expand and lend to high returns which compensates them for the probability of crash (Mokhtar, Nassir, Hassan, 2006). Mokhtar at al (2006) described this belief as the greater fool theory contending that though one may be a fool for buying an asset which is overpriced, one will profit if there are greater fools who will pay even more for it.

Researchers such as Jirasakuldech B, Compbell R and Knight JR (2006) Mokhtar et al (2006) observed that rational expectation bubbles divert financial flows from investment in real capital to short run investment, create additional risk and increase instability and hence market imperfections.

Nigerian capital market has its share of ups and downs since its inception in September 15, 1960. Available research evidences from Odedokun, 1995; Olowe, 1998, Oludoyi, 1999; Adelegan, 2003 and 2006 indicate that the Nigerian capital market is imperfect. The international finance corporation (IFC) classified the Nigerian capital market as emerging and undeveloped having exhibited different types of imperfections. Distortions noted in the market range from barring foreign investors from entering the market in 1999, imposing price caps on share price movement to interest rate regulation and political instability – all of which resulted to all round low performance of the market.

The repercussion effect is thinness of trading, low market capitalization, low turnover, negative performance ratios, low betas, significant abnormal returns and illiquidity of the market (Inanga, and Emenuga, 1977, Ogroumike and Omole, 1997, Oludoyi, 1997, Inanga, 1999; Adelegan 2003) Adelogun and Ariyo (2008) observed that information is not instantaneously and simultaneous available to all investors and noted the existence of unequal access of firms to the capital market in Nigeria.

Investigation of the existence of rational speculative bubbles in the stock market will provide an essential implication for both investors and policy makers. Though price bubbles allows the investors to make abnormal profits, the awareness of the extent of its existence can not only help them to detect early signals on the possibility of stock price crash but can also help them to act rationally (Mokhtar, Nassir, Hassan, 2006). The realization of speculative trading and the size of financial bubbles will assist the policy makers’ decision on how to curtail the bubbles to bring the market to efficiency. This paper therefore poses some questions. Do speculative price bubbles exist in the Nigerian stock market? If they do, what is the extent of the bubbles? To carryout this investigation
the paper is divided into 4 sections. Section 1 is the forgone introduction. Section 2 proceeds with review of empirical literature, section 3 is the methodology on financial bubbles. Section 4 is concerned with discussion on the findings while section 5 summarizes and concludes the paper.

2. Review of Empirical Literature

Several techniques or approaches have been employed by researchers to detect the price babbles in the stock price. These techniques include tests for bubble premiums, test for excess volatility, test for the cointegration of dividends and prices and duration dependence test. Hardouvelis, 1988; Rappoport and white, 1993; Delong et al 1990 and Liu et al, 1995 employed the bubble premium technique in their investigation. A bubble premium is the excess returns the investor demand above the fundamental return in the presence of speculative bubbles. The return incorporates the actual excess return of the stock over the risk free rate. This test is said to face serious problems and is therefore said to be inadequate in detecting bubbles (Mokhtar, Nassir, Hasses 2006). The test for excess volatility involves the examination of the markets’ variance and the application of tests for excess volatility. If the variance of the stock price is found to be greater than the variance of the fundamental price, the speculative bubble is detected; otherwise, it does not exist. Friedman, 1953; Baumol, 1957; Kohn, 1978; Shiller, 1981; Hart and Kreps; 1986; Marsh and Merton, 1986; Kleidon, 1986; Demirguc – Kunt, 1990; Shiller 1997 and a host of other researchers used this techniques.

The non-stationary and cointegration test was used by Diba and Grossman 1988, Campbell and Shiller, 1987; Craine, 1983; Fama and French, 1988; and summers, 1986. This method supposes that bubbles exist when the series is not stationary and cointegrated. However, Johansen (1991) was of the opinion that lack of cointegration of price dividends and prices might be caused by other factors rather than price babbles. Evans (1991), Mattey and Meese (1986), WU and Xiau (2002) and Chermza and Deadman (1995) among others expressed doubt on the reliability of stationary and cointegration test for detecting bubbles.

Many authors have employed duration dependence test using log-logistic or weidibull’s hazard model to detect rational speculative bubbles in the stock market. Chan et al (1998)
used this method and detected rational speculative bubbles in Asian and the US stock markets. Harman and Zuehlke (2001) and Watanapalachaikul (2003) employed duration dependence test on the New York stock exchange and the Thailand stock market respectively and found evidence of rational speculative bubbles in both markets. These two methods for duration dependence test – the log-logistic hazard model and the Weibull’s hazard model are said to be more widely accepted in detecting rational speculative bubbles in the security market (Fung, 2001; Harman and Zuehlke 2001).

3. Methodology

In this study, duration dependence test using the Weibull Hazard model shall be employed to detect rational speculative price bubbles in the Nigerian stock market. The yearly stock price index of the Nigerian stock exchange covering the period 1984 – 2006 will be used to calculate continuously compounding nominal stock market returns using the difference of the natural logarithm of the present and past prices multiplied by 100. That is

\[ r_t = \frac{\ln P_t - \ln P_{t-1}}{100} \]

Where \( r_t \) are the continuously compounded nominal returns in year \( t \). \( P_t \) and \( P_{t-1} \) are the end of the year price indices for years \( t \) and \( t-1 \).

In order to perform duration dependence test, returns must first be transformed into series of run lengths on positive and negative observed abnormal returns. The sequence of abnormal returns (following Ali et al 2009) will be defined as the residuals from the regression of real returns on its first three lags and the dividend yield. Functionally, this can be expressed as \( R_t = f(Y_d, R_{t-i}) \). The abnormal returns will be transformed into two sets of data namely, a set for runs of positive abnormal returns and a set for runs of negative abnormal returns. A run is defined as a sequence of abnormal returns of the same signs. Thus, the data will be made up of a set \( S_T \) of \( T \) observations on the random run length \( I \) which is a positive valued discreet random variables generated by some discrete density function,
Testing of duration dependence involves the examination of the hazard rate \( h_i \) for runs of positive and negative returns. MC Queen and Thorley (1994) defined hazard rate as the probability of obtaining a negative innovation given a sequence of \( i \) prior positive innovations. That is

\[
h_i = \text{Prob. } (\varepsilon_i < 0 / \varepsilon_{i-1} > 0, \varepsilon_{i-1} < 0)
\]

if bubbles exist, we expect hazard rate to be decreasing in \( i \)

To perform test of duration dependence we use a functional form of the Weibull Hargard model given as

\[
S(t) = \exp (-\alpha t^{\beta+1})
\]

Where \( S(t) \) is the probability of survival in a state to at least time \( t \). The corresponding hazard function is stated as

\[
h(t) = \alpha (\beta + 1) t^\beta
\]

Which is further transformed into a linear relationship between the log of the hazard function and log of duration. That is;

\[
\ln(h(t)) = \ln \alpha (\beta + 1) + \beta \ln(t).
\]

Where \( \alpha \) is the shape parameter of the Weibull distribution and \( \beta \) is the duration elasticity of the hazard function. For “non existence of bubble” or “no duration dependence” the hazard rate should be a constant. That is the probability of a positive run’s ending is unrelated to prior runs. Alternative hypothesis is that the hazard rate should be decreasing over the run length. In other words, the probability of a positive run’s ending should decrease with the length of the run. That is the existence of speculative bubbles implies a negative relationship between the probability of a run of positive returns ending and the length of run. In other words presence of bubbles suggest negative duration dependence and a decreasing hazard rate in positive abnormal returns but not in negative abnormal returns. Mc Queen and Thorley (1994) posit that an estimate of \( \beta \) that is negative and
significant for positive runs coupled with an insignificant estimate of $\beta$ for negative runs indicate evidence of speculative bubbles.

Table 1: Result of Test of Duration Dependence

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$\alpha$ is the size of the bubbles, $\beta$ is estimated coefficients length of run in accelerated failure time form. The log likelihood ratio (LRT) is joint probability density function. The LRT is for the null hypothesis of non duration dependence. The LRT statistics is asymptotically $X^2$ with one degree of freedom. The chi square random variable is continuous and non-negative.
4. Discussion of Findings

The study documents a total of 103 runs comprising 53 runs for positive and 50 runs for negative abnormal returns. The positive runs tend to have longer lives with longest run period that repeat itself. The longest positive runs last four months and occurring in 2000 and 2003 while the negative runs tend to have shorter lives with the longest run lasting only 3 months in the same years. The actual hazard rates tend to adopt no obvious pattern of increasing or decreasing pattern in hazard rates that is consistent with rational speculative bubbles for both runs of positive and negative abnormal returns. There is no sequential decreasing hazard rate. The duration elasticity of the hazard function, the $\beta$ parameter is not negative but positive and significantly different from zero for positive runs and the estimate of $\beta$ for negative runs is significant. In other words, the positive $\beta$ coefficient for the positive runs suggests positive duration dependence, which is not consistent with the rational bubbles. The likelihood ratio test (LRT) of the null hypothesis of no duration dependence or constant hazard rate is rejected at 5 percent significant level.

The researcher therefore does not find any evidence of rational speculative price bubbles in the Nigeria stock market. However, further studies may be made using other methods for the dictation of financial bubbles in the market.

5. Conclusion

The existence of rational speculative bubbles indicate distortions and hence market imperfections that engender instability in the financial system. The identification of financial bubbles in any economy will be of help to the market participants, who will utilize this information in their investment decisions, the monetary authorities and the government that will design policy to arrest the bubble and its menace. In a situation of financial bubbles, the policy makers can increase interest rate, impose restriction on short sales and insider trading activities, increase the brokerage fees and stamp duty in order to control the share price bubbles.

However, the result shows no evidence of rational speculative bubbles in Nigeria implying that the Nigeria stock market is devoid of imperfections emanating from trading speculation excesses. In other words any trace of imperfection in the market can be associated with factors unconnected with speculative bubbles.
References


## Appendix

### THE NIGERIAN STOCK EXCHANGE ALL-SHARE INDEX

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ECONOMIC DEVELOPMENT: A COMPARATIVE STUDY ON PAKISTAN AND BANGLADESH

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Abstract

This paper discussed economic development in Pakistan and Bangladesh. It is a comparative study, which try to explore causes and variable involves in creating difference in both country development. A descriptive method employed in this regards. This study considers the Democracy, rule of law & governance; Human index, and Economy structure in this regard. Data range from 1980 to 2009. The data range was selected on base of availability of data. Our result reveals better trend in Bangladesh than Pakistan.

Keywords: Economic Development, Comparative Study, Pakistan, Bangladesh

1. Introduction

Asian countries are dominating the world economy after structural reforms. Asia shows strong growth till the currency crises. Some expert think, Asia will be the new centre of economic gravity as most of Asian stand in middle or upper class income country. Most of the Asian country especially South Asian Courtiers are agrarian. Empirical literature support argument that Agricultural sector plays a major role in economic growth. Other
than Asian tiger, S4 countries (India, Pakistan, Bangladesh, Bhutan), emerging economy, has shown prominent growth in GDP before world economic crises 2007-2009. Subcontinent countries are rich of natural resources. Almost all subcontinent countries gets freedom after fall of British Empire 60 years ago except Nepal, Afghanistan and Bhutan. Despite such similarity some country growing faster than other and more fluctuation as figure no. 1 shows. This study explores the reason why?

Fig No. 1 GDP GROWTH RATE OF SUBCONTINENT COUNTRIES 1969-2009

Source: World Bank World Development Indicators

After abolish of British rule, Pakistan emerged as separate country under two-nation theory and East Bengal (East Pakistan) joined Punjab, Sind, NWFP and Baluchistan (West Wing) in 1947. Both have common history, different culture, different language and different climate. Distance between two wings about 1500 miles. East Pakistan becomes Bangladesh, an independent country, after civil war 1971. Economy of West Pakistan (Pakistan) and East Pakistan (Bangladesh) deteriorated in civil war. No doubt infrastructure of Bangladesh more badly affect than Pakistan but this also creates panic for Pakistan economy. In 1971 Pakistan had a GDP per capita about US Dollar 17.22 and Bangladesh had a GDP per capita about US Dollar 17.23 (world Economic Indicator).

In 2008, Pakistan had slightly higher GDP per capita of $ 2600 than Bangladesh’s GDP per capita $ 1500. Bangladesh ranked 164 with 47.5% literacy rate and Pakistan got position 160 with literacy rate 49.2% in 2009 world literacy ranking. Infant mortality rate in Pakistan is 65.14 deaths/1,000 live births, while Bangladesh has infant mortality rate 59.02 deaths/1,000 live births. Both countries have shifted their economy from agricultural base to service base which contributes 53% to GDP. Agricultural sector
contributes almost with same ratio (19.6%, 19%) to gross domestic output in Pakistan and Bangladesh. For more comparison, table 1 listed below.

Fig No. 2    GDP growth of Pakistan and Bangladesh 1969 – 2009

Source: World Bank World Development Indicators

Table 1: Comparison Static

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Source: Economic Review of Pakistan, Economic Review of Bangladesh

Pakistan and Bangladesh have same historical background and face similar situations. Both are Islamic state and enriched with natural resources. There is little bit difference in climate and Bangladesh often hit by cyclone. Despite all this the trend of economic growth shows Pakistan Economy is more instable as compare to Bangladesh. Bangladesh shows consistency in growth rate after structural reforms since 1990. According to World Bank report 2005-06, Bangladesh has gain 10th position among the 31 fast developing countries. No doubt, in Pakistan number of reforms program promulgates in past. Such
programs are not as much effective as in Bangladesh which depict from volatility in Pakistan economic growth. Corruption, weak institution, lack of infrastructure, Low saving rate etc are common obstacle to both countries economy. This study tries to explain the divergence in development by analyzing some natural and artificial difference among Pakistan and Bangladesh considering various factors.

2. Factor contribute to Difference in Economic Development

2.1 Democracy, Governance, and Rule of Law

Since birth, Both Pakistan and Bangladesh has faced the similar situation. Political situation is not good. Military establishment is more powerful and derail the democratic process. Week Political institution, lack of accountability, bureaucratic control, and feudalism are also major contributor toward instability of democratic process. Despite all these similarity Bangladesh shows more stability toward political stability as compared to Pakistan.

Figure No. 3 Political Rights Index 1972 - 2007

Source: House of Freedom

Bangladesh is less diverse in linguistic, culture and ethnicity groups as compared to Pakistan. Moreover Bangladesh has no or minor boundary conflict, provincialism, linguistic problem, terrorist activity and ethnicity groups activity. In Pakistan, conflict among province exists over resources and revenue distribution. Numbers of issue are still
to address among the state and province, among the provinces and within provinces territory. As compared to Pakistan, Bangladesh has uniformity in culture and population. There are 90% Bengali speaking and 85% are Muslim. The only social threat by the Bihari, the people describe themselves as stranded Pakistani, live in misery condition in camps. In 1999 Bangladeshi govt has successfully accord with Parbattya Chattagram Janasanghati Samitti and closed an era of conflict.

**Figure No. 4  Rule of Law**

![Rule of Law Graph](https://example.com/rule_of_law_graph.png)

Source: World Economic Indicator

In short Pakistan is heterogeneous state as compared to Bangladesh. Due to heterogeneity, each ethnic leader has its own priority; Censuses on national issue is hardly observed.

**Figure No. 5  Govt Effectiveness**

![Govt Effectiveness Graph](https://example.com/govt_effectiveness_graph.png)

Source: World Economic Indicator
2.2 Investment and Human Development

Basic principle of economics is that the economic growth required capital investment. Literature on investment also reveals that domestic investment is key determinant of the capital / labor ration and economic growth. Figure No. 5 indicate that Pakistan invested 18.6% of GDP in machinery and equipment on average from 1975 to 2008 as compared to 18.3% of GDP in Bangladesh.

Figure No. 6 Gross Capital Formation 1975–2008 (% of GDP)

Source: World Bank, World Development Indicator 2008

People are the real asset of the country. Therefore effort to promote socioeconomic programs should encourage. Literature on Human development depicts that Human development and economic growth are correlated. Human capital is more valuable than commodities and financial wealth. Human development is vital role to the economic development of a country [UNDP Report 1994). Human development computes on three dimensions i.e. education, health and income. Education and Health has vital role in development of human capital. Education sector, in developing countries, has influential role in industrial development. Education is a source of skilled and productive manpower. Education is a wealth distribution vehicle as it helps poor to grasp the opportunity provided by economic growth. More education increases the learning desire and reduces the fertility.
Up to separation there is great disparity exist in education sector among Pakistan and Bangladesh. Bangladesh is far behind Pakistan, Asadullah (2004). Bangladeshi Govt committed itself to implement reforms in education sector and launched number of projects from universal primary education, Food for education and Education for All (EFA) program [BMoPME]. Samer Al-Samarrai (2007) highlighted the increase in education budget more as compared to 2000. It is fruit of committed policy that gross primary enrollment rate (Male & Female) reached to 90% in 2007 [BSTD]. Her Education sector flourished dramatically late 1990. NGO’s, uniform culture, 90% Bengali speaking and small area, which easy to administrate, has key role to promote primary education in Bangladesh, [BMWCA Report].

In contrary to Bangladesh, Pakistan is more diverse in culture and linguistic. Pakistani Govt is committed to free education for all. Early decade observed slow rate despite number of reasons, one of them is lack of teaching staff described by Behrman (1976). After denationalization policy, private sector has played vital role. Private sector shares much burden of Govt expenditure on this sector as described by Andrabi et al (2002). Gross primary enrollment rate (Male & Female) in Pakistan is 92% [World Bank-2007]

**Figure No.7 Primary School Enrollment in Million (1980–2006)**

![Primary School Enrollment in Million (1980–2006)](image)

Source: Nation Master & Statistical Bureau Pakistan & Bangladesh

In 2007, nearly 33 % of youngsters of Pakistan attend secondary schools compared with 43% of Bangladesh. The ratio attending the college and university is 7.2% in Bangladesh where as in Pakistan 5.1%. Education expenditure in Pakistan is 2.9% of GDP where as in Bangladesh 2.4% of GDP. In last budget Bangladesh allocate 7.7 Billion (US Dollar) where as Pakistan allocate 3.4 Billion (US Dollar).
Other element of human capital that helps to uphold the economic development of a country is the health of its labor force and general population. Life expectancy rate (at birth) for female in Bangladesh rise from 54% in 1990 to 64% in 2007 and for male it is 54% to 63%. Whereas in Pakistan for female it jumps from 59% to 64% and for male it is 58% to 63% during the same period. Bangladesh health expenditure fall 3.4% to 3.2% of GDP from 2002 to 2006 while Pakistan health expense fall 2.3% to 2.00% of GDP. Redman et al (2007) stated more struggle is still required to improve literate life expectancy in rural area. Akram and khan (2007) described inequality in health service in Pakistan. Under the slogan water for all Bangladesh govt has take stern action and 75% Bangladesh has access to improved drinking water system. In Pakistan there is only 18% population which has access to clean water.

**Figure No. 8 Human Development Index**

![Human Development Index](image)

Source: World Bank, World Economic Indicator

2.3 Export, Inflation and Economy Structure

Bangladesh has been a little bit more open than Pakistan. Freedom to trade index of Pakistan has changed from 4.09 (1980) to 5.83 (2007) where as Bangladesh index has changed from 2.24 (1980) to 5.94 (2007). Pakistan is more restrictive to import as 7.14% tax revenue from trade sector while in Bangladesh revenue from trade sector is 5.89% (EFW-2009).

**Figure No. 9 Export of Goods and Services 1998 to 2008(\% of GDP)**
Stability in Price is a good sign for economic growth. Figure 9 below reveals that Bangladesh manage to bring inflation down almost as far Pakistan in 1988. In 1990s inflation in Bangladesh remain below the Pakistan. After 2000, rising trend observed both countries.

**Figure No. 10 Inflation rate 1980 – 2008**

In 2008, inflation in Pakistan is higher than Bangladesh as the result of monetary and other problems. Therefore, it is not surprising that the process of monetization is in downward in Pakistan than in Bangladesh. High inflation leans to hold back economic growth by various channels. Inflation may reduce financial depth or by daunting the financials capital accumulation, deprive the financial lubrication which impedes economic efficiency and growth.

**Figure No. 11 Financial Depth 2005 to 2008 (M2 % OF GDP)**
Exchange rate has its own role in economic growth. Levy and Sturzenegger (2003) argued that Peg exchange rate cause less inflation and less economic growth as compared to flexible rate. Gosh et al (2000) supported the peg rate. Their result showed that country with hard pegs had less inflation and high growth rate. Since separation, both countries adopted pegged exchange rate. Figure 2 showed that Bangladesh showed more sustainable growth since 1990 as compared to Pakistan and have low inflation figure 10. Both the countries are agrarian. Bangladesh reduced its agricultural share since 1990 from 40% to 22% in 2008 where as Pakistan sustained the share at 20%.

**Figure No. 12 Agriculture 1990 – 2008 (% of GDP)**

Bangladesh and Pakistan have large natural reservoir and human manpower. Both endeavor to modernize it economy. Manufacturing sector in Bangladesh is more rapid due to boom in knit wear industry as compared to Pakistan. The manufactured sector is a key factor to economic growth as it encourages research and technological progress far beyond the agriculture and builds up human capital as well.
As for Business start up, it took 44 days to start a business in Bangladesh against 20 days in Pakistan (DBR-2010). Pakistan ranked at 117 whereas Bangladesh placed at 137. If the improvement in ease of doing business sustained, investment could rise and country could also rise. To summarize, economic growth requires capital to be accumulate and to be efficiently.

**Figure No. 14 Economic Freedom Index 1995 – 2010**

Source: Heritage Foundation

3. Conclusion

The different economic development of Pakistan and Bangladesh since separation suggests policy implication. Bangladesh shows sustainable growth rate since 1990. On other hand Pakistan has more fluctuating history of GDP rate. Previous section discussion reveals that Pakistan and Bangladesh moving side by side in all indicator which discussed then why Bangladesh ahead than Pakistan and show sustain growth rate.
The sustain growth of Bangladesh attributes to its consistence policy toward trade openness, education, Political stability and investment friendly business environments. Bangladesh receiving foreign aid unconditionally and there is no Taliban like threat. In Bangladesh rule of law and Govt effectiveness is improving. Policy maker prudently use the resources and manage to lower the cost of factor of production. They also curtailed the inflation.

Major threat to Pakistan economy is Taliban and ethnicity group. State institutions and political system is not strong enough. Corruption, terrorism and foreign intervention in policy decision create uncertainty and investor reluctant to invest. These entire factors contribute to worst Pakistan economy.
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The Impact of Commitment of Auditing Firms in Jordan in Accounting and Auditing International Standards, on their Strategic Marketing Plans.

Dr. Ahmad Areiqat    Dr. Mohammad Dbbaghieh   Dr. Haithm Al-Abbadi

Abstract
This study aims to evaluate the impact of applying the international standards of auditing by the Jordanian companies, on their marketing strategies. The needed data had been collected from four auditing companies in Jordan, two are local and two are international companies. Another five companies from the customers of the auditing companies were asked to provide additional data about their auditors. The findings of this study pointed out that; applying the international standards is very important to; auditing company, and the customer. But the most significant factors are; the multi experience and the professionalism of the auditing staff. This study recommended to design different to marketing mix especially to this career, and conducting more studies about this business.

Keywords: Impact, Commitment, Auditing Firms, Jordan, Accounting and Auditing, International Standards, Strategic Marketing Plans.

1. Introduction
The services provided by auditing firms, ie, auditing firms, which audits the account of companies that legally binding audited by external auditors as a neutral party, these services are characterized by frequent and multiple users, each of whom expected that these services meet his requirements and needs. Investor (Shareholder) in a company; and in the meeting of General Assembly of Shareholders, listening to the outcomes of this service in order to reassure his money invested in the company. Also, prospective investors, who are thinking to invest a part of their money in this company, must have access to the results of the audit process, and finding concerning the financial condition of the company. Also, relevant government departments, lenders and depositors, all of whom are interested in accuracy and credibility of the statement by the external auditors. Audit process can be defined as: examination of; the internal control systems, data, documents, accounts and books and accounting records of the company, such that the critical and systematic examination, with a view out, neutral and professional opinion.
about the significance of financial statements on the financial situation of the company at the end of a period of time, and the portrayal of the results of company: Profit or loss for that periodic (Abdullah, 2004, P. 13), the process of audit includes three jobs, the first one is examination which aims at the mathematical examination of measurement of financial operations for the activity played by the company and secondly, the verification process and which is intended to ascertain the validity of financial statements to reflect accurately the business of the company for the financial period, and if it reflects the sound financial situation of the company, the third function is reporting, and the report is the output of the audit process (Lutfi, 2005, PP. 216-217).

In order to apply uniform procedures and processes in all states, the Financial Accounting Standards Board, issued a binding standards to the practitioners of this profession. There were these standards have been codified in the law No. (32) of 1985 as: Auditing profession law.

This paper will focus on the importance of compliance and commitment of companies that provide audit services, consulting and accounting to international standards for the professions of auditing and accounting, adopted by companies to market their services.

2. Problem Statement and Questions:

Problem of this study has been formulated according to the following statements:
"The commitment of audit licensed firms to apply the international standards of accounting and auditing, is one of important factors of success and survival, as, this commitment is reflected on its marketing plans for the services provided by them".

And this problem has been discussed according to the following questions:

1. Are the Jordanian audit firms consider its commitment to implement international standards for the audit profession, a commitment to the Jordanian laws issued in this regard?

2. What is the impact of the commitment of the Jordanian audit firms in applying the international standards, on the quality of the services provided by these firms?

3. Are the Jordanian audit firms developing their marketing strategies according to the extent of their commitment to international standards for the audit profession?
4. What is the impact of the commitment of the Jordanian audit firms to the international standards, to maintain the companies, which audit their accounts now, and provide supporting services for them, as well as to attract new companies as prospective clients?

3. The study objectives:

This study aims to the following goals:

i. Recognize the benefits of commitment of the Jordanian audit firms with international standards for auditing, whether these benefits to the same company, or companies receiving the service.

ii. Determine the impact of commitment of the Jordanian audit firms with international standards on the marketing strategies of the services of these companies.

4. The study hypotheses

The first major hypothesis:

**Ho1**: There is no impact for the commitment of the Jordanian audit firms, with the international standards for auditing, on the marketing plans of these firms.

The second major hypothesis:

**Ho2**: There is no impact for the commitment of the Jordanian audit firms with the international standards for auditing, to expand the market share for these firms.

And this hypothesis consists of the following sub-hypotheses:

**Ho2₁**: There is no effect for the commitment of the Jordanian audit firms with the international standards for auditing in attracting new customers.

**Ho2₂**: There is no effect for the commitment of the Jordanian audit firms with the international standards for auditing on achieving customer satisfaction.

5. The Study Model

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment of Jordanian audit firms with international standards auditing.</td>
<td>- Marketing plans of the Jordanian audit firms.</td>
</tr>
<tr>
<td></td>
<td>- Expanding the market share.</td>
</tr>
<tr>
<td></td>
<td>- Attracting new customers.</td>
</tr>
<tr>
<td></td>
<td>- Achieving customer satisfaction.</td>
</tr>
</tbody>
</table>
6. Procedural Definition of terms

5.1 Independent Variables

The commitment of Jordanian audit firms by international standards for auditing; the majority of these standards are identical or derived from the standards issued by the American Standards Board. One of these standards, the standard No. 500 under the name of "Audit Evidence" and states that, "audit evidence means, all obtained by the auditor of information such as; documents, reports, the results of inquiries, estimates, conclusions which used by the auditor to issue his professional judgment, to device whether the financial statements give true and fair image".

5.2 Dependent Variables

a. Marketing strategy: It is a set of integrated activities, by which company resources are directed to the opportunities available in the market, in order to achieve the highest levels of saturation of the needs and desires current and future of consumers and to ensure that maximize the chances of profit for the company, whether profit financially or socially (Mualla and Tawfeek, 2001, P. 81).

b. Market share: It is a tool to measure the performance of the company compared with competitors, and it means, the percentage controlled by the company of the overall market, calculated as follows;

The market share of a company = The Company's Sales from product or services / total market sales (Michael, 2007).

c. Customer satisfaction: Is a state of psychological comfort, which the customer feels satisfied, as a result of the organization's success in achieving his desires and needs at one time, and this occurs the organization's service match with the expectations of the customer (Kalash, 2007).

7. Relevant previous studies

7.1 Study of the University of King Saud Bin Abdul Aziz (2008), under the title: "Accounting, and the Impact of the Collapse of Some International Companies Upon it". This study aims to reveal the reasons that led to the collapse of Enron Company, and Arthur Anderson. And attributed that to the weakness of accounting policies, which enabled the manipulators who caused this collapse of the exploited, causing the
consequences, can not be repaired, and thus, reflected on the world economy negatively.

Then the study came to new changes that have affected the accounting profession, which was issued after the collapse, which necessitated the establishment of a special board to the companies, entrusted with the task of monitoring the accounting.

Also, the new amendments granted to the audit committee the right to change the external auditor in the following circumstances:

- If the auditing firm audited the company's business for a considerable period (10 years or more).
- If an employee of the auditing firm was a former employee in the company which is audited now by that firm.
- If the auditing firm provides other services non-related to the auditing process.

7.2 A study by: Kur et. al. (2008) under the title "I.S. Auditing Standards In Malaysia",

This study aimed to assess the impact of the commitment of international auditing standards on the performance of audit firms, the study included 480 companies which the external auditors audited their operations, the results of this study were:

- Commitment to Standards is in the interest of both, a client company and the audit company.
- Adherence to the international standards of auditing makes audit firms a target for the companies invested in achieving the high rate of return.

The size of the company plays an important role in the extent of its commitment to international standards of auditing. The current study will benefit from this study, that adherence to international standards of auditing increases the demand for audit firms keen to adhere to these standards.

7.3 A study by: Marie Leon (2008) under the title: "Audit Firms Bigs Cite for Global Standards".

The researcher pointed out that the audit firms, to be accepted, must be attentive to the quality of auditing service, through not only the commitment to international standards of audit, but a commitment to the contents of the culture and standards of the audit company
itself, most importantly, the auditor should understand that he is not only responsible to the company's management, but also to its stakeholders.

7.4 A study by A Jour (2008), under the title "Rules and Ethics and behaviors of Accounting and Auditing Profession: A comparative Introduction Arab and International, (Saudi Arabia Kingdom, and United Kingdom)".

The study aimed to present the rules, governing the ethics and behaviors of accounting and auditing profession, in both Saudi Arabia and U.K. being from two different schools in determining the basic reference for the rules of ethics and behavior of the audit profession.

The researcher attributed the collapse that occurred in Enrom Company for Energy and Arthur Anderson for Auditing to the weakness of accounting policies and the absence of the ethics and behaviors of the accounting and auditing profession. The researcher finds in his study, that the adoption of rules of conduct on the Islamic Religion as a source is considered one of the keys to promote companies that comply with these rules, which means it is committed to Islamic Sharia.

7.5 A study by, Oxera (2007) under the title: "Ownership Rules of Audit Firms and their Consequences for Audit Market Concentrations".

The study aimed to answer the following question: To what extent does each of the professional rules of the auditing profession and commercial factors, influencing the selection of the auditor? These factors are: The impact of ownership percentage of a member of the company's capital, impact of the size and spread of the audit company and the impact of auditor's independence. The Study found; the need to give priority to professional norms and behaviors stemming from the international standards, on the wishes of both owners and management in the selection of external auditor.

8. Theoretical Background:

8.1 Services provided by audit firms to their customers

Services provided by audit firms to their customers are considered as formal services, governed by formal instructions, in the form of government legislations. And the international standards of auditing play a significant role in minimizing the role of pricing
as one of the independent variables in the marketing mix, because the price factor is no longer room for competition among audit firms for the purpose of auditing (Abedaat, 2008, PP. 103-104), requiring audit firms when developing strategic marketing plans excluding the price factor and its impact on the items of the plan, and impose them upon the need to search for services linked or related to the core service such as; consulting and training or others, which are subject to price competition (Zeithamland Binter, 2002, P. 46).

The Financial Accounting Standard Board, derived from the General Accounting Standard Board, new standards, called; International Financial Reporting Standards (IFRS), (Price Water House Coopers, 2009). And since compliance with international auditing standards has a significant role in enhancing the reputation of the audit firm, most audit firms became to provide their customers other services such as; business risk assessment, risk assessment of related government policies and legislations, and capital risk assessment (www.rumconsult.com).

8.2 Generally accepted auditing standards applicable in Jordan

The Jordanian legislator adopted the international standards of auditing which corresponds to a large extent with the American Companies Law No. 22 of 1997, and in the law No. 32 of 1985 as the Law of Auditing Profession.

9. The Type of the Study

This study was conducted through using the descriptive, deductive approach, because the data collected did not apply to statistical analysis, but the hypotheses has been tested according to the answers of sample's companies.

10. The Study Population and Sample

The population of this study is, auditing firms working in Jordan and the companies that receive the audit service. The study sample consists four auditing companies, two international firms, and two local firms. In addition to five companies from the customers, from different sectors: Industrial, banking, services and insurance.
11. Data Collection

The secondary data had been collected from several sources; books, researches, previous studies and the internet, while the researcher has conducted structural interviews with the managers or owners of the auditing firms, and the five companies that represent the customers, in order to collect the primary data.

12. Hypotheses Testing

The answers of the auditing firms and the customer companies confirmed that the commitment to the international standards of auditing has an impact on the marketing process for auditing services, but it is not the only factor that the audit firms rely in marketing their services on it. Therefore, this commitment is a part from integrated marketing mix which includes the following: Experience, efficient, commitment, international reputation, the company size, and the complementary services.

13. Recommendations

The study represents the following recommendations:

i. The need for the global deployment of major Jordanian audit firms.

ii. The audit firms in Jordan should attract auditors who master the auditing of accounts of any economic sector.

iii. Activating the role of Association of Accountants and Auditors in Jordan, in the area to ensure compliance with international standards of auditing.

iv. Development of a marketing mix, for marketing audit services.
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A Jour, Ameen (2008), under the title "Rules and Ethics and behaviors of Accounting and Auditing Profession: A comparative Introduction Arab and international, (Saudi Arabia Kingdom, and United Kingdom)".


University of King Saud Bin Abdul Aziz (2008), Accounting, and the Impact of the Collapse of Some International Companies Upon it.
Corporate Tax Changes and Performance of SMEs in Malaysia

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Abstract
Organizations have often been affected by tax regulations imposed on them. Tax regulations normally dictate organizations' profitability. In Malaysia, the government has changed the corporate tax rate for eight times since 1988 until 2009. It has been continuously reduced from 40% in 1988 to 25% in 2009. Hence, the purpose of this paper is to investigate the effect of corporate tax rate changes on firms' financial performance of Small Medium Enterprises (SMEs) in Malaysia. Hence, it is paramount to investigate the effectiveness of corporate tax rate changes on firms' financial performance in SMEs. Four financial ratios were used (current ratio, debt ratio, total asset turnover and return on assets) from the year 1999 until 2003 in observing the SMEs' performance. The analysis indicated that tax changes do affect SMEs' performance. This is due to the significant performance improvement that can be observed in SMEs' profitability.

Keywords: SMEs, Corporate Tax Rate, Tax Changes, Financial Performance, Financial Ratio

1. Introduction
Many studies have established that Small Medium Enterprises (SMEs) form an essential component of many economies. In some advanced countries, 98% of SMEs dominate more than 65% of employment opportunities and contributed to more than 50% of gross domestic product (GDP) (Bank Negara Malaysia). For example, the contribution of SMEs to GDP over total value added range from 50% in Korea, 55.3% in Japan and 60% in China (Normah, 2006). However, it is only 47.3% in Malaysia.

The economic crisis in 1997/1998 has been a major wake up call for the Malaysian government to assist SMEs development. During this crisis, many major corporations collapsed due to their inability to sustain increased overhead costs with low profitability. Foreign investors start pulling out their investments from the country and transfer them to...
new destinations which are more profitable and cost efficient (cheaper labour cost). Nevertheless, SMEs manage to continue operating and retain their business. Thus, assisting the country’s in confronting the economic challenge. This has been a painful lesson for Malaysian government not to be solely dependent on foreign investments to stimulate economic development. Further, SMEs has been widely recognised as the backbone of Malaysian economic due to their contribution in promoting endogenous growth industry expansion and development (Saleh and Ndubisi, 2006). Consequently, this leads to more attention directed to SMEs in national development program. In addition, SMEs have also been targeted as a vital mechanism in generating domestic-led investment and in accelerating the country’s economic expansion. Despite the growing importance of SMEs expansion, developing SMEs require strong support from the government. One of the government efforts in facilitating SMEs growth is through tax reduction and incentives.

In Malaysia, corporate tax is imposed by federal legislation passed by Parliament under Income Tax Act 1967. Therefore, all SMEs in Malaysia that are incorporated businesses are subject to income tax as corporate taxpayers. Meanwhile, SMEs businesses that are unincorporated are charged in accordance to individual tax rates. Since the introduction of the tax legislation, several changes have been made. As shown in Table 1, tax rate charges have been continuously reduced from year 1988 to 2009 ranging from 40% to 25%. These changes are made as an effort to increase firms’ competitiveness and to reduce businesses’ operating costs. In addition, Table 2 further reveals some summarizes amendment that has been made on the Financial Act (Act 624, Paragraph 2A) on the companies’ tax charges. The amendment stipulated that for company with ordinary shares capital less than RM2.5 million in the beginning of the Year of Assessment, for the first RM100, 000 of taxable income, the tax rate will be charged at 20% while the remaining taxable income will be charged at 28% tax rate (MICPA, MIA and MIT, 2004). Therefore, in depth review on these new amendments will signify that the incentives are intended to assist SMEs development in Malaysia as the conditions stated can mostly be satisfy by SMEs.

Other than this, government has also came out with several incentives to assist SMEs development particularly in finance, technology and infrastructure areas
(SMIDEC, 2002). Examples of stimulus provided are Global Supplier Program, Industrial Linkages Program and Market Development Programs. These programs are developed particularly aiming in improving SMEs competitive capability and financial conditions. Therefore, this study is mainly about investigating the effects of tax reform on SMEs. In particular, the research objective of this study is to look at the effect of corporate tax on SMEs performance before and after tax rate changes. Additionally, this paper is to further examine whether there is significant changes in SMEs performance resulting from the tax reduction reform.

**Table 1: Corporate Tax Rate Reduction Imposed by Government Each Year**

<table>
<thead>
<tr>
<th>Year Assessment</th>
<th>Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988 and prior</td>
<td>40</td>
</tr>
<tr>
<td>1989-1992</td>
<td>35</td>
</tr>
<tr>
<td>1993</td>
<td>34</td>
</tr>
<tr>
<td>1994</td>
<td>32</td>
</tr>
<tr>
<td>1995-1997</td>
<td>30</td>
</tr>
<tr>
<td>1998-2006</td>
<td>28</td>
</tr>
<tr>
<td>2007</td>
<td>27</td>
</tr>
<tr>
<td>2008</td>
<td>26</td>
</tr>
<tr>
<td>2009</td>
<td>25</td>
</tr>
</tbody>
</table>

**Table 2: Further Incentive Provided By the Government**

<table>
<thead>
<tr>
<th>Year Assessment</th>
<th>Acts/ Amendment</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>Financial Act (Acts 624, Paragraph 2A)</td>
<td>Ordinary Share Capital less than RM 2,500,000, taxable income 1st RM 100,000 is charged 20%, excess is 28%.</td>
</tr>
<tr>
<td>2004</td>
<td>Financial Acts (Paragraph 2A)</td>
<td>Ordinary Share Capital less than RM 2,500,000, taxable income 1st RM 500,000 is charged 20%, excess is 28%.</td>
</tr>
</tbody>
</table>

This article highlighted some insights and implications of tax changes imposed by the government. It provides importance views to the government and policy makers on the effect of tax changes. The results of this study will reveal whether the provision of tax changes is in the right directions of improving business competitive ability and financial conditions. Additionally, this study has laid down some important issue for Malaysian government to start considering the importance of having a special tax rate for SMEs since several countries have already developed specific tax rate for their SMEs. Further, it is also aimed to provide some guidelines for the policy makers to analyse and predict the future growth of economy by associating taxation with national growth. If the tax rate
reduction helps to improve SMEs productivity, indirectly Malaysian economic will further improved.

2. Literature Review

SMEs contributions in building economic growth have long been acknowledge by many countries (Normah, 2006). This is because SMEs have the potential to promote domestic-led growth in new and existing industries and to further strengthen a country’s economy in the current competitive and challenging environment. In addition, numerous studies have supported the notion that SMEs are the backbone of economic growth in many advanced countries (Lewis, 2008; Chang and Doina, 2005). They have large potential in contributing to economic growth through their output productions, numbers of businesses and substantial employments generation. Further, Malaysian Government acknowledging SMEs contribution is channelling many of their efforts to support SMEs survival and expansion. This is done by providing greater access to business facilities locally and abroad, enabling business structure and improves operation and productive capabilities to remain competitive.

As mentioned above, SMEs contribution to a country’s economic growth has often been highlighted in many studies (Tambunan, 2008,) However, researches have also acknowledge that SMEs developments require strong support from the government as they do not have adequate capabilities and facilities to stand for themselves (Pope and Abdul-Jabbar, 2008; Moha, 1999). Thus, tax reduction and incentives provided by the government is expected to have some impact on SMEs performance.

Therefore, the effect of business or corporate tax rate changes has always been the focus of many empirical studies. The effects will either be on the economy or firms. The fact is both will be affected if corporate tax rate changes. This is because tax is revenue for the government while it is an expense for firms. Theoretically, changes in tax rate will benefit one side and a disadvantage to the other party. Thus, to change tax rate system one must consider various factors. In the previous study conducted by Whalley (1997) in designing the business tax system that would minimized business cost, he suggested tax reformer should consider the efficiency effect.
Hines (2001) examined the behavioural economic impact of corporate taxation using United State data. He discovered that firms will consider taxation in designing their operation. They will try their level best to adopt design that minimised tax exposure. This is due to the fact that high tax results to high cost of production. Thus, price of the goods will increase and this will then affect the demand. He also suggested that firms can shift the tax burden to employees by reducing their wages with hope of maintaining the price of goods. However in the latest study by Peretto (2007) on long run implication of taxation, he found that tax on corporate income have different effect on the growth of existing product and on development of new product.

Motivated by the economic slowdown due to terrorist attacks on 11 September 2001, Gravelle (2003) carried out a study using business tax rate cuts and investment incentives to stimulate the economy. She concluded that tax cuts on business income do not necessarily be the best instrument of fiscal policy to stimulate economy. Besides, permanent investment subsidy is more effective for long term investment than short run tax cut.

Additionally, Fazzari (1987) applied capital theory to analyse the impact of tax increment on firms investment. He suggested that investment impact depends on cost of capital. Firms’ investment would increase if cost of capital is tax deductible. This study is in line with study conducted by Diamond (2005), who also noted the increment in investment when U.S. government extend the 2001 and 2003 income tax cuts. Further, this policy also increases employment opportunity and output by reducing government spending. In other study, Ridder (2002) wrote in Tribune Business News magazine about the aggressiveness of U.S firms in reducing tax. This is due to taxing the firms would make the U.S companies less competitive. This is supported by Hines (2001) findings which suggested that tax changes will have an impact on the price of the firm’s product. If the price of the product is not competitive, the company would experience less competitiveness problem. Thus, government should impose effective tax rate on business income by taking into consideration the effect on efficiency (Whalley, 1997).

Recently, Chang and Doina (2005) have conducted a study on corporate tax reform in European Union (EU) countries involving lower statutory tax rates and reduction in generous tax depreciation provisions. The study reveals that SMEs appear to be directly
affected by the national corporate tax rather than multinational firms. Further, the researchers state that EU countries that traditionally had lower tax rates for SMEs and provide fiscal incentives claimed that they have create a large number of jobs and enhanced the level of entrepreneurship, which implies flexibility, speed, risk-taking and innovation develop through these schemes.

3. Data and Methodology

Data of this study was collected from SMEs which incorporated business in Klang Valley. Klang Valley was chosen since it is the hub of Malaysia SMEs business as almost 48.8% (http://www.smeinfo.com.my) of Malaysian SMEs are located here. Furthermore, in the study conducted by Saleh and Ndubisi, (2006), they have mentioned that majority of SMEs are located in the central part of the country. Financial statement data are gathered for a 5 years period commencing from year 1999 to 2003.

To investigate the effect of tax changes on firms, financial performance of each firms are examined. In this study, financial ratios methods are chosen to analyse the financial performance of the enterprises. These methods have been widely accepted as an appropriate measure since this study is to compare the performance between manufacturing and service sectors (Moyer, McGuigan and Kretlow, 2003). Further the mean of each ratio before and after tax changes are compare using SPSS. The Paired T-test is then asapplied to observe the significance changes before and after tax changes.

There are four different areas of the ratios, that is: Liquidity, Financial Leverage, Asset Management and Profitability. Liquidity is calculated by using current ratio. It measures the ability of the business to meet short terms creditors demand in term of cash within the next few months. Current ratio defines as current assets scaled by current liabilities. Asset Management is calculated by using total asset turnover. It measure the efficiency of a firm in using it resources to generate sales. Total asset turnover is obtained by dividing Sales with Total Assets. Financial Leverage is calculated by using debt ratio. Debt Ratio is defines as Total Debts divide by Total Equity. This measure indicates a firm capacity to meet its obligations. The lower the ratios demonstrate firms’ ability to pay debt. Profitability is calculated by Return on Asset. It measure by dividing Earnings after taxes
(EAT) with total assets. It is used to measure management effectiveness in managing the shareholders’ investments, generating sales and manage the business total assets.

4. Research Findings

4.1 Current Ratio

As noted in Figure 1 and 2, the current ratio of SMEs under both manufacturing and services sectors illustrate a continuous increase in their liquidity position. This suggested that companies in both sectors are strengthening their ability to meet their financial obligations. Thus, the increasing rate in this ratio point out that the SMEs capabilities are improving in meeting its short term obligations when tax rate decrease.

Figure 1: Current Ratio of SMEs in Manufacturing Sector for Year 1999-2003

Figure 2: Current Ratio of SMEs in Services Sector for Year 1999-2003
4.2 Debt Ratio

Figure 3 and 4 reveal that the debt ratio for SMEs in manufacturing and services sectors. Both of the figure show a slightly increase in debt ratio for the year 1999 to 2000, indicating increase in debt financing. The debt ratio starts to decrease in year 2001 and 2002 demonstrating SMEs’ improvement to finance by themselves. Nevertheless, year 2003 shows a rapid climb of debt ratio suggesting an excessive debt obtained by the SMEs. However, the increase may be due to additional assistance provided by the government in 2003, to motive SMEs to expand and enhance their business operations. Thus, resulting in more debt acquired to finance expansion activities. Additionally, The incentive in 2003 is believed to induce higher borrowing as now SMEs have the ability to pay back their loan due to increase in earnings as consequences of lower tax rate imposed to them.

4.3 Total Asset Turnover Ratio

Figure 5 and 6 describe the total asset turnover ratio of SMEs in manufacturing and services sector respectively. Both figures display quite a different asset management performance of the sectors. The gradual increase can be seen in asset management ability except for manufacturing sectors which experiencing a swift decline in year 2002. However, a deeper analysis reveals that this is not due to the SMEs’ inefficiency. This is due to the incentives given to SMEs in manufacturing to acquire specialized machinery and equipments such as machine tools, plastic injection machines, material handling equipment, robotics and factory automation equipments to be classified as strategic industries and hence were granted tax incentives in 2002. The investment in machinery and equipment will lead to increase in property, plant and equipment account thus increasing the amount of total asset. As a result, this would not affect or increase sales during that particular year. Consequently, it leads to decrease in total asset turnover ratio of the manufacturing sector. Further the effectiveness of the assets acquired has benefited the SMEs by rapid grow obtained in profitability for year 2003. This can be clearly seen in Figure 5 and 6.
Figure 3: Debt Ratio of SMEs in Manufacturing Sector for Year 1999-2003

Figure 4: Debt Ratio of SMEs in Services Sector for Year 1999-2003

Figure 5: Total Assets Turnover of SMEs in Manufacturing Sector for Year 1999-2003
4.4 Return on Asset Ratio

The return on asset ratio (ROA) of SMEs in manufacturing and services sectors are revealed in Figure 7 and 8 respectively. Both figures indicate that SMEs experienced consistent progress in their business operations except for micro service. Where it reveals a sharp increase in ROA and followed by a sharp decline in year 2001. Further observation indicates, the asset of the micro companies will keep changing. The old or traditional machinery will be continuously replaced by higher technology machinery. Therefore during year 2000 there were sharp increases in ROA because in that year the companies dispose off some of their assets to gain advantage of 2001/2002 investment incentives given on the machinery.

Figure 7: Return on Assets Ratio of SMEs in Manufacturing Sector for Year 1999-2003
4.5 Paired Sample T-test

Further analysis using Paired t-test is implemented to compare mean of the financial ratios between year 2002 and 2003. The analysis is organized to observe whether the financial performance is significantly improved consequently of the tax rate reduction. The results of the analysis are shown in Table 3.

As reflected in Table 3, it is clearly demonstrated that there is significant differences at level 1% on the overall SMEs’ performance for combine sectors between the two years (2002 and 2003) except for total assets ratio. Similar result is obtained for each individual sector, suggesting that the tax incentives provided by the government in 2003 did influence SMEs performance. Nevertheless, it is clearly noted that total assets turnover ratios display an opposite result. There is no significant difference in total assets turnover performance for both industries and combine sector. This however can be explained by the incentives awarded by the government in 2002 (MICPA, MIA, MIT, 2002). SMEs that acquire specialized machinery and equipments such as machines, tools and factory automations were granted tax incentives. Thus, this promotes new purchases and encourages SMEs to replace old machineries and equipments in 2002. As a result, such activities will provide significant difference performance improvement in 2002 if compare to 2001. Consequently, the special tax rate changes in 2003 provide nil significant difference in total asset turnover performance of SMEs.
Table 3: Paired Sample T-Test of SMEs between Year 2002 and 2003

<table>
<thead>
<tr>
<th></th>
<th>Combine</th>
<th>Manufacturing</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Ratio</td>
<td>12.9532</td>
<td>10.0001</td>
<td>7.0899</td>
</tr>
<tr>
<td></td>
<td>(0.0000)</td>
<td>(0.0099)</td>
<td>(0.0193)</td>
</tr>
<tr>
<td>Debt Ratio</td>
<td>-10.0565</td>
<td>-6.1943</td>
<td>-6.5688</td>
</tr>
<tr>
<td></td>
<td>(0.0002)</td>
<td>(0.0251)</td>
<td>(0.0224)</td>
</tr>
<tr>
<td>Total Assets Turnover Ratio</td>
<td>-0.3852</td>
<td>-0.3718</td>
<td>-0.0907</td>
</tr>
<tr>
<td></td>
<td>(0.7159)</td>
<td>(0.7458)</td>
<td>(0.9360)</td>
</tr>
<tr>
<td>Return on Assets</td>
<td>-23.9901</td>
<td>-12.9999</td>
<td>-24.2490</td>
</tr>
<tr>
<td></td>
<td>(0.0000)</td>
<td>(0.0059)</td>
<td>(0.017)</td>
</tr>
</tbody>
</table>

* Parentheses indicate p-value

In summary, we can conclude that tax do impact SMEs’ performance. The special tax administered by the government in 2002 on reduce tax rate charge on the first RM100,000 of taxable income for companies with share capital less than RM2.5 million does assist in improving the SMEs financial condition. Even though, the incentives given do not directly mean to SMEs, but the conditions lay out can mostly be satisfied by SMEs. As a result, they gain considerable benefit from the stipulated condition as they now have additional cash-flow to finance their business operation.

An apparent example is on the debt ratio analysis. It is obvious that most of the debt ratio means were at the highest peak in 2003. This is due to the improving economic condition that encourages SMEs to grow and expand their businesses. Tax incentives given motivate SMEs to obtain more loans in financing their business activities. Furthermore, the additional cash save derived from the reduction of tax charged has strengthen the SMEs’ cash-flow statement, increasing the prospect to obtain capital through debt financing. This opportunity enables SMEs to expand their business and acquire more profit.

5. Conclusions and Implications

In recent years, there has been an increasing awareness on SMEs establishment and growth in Malaysia. Government has implemented various strategies and policies to assist SMEs development. The economic crisis in 1997, that hit the ASEAN countries has speed up the process as now the importance of SMEs have been fully acknowledge. SMEs are able to continue operating and maintaining their business when other major businesses are falling apart. This is evidence by SMEs remarkable performance in
surviving the toughest condition and sustaining their business operations despite the economic turmoil experience by the country.

SMEs businesses have been one of the major contributors that assist the country in confronting the economic downturn. Thus, realizing the importance of SMEs in the country development, government has starts focusing on improving and catering to the needs and requirements of SMEs companies. This is demonstrated by the introduction of various incentives provided such as subsidy provision in supporting SMEs in loans acquisition, tax incentives in reducing SMEs financial burden, conducting training to enhance SMEs skills and capabilities and assisting SMEs in promoting and marketing their products and services.

This study is conducted to see if the benefits provided do affect SMEs performance, particularly focusing on the tax incentives in year 2003. Result of this study show that SMEs performance has improve significantly when tax rate charges is decreasing. Additionally, there are significantly differences in performance improvement between year 2002 and 2003 when there are special tax rate incentive provided that indirectly mean for SMEs in 2003. Therefore, we suggest that Malaysian government could provide specific corporate tax rate for SMEs. This will ensure that SMEs are enhanced and further certify the growth of Malaysian economic.
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Ethnic Conflict in Pakistan in 1980s: A Case Study of Sindhi Muhajir Riots

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Abstract

Ethnic conflict is a worldwide phenomenon and it is threat for regional and world peace. South Asian States India, Sri Lanka and Pakistan are also suffering from this problem. In the result of the division of Sub-Continent, in 1947, a large number of refugees migrated from India to Sindh. Majority of them settled in the urban areas of the province. The conflict erupted between Sindhis and Muhajirs when Urdu declared as national language and many Sindhi medium Schools were closed in Karachi. In 1970s ethnic riots took place between Sindhis and Muhajirs over language issue in the cities of the province. The rule of General Zia was the era of ethnic conflict and riots in Sindh. This paper aims to bring out the causes of ethnic conflict and is to trace out the solution of ethnic conflict to promote peace and fraternity among the residence.

Key words: Ethnic, Conflict, Riots, Migrants, Sindhi, Muhajir

1. Introduction

Pakistan, a multi ethnic federal state came into being on 14th August 1947. There were two wings of Pakistan till 1971. In 1971 Bengal the Eastern part of Pakistan had been separated and became independent. After the separation of Bengal, rest Pakistan consisted on Four Provinces Punjab, North West Frontier Province, (Khyber PukhtoonKhawa) Balochistan and Sindh. There are many ethnic groups residence in the
Provinces of Pakistan. The Punjab is deeply populated province of Pakistan is divided into two major ethnic groups i.e. Punjabi and Saraiki, NWFP is divided into Pakhtoons and Hazara, Balochistan is divided into Baloch Pakhtoons, Barahoi, Sindhi and Saraiki groups and Sindh is divided into Sindhi, Urdu (Muhajirs) Peaking migrated from India to Sindh after the partition of United India) Pakhtoons, Punjabi and Balochi ethnic groups. This research paper is exclusively focuses on the ethnic conflict between Sindhis and Muhajirs in Sindh. Sindh is the most important province of Pakistan due to its geopolitical situation. Sindh province is located in the southeast with the border of India and Arabian Sea. It is covered about 1,40,914 square kilometers area.

The total population of Sindh province was 30.440 millions in 1998 and 43,000,00 in 2008. (Sindh wikipedia). Sindh lies between 23-25 and 28-30 north longitude and 66-42 and 71-10 east longitude. It is about 579 kilometers in length from north to south and its extreme wideness is 442 kilometers. The average breadth is about 281 kilometers.(Sindh Quarterly 1994, p-59)

The population of Sindh is primarily divided into indigenous and immigrant’s ethnic groups. Sindhi speaking people are the old native of the land, The Baloch also settled from the centuries in Sindh. When British occupied over Sindh in 1843 at that time Sindh also ruled by Talpurs the main clan of Baloch community. The Baloch have been merged into Sindhis. The Sindhi is the first language of the majority of Baloch people some them speaking Balochi and Serraki also. But they got their education in Sindhi medium. So there is no countable conflict between Sindhis and Balochs. Many Baloch are leading the Sindhi nationalist organizations Such as Dr. Qadir Magsi and Hyder Shahani are the leaders of Sindh Tarki Pasand Party, Mir Aalim Maree is the leader of Jeay Sindh Tahreek, Jami Chandio Hakeem Zangejo are the leaders of Sindhi Awami Tahreek and Ayoub Shar is general secretary of Sindh National Front.
So the Baloch of Sindh are indivisible part of Sindhis. When riots took place between Sindhis and Muhajirs at that time common Baloch were involved as Sindhi. But it was continuous conspiracy of the enemies of the country against the Son of Soil and they were trying to create the division and differences between them. In this conspiracy they wanted to show that Sindhis are not in majority in Sindh province but they could not succeeded. It was also clear from the census of 1998, in which Sindhis are more than 60%.

The immigrant’s ethnic groups are divided into Muhajirs (Urdu Speaking) Gujrati, Punjabi, Pakhtoons and the peoples who are migrated from other countries such as Bangladesh, Sri Lanka, Nipal, Burma, Iran and Afghanistan.

After the indigenous people, the Muhajirs are on second number. Muhajirs were migrated from the northern areas of India such as UP, CP, Delhi. They settled down in the urban areas such as Karachi, Hyderabad and Sukkur. The Gujrat Kuchhis also migrated from India before and after partition. The borders of Gujrat and Kutch are attached with Sindh, so many of them merged in Sindhis due to related culture. But after the MQM the faction of Gujarti people supported MQM. The majority of the Gujrat and Kutchi are businessmen and avoided from conflict and violence.

Punjabi is the third largest ethnic group in Sindh, they migrated from Punjab to Sindh in two phases. First under the British Raj, British rulers settled the Punjabi in the Sindh special in Sangher and Khairpur areas to crush the Hur Movement* in 1889s, 1939 and 1942. Punjabi also migrated in Sindh after the completion of Sukkur Barrage when land of Sindh allotted to them. The second phase of Punjabi came in to Sindh after independence and that process is still continued.

Pakhtoons also the main immigrant ethnic group of Sindh, they migrated to Sindh from the years. The little number of Pakhtoons came into Sindh before the British Raj and some during British rule, under the policy of Britain government to face the Hur movement. Big number of Pakhtoons came into Sindh under the shadow of the Army rule of Ayoub Khan and General Zia. The migrations of Pakhtoon’s is still continu due to the crisis of Afghanistan, Waziristan and other tribal areas. The Pakhtoons who came before Pakistan are merged in Sindhis and now they are part of Sindhis as Baloch. In this regard the best example of the Pakhtoons of Shikarpurs, they speak Sindhi and also adopted the Sindhi culture.

* Hur Movement, The militant movement of the People of Sindh against the British rule under the religious leader Pir Pagaro
The ethnic conflict between the indigenous and immigrants and conflict among the migrants is the main problem and threat for the integrity of Sindh and Pakistan. The exploitation and victimization of Sindhis in every walk of life created the inferiority complex, sense of deprivation and hatred thinking against the migrants’ peoples. The study of this paper is concerned with Muhajir Sindhi conflict during the rule of General Zia.

2. Muhajir Sindhi Conflict

Muhajirs (Urdu-Speaking) were migrated to Sindh in the result of the divisions of India on the basis of religion in 1947. Liaquat Ali Khan became the Prime Minister of newly established Muslim State Pakistan. He also migrated from India and fully supported the migrants’ peoples to accommodate and settled them. Due to the favour of Federal Government they occupied important position in bureaucracy. The people of Sindh well come to migrants people.

2.1 Settlement

The settlement is the main problem of Sindh from the genesis of Pakistan. When India was divided on the basis of religion it was a big migration of the history of the world was took placed. Millions were migrated from the newly established state Pakistan to India and from India to Pakistan. The Urdu-speaking people of UP, CP and Delhi were moved to Sindh province. It was the evidence of the history that people of Sindh said well come to those peoples and provided the food and shelters. The leadership of the All India Muslim League and the bureaucracy tried to settle the Muhajirs in the cities specially in Karachi and Hyderabad though it was the stand of the Sindh government that all the migrants peoples should be disperse in allover the province. But Federal Government opposed it and contradictions became sharp between the Sindh and Central government.

After the differences of Sindh and Central governments, Central government decided to separate Karachi from rest of Sindh. Ayub Khuhro, Chief Minister of Province bitterly opposed to the separation of Karachi and more settlement of the Muhajirs in karachi. Therefore, the Governor dismissed his government on 26th April 1948. “Jinnah authorized the Governor to dismiss Khuhro under the special emergency powers noted in section 51(5) of the Government of India Act 1935 and amended by the Pakistan Provisional Constitution Order 1947.” (Ziring 1997,
p-83), So the provincial government was dismissed according to the instructions of Central Government. So it was first issue of the conflict between the Sindhis and Muhajirs Because at that time the Muhajirs were dominant in the central government under the leadership of Liaquat Ali Khan.

2.2 Allotments of Evacuee Property
Muhajir Bureaucracy occupied the key posts in Federal Government. So, decision went in the interests of the migrant’s peoples as compare to the local peoples. The evacuee property went into the hands of the Muhajirs. Many farmers ousted from the lands. They were settled and farm the lands from the years. Therefore contradiction was started between the both communities. At that time Punjabis also supported Muhajirs.

2.3 Separation of Karachi
The contradiction and disputes started between them when Karachi was separated from rest of Sindh. The Capital of Sindh transferred to Hyderabad. All staff of Sindh secretariat was shifted to Hyderabad their homes were allotted to the federal employees so many Sindhi families were in trouble, which were settled in Karachi from many years. Federal Government patronized the Muhajirs in every walk of life under the leadership of Prime Minister Liaquat Ali Khan. This phenomenon and ignorant attitude of central government created the inferiority complex in native Sindhis. The hatred thinking was grown up among Sindhis against the Muhajirs. Because at that time the Federal Government was leaded by them and they were dominant on civil bureaucracy. They occupied the evacuee property. In this situation the dispute and conflict was grownup between them.

2.4 Language Controversy
Government of Pakistan declared Urdu as a National Language in 1948. Thought it was the mother tongue of only 3% people of the country. (Ahmed 1999, p-48), The Sindhi language oppressed in Karachi, especially after the declaration as ‘Federal Capital’ of the country. After the separation of Bengal from Pakistan, “the Urdu speaking were 7% of the total population of the country and one fifth of Sindh’s population.”(Ahmed 2000)
When Karachi separated from Sindh and declared as Federal Capital area more than 1300 Sindhi medium schools were closed only in Karachi. The status of Sindhi language was reduced. This
attitude of Central government towards Sindhi language enhances the hatred thinking against the Federal government as well as towards the Muhajirs.

Many Sindhi medium schools were closed or converted into Urdu medium in Karachi. Therefore, the thinking of Sindhis was grown against the Muhajirs. Because Federal Government was leded by Liaquat Ali Khan. He was Muhajir and against the Sindhis. Its hatred thinking towards Sindhis were open when he said to Sayed Ali Akbar Shah that "Sindhis are uncivilized and Sindhi Language is the language of the illiterate persons so how could it possible that we protected it. (Sayed, p-146). So the early years of the history of Pakistan were full with the victimizations of Sindhis.

When the scheme of One Unit was launched by the Punjabi elites, Muhajirs supported them. While Sindhi opposed and protested against the scheme. They were continuing in struggle against the One Unit but Muhajir were silent. The Muhajir community extended support to religious right wing parties while Sindhi supported the liberal and secular parties such as Pakistan Peoples Party (PPP) and other groups. It was proved in the general elections of 1971. After 1971 elections Pakistan divided into two parts and Bangladesh became an independent state on 16th December 1971. The rest of Pakistan handed over to Zulfiqar Ali Bhutto (Z. A. Bhutto) the leader of PPP. He tried to compensate the Sindhis, which were ignored in the previous governments.

Sindhi Language was made official language of Sindh as was promised by Bhutto during the election campaign of 1970. It was passed by the Sindh Assembly on 7th July 1972. The Bill was passed by the majority members of the Sindh Assembly 50 members supported the Bill only 12 members were opposed the Bill. (Reference is required) Though it was not against the Urdu Language, but the Urdu media described it as against the Urdu language. Jamait-i- Islami and Jamait-e- Ulma-i- Pakistan (JUP) leaded the Urdu speaking people and used them against the Sindhis. Many innocent Sindhis were killed in Karachi. In the reactions many Urdu-speaking people were also murdered in the Sindhi dominated areas.

The riots of 1972 became under control due to the direct involvement of Z.A Bhutto and an agreement was occurred between the both communities. In the language riots of 1972, Punjabis fully supported the Muhajirs because they already selected as medium of education. Jamait-i-Islam arranged rally in Lahore in the favour of the Muhajirs. Punjabi Pashtoon Muhajir Mutahada Mahaz was made by Punjabi, Pakhtoons and Muhajir in Sindh Province to counter the
Sindhis. It was the cause of the division between the Muhajirs and Sindhis. After that Sayed (G. M.) used term Muhajir Punjabi Mustakal Mafad* and struggled against their dominancy. The struggle of PNA against Bhutto also enhanced the conflict between Sindhi and Muhajirs because the Muhajirs dominant areas were the hub of anti Bhutto movement and majority of Sindhis supported Bhutto government. When Bhutto ousted from power and Martial law was imposed by General Zia they became happy. When their hopes and demands did not fulfill according to their wishes they established MUhajir Quomi Movement (MQM) on the basis of ethnicity and claimed themselves as fifth nation. G.M Sayed supported MQM, but opposed its claim of fifth nation and said that Muhajirs are the part of the Sindhi nation. (Junejo 2004)

2.5 Quota System
The Quota System implemented in Sindh on urban and rural basis. Muhajir opposed the Quota System. This is the one point of conflict between Sindhis and Muhajirs. Muhajirs demanded to end it and Sindhis favoured it. Though it was “introduced in 1949 by Liaquat Ali Khan for candidates seeking entry into officer level ranks in the federal bureaucracy. Since then it has continued in one or another. (Shah 1998,p-509)

In united India All India Muslim League fought for the quota system. But now they opposed the quota system and said that it is against the Islam and the merit. Bhutto continued the Quota system for the employment and the admission in professional collages for the backward areas.

2.6 One Unit
One unit was imposed in 1955 in the West Pakistan by the ruling class of Punjab to counter the numerical majority of Bengalis and same time to snatch the resources of the smaller provinces specially Sindh. Sindhi opposed the One Unit scheme and moved against it, because due to this scheme the provincial status of Sindh was ended. Sindhi had already fought for the provincial status and launched the movement for the separation from Bombay during the British rule. Indian National Congress and Muslim League also supported the demanded of the restoration the provincial status of Sindh. Nehru and Quad-e- Azam Mohammad Ali Jinnah also demand of the separation of Sindh from Bombay.* The implementation of One Unit was against the Resolution of Pakistan and Objective Resolution. So Sindhi did not accept to it and launched anti One unit

* Permanent interested group
movement. At that time Muhajirs supported One Unit. Due to that attitude of the Muhjirs the conflict raised between them.

2.7 Separate Province for Urdu-Speaking
Karachi was separated from rest of Sindh in 1948. At that time Sindhi opposed it. After the formation of One Unit all the western provinces of Pakistan amalgamated into one Province, When One Unit was abolished in 1969 and all the provinces were restored. At that time the demand of the separate province form some Urdu speakers also raised. But they did not success to get the mass support. After the language crises and riots in 1972, and during the army rule of General Zia the demand of the separate province and division of Sindh raised by some organizations enhance the difference between Sindhis and Muhajirs.

2.8 Fifth Nationality
Main demand of the Muhajir Quomi Movement was to recognize Muhajirs as Fifth Nation of Pakistan. Though according to the constitution of 1973 there is only one the Pakistani nation and preach of the other nations are against the constitution of Pakistan. The claim of separate and fifth nation is bitterly opposed by the Sindhis because it is the fear of the Sindhi that today Muhajirs claim for the separate nationality and tomorrow they will demand for the separate home land and it means they want the division of Sindh as well as the breaking of Pakistan so on that ground Sindhi opposed the claim of Fifth nationality. The leader of Jeay Sindh Tahreek G.M Sayed was the supporter of the MQM but he was also against fifth nationality and said that Muhajirs are the part of Sindhi nation as Baloch and Sayeds.

2.9 The Repatriation of Biharies
In the general elections 1970, Awami League won the majority seats of the National Assembly of Pakistan. But power did not transfer to it. Awami League moved against the undemocratic attitude of the military regime of General Yahya Khan. The military launched operation against Awami League. The Biharis (Migrants) supported Pakistan Army and fought against India and Bengalis. When Bangladesh became independent they did not ready to live in Bangladesh. During Bhutto government at least 2,50,000 Biharis came into Pakistan. But after the opposition of The Sindhis the migration of Biharis was stopped. The all organizations of Urdu Speaking peoples and religious parties were in the favour of the migration of Biharis to Pakistan. MQM also demanded that Pakistan government fulfill all the arrangements for the migration of Biharis
to Pakistan. It was also the main point of the conflict between the Sindhis and Muhajirs. Sindhi felt that more migration to Sindh will convert them into minority in their home land. So they opposed the any colonization in Sindh.

2.10 MRD

When movement launched by MRD for the restoration of Democracy and against the military rule of General Zia the Sindhi speaking people fully participated in the movement but there was less participation of Urdu speaking people. In this phenomenon military regime supported the leaders of APMSO (All Pakistan Muhajir Students Organization) to form party on ethno language basis to counter the PPP.

When MRD (Movement for Restoration of Democracy) launched second round of movement against Zia regime in 1986, Sindhi once again fully participated and leaded the movement. But MQM did not participate in democratic movement. So directly or indirectly MQM supported military rule. And this attitude of MQM shocked to Sindhi.

2.11 Riots between Sindhi and Muhajir

MQM swept the local bodies elections in the Muhajir dominated areas of Sindh province. The starting point of the riots in of 1987 between Sindhis and Muhajirs cause was replacing the name of Hyder Choke into Muhajir Choke on 6th April 1987. These riots were continued till the fall of the First Nawaz Sharif government. The Sindhi Muhajir riots were more dangerous because of their thick population in the province. This is also clear from the following table.

<table>
<thead>
<tr>
<th>Ethnic group</th>
<th>1941</th>
<th>1951</th>
<th>1981</th>
<th>1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sindhi</td>
<td>82%</td>
<td>73.8%</td>
<td>52.40%</td>
<td>59.7%</td>
</tr>
<tr>
<td>Muhajir</td>
<td>9.7%</td>
<td>22.64%</td>
<td>21%</td>
<td>21%</td>
</tr>
<tr>
<td>Other</td>
<td>8.93%</td>
<td>5.28%</td>
<td>24.96%</td>
<td>98%</td>
</tr>
</tbody>
</table>


Due to those contradictions and conflicts the riots started between Sindhis Muhajirs. The immediate cause of the riots of 1987 was the abrogation of the name of the Hyder Bakhsk Jatoi from Hyder Choke in Gaadi Khata Hyderabad city. But actually the roots of the dispute between the Sindhis and the Muhajirs were started when sindhis were victimized in Karachi by federal
government under the leadership of liaquat Ali Khan. The separation of Karachi from Sindh, converted sindhi medium school into urdu medium, evacuee property given to the migrants and many sindhi officers transferred from Karachi.

2.12 The Riots

The Local Bodies elections were held in 1987, in which MQM succeeded in the Muhajir dominated urban areas of Sindh province. Aftab Ahmed Shaikh leader of MQM was elected as mayor of Hyderabad city. During his Mayor ship, the name of Hyder Choke was replaced by Muhajir Choke at Gadi Khata Hyderabad. It was not bearable by the Sindhis, because the name of Jatoi is most respectable for the Sindhis. Jatoi dedicated his life for the rights of Sindh and Sindhi peasants. Changing of name of the Hyder Choke according to the policy of ‘Divide and Rule’ of General Zia. After the protest of Sindhis, Altaf Hussain directed to his workers to rewrite the name of Hyder Bakhsh Jatoi on said choke. But the anti Sindhi Lobby in MQM was active against the Sindhi. On other side Rasool Bakhsh Palejo, Qamar Bhatti, and some workers of JST also were active against the Muhajirs and they all worked according to the strategy of the establishment. Finally Sindhi Muhajirs riots spread allover the province. Many innocent Sindhis and Muhajirs were killed. G. M. Sayed the leader of Jeay Sindh Tahreek was trying to reduce the tension between the Sindhis and Muhajirs. The same wishe of Altaf Hussain, but both leaders did not succeed to prevent the Sindhi Muhajir riots. Due to the differences in their party ranks. MQM Chairman, Azim Ahmed Tariq, General Secretary Imran Farooq, Aafaque Ahmed, Badar Iqbal and Iqbal Khan* were against the unity with Sindhis. They supported the divided and rule strategy of Zia. In these events the agents of the establishment also played their role to instigate the politicians and common peoples. During this phenomenon the relations became hard between President Mohammad Zia-ul- Haq and Prime Minister Mohammad Khan Junejo. Zia dismissed his government, dissolved the assemblies and nominated Ghulam Mustafa Jatoi as a caretaker Prime Minister of Pakistan. Even after the dissolution of the Assemblies the ethnic riots were continued. Hyderabad city was the center of the riots between the Muhajirs and Sindhis. On 18th of June 1988, students of Sindh University were going to participate in the procession before the press club of Hyderabad, when buses of the university reached near Municipal Office, the fires were open from Baldia office and at least 8 students were died on the spot. (www.fas.org)

* Later Azim Ahmed Tariq was killed by unknown Persons and Aafaque Ahmed, Badar Iqbal and Iqbal Khan formed their own organization Haqqi after the differences of Altaf Hussain.
During that phenomenon unknown person attacked on Mayor Hyderabad Aftab Ahmed Shaikh on 17th of July 1988. Police blamed on Bashir Khan Qureshi and Niaz Kalani leaders of Jeay Sindh Students Federation.** The riots spread in the city and at least 8 people were killed. The situation of the cities of the province became worst. G. M. Sayed told newsmen on 22nd of July that government and Altaf Hussain was responsible for the deteriorating law and order situation and he further told that Altaf Hussain has become arrogant and inflated. On the following day, Altaf Hussain was called by Sayed at Hyder Manzil and the two leaders met and remove misunderstandings. (www.fas.org)

After the dialogue between Sayed and Altaf Hussain, the tension reduced between the Jeay Sindh Tahreek and the workers of MQM but still situation was not normalized. In the month of August the APMSO workers attacked on Sindhi Students in the educational institutions of Karachi. During this period General Zia died in Air crash on 17th of August 1988. Senate Chairman Hula Ishaq Khan became acting President of Country. General Zia was passed away but his strategy was continued. In the month of September APMSO leaders under the guidance of five councilors attacked on the Sindhi Students and lecturers in Karachi University and other colleges of the cities. So the riots were continued, “On 30th of September 1988, the worst carnage of Hyderabad history took place in which more than 150 persons were killed without the discrimination of language and ethnic relations. (www.fas.org) K. M. Arif wrote that more than two hundred people were killed in the firing of the political militant. The majority of the killed peoples belonged to Muhajir community. (Arif 2001, p-228) MQM and government blamed on Jeay Sindh’s faction of Qadir Magsi. On following day i.e. 1st October 1988, MQM preplanned attacked on the houses of Sindhis and more than 90 Sindhis were killed in Karachi. (www.fas.org)

In Sindhi Muhajir ethnic violence at least 1000 people of both sides were killed. during the years of 1987 to 1991. (www.fas.org) In 1991 MQM splits into two groups i.e. MQM Altaf lead by Altaf Hussain and MQM Haqiqi leaded by Aafaq Ahmed. After the division of the MQM the quarrel was started between them. After that the riots between Sindhis and Muhajirs were reduced. The bloody ethnic riots left wounded history of the country; the fraternity and brotherhood does not exist even still today in the land of Sindh, which was the land of peace and

** Jeay Sindh Students Federation the students wing of Jeay Sdindh Tahreek
love. The conflict between the various ethnic groups still continued some time it’s on peak and some time is reduced. The governments are failed to solve this problem smoothly.

3. Conclusion and Suggestions

The migration of the peoples towards urban areas of Sindh province is the main reason of the ethnic conflict, tension and riots. The peoples are migrated from the rural areas to the urban areas, in the search of jobs and employment. In 1981 the Census calculated a net migration to total population ratio of 9.6% for Sindh. (Ahmed 2000) The migrated peoples from Punjab and NWFP are easily success to get jobs, due to their relations with civil and military bureaucracy. The illegal emigrants of Bangladesh, India, Burma and other countries are settled in Karachi. Many of them are absconder from their respective countries. They are involved in crime and ethnic riots. Saveda Hina quoted in her thesis that “at least 20.2 million illegal emigrants were settled in Karachi only and they are involved in the criminal activities, and some of them trained for the terrorist activities.” (Hina 2003, p-118-119)

A Large number of the Biharis were illegally entered in Pakistan and settled in Karachi. They joined to MQM. The Biharis were on front line during the riots between Muhajirs and non-Muhajirs in Karachi.

Military rules also the main reason of the conflict. The military governments of General Ayoub Khan, General Zia proved this. The governments of Ayoub Khan and General Zia, supported and patronized to Pakhtoon and Punjabis. Military rulers followed the policy of Divide and Rule to linger on their dictatorial rule. Due to this attitude and policies of Army rulers, they created tension among the various ethnic groups in their self interests. So the military rule also one of the reasons of conflict.

In the ethnic riots we cannot rule out the foreign involvement. Many workers of the Afghan agency KHAD were entered in Pakistan in the shape of the Mujahdeen during Najeeb government. They were involved in the activities in which they created the disturbance in the cities. Numbers of Afghan Muhajirs were directivity participated in the ethnic riots. The ammunitions and weapons reached to the various ethnic groups through the Afghan people. Anees Jeelani said about the ethnic riots that “Afghan policy of the government and the long years of political suppression and deviation from constitutional rule responsible for the catastrophe.” (Jeelani 1991, p-274)
India also involved in Sindh crises, the Indian intelligence agency Research and Analysis Wing (RAW) directly operate the activities in Pakistan to counter the Kashmir issue. The links of MQM and India are not hidden the All India Radio Urdu Service openly support to MQM in its programs, Many absconder of MQM cross the border and live in India under the shadow of the Indian government. Number of Indian citizens illegally entered and settled with the help of the Urdu-Speaking bureaucracy and MQM. Those migrated people are involved to create the disturbance in Sindh province in the shape of the ethno national and sectarian riots. Also some Hindus are worked for the Indian governments. Brigadier Sayed A.I Tirmazi, wrote in his book titled ‘Profiles of Intelligence’ about that interference of Indian government in Sindh as under “The province of Sindh seems to be on the top of their hit list RAW has been quite successful in creating a serious situation of anarchy and lawlessness in one of the most peaceful regions and the economic nerve center of Pakistan.” (Tirmazi 1995, p-145) Teesta Ghosh also wrote about the Indian involvement as under: “India can provide moral and political support to groups such as MQM.(Gosh 2003, p-123) India also used ethno national organizations, in this connection MQM was favourite organization for India, which was in a position to create the disturbance in the hub economic city of Pakistan. That was clear from the writings of Indian Counsel General of Karachi Mr. Mani Shanker Ayier “The possibilities of secession in Pakistan have decreased significantly, Because of the Soviet intervention in Afghanistan. Pakistan is more interested in that country. Wali Khan is alone and he is surrounded by the pro-establishment in Pakhtoons in the NWFP. Bloch’s have either joined the Pakistan establishment or live in a self-imposed exile. Sindhis are supporting either PPP or other federalist parties. Only a few of them still cherish the fantasy of Sindhu Desh. And their influence in Sindh is marginal. In these circumstances the MQM is now the unrivalled power center of Karachi politics. Though the MQM is divided against itself it is united against all non-Muhajirs. Thus the MQM is a force to be reckoned with Aiyers Pakistan Papers.” (Shah 2003)

The ethnic conflict and riots in Sindh were the result of the injustice and favoritism. So the conflict and tension reduced in Sindh to stop the migration from the country as well from any part of the world in this regards the hard steps may be taken by the government to stop the migration. The justice to all the citizen without any discrimination to getting the jobs, employment in government, Semi Government as well as in private sectors.
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Sayed G. M (not mentioned) *Azadi Choo Ain Chha Lai* p,146


Sindh Wikipedia the free Encyclopedia


Petroleum Oil & Lubricants Consumption Trend in Pakistan (A case study of Market Share of Pso & Shell in Various Products)

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Abstract
According to international energy agency & economic survey of Pakistan, consumption of petroleum products has increased by at average rate of 7% per annum from 96 to 2007. It can be attributed to (1) High consumption of HSD in transport sector. (2) Increase in no of vehicles by auto financing. (3) High demand of FO in power generation & other industries.(4) Mogas prices are too high because of heavy taxes by government. In Pakistan total oil requirement is 6.5 MT, domestic production contributes 2.5 MT but remaining is fulfilled by import i.e.4MT.crude oil import increase at 61% because of refineries operation especially of PARCO but finished product import is decreased by 23%. During the last fiscal year, Pakistan used billions of dollars of its prestigious tax payer’s money for import of crude & other petroleum products. Secondly, expensive fuel is not only issue; fuel handling capacity in Pakistan is also an emerging issue. Fuel handling capacity in Karachi is reaching its maximum ad with the construction and operation of new sea port at Gwadar, the problem does not seem to resolve as since long fuel has been transported from Karachi to rest of other country but now onward it might also be coming from Gwadar. The other suitable sources available to OMC’s as substitutes product for energy are CNG, LPG, COAL and LNG.

Keywords: Petroleum Oil & Lubricants, Consumption, Trend, Market Share, PSO, Shell, Products
1. Introduction

According to international energy agency report since 1980-2000 petroleum products consumption is increasing at the rate of 07% per year. Almost 80% consumption in Pakistan includes residual fuel oil and Gasoil.

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<tr>
<th>Gasoil</th>
<th>Residual Fuel</th>
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<td>High Speed Diesel (HSD)</td>
<td>Furnace Oil (FO).</td>
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<td>Light Diesel (LDO)</td>
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Consumption pattern of petroleum products in Pakistan's s is pretty unusual from its neighbor countries and other main regions. FO is well below 20% in most other regions, with the exception of the FSU and Iran. Pakistan consumption of High Speed Diesel (HSD) & Light Diesel (LDO) is higher than gasoline (Mogas/petrol) in all main regions with the exception of OECD/North America. Pakistan's gasoline share is noticeably lower, and similar to India.

2. Gasoline Consumption Pattern in Pakistan

Gasoline commonly known as (Mogas/petrol) is principally consumed in the transport sector, for equally business and personal consumption- in general market has grown-up about 6.5% a year more than the past 03 decades. But the motor gasoline consumption is increased up to only 02% per year since 1985because of heavy taxes (nearly 53% of IPP) fixed by government that makes its price double in comparison of last years. Literally increase in tax on gasoline is because of government promise with PARCO for surplus production to retain a guaranteed profit until 2008 by government favor. if any decrease in profit of Parco, it is bear by government in form of heavy taxes that are recovered from public. But I think it is a wrong method because high prices shifted the consumers from gasoline to its substitute and it become in surplus and moved for export. Consequently a substitute product has been introduced i.e. CNG at a cheaper rate (its price is half of the motor gasoline).
The picture for the share Of OMC's is clear that the share of Pso in motor spirit/petrol was declining rapidly at a CAGR of 3% from 1996-2001 and increased 1% in 2002, in 2003 Pso was able to regain lost ground & company improved its sales by 5%. With brand preference on its side and the retail visual identity concept initiated, shell was able to give PSO a run for its money until 2003, when PSO regained market leadership status following a list of aggressive mkg initiatives. As a result, from 2003 onward, shell has posted a negative MOGAS volume CAGR of 5% where its market share has fallen from 39% to 31% over the same period. Going forward with MOGAS accounting for 13% of the company's product mix, we estimate shell to post a 4 year volume CAGR of -1% due to continued aggression from PSO to maintain market share and rising penetration from new entrants in the sector. PSO position from 96 -2003 was good in MOGAS/motor spirit /petrol business but also victimized in 03 like but recovered as it did by PSO. With increasing penetration the companies are likely to witness growth in MOGAS/motor spirit /petrol as per their own strength.

3. Furnace oil Consumption Pattern in Pakistan

Furnace oil (FO) is the main product in the black oil segment constituting 97% of total black oil sales volume and 32% of total POL product sales. Furnace oil is primarily used for power production, while about one quarter is consumed by industry. It use grew at an average rate of 13.6% from 1980-2000 but its volume has gradually declined (between FY01 to FY05) due to higher FO prices leading producer & consumers to switch towards alternative thermal generation.
methods particularly gas-based generation. Resultantly, FO volumes have posted a 5 year CAGR of 9%. PSO is the current market leader in FO sales volume due to a captive market catering to independent power producers (IPP’s) through guaranteed fuel supply agreements (FSA) & WAPDA is the 2nd consumer and also the customer of PSO.

Rising power demand, lack of water availability and gas-supply constraints have changed the tale for FO in FY06 & its volumes increased by 12%YoY. With Hub Power connected to the KESC grid, expected erratic FO consumption by Hub Power to normalize going forward. For FY07, FO sales volume expected to post a marginal increase of 2%YoY. Keeping in view the excessive rainfall during the current monsoon season, Going forward, with a looming power shortfall in excess of 5,500MW facing the country by 2010, the GOP is attempting to speed up the investment process in the power sector to set up new/additional capacity on a fast track basis. If this occurs, FO volumes should post a 4-year CAGR of 4.7%.

In above situation of FO supply no doubt PSO will is likely to remain ahead in it subject to the vital storage capacity is at its port and the privatization will be takeoff from the PSO. If the GOP will be impending PSO in privatized and the calculations for the requirement of power on oil based will remain same then shell has good opportunity to run for money in FO.

Since fiscal year 1996, demand growth for petroleum products has slowed, and decline in the year 1998-99 in part because of the slow down in economic growth to near 02 %of GDP. While FO demand continued to grow at a relatively strong pace of 04%, before declining in fiscal year 2002. Consumption fell slightly in fiscal 2001 and decline 4.3% in 2002 with declines in all sectors.

![Figure 2: PSO and Shell Share in Furnace Oil (FO) in MT since 97-06](image)
PSO is the largest supplier of FO in Pakistan commanding a market share of 79%. PSO being a Part and parcel of state-owned enterprise, benefited by receiving exclusive rights to supply FO to Independent Power Producers (IPPs). This was an outcome of high GDP growth rates envisioned for Pakistan in the early 90s leading to establishment of several private sector power projects. Under guaranteed Fuel Supply Agreements (FSA) with IPPs backed by the GOP, PSO received exclusive rights to supply eleven Independent Power Producer (IPP) FO requirements. However, excluding FY06, the underlying story for FO has been subject to change where despite rising power demand, FO volume has witnessed a gradual decline. Shell sales in FO was limited to its product mix from 96-2002 but after 2003 its volume however declining at an average of 23%despite high demand by 61% YOY signaling an exit by SHELL from this low margin product category. Attock Petroleum was able to become the country's second largest FO supplier behind the state-owned PSO. Caltex and Total both was in moderate business of FO during 96-02 but after to yet the have drastically lost the same. Going forward, we foresee the company to continue benefiting from growth in FO demand due to the continuous rising power requirements of the country. The company also benefited from rising demand to export markets particularly Afghanistan and in the process became the second largest exporter of petroleum products to that region.

4. High Speed Diesel Consumption Pattern in Pakistan

High Speed Diesel is a component of Gasoil in Pakistan that is largely consumed in transport sector & its consumption rate is increasing almost 6.5%. This product is taxed in comparison of motor spirit/gasoline much less so many of transporters either commercial or personal users shifted towards it (HSD). Its low prices also attract low income people & industrialist & its consumption among POL is almost 40%.in Pakistan total refinery production is about 11.3mt/Y.out of this total 60% is HSD & FO.Because of local refineries output especially of PARCO import of refined product is decreased up to 23% but crude import is increase 61%.HSD imports fell 1 million ton
PSO is the market leader in HSD sales volume with a market share of 59%. From 97-05 PSO HSD volumes has posted a CAGR of 1% where in FY06, HSD volumes declined by 6%YoY. The decline in HSD volumes was due to the delay in agricultural activity, CNG fueled buses, use economization and the commencement of the white oil pipeline project (WOPP) resulting in reduced tanker traffic in the transport of HSD throwing a wrench in the correlation with GDP growth. Going forward, with the economy set to grow at 6% I over the next five years we expect the correlation to develop again linking HSD demand with the GDP growth rate. However, we have accounted for the change in industry dynamics and expect PSO to post a 4-year HSD volume CAGR of 2%. Shell position in HSD was moderate from 97-03 at the rate of —. Relative to the industry's 5-year volume of CAGR of 1%, shell has posted a decline in HSD volume at a negative 5-year CAGR of 4%. In FY05-07 shell posted a decline of 13% YOY in HSD volume relative to 5% decline by the overall sector. With no Expansion in sight of its retail network, the company only has approximately 588 retail outlets located in Punjab against over 2000 such sites of PSO. We expect PSO to remain the dominant force in HSD volume. As for shell, the expectation to post a flat 4%/year HSD volume.

Market dominance for PSO stems from its extensive network coverage throughout Pakistan particularly in the province of Punjab. With agriculture activity concentrated in Punjab, the province on the average consumes approximately 60% of total POL products.

5. JET FUEL (JP-I) Consumption Pattern in Pakistan
Jet Fuel is an aviation fuel and constitutes 12% of total white oil in Pakistan. Its consumption is going up 15% per year (1.25mt) because of increase in economic activity in Pakistan by airline
services and also no of airlines are also increased. Not only is this but jet fuel export to Afghanistan also ranged to 42% for business both for civilian and for military use.

In late 1989 PSO had realized from the outset that it needs to join hands with an internationally accredited company for aviation business. For this concern they has signed an agreement with Air Total International France for global aviation business .for that purpose in 1990 they constructed state of the art fuel farm facility at the newly developed Allama Iqbal International Airport at Lahore. As for Shell it’s an international brand so mostly people and companies preferred its products because of international brand and quality assurance. Many of airlines working in Pakistan their first priority is shell then caltex if supply is assured.

Jet fuel is entitled as export driven product from POL.PSO is the current market leader in aviation fuels. Company has operations at 8 airport and supplies fuel to domestic as well as international airlines from 96-03 Pso was enjoying a 70% share in JP-I business but it was decreased & fall down up to 62% bcz of shell and caltex got the supplies of jet fuel to domestic & international airlines & also by the entrance of new OMC 'S like Attock have got a share at CAGR of 1.4 in jet fuel.

6. Lubricants Consumption Pattern in Pakistan

In volume terms, lube contributes approximately 1% growth in POL Product volume. However, the importance of lubricant stems from the fact that it is the only completed deregulated white oil product since 1996 that earn the margin at the range of 35-50%.Owing to this high growth in profit the company has continued with its focus on Lubricants.
Shell lubricant brands of Rimula, Helix and Advance have a continue preference, contributing appreciably to profitability. Shell has managed to increase its market share in the Lube product category from 40-44% during research period also have a potential for further increase in it but because of national entity hold by PSO, acquired major contracts of lube supply like to Pakistan steel mill, not able to lead from its existing share but close the window of its further growth in 2003-04. However, with the rise in competition and improving product quality from its competitors, Shell's brand name is finding it hard to retain market share. In 2005 despite of maintaining the highest throughput per site, Shell Pakistan is facing a declining trend.

In volume terms lube contribute approximately 1% towards POL products volume. However, the importance of lube stems from the fact that it is the only de-regulated white oil product segment where profit margin range from 35-50%.

With the posting a 5-year CAGR of 5% for the overall industry it has performed at par with industry. Going forward, and expect Shell to leadership status in the high margin product segment to perform at par with the industry by posting a 4-year.

Figure 5: PSO and Shell share in lubes in MT since 1997-06

7. Kerosene Consumption Pattern in Pakistan

It is regarded as inferior good because of its usage problem. Actually it is a transition fuel because before this people are using biomass then now they use it as modern fuel. The use of kerosene quickly disposes off in the following conditions if :-

i. LPG or electricity is available
ii. Higher prices because of heavy tax
iii. Its availability is uncertain
Figure 6: PSO and Shell share in Kerosene in MT since 97-06

From the above figure it is very much clear that 70 -80% requirement of kerosene supply in Pakistan is fulfill by PSO and near to 20-25% by Shell. The trend of its usage is same throughout ten years but it decline in 1999 in general because the government tax take on this product is 30% but in 1999 it was increase up to 50% in form of petroleum levy.

Figure 7: PSO and Shell share in HOBC in MT SINCE 97-06

The above data of Pso and Shell share in HOBC is shown that the PSO market share from 97-03 was attractive and profit generating to company but become down for the year 03-04 but quickly regained in 05 till to yet with relative increase of 2% of last years, "the share of shell for HOBC from 1997-03 was rising but down in 2004, it was recovered by shell in 05 & maintained till to yet."
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The Three Crisis: Oil Prices, Climate Change And International Debt, Feasta Research
Assessing Environmental Sustainable Mobility In Nigeria

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Abstract
The purpose of this paper is to determine the extent to which Nigeria’s Transport Industry enhances environmental sustainability in Nigeria and offer guidance to transport planners on effective ways to make progress towards environmental sustainable transportation in Nigeria. The finding is that overall mean score was 2.74 which was lower than the expected value of 3.00 on a 5 point Likert scale. Test of hypothesis using one sample Z-test at 5 percent level of significance, indicated that calculated z was -13.3744 with significant probability of 1.0000, which was greater than 0.05; thus the test was not significant at 5 percent of level of significance. Therefore, it was concluded that the extent to which the Nigeria’s Transport Industry enhances environmental sustainability in Nigeria was not significantly above average. To achieve environmental performance expectations in Nigeria, the transport stakeholders should employ the environmental and management system approach.

Key words: Nigeria, Transport, Industry, Enhance, Environmental, Sustainability.

1. Introduction
The transport sector is a driver of economic growth and private motor vehicles have contributed significantly to perceived improvement in the quality of life (United Nations Economic and Social Council (UNESC), 2008). The industry is a strategic catalyst for overall economic growth in any country. For instance, it accounts for 10 percent of the world Gross Domestic Product (GDP) American Association of State Highway and Transportation Officials (AASHTO), (n.d.). In United States of America (USA), for example, the transport sector employs about 10 percent of the nation’s workforce and contributes more than 11 percent of the GDP (The Federal...
Transportation Advisory Group (FTAG), 2001). In a similar trend, in European Community (EC) Countries, transport sector, accounts for 7-8 percent of the GDP Gudmundsson and Höjer (1996); in India it was responsible for 5.5 percent in 2007 World Bank, (2010); while in Nigeria it contributed about 3 percent of the GDP between 2003 and 2007 and employed a total of 1318,688 or 4.64 percent of 28,421,008 workers engaged in all sectors of the economy between 1999 and 2005 (Ugboaja, (manuscript, a) see also Nigeria National Bureau of Statistics (NBS), 2006 and 2008).

However, one of the negative impacts of transportation is its reliance on non-renewable fuels. For instance, in 2005, the transport sector consumed a total of 2,067 million tons of petroleum products or 60.4 percent of 3,420 million tons of petroleum products utilized worldwide. Even through, transport sector consumes 22 percent of the world energy, burns 25 percent of fossil fuel globally and produces 30 percent of the world air pollution and green house gases (AASHTO, n.d); it is the foundation of the US entire economy and quality of life (FTAG, 2001). In UK also quality of life depends on transport and it to helps make the economy tick (UK Department for Transport (DfT), 1998). These opinions expressed by the FTAG and DfT are true in most countries of the world because transport provides access to work, vacation, recreational activities and even, is an integral part of health care system, for delivery of medical services and supplies among others. In Africa the importance of transport cannot be over emphasized since a good transport system is required to support the livelihood of the people (Ugboaja, 2010).

1.1. Sustainability

The word sustainability is derived from the Latin word:, sustinere (tenere to build sus up). (Wikipedia, 2010). Succinctly, sustainability is the capacity to maintain, support or endure. Similarly, Brundtland commission of the United Nations (1987) defines sustainable development as development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.

Invariably Wikipedia argue that sustainability applies not only to human sustainability on Earth but to many situations and contexts over many scales of space and time, from small local ones to the global balance of production and consumption. For example, in transport term, it came to use as a logical follow-up from sustainable development principles and it is used to describe modes of transport and systems of transport planning which are consistent with wider sustainability issues.
Sustainable transportation is an expression of sustainable development in the transport sector based on the broader concept of sustainable development outlined by the Brundland commission adapted to meet current and future mobility and accessibility needs without resulting in undue negative externalities (American Association of State Highway Transportation Officials (AASHTO) n.d.).

Furthermore, AASHTO defines sustainable transportation as the provision of safe, effective and efficient access and mobility into the future while considering the economic, social and environmental needs of society.

In a similar manner, Professor A.D. May contends that “a strategy which achieves improvements in inefficiency and accessibility without degrading the environment or increasing the accident tolls is clearly more sustainable” (May, 2001 P. 48).

Moreover, United Nations (UN) at its world summit in 2005 argues that sustainability makes economic, environmental and social impacts on the society UN (2005) and as a result these impacts are often referred to as the three pillars of sustainability (World Resources Institute (WRI) (2004); Ugboaja, in press).

However, population growth, increased economic activity and growing incomes combine to generate higher demand for transport services worldwide. For example, the world population doubled from 500 million in 1650 to 1 billion peoples in 1850. Also in 2009 the global population was 6.9 billion and is projected to reach 7 billion by 2012 and will exceed 9 billion by 2050 (Wikipedia, 2010). In this regard Schafer and Victor (1997); United States Department of Transportation (DOT) (1999) argue that global demand for passenger transport services is predicted to grow from 26 trillion passenger kilometers in 1990 to 103 trillion passenger kilometers in 2050 on average. Inevitably, the growth in transport demand contributes to several major environmental pressures including pollution; traffic accidents and congestion; resources, depletion, waste accumulation and disruption of nature and cities.

Consequently the growth in transport demand and its attendant negative impacts necessitated the introduction of the sustainable transport policies in many countries of the world to deal with the threats pose by transport system (Gudumundson and Hojer, 1996). Although, in Nigeria the Federal Government of Nigeria (FGN), in 1993 introduced National Transport Policy, Federal Ministry of Transport (FMT), (1993); and FGN Honourable Minister of Transport attempts to evolve strategies for the policy implementation, in 2002, Maduekwe, (2002) it is observed that
no work has dealt with the extent to which the transport industry enhances environmental sustainability in Nigeria.

Against this background the author’s interest in this work arose from the concern to fill this void by investigating the transport industry to determine the extent to which the industry enhances environmental sustainability in Nigeria.

1.2. Purpose of the Study

The purpose of this study is to determine the extent to which Nigeria’s Transport Industry (NTI) enhances environmental sustainability in Nigeria.

1.3. Hypothesis for the Study

Hypothesis for this work is:

Ho: The extent to which the Nigeria’s Transport Industry enhances environmental sustainability in Nigeria is not significantly above average.

Hi: The extent to which the Nigeria’s Transport Industry enhances environmental sustainability in Nigeria is significantly above average.

2. Literature Review

2.1 Environmental Sustainability

According to the American Association of State Highway, and Transportation Officials (AASHTO) (n.d.), sustainable development goals include; to meet human needs and improve quality of life; to live within the earth’s ecological carrying capacity and maintain or enhance its natural capital; and to protect future generations from reduced quality of life. These goals are realized through the three pillars of sustainability:

i. Economic sustainability: This is to ensure that the financial and economic needs of current and future generations are met.

ii. Social sustainability: This concerned with improvement of quality of life for all people and promotion of equity between societies, groups and generations.

iii. Environmental sustainability: This is to ensure a clean environment for current and future generations and use of resources sparingly.
For Cato, (2006); Environmental sustainability is concerned with better directed planning of land use and stricter management of demand including the use of pollution and congestion charges, to correct the relative prices of private and public transport. Victoria Transport Policy Institute (VTPI) (2006); in an attempt to clarify what environmental sustainability is identifies the following environmental issues:

i. Pollution prevention:

ii. Climate protection

iii. Biodiversity

iv. Avoidance of irreversibility

v. Habitat preservation and

vi. Aesthetics.

VTPI, further argues that transportation facilities and activities have significant impacts on sustainability. In the case of environmental sustainability the impacts include:

i. Air pollution;

ii. Climate change;

iii. Habitat loss;

iv. Water pollution;

v. Hydrologic impacts and

vi. Noise pollution (see also, Ugboaja, in press and manuscript).

2.1.1 Sustainable Transport Performance Indictors

However, sustainability and sustainable transportation are difficult to measure VTPI (2006) and the concerns of sustainable transportation are too complex to be captured with only one variable (Gudmundsson, 2001).

In order to develop, an innovative approach that would enable an assessment of the rate of progress towards sustainable transportation to be made, the Centre for Sustainable Transportation in collaboration with IBI Group Consultants in 2000 conducted the sustainable transportation
performance indicators project (STPI) in Canada. The aim of the STPI is to develop a set of indicators that can be used to monitor the progress of Canadian transport systems towards sustainability (Gudmundsson, 2001).

Gudmundsson also asserts that the selection of indicators through the innovative approach of the STPI project is to be based on explicit definition of sustainable transportation. One of such explicit definitions of sustainable transportation is that of Gilbert and Tangany (2000) as cited in Gudmundsson (2001) which defines sustainable transportation as one that:

i. Allows the basic access needs of individuals to be met safely and in a manner consistent with human and ecosystem health and within equity within and between generations;

ii. Is affordable, operates efficiently, offers choice of transport mode, and supports a vibrant economy.

iii. Limits emissions and waste within the planet’s ability to absorb them, minimizes consumption of renewable resources to the sustainable yield level, reuses and recycles its components and minimizes the use of land and the production of noise (Gudmundsson, 2001, pp 36-37).

Accordingly, based on this definition, 18 elements within the three pillars of sustainability; economic, environmental; and social were identified;

For environmental dimension the following elements are outlined:

i. Limiting emissions

ii. Limiting waste

iii. Minimizing consumption of non-renewable resources;

iv. Limiting consumption of renewable resources to the sustainable yield level

v. Reusing and recycling of components;

vi. Minimizing land use and

vii. Minimizing noise intrusion.

The benefit of definition based indictors is to build on a logical and comprehensive frame work from which to identify indicators. Gudmundsson further list some environmental indicators which include: air pollution and air quality; climate change, energy, noise, habitat, land use and biological resources, water quality; hazardous materials and waste / recycling.
Similarly, VTPI (2006), Litman (2009); proposed some environmental sustainable indicators that can be used to evaluate environmental sustainability. The indicators include:

i. Depletion of non-renewable resources,
ii. Climate change emissions; air pollution;
iii. Noise pollution;
iv. Water pollution;
v. Land use impacts;
vi. Habitat protection; and
vii. Roadway aesthetic conditions.

In general, environmental sustainability assumes that transport has significant effects on environment and these effects should be addressed explicitly in the design of programmes and the systems. As can be evidenced from the above discussion transport is a major contributor to climate change since it is almost totally dependent on hydrocarbon energy (Oxford Transport Studies Unit, 2006-2010). For example, road traffic is a major contributor to air pollution in the UK and about 24,000 vulnerable people are estimated to die prematurely each year and the same number are admitted to hospitals because of exposure to air pollution, much of which is as a result of road traffic (UK Department for Transport (DfT), 1998).

In this light, the DfT contends that there is need to have transportation system which is conducive to people’s health and provides a better quality of life now for everyone without passing onto future generations a poorer world. Therefore, it is imperative to examine the Nigeria’s Transport Industry using the sustainable transportation performance indicators to determine the extent to which the industry enhances environmental sustainability in Nigeria’s transport systems.

3. Methodology
The study was carried out in selected transport firms in Nigeria to determine extent to which mobility system in Nigeria enhances environmental sustainability. The survey research method was adopted for study. In sample size determination and selection, simple random sampling and stratified random sampling techniques were employed. Data were collected from both primary and secondary sources and descriptive and inferential statistic were employed in the analysis. The instruments for gathering data were structured questionnaire augmented with additional information from oral interview. With the aid of Yamene’s (1964) statistical formula, a random
sample of 127 (or 68.28 percent) transport firms were selected for the study, out of a population of 186 registered transport firms in Nigeria as of 2005 (ALBON (2005) and NMA, 2005). Proportion of each strata was determined by Bowley’s proportion allocation formula. (Kumar, 1976). From the sample, all available managers in the firms were included in the study. On the whole, there were 1270 managers in the 127 firms, which were used for the study. For completeness, a sample of 400 transport facilitators, referred to as non-transport workers were included in the study, using Walpole (1982) formula.

Therefore, a total number of 1670 questionnaire were administered to the respondents, out of which 1452 questionnaire were completed, give a response of 86.95 percent. To draw a valid conclusions for the study, the hypothesis formulated was tested with an aid of one sample Z-test statistic at 0.05 level of significance.

4. Data Presentation and Analysis

4.1. Data Presentation

The research question for this study is: to what extent does the Nigeria’s Transport Industry enhance environmental sustainability in Nigeria?

The extent to which the Nigeria’s Transport Industry enhances environmental sustainability in Nigeria is considered under cohort “C” section of the questionnaire (see Table 1 Appendix 1). The respondents were expected to react to the statements along a 5-point Likert scale: VH= Very High; H = High, U = Undecided; L = Low; VL = Very Low. The statements were scored 5; 4; 3; 2 and 1 for VH; H; U; L; and VL; respectively.

A total of 1670, questionnaire were administered to the respondents, out of which 1452 questionnaire were completed, returned and found analyzable; given a response rate of 86.96 percent. The questionnaire response rate is shown in Table 2 Appendix 2.

4.2 Analysis of the Data

The responses of the respondents, that pertain to the research questions were analyzed, using means procedure at 5 percent level of significance, to provide answers to the research questions. The means procedure is presented in Table 3 Appendix 3:
The Table 3 Appendix 3 shows that five items were considered, in order to determine the extent to which the Nigeria’s Transport Industry enhances environmental sustainability in Nigeria.

The items are:

- Item 15; the extent of land devoted to transport facilities in Nigeria
- Item 14; the extent of water pollution resulting from transportation services in Nigeria.
- Item 16; the extent to which provision of transport facilities result in the loss of preservation of wide life habitat in Nigeria.
- Item12; the extent of air pollution resulting from transportation services in Nigeria and
- Item 13; the extent of noise pollution resulting from transportation services in Nigeria.

Two of the items, were accepted as major areas, where the industry enhances environmental sustainability in Nigeria, since they have means scores greater than the expected value of 3.00, on a 5-point Likert scale. These are, items, 15; and 14 (the extent of land devoted to transport facilities in Nigeria; and the extent of water pollution resulting from transportation services in Nigeria) with means’ scores of 3.31 and 3.10 respectively.

The other three items, were rejected as major areas, where the industry does not enhance environmental sustainability in Nigeria, since they have means scores lower than the expected valued of 3.00 on 5-point Likert scale.

The items are:

- Item 16; the extent to which provision of transport facilities result in the loss of preservation of wide life habitat in Nigeria
- Item 12; the extent of air pollution resulting from transportation services in Nigeria and
- Item 13; the extent of noise pollution resulting from transportation services in Nigeria.

The item with highest score, in term of the extent to which the industry enhances environmental sustainability in Nigeria, is item 15, (the extent of land devoted to transport facilities in Nigeria) with mean score of 3.31. This is followed by item 14, (the extent of water pollution resulting from transportation services in Nigeria) with mean score of 3.10. The item with the least score, in terms of the extent to which the industry enhances environmental sustainability in Nigeria is item 13,
(the extent of noise pollution resulting from transportation services in Nigeria) with mean score of 2.06.

The overall mean score of the five items is 2.74, which is lower than the expected value of 3.00 on a 5-point Likert scale. It is therefore concluded that the extent to which the industry enhances environmental sustainability in Nigeria is below average.

4.3. Test of Hypothesis

To draw a reliable conclusion from the above means analysis on the research questions, the hypothesis (see section 1.3) was tested with aid of one sample z-test at 5 percent level of significance.

The computed z-test is presented in table 4 appendix 4.

From the table 4 appendix 4, the z calculated value of the hypothesis is -13.3744, with significant probability of 1.000, which is greater than 0.05. Thus, the test is not significant at 5 percent level of significance. This means, that the null hypothesis is not rejected (P>0.05). It is therefore, concluded, that the extent to which the industry enhances environmental sustainability in Nigeria is not significantly above average.

5. Discussion of the Results and Conclusion

5.1 Discussion

The result of means analysis of the data, pertaining to the research question, indicated that overall means score of the five items considered was 2.74, (see table 3 appendix 3) which was lower than the expected value of 3.00, on a 5-point Likert scale. As a result, it was concluded that the extent to which the industry enhanced environmental sustainability in Nigeria was below average.

To draw a valid conclusion, from the means analysis on the research question the study hypothesis, was tested with the aid of one sample z-test at 5 percent level of significance. The result of the test of the hypothesis indicated that the z-calculated was -13.3744, with significance probability of 1.0000, which was greater than 0.05 (see table 4 appendix 4). Thus, the test was not significant at 5% level of significance. This means, that, the null hypothesis was not rejected (P>0.05). It was therefore, concluded, that the extent to which the industry enhanced environmental sustainability in Nigeria was not significantly above average.
5.2 Implications of the Results

The evidence obtained from the means analysis of the research question and test of hypothesis, undoubtedly showed, that although the industry has fostered appreciable change, it has not had the substantial and intended impact on the environmental sustainability. To a large extent, the reason for this, is owing to lack of appropriate environmental stewardship and mechanisms for compliance. These mechanisms include; the scheme or approach and implementing organizations (transport firms) characteristics, which may seriously impede the introduction of a scheme or approach such as environmental management system and smooth implementation of the scheme. Prominent among these characteristics were unsustainable approach and implicit policy, uncommitted leadership, insufficient resources and lack of relevant experience by the transport firms. This observation is supported by Nachmias (1980), who identifies three factors influencing policy implementation. These factors are: policy, organization and political characteristics. Conceivably, these results suggested that, to the extent that one of the goals of the Nigeria’s transport industry is to enhance environmental sustainability, it served this purpose only in a limited way with regard to:

i. The extent of land devoted to transport facilities in Nigeria;

ii. The extent of water pollution resulting from transportation services in Nigeria,

iii. The extent to which provision of transport facilities result in loss of preservation of wide life habitat in Nigeria;

iv. The extent of air pollution resulting from transportation services in Nigeria; and

v. The extent of noise pollution resulting from transportation services in Nigeria.

vi. Invariably, the objective of this study had been realized to the extent that the study has found that the industry has not significantly reduced the negative impacts on the environmental sustainability issues, identified by Gudmundsson and Höjer, (1996) World Resources Institute, (2004) VTPI (2006, Litman, 2009).

5.3 Conclusion

It was found that promotion of environmental sustainability by Nigeria's transport industry was below average. Following this finding, it was concluded that the industry did not sufficiently enhance environmental sustainability in Nigeria. Therefore it is recommended that transport
stakeholders in Nigeria should make environmental stewardship a part of their mission by employing environmental management system (EMS). This approach is defined by AASHTO as “the organizational structure and associated responsibilities and processes, procedures and tools for integrating environmental considerations and objectives into the ongoing management decision-making processes and operations of an organization” (ASHTO, n.d. p.2).

The EMS approach will enable the transport stakeholders to achieve environmental performance expectations which include:

i. Minimization of waste,

ii. Prevention of pollution

iii. Reduction of resources consumption, and

iv. Minimization of the environmental footprint of transport facilities and activities.
References


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Ugboaja, P.C (Manuscript b) Assessing Social Equity of Nigeria’s Transport System, Manuscript Submitted for Publication.


Appendices

Questionnaire: Cohort C:

Table 1 Appendix 1

<table>
<thead>
<tr>
<th>S/N</th>
<th>Environmental sustainable mobility in Nigeria</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.</td>
<td>The extent of air pollution resulting from transportation services in Nigeria is</td>
</tr>
<tr>
<td>13.</td>
<td>The extent of noise pollution resulting from transportation services in Nigeria is</td>
</tr>
<tr>
<td>14.</td>
<td>The extent of water pollution resulting from transportation services in Nigeria is</td>
</tr>
<tr>
<td>15.</td>
<td>The extent of land devoted to transport Facilities in Nigeria is</td>
</tr>
<tr>
<td>16.</td>
<td>The extent to which provision of transport facilities result in the loss of preservation of wide Life habitat in Nigeria is</td>
</tr>
<tr>
<td>17.</td>
<td>Others (please specify)</td>
</tr>
<tr>
<td>18.</td>
<td>Gender Male ( ) Female ( )</td>
</tr>
<tr>
<td>19.</td>
<td>Occupation transport Related ( ) Non transport Related ( )</td>
</tr>
</tbody>
</table>
Table 2: Appendix 2: Questionnaire Response Rate

<table>
<thead>
<tr>
<th>Description of sample</th>
<th>Sample size</th>
<th>Response Rate</th>
<th>% of stratum Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport workers</td>
<td>1270</td>
<td>1100</td>
<td>86.61</td>
</tr>
<tr>
<td>Non-Transport workers</td>
<td>400</td>
<td>352</td>
<td>88</td>
</tr>
<tr>
<td>Total</td>
<td>1670</td>
<td>1452</td>
<td></td>
</tr>
<tr>
<td>% of Total</td>
<td>100%</td>
<td>86.95</td>
<td></td>
</tr>
</tbody>
</table>

Source: Fieldwork

Table 3 Appendix 3: The means procedure for the Research Question

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Variance</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 15</td>
<td>3.3</td>
<td>1.3181</td>
<td>1.7374</td>
<td>Accept</td>
</tr>
<tr>
<td>Item 14</td>
<td>3.1006</td>
<td>1.3353</td>
<td>0.7831</td>
<td>Accept</td>
</tr>
<tr>
<td>Item 16</td>
<td>2.7493</td>
<td>1.2717</td>
<td>1.6173</td>
<td>Reject</td>
</tr>
<tr>
<td>Item 12</td>
<td>2.5041</td>
<td>1.2136</td>
<td>1.4728</td>
<td>Reject</td>
</tr>
<tr>
<td>Item 13</td>
<td>2.0551</td>
<td>1.2200</td>
<td>1.4883</td>
<td>Reject</td>
</tr>
<tr>
<td>Overall 3</td>
<td>2.7433</td>
<td>0.7314</td>
<td>0.5349</td>
<td>Reject</td>
</tr>
</tbody>
</table>

Source: Field Work (Computer Results)

Table 4 Appendix 4`: One Sample Z-Test for the Hypothesis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Overall 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.7433</td>
</tr>
<tr>
<td>Known variable</td>
<td>0.5349</td>
</tr>
<tr>
<td>Observations</td>
<td>1452</td>
</tr>
<tr>
<td>Hypothesized mean</td>
<td>3.0</td>
</tr>
<tr>
<td>z-calculated</td>
<td>-13.3744</td>
</tr>
<tr>
<td>P(Z &lt;- =Z) one tail</td>
<td>1.0000</td>
</tr>
<tr>
<td>z-tabulated (one tail)</td>
<td>1.6449</td>
</tr>
</tbody>
</table>

Source: Field Work (computer result)
The Role of Information Systems in Scientific Research

Dr. Naim Musa Al-Zeer

Dr. Ahmad Yousef Areiqat

Abstract

This research focuses on the role of Information systems in scientific research. The effectiveness of research depends upon the validity of data which is turned into information. This study also focuses on the importance and vital role of Information and the role of information systems in research related to scientific areas.

Keywords: Role, Information Systems, Scientific Research

1. Introduction

The strength of scientific research depends on using the preliminary data that were revised and turned into information utilized in the preparation of research. For information to be regarded as the raw material of scientific research, it is a major and important input in the process of research preparation. It also represents the output of this work which are used in the future as sophisticated inputs for another scientific research. It can be said, therefore, that scientific research is a continuous circle of information.

In our present time, the age of huge economic blocs, the age of sophisticated technology, the age of speed in everything and the age of globalization, information became available on a wide scale whether in terms of source, strength and credibility. And with the development of communications technology access thereto costs only a little effort and money.

Since information is the basis of knowledge, many organizations, countries and peoples came to be deeply interested in being transformed into knowledge societies. The UNESCO report adopted the concept of knowledge society in its version which was issued in the year 2005 when this report used plural number "knowledge societies" as the more congruent of the changes that are going on in a world which the technological dimension constitutes the cornerstone thereof while new economy and
communication network constitute the two central aspects in its general structure. (Arab Knowledge Report, 2009, p. 32).

Hence comes the importance of the information systems and their effective and positive role they play in the success of the scientific research process. Information systems are the foundation on which the researcher relies in setting the hypotheses of his research to solve the problem which he is trying to resolve. They also constitute the basis used by the researcher to build his opinion and conclusions and through which the decisions that solve the problem are made. For whenever the information are available at the suitable time and place; wherever they were clear, purposeful and correct, and the more updated they are in a method that meets the end in which they were stored and published through electronic networks and databases the more are they decisions taken at the level of organizations or states based on knowledge, cognizance and science instead of randomness and fumbling in taking them.

2. Information as Inputs for Scientific Research:

In order to achieve a common understanding for the meaning of the word "information", we must at first define or get acquainted with the place where information are found. Traditionally the library is the fertile ground for information because libraries house various types of books, authored works, periodicals, researches and theses. But according to the concept of the present time the library is any place where we find the information which we want. The computer is a library. Internet is a library. Electronic sites with the information they contain are all libraries.

The library is regarded to be the fundamental prop and lifeblood for any research institution. Whenever the contents of this library are strong, this strength will be reflected on the outputs of the researches. Moreover, the library forms the basic nucleus of an integrative and specialized information system which in turn forms an axial part of the national information system. Through the mutual conjunction and coherence of national information systems, we will have a regional information system which would finally evolve into a global information system (al-Dawsari, 2008).
In this context, we must point out that, unfortunately, our Arab world lacks a national pan-Arab observatory which prepares quantitative and qualitative Arab indicators. It should also guarantee the creditability of data about Arab scientific research, publication and creativity. This is evidenced by the fact that international institutions complain of the sharp shortage of information coming from Arab countries. Despite the continuous insistence of the United Nations Educational, Scientific and Cultural Organization (UNESCO), only nine Arab states provided complete official information about the situation of their scientific publication and creativity. These states were Kuwait, Algeria, Tunisia, Morocco, Jordan, Sudan, Egypt, Lebanon and Mauretania while information were totally absent from ten Arab states (Arab Information Report for the Year 2009, p. 163).

Availability of information systems first facilitates the work of the researcher and makes him more accurate and closer to reality and secondly because when he wants to discuss a certain problem, the first things he thinks of are the following questions: "What are the data I need for dealing with this problem? And from where shall I get these data?"

Thus the presence of a database which contains clear, frank, purposeful and updated information would save the researcher much money, effort and time. But if such database is lacking or inconvenient, the researcher would find himself forced to move to the basic information center to obtain this information either through interviews, meetings or previous appointments. These may take a long time which may cause the problem to exacerbate and turn into a dilemma which may be difficult or costly to solve because of the effort, time and money in order to get the required information. He may also have to resort to questionnaires which are to be prepared, typed and distributed to individuals and entities that constitute a sample which represents the study population. In this respect, all of us know that the method of collecting all information through a questionnaire is a method surrounded with numerous problems. For example but not exclusively: not all the questionnaires which were distributed are returned to the sender. Also not all the
answers would be filled in. The choice of answers is sometimes a biased one. As a result these shortcomings may be reflected on the results and outputs of the research. Therefore, we have to realize that the efficiency and continuity of scientific research will not be achieved without creating the sphere which supports research and researchers through continuously and systematically providing information (Al-Wabili, 2008).

3. Information as Output:

One of the widespread definitions of scientific research is that it is an organized investigation through following defined scientific methods and approaches of scientific facts to make sure of their veracity and adding new information to them (Yaqūt 2007).

Consequently the researcher uses the information that come in the form of realities, texts, figures, etc. Whenever there good and sophisticated information systems it becomes easy to reach this information. This clearly appears through the keenness of organizations in advanced countries on having mines of information. These mines offer the researcher all what is related to the organization itself and its internal and external environments. This would enable the researcher to get access to solving the problem which he is searching for and suits this solution through many alternatives. Thereby he would agree or at least not disagree with the surrounding environmental variables (Sekaran, 2000, p. 49).

Researchers are regarded to be among the most important information producers since the results of their researchers are used in the study other subjects or resolution of their problems. Over and above, they add to the cognitive stock new pieces of information through the knowledge which the researcher has attained.

When this information is stored in mechanical information systems, they are transformed into systems that support the decision, since the solution of the problem which the researcher dealt with and found a solution therefore often require taking a decision or group of decisions to execute the findings arrived at by scientific research.
The users of information resulting from scientific researches are diverse since the following categories benefit from such information:

i. Researchers and specialists: For it is possible, after evaluation of the results of researches, to use results in other researches, which means enrichment of information stocks.

ii. Decision makers: According to their benefitting from the results of researches, they will allocate larger budgets for scientific research.

iii. Professionals: They are the people who work in a certain specialization.

iv. The general public: It consist of the broad masses of the members of society, which contributes to changing society into a community of knowledge (Al-Dawsary, 2008).

v. Educators and teachers: it is possible here to accredit the findings of scientific researches as information for the preparation of teaching curricula that were not known before.

In this regard, one may recollect an event that confirms this result: when the former Soviet Union excelled the United States of America in the invasion of outer space during the nineteen fifties, the U.S.A. reaction was to change the science curricula and physics in particular. Educational System in America (a documentary program telecast on a television program).

After the completion of one particular scientific research, it will produce two types of outputs. One of them is material and the other is moral. This is represented in a new branch of knowledge from which emanate consultations, training programs and printed material for publication. These printed materials assume several forms such as a periodical report, scientific articles published in scientific journals or a summary of the research paper.

Hence we find that an information enters into a renewing and moving cycle; for once it reaches the outputs stage it enters once again under discussion, analysis and experimentation, then the researcher's recommendation to be transformed into new inputs and a new cycle (Al-Dawsary, 2008).

4. Importance of Information Systems for the Researcher and Scientific Research

The management of information system in a good and effective manner whether these systems are institutional, national, regional or even international offers a great service to scientists and
researchers. In this field we must mention a practical case which the researcher personally practiced. Before a brief period age a scientific research was prepared and was required to gather data about Amman Stock Exchange and the Securities Commission. The researcher found that there was a site on the Internet for the Securities Commission and another for the Amman Stock Exchange. It was revealed that they provide all the information needed for the preparation of any scientific research related to this important economic institution. There are keys each of which requires only one click where it is possible to obtain the information related to the prices of shares separately for each company whether these prices are recent or historic including the opening price for a particular day and the closing price and the highest price and lowest price on which execution was carried out.

There were other known facts related to the size of circulation in its two forms i.e. the size of circulation as a member of the stocks that were circulated or the value of these shares that were circulated on a particular day or a particular year or any period the researcher may wish. Moreover there is a key which gives full information about the conditions of circulation over and above specialized analytical studies which are supported by figures and graphs which clarify the causes of the rise or decrease of the indicator. Moreover the scrutinizer can obtain the names of licensed circulation companies and the addresses of these companies in addition the law of the Securities Commission as well as the regulations of discloser issued by this Commission and all the information covering the needs of the researcher, student, analyzer or investor.

Had such information been unavailable in this regulated way, the researcher should have been compelled to exert much effort and more time plus a high financial cost to obtain such information. The total of these cost would exceed the benefit that could be realized by the results of the research because the obtainment of the information is costly. But the information systems reduced this cost and the researchers a great deal.

For the benefit from information to be meaningful, the states must enter into the network system and its accreditation in this regard.
The following table shows the ranking of some Arab countries according to the guide of network readiness:

<table>
<thead>
<tr>
<th>The Arab Country</th>
<th>The Rank vis a vis the Other Countries in the World (134)</th>
<th>The Value of the Guide of the Internet Readiness</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Arab Emirates</td>
<td>27</td>
<td>4.76</td>
</tr>
<tr>
<td>Qatar</td>
<td>29</td>
<td>4.68</td>
</tr>
<tr>
<td>Bahrain</td>
<td>37</td>
<td>4.38</td>
</tr>
<tr>
<td>Tunisia</td>
<td>38</td>
<td>4.34</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>40</td>
<td>4.29</td>
</tr>
<tr>
<td>Jordan</td>
<td>44</td>
<td>4.19</td>
</tr>
<tr>
<td>Oman</td>
<td>50</td>
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</tr>
<tr>
<td>Kuwait</td>
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<td>Egypt</td>
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<tr>
<td>Morocco</td>
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<td>Syria</td>
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<td>Libya</td>
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<td>Algeria</td>
<td>108</td>
<td>3.14</td>
</tr>
<tr>
<td>Mauretania</td>
<td>109</td>
<td>3.12</td>
</tr>
</tbody>
</table>

(Arab Knowledge Report for the Year 2009)

5. Recommendations

Owing to the importance of information not only with regard to researchers but also with regard to members of society as a whole and to the reputation of the country at the international level, this paper give the following recommendations:

i. Expediting the application of the electronic government in Jordan because this transformation from the traditional government system to the electronic one makes the country itself a haven for information which makes possible the marketing of Jordan in terms of tourism, economy and medical treatment.
ii. Application of electronic government would facilitate for the researchers and citizens at large the obtainment of the information they want at any time. It also facilitates the obtainment of the services which are offered by the government to citizens especially as the electronic system of government is based on the exchange of information and services between the government, business organizations and government.

iii. As regards the Arab level, the Arab world is not lacking in funds, qualified personnel, or thinkers and people of opinion to become equal to advanced nations that respect information and change it into knowledge which benefits Arab citizens without trouble. In this regard Arab countries should agree among themselves either within or without the Arab League to establish an Arab information center supervised and run by an Arab elite of educated people and thinkers.
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The prevalence of job stress among industrial managers
A cross sectional study of managers of the pharmaceutical industries of Hayatabad Industrial Estate, Peshawar, Pakistan

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Abstract
Industrial world is globally known for its stressful environment. It is because of advancements in science & technology which have brought remarkable transformation in the way through which work is carried out in industries which ultimately lead to development of stress among employees. The stressful environment often exerts negative effects upon both physical and mental health of employees. A cross sectional study was carried out in order to examine the occurrence of job stress among the industrial managers of the pharmaceutical industry of Hayatabad Industrial Estate, Peshawar in relation to Individual personal characteristics (age, gender, martial status, number of children, income level, and education level), Job characteristics (nature of work, type of department, job position, working hours, and length of service), & organizational working environments (conflict at work, work over load, poor physical conditions, employment opportunities, and social support from boss/colleagues). For this purpose total 85 managers were randomly selected from seventeen pharmaceutical industries of Hayatabad Industrial Estate, Peshawar. These managers belonged to Labor/personnel, Marketing/Sales, Finance/Account, Store/warehouse and Production/operation Departments and were the in charges of their respective departments. A self administered NOISH generic job stress questionnaire was used for data collection. A multiple logistic regression was performed to estimate odd ratios (OR) for individual personal characteristics, job characteristics and factors present in organizational environment, so that the prevalence of job stress among the managers
can be traced in relation to these characteristics. It was found that the managers in age category of 25 to 30 years were more likely to have job stress (OR=2.054, 95% CI=1.565-2.693). The single managers were more likely to have job stress (OR=1.096, 95% CI= 0.953-1.261) as compared to married. Department wise the managers from marketing department were more likely to have job stress (OR=6.836, 95% CI= 5.33- 6.223) as compared to Finance (OR=5.296, 95% CI= 4.052-6.122). Among the organizational factors the work overload (OR=3.924, 95% CI=3.488-4.415) and less employment opportunities (OR=2.001, 95% CI= 1.885-2.124) were more likely to cause job stress among managers. This study was an effort to trace prevalence of job stress among managers of pharmaceutical industry from a broader perspective by integration of both individual as well as organizational antecedent factors of job stress. In fact the study of antecedent factors of job stress consequently helps the managers to get familiarity with stress related problems in an organization as these problems negatively affect the productivity of an organization in both short as well as long run. There is a need to conduct more research on prevalence of job stress in the other industries of Pakistan, so that over all understanding of job stress can be gained. This will lead to increased awareness of job stress in developing country like Pakistan and both the organizations as well as society will be in position to control job stress and ultimately preventing its devastating effects.

Keywords: Prevalence , Job stress , Industrial managers, Cross sectional study , Managers , Pharmaceutical industries

1. Introduction

The last two decades have witnessed significant transformations in the way in which organizations approach business interactions (Elizabeth Kendall et al., 2003). It is the time where high performance is expected to be the norm. Many organizations demand a high level of quality, service and overall business success. (W.F. Swee et al., 2007). Industrial world is globally known for its stressful environment, which often exert negative effects upon both physical and mental health of workers. Les Worrall et al., 1995 & Madhu Rathore et al., 2009 found in their studies that job stress is not only prevalent among industrial executives but it has also devastating effects in shape of lower productivity and workers’ health complaints.

The job stress is present both in developed as well as in underdeveloped world. It is affecting both business as well as non business sectors. Pakistan is underdeveloped country, which has
suffered from decades of internal political unrests, low levels of foreign investment, and declining exports of manufactures. It has faced high inflations, and hemorrhaging foreign exchange reserves (CIA, World facts book on Pakistan, 2009). These situations have led to development of weak industrial base in Pakistan. The weak industrial base never allowed the industrial sector to grow swiftly and compete in local as well as in foreign markets.

In order to strengthen Pakistan’s low industrial base, Pakistan’s policy makers banked upon small industrial estates to groom an entrepreneurial class, which was not existent at the time of Pakistan’s creation. Resources were augmented to develop numerous industrial estates in all corners of the country and today the number of industrial estates has increased to 72. The industrial estates are distributed in all provinces (A report of Ministry of Industries & Production, Government of Pakistan, 2005).

In NWFP, Hayat Abad Industrial Estate was established in 1963 by the department of industries, Government of Pakistan, which is situated about 15 kilo meters away on south-west of the main Peshawar city. It has total 115 industrial units. In which 17 are pharmaceutical industries (Data base, Sarhad Chamber of commerce Trade & industry, 2009).

The pharmaceuticals industry is one of the important industries of Peshawar which is providing employment to thousands of people. This industry is considered to be one of most innovative, knowledge-based and competitive industry, which is dedicated to provide health care products to the country and is making major contributions to the economic vitality of this country. The pharmaceutical industry of Peshawar can be broadly classified into multinational and national companies. It is alarming fact that none of the local pharmaceutical manufacturing company of Peshawar is FDA approved. (Food and Drug Administration is an international agency setting standards of drugs). On other side the pharmaceutical companies of Peshawar hardly produces any pharmaceutical raw material and almost all raw materials which are used by the Pharmaceutical Industry are imported from Europe, India, China and other countries. The rapid devaluation of Pakistani Rupee has made the imported raw material much costly which adversely affects profitability of the local manufacturers.

Compared to the pharmaceutical industry in neighboring India & China the size of the companies located in Peshawar is small and hence less competitive. The Indian pharmaceutical industry has grown tremendously and is now setting up internationally approved drugs manufacturing plants and also export drugs to many other countries including Pakistan. It will not be out of place to
mention that Pharmaceutical Industry of Peshawar is fully documented and totally controlled by the government. The maximum retail price of each and every medicine manufactured by each and every company is controlled. This industry has never been given any incentive or subsidy by the government in the history of the country, as compared to textile and IT sectors to which in past, the government has given incentives like tax-breaks, R & D and tax rebate. Whereas on the other hand pharmaceutical industry has to bear the same taxes and levies which are bear by the other industries. Thus if such incentives are offered for the pharmaceutical industry, the exports of pharmaceutical products can be increased exponentially (Jawaid Tariq Khan, 2008 & A Report of Daily the Nation, January, 7, 2009).

Pakistan does have a medicine policy and a Drug Act of 1976 but the ministry of health does not have a clear view of what it is up to. The ministry maintains a cordial relationship with pharmaceutical companies and publishes a newsletter with the industry's support. Professional societies like the Pakistan Pharmacists Association do not have the vision to debate or discuss the issues of medicine use. (Zaheer, 2005) On other side multinational companies are producing research based and common products which are promoted in such way that it captures the whole market in short time.

Thus it is clear that the pharmaceutical industry of Peshawar is facing number of problems. Which include unavailability of Bio equivalence and Bio availability Centers of international standard, lack of technical competencies to carry out (WHO) World Health Organization, (FDA) Food and Drug Administration, & (TGA) Therapeutic Goods Administration accreditations, import pharmaceutical manufacturing machinery along with equipments in cost effective ways and market its products in such way that major portion of market is captured.

It is because of such like problems as mentioned above that the pharmaceutical industries are even declared sick in the Hayat Abad Industrial Estate of Peshawar. The example of such sick industrial unit is Jafson Pharmaceutical industry which was declared sick during 2008 according to a news report by Mohammad Ali Khan, 2009.

In fact sick industrial units are those which are proven to be unable to financially sustain themselves. Industrial unit may face a number of bad events & If the occurrence of bad events continue to exist and does not permit the industrial units to pursue the normal course of
operations leading to reasonable utilization of capacity, generation of surplus, debt servicing, etc, it can be presumed that some kind of sickness has engulfed the unit and if this trend grows unchecked, it would adversely affect production and employment in the country besides other socio-economic repercussions. (Sick Industries: Causes, Remedies and Prevention, 2009).

The pharmaceutical Industrial units which face heavy financial loses, face intense market competition, cannot meet international drugs standards, don’t have locally available raw materials, subjected to tight governmental regulations, hit by the dumping of foreign products in market and so many other challenges often adopt downsizing and layoff polices. It also put cuts on the salaries of employees working there, offer fewer salaries to the new entrants, and it cannot maintain good physical working environment. The employees in such units have to work in a very tight routine, whereas these employees have to work for longer hours, perform multiple tasks, face pressure form boss, have both intra as well as inter employees’ conflicts and have often less opportunities for promotions or finding out any other jobs in market.

Resultantly these employees experience job stress because of increasing job insecurity, less salaries, more work overload, lay offs and bad physical environments. But this doesn’t mean that all of the pharmaceutical units of Hayat Abad Industrial Estate are sick and suffering from financial crisis. The main concern is to trace the occurrence of job stress among the employees which are working in these industrial units regardless of the financial position of the unit, so that an understanding can be gained about the different causes of job stress among these employees.

Once the understanding of different factors of job stress is gained it would be easy to suggest any possible solutions. The solutions will help the pharmaceutical industries of Hayatabad Industrial Estate to grow, attain prosperity and provide a better working environment to the employees which are working there.

1.1 Research Problem

In the introduction of study it has been mentioned that the pharmaceutical industry of Peshawar is not only one of the vital industry but is also facing intense competition and various other challenges. It has also been stated that job stress prevails in such like industrial units which exists in challenging business environment. Thus it is confirmed that Job stress is recognized killer in organizations especially in those organizations where negative demands are placed on
the employees during work. It has been found that the employees working in different types of industries face various work related problems like work over load, odd working timings, poor working environment (not ergonomically standardized), over crowdedness, role conflict, and restrictive organizational cultures, etc.

The job stress can affect all employees regardless of the organizational level where they are but the employees in the middle level of management are more prone to job stress because they have occupy a vital position in organization. They serve as a liaison between the upper management and lower management levels. Such employees face more work load, pressure, and responsibilities in various forms, which consequently develop work related stress among them. Once employees have developed work related stress in shape of different physical as well as psychological symptoms like high blood pressure, cancer, diabetics, stomach ache, anxiety, depression, etc, then they start showing poor performance at work. There is a need to trace the different causes of job stress among the employees which are working in the upper levels of management cadre especially those who are the in charge of their respective departments. Once the occurrence and cause of job stress are searched out, different possible solutions can be made for controlling the occurrence of job stress among the employees of upper levels of management cadre.

1.2 Research Objective
The present study has investigated the prevalence of job stress among the managers of pharmaceutical industries of Hayatabad Industrial Estate, Peshawar in relation to Individual personal characteristics like (age, gender, martial status, parent hood, income level, and education level), Job characteristics like (nature of work, type of department, job position, working hours, and length of service), & the organizational working environments like conflict at work, work over load, intense hear/noise, poor light/air, exposure to dangerous substances, employment opportunities, and social support from boss/colleagues.
1.3 Review of Literature

Job stress is a term that almost everybody from all occupations knows and also experience. A single definition of Job stress is difficult because it is a result of many factors. Job stress can be resulted because of personal, organizational or any other factor.

In fact occupational stress is the inability to cope with the pressures in a job because of a poor fit between someone’s abilities and his/her work requirements and conditions (Holmlund Rytkonen et al., 2005). Job stress results from interaction of work & conditions of the work. Views are differing, however the importance of “Workers’ characteristics” verse “Working conditions” are the primary causes of job stress.

Among life situations, the workplace stands out as a potentially important source of stress purely because of the amount of time that is spent in this setting (Erkutlu & Chafra, 2006). Over the years, a large number of workplace stressors of varying degrees of gravity have been identified. According to Murphy, 1995, common organizational and individual stressors could be classified into five groups: (1) organizational practices (performance reward systems, supervisory practices, promotion opportunities), (2) job/task features (workload, work pace, autonomy), (3) organizational culture/climate (employee value, personal growth, integrity), (4) interpersonal relationships (supervisors, coworkers, customers), and (5) employee personal characteristics (personality traits, family relationships, coping skills). Lu et al., 2003 grouped job stressors into the following six categories: physical environment, role stressors, organizational structure and job characteristics, relationships with others, career development, and work-family conflict, while Copper et al. 2003 identified six sources of stress at work: factors intrinsic to the job, management role, relationship with others, career and achievement, organizational structure and climate, and home/work interface. More simply, Antoniou et al. 2006 point that specific conditions that make jobs stressful can be categorized either as exogenous (i.e. unfavorable occupational conditions, excessive workload, lack of collaboration, etc.) or endogenous pressures (i.e. individual personality characteristics, etc). When we add the complexity and turbulence of contemporary business environment and organizational life, altogether, causes of occupational stress can be grouped into two main groups: (1) job related stressors, with three major subgroups – environment specific, organization specific, and job specific stressors, and (2) individual-
related stressors, which can be either a consequence of individual characteristics or a consequence of individual life circumstances, as table below depicts.

### Sources of Job stress

<table>
<thead>
<tr>
<th>Environment specific</th>
<th>Organization specific</th>
<th>Job specific</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic conditions</td>
<td>Changes within organization</td>
<td>Poor fit between abilities and skills needed to perform job effectively</td>
</tr>
<tr>
<td>Increased levels of competition</td>
<td>Re-organizations</td>
<td>Work over load</td>
</tr>
<tr>
<td>Technological development</td>
<td>Delaying &amp; Layoffs</td>
<td>Work place Pressure to work longer hours</td>
</tr>
<tr>
<td>New forms of organization &amp; product development</td>
<td>Organizational structure</td>
<td>Job characteristics</td>
</tr>
<tr>
<td>Drive for greater cost-effectiveness</td>
<td>Organizational culture/climate</td>
<td>Conflicting job demands</td>
</tr>
<tr>
<td>General public concern for the environment, etc.</td>
<td>Workforce diversity</td>
<td>Unclear job expectations</td>
</tr>
<tr>
<td></td>
<td>Promotion policies</td>
<td>Time pressures</td>
</tr>
<tr>
<td></td>
<td>Job security</td>
<td>Lack of collaboration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Relations with subordinates, coworkers and superiors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Physical danger</td>
</tr>
</tbody>
</table>

- **Individual-related stressors**
  - **Individual characteristics**
    - Personality traits
    - Demographic characteristics
    - Coping skills
  - **Individual life circumstances**
    - Work/life conflict
    - Family problems
    - Personal problems
    - Social problems
    - Financial difficulties

This has been compiled using work of Cooper & Marshall (1976); Burke (1988) in Lu et al. (2003); Chusmir & Franks (1988); Hurrell et al. (1988) in Murphy (1995); Jamal (1990) in Montgomery et al. (1996); McHugh (1993); Dua (1994); Fulcheri et al. (1995); Murphy (1995); Blake et al. (1996); Montgomery et al. (1996); Rees (1997); Schabracq & Cooper (2000); Antoniou et al. (2006)

Consequences of occupational stress can be grouped into those on individual and those on organizational level. On the individual level, there are three main subgroups of strains: Unwanted feelings, Physiological diseases, & psychological diseases. On the organizational level, consequences of occupational stress can be grouped into two major subgroups: Organizational symptoms such as discontent and poor morale among the workforce, performance/productivity losses. Organizational costs such as costs of reduced performance/productivity (lack of added value to product and/or service).
Let us examine some of the factors responsible for creation of challenging business environment in pharmaceutical industry of Peshawar, which ultimately create sources of job stress for employees working there:

i. Price instabilities: The instabilities in the prices of raw materials supplied to the pharmaceutical industries leads to the fluctuation in the prices of end products because the raw materials are either supplied at very high costs or vice versa, thus capturing market with one stable price becomes difficult for such companies.

ii. Power crisis: The rationing the power in the form of load shedding in the industrial areas has forced the majority of pharmaceutical industries to have their own power units.

iii. Global Market Competition: There is a genuine concern among many quarters that Peshawar’s pharmaceutical industry will not be able to compete with the giant sized well established competitors of China and India because globalization of the markets is leading to dumping of the foreign products in Peshawar. It is adversely affecting the production and employment of the domestic industry.

iv. Inflation destroys pharmaceutical industry: According to a report by Pakistan Pharmaceutical Manufactures Association (PPMA), Depreciation of rupee by more than 21% during the year 2008 has decreased margin of profit for the local pharmaceutical industry. The situation has caused even a threat to closure for a number of manufacturing units.

v. Improper drugs marketing techniques: In Peshawar there is no proper mechanism for drug promotional campaign, which is further worsening by the entering of unregistered companies. The unregistered companies have no exclusive marketing rights. On other side these companies bargain with doctors for providing them incentives in different shapes and thus capture market by fake ways.

vi. The quality challenge: The local pharmaceutical companies of Peshawar are facing the challenge of quality which if not handled properly will lead to the stoppage of many units because the products of such units will not meet the standards of the international drugs quality controls. On other side the customers due to lack of quality will not prefer to buy products and the sales will decline, thus putting immense pressure on local manufactures.

vii. Lack of modern technology: The local pharmaceutical companies of Peshawar are lacking initiatives in new Product development, which shows that “new product development” is obviously not the interest of the local pharmaceutical companies of Peshawar. This is because these
industries lacks basic manufacturing facilities and relies heavily on high priced imports of not only raw materials but also drugs formulas.

viii. Occupational safety & health concerns: The employees working in the pharmaceutical industries of Hayat Abad industrial estate, Peshawar are often exposed to the lethal chemicals at work. These employees are not often given proper protective dressings and other materials, ultimately these employees are subjected to harmful physical stressors.

1.4 Research Methodology
A descriptive cross sectional research design was used. In fact a descriptive study is undertaken in order to ascertain and be able to describe the characteristics of the variables of interest in a situation. The cross sectional studies are carried out once and represent a snapshot of the one point in time (Donald R Cooper et al., 2003). This study is cross sectional in nature because it involves examining of a specific population of managers of the different pharmaceutical industries of Hayatabad Industrial Estate, Peshawar at a point of time, by a comparison of the different factors of job stress. These factors will be actually divided in to dependent and independent variables for drawing up any significant results.

In the present study total seventeen pharmaceutical industries have been randomly selected for data collection. These pharmaceutical industries are registered members of Sarhad Chamber of Commerce Trade & Industry, Peshawar and are located in Hayatabad Industrial Estate, Peshawar. The respondents of present study were the departmental in-charges of different departments of the seventeen pharmaceutical industries. These departments includes Labor & personnel Department, Marketing Department, Finance Department, warehouse Department & Production & operation Department.

The data was collected from randomly selected 150 managers by a self administered National Institute of Occupational Safety & health (NIOSH) Generic Job Stress Questionnaire. The scale of (NIOSH) Generic Job Stress Questionnaire consisted of both Likert type items with scale points varying from “strongly agree” to “strongly disagree”, as well as items with open as well as close ended options for data collection. Data was analyzed both by descriptive statistics, as well as by inferential statistics, where a multi variate logistic regression analysis was conducted for calculating odd ratios (OR) for each knowing the probability of occurrence of job stress among the
managers in relation to the individual personal characteristics, job characteristics and factors present in organizational environment.

1.5 Data
The results of the study have been shown in the table: 1. The Odd ratios obtained from the multiple logistic regression shows that managers in the age category of 25 to 30 years were more likely to have job stress (OR=2.54, 95% CI=1.65-2.93), as compared to age category of 20 to 25 (OR=1.98, 95% CI=0.65-2.11). The female managers (OR=2.66, 95% CI=2.08-3.10) were more likely to have job stress as compared to males (OR=1.47, 95% CI=1.12-1.55). The single managers were more likely to have job stress (OR=1.96, 95% CI=0.95-1.26) as compared to married (OR=0.91, 95% CI=0.55-0.95). Department wise the managers from marketing and production departments were more likely to have job stress (OR=6.83, 95%, CI=5.33-6.94), (OR=4.28, 95%, CI=3.09-4.73) as compared to Finance department (OR=3.29, 95% CI=3.01-3.45). Among the organizational factors the work overload (OR=3.92, 95% CI=3.48-4.41) less employment opportunities (OR=2.01, 95% CI=1.88-2.12), and physical environment (OR=2.16 95% CI=1.93-3.10) were more likely to cause job stress among managers as compared to factors like conflict at work (OR=1.130, 95% CI=0.860-1.890) and less social support (OR=0.96, 95% CI=0.82-0.99)

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>OR</th>
<th>95% CI</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Males</td>
<td>123</td>
<td>1.47</td>
<td>1.12 - 1.55</td>
<td>0.03</td>
</tr>
<tr>
<td>Females</td>
<td>27</td>
<td>2.66</td>
<td>2.08 - 3.10</td>
<td>0.02</td>
</tr>
<tr>
<td>Age</td>
<td></td>
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<td></td>
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<tr>
<td>&lt;20 years</td>
<td>15</td>
<td>1.20</td>
<td>0.80 - 1.90</td>
<td>0.03</td>
</tr>
<tr>
<td>20 to 25 years</td>
<td>110</td>
<td>1.98</td>
<td>0.65 - 2.11</td>
<td>0.01</td>
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<tr>
<td>25-30 years</td>
<td>25</td>
<td>2.54</td>
<td>1.65-2.93</td>
<td>0.01</td>
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<tr>
<td>Marital status</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Single</td>
<td>52</td>
<td>1.96</td>
<td>0.95 - 1.26</td>
<td>0.25</td>
</tr>
<tr>
<td>Married</td>
<td>98</td>
<td>0.91</td>
<td>0.55-0.95</td>
<td>0.12</td>
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<tr>
<td>Income level</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>55</td>
<td>2.87</td>
<td>2.15 -3.55</td>
<td>0.18</td>
</tr>
<tr>
<td>Middle</td>
<td>95</td>
<td>2.11</td>
<td>1.98-2.51</td>
<td>0.22</td>
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<tr>
<td>High</td>
<td>0</td>
<td>-</td>
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<td>-</td>
</tr>
<tr>
<td>Parenthood</td>
<td></td>
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<td></td>
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<tr>
<td>No Children</td>
<td>33</td>
<td>3.10</td>
<td>2.09-3.08</td>
<td>0.55</td>
</tr>
</tbody>
</table>
1.6 Discussion on Findings

The findings of present study shows that the selected items of NOSIH Generic Job Stress Questionnaire have given different OD Ratios thus the chances of their occurrence also differed from each other. On other these items also differed for individual factors like age, gender, martial status & parenthood. This means that stress has occurred among the managers of pharmaceutical industries of Hayatabad Industrial Estate from different perspectives.

Among these perspectives if we look at the gender perspective it has been revealed that the female managers were more likely to have suffered from job stress as compared to male managers. The reason behind it is that that the female managers are under more mental pressure at work as compared to male counterparts (Fotinatos Ventouratos et al., 2005 & Irma Wright et al., 1994). Female managers suffer from different barriers at workplace these includes male stereotypes, less general management experience, an inhospitable corporate culture, e.t.c.
Age wise the managers which are in their young age career (25 –to- 30 years) were more likely to experience stress as compared to other age categories. According to K. Chandraiah et al., 2003 age factor can be explained in the terms, that the individuals matured personality disposition related to the attainment of developmental tasks specific to each developmental tasks specific to each developmental phase and its influence on individuals’ perception of the situations as stressful or otherwise. It has been found that managers in the young age career experience more stress because of role overload, role ambiguity and strenuous working conditions compared to late middle aged. It is something natural that married people have stronger support from spouse and family as compared to single people therefore in our study it was found that single managers were more likely to experience stress as compared to married. The managers which had low level of income were more likely to experience stress because people of lower socioeconomic status may experience greater levels of stress and poorer health outcomes because lower paying jobs bring lesser personal control, and those who are in higher socioeconomic levels make healthier choices. If we look at the parent hood then those managers who have children were less likely to experience stress as compared to those who have children because like spouse, children are also source of happiness and mental satisfaction for people. Department wise it has been found that the managers of production department were more likely to experience stress because there is a need of increased participatory management, extensive computerization, working in such areas where there is so much heat, noise and other physical stressors, therefore such managers are likely to experience more stress. On other side the managers from marketing department were also more likely to experience stress because the ever changing demands of the external market in shape of meeting the needs of customers, fighting the price war, maintaining quality, and doing right promotion at right time becomes too tough in pharmaceutical sector of Peshawar, where there is a cut throat competition between the industries, and this competition get more intense when it is fueled by the fake promotional campaigns run by un registered companies. So these all factors put a lot of pressure on marketing managers of pharmaceutical companies. If we look at the other contributing factors of stress then we see that the temporary managers were more likely to experience stress as job in secretly is a big source of stress, those managers who work for long hours were more likely to experience stress as work demands in persistently placed on manages then they become exhausted and develop stress. The managers working in such areas where there is exposure to dangerous physical stressors like intense noise, heat, and dust fumes, e.t.c ultimately
develop job stress therefore such managers are more likely to experience stress. The last one factor is the less opportunities for employment, it is natural that every managers demands career progression and development as it is his/ her professional requirement, therefore those managers which have less employment opportunities are more likely to experience stress and vice versa.

We can end that the prevalence of job related stress among the managers of the pharmaceutical industries of Hayatabad Industrial Estate, Peshawar is multi fold and managers are experiencing stress form different factors ranging from individual, departmental, and organizational. It is therefore required that a multidimensional stress management programme is designed for the managers so that they can cope in a better way with prevalent stress in their respective companies.

1.7 Conclusion

Keeping in mind the points of above mentioned discussion regarding findings of the study it has been concluded that that selected managers’ individual personal characteristics are related to job stress, in such way that the both job nature along with the factors present in the organizational environment are affecting managers thus significantly related to the occurrence of jobs stress among the selected managers.

This conclusion has been made because different studies on job stress have confirmed that not only individual, as well as organizational factors are the leading source of job stress for managers which are working in industrial sector of Pakistan. Jamal, Muhammad, 2008, conducted a study which examined the relationship of job stress and job stressors with burnout among employees working in a large multinational corporation of Pakistan & found that the job stressors in shape of work overload, task ambiguity, work conflict, and resource inadequacy were positively related to burnout and health problems. Another study which was conducted by Tahira Mubashir et al., 2008 for assessing the level of Occupational Stress among employees of different departments of Wall’s Ice Cream Factory, Unilever Pakistan Limited and they found that job stressors like workload, conflict with coworkers and repetitive work tasks were major causes of job stress among employees. In same way a study conducted by Hina Rehman during 2007 for checking relationship between job stress and managerial relationships of an organization in both public as well as private industries of Pakistan including pharmaceutical industries and found that there is more stress in pharmaceutical industry of Pakistan and the causes of stress work conflict, Management perceived as being unsupportive, below average sick and vacation benefits & lack of recognition or reward for doing a good job, etc.
It is further stated that there is a need of development of a comprehensive stress management programme that addresses the each and every aspect of job stress that has prevailed among the managers of the pharmaceutical industries of Hayatabad Industrial Estate, Peshawar. In this regard stress which is occurring because of the manager’s personal lives should be addressed in such way that the managers should be trained regarding how to manage stress, and awareness should be created among the managers to understand the cause and consequences of job stress. On the departmental level the factors of stress should be identified in such way that both the senior management as well as the middle management should play participative role, especially the senior managers should develop a proactive style in not only identifying the different antecedents factors of job stress but also should work for coping with such like factors. When both the individual as well as departmental level stressors are handled then the organization as a whole will be in position to handle the stress at broad level. In this regard broad type of job stress management programmes, policies and strategies can be developed. Managing job stress is not a single person activity, it is a participative task and it is also complex therefore it requires addressing of broad range of aspects of job stress.
References


ASSESSING SOCIAL EQUITY OF NIGERIA’S TRANSPORT SYSTEM

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Abstract
The purpose of this paper is to investigate the Nigeria’s transport system, to determine the extent, to which the system enhances social equity in Nigeria, and provide guidance to transport stakeholders on effective ways to make progress towards social sustainable transportation in Nigeria. Survey research method was employed and analysis revealed that overall mean score, was 2.22, which was lower than the expected value of 3.00 on 5-point Likert scale. The result of the one sample Z test at 5 percent level of significance indicated that calculated Z was – 49.9563 with significant probability of 1.0000, which was greater than 0.05; thus the test was not significantly at 5 percent level of significance. In this light, it was concluded, that the extent to which the Nigeria’s transport system enhances social equity in Nigeria, was not significantly above average. Therefore, Environmental Justice concept should be adopted to address, the inequitable scenario.

Key words: Nigeria, Transport, Enhance Social, Equity, Sustainability.

1. Introduction
Social sustainability is one of three dimensions of sustainability. It is often referred to as social equity which is concerned with improving the quality of life for all people and promoting equity between societies, groups and generations (The American Association of State Highway and Transportation Officials (AASHTO), n.d.). According to Cato (2006) sustainability is the ability of a society to meet the needs of the present, without compromising the ability of future generations to meet their own needs. Cato, further contends, that in the context of public
Transportation, sustainability refers to a society’s ability to move freely, gain access, communicate and trade without sacrificing other essential human or ecological values, today or in the future.

In a similar pattern, social sustainability or equity in transport, is transport that is affordable, accessible, operates efficiently, offers choice of transport mode, and supports, vibrant economy, it also includes customers satisfaction as a key ingredient in creating a socially sustainable transport system. Social sustainability is significantly affected by psychological factors such as comfort level, personal safety and security, interpretation of one’s own social status and convenience which combine to influence transportation behaviour. (Centre for Sustainable Transportation (CST 2006) as cited in Cato, 2006).

In addition social sustainable transport which is concerned with equity seeks transport strategies that provide the poor with better physical services. However, sustainable transport evolved from sustainable development principles. Sustainable development is a global mission by almost all national governments, since they at the United Nations conference on Environment and Development (UNCED) in 1992 held in Rio de Janeiro, Brazil adopted Agenda 21, which states that the various sectors of human activities should be developed in a sustainable manner. The UNCED goals were confirmed and elaborated at the World Summit on Sustainable Development held in 2002 in Johannesburg, South Africa (Gilbert, Irwin, Hollingworth and Blais, 2002).

Presumably in pursuance of this mission, most national and international conferences on transport includes a section on sustainability of transportation. An example, is the international conference on transportation operations and planning held in Chennai, India, on February 18-20, 2004, where five papers were directly on sustainability of transportation. The inclusion of sustainability highlights the significance of sustainability worldwide (Yevdokimov, n.d.).

Along the same lines, the Federal Government of Nigeria (FGN) in 1993 introduced the Nigeria’s national transport policy aimed at achieving sustainable transport system in Nigeria (Federal Ministry of Transport (FMT), 1993). Surprisingly, the transport infrastructural facilities are deteriorating and quality of service is falling (World Bank, (1996); Ugboaja, (2010a). Moreover, the FGN honourable minister of transport in 2002 in an attempt of to evolve into strategies for effective implementation of the national transport policy remarks that a revitalized, modernized, dynamic and sustainable transport system is crucial to the achievement of the government’s developmental plans in all sectors of the economy (Maduekwe, 2002).
Conceivably, to a considerable extent it appears that transport stakeholders over the years neglected to care for the transport needs of the disadvantaged people in Nigeria. These people include: the elderly; illiterate people; vulnerable children, the poor, and other disabled persons numbering about 429142 persons or 0.5 percent of Nigeria population as of 1991 (National Bureau of Statistics (NBS), 2006). It is evident from European studies in 2006, that social disadvantaged groups e.g. those on low incomes or the elderly suffer most from environmental problems as a result of their vulnerability to impacts. These findings indicate that more attention needs to be paid to the groups, that are mostly likely to suffer from environmental degradation (Pye et al; 2008).

In Nigeria, no attempt has been made to assess social equity of Nigeria transport system using sustainable transport performance indicators to determine its progress towards or away from social sustainability. In accordance with AASHTO (n.d.), suggestion there is need to evaluate transport performance on the basis of economic, environmental and social sustainability impacts; therefore, the purpose of this paper is to determine the extent to which the Nigeria’s transport system enhances social equity in Nigeria with the aid of sustainable transport performance indicators.

1.1 Purpose of the Study
The purpose of this study is to investigate Nigeria’s transport system, to determine the extent to which the system enhances social equity in Nigeria.

1.2. Research Question
The general research question for this work is; to what extent does the Nigeria’s Transport system enhance social equity in Nigeria?

1.3. Hypothesis for this Study
The hypothesis for this study is.

Ho. The extent to which the Nigeria’s transport system enhances social equity in Nigeria is not significantly above average.

H1: The extent to which the Nigeria’s transport system enhances social equity in Nigeria is significantly above average.
2. Literature Review

2.1. Sustainable Transportation

According to the Centre for Sustainable Transportation (CST) (2005), sustainable transportation or sustainable transport often referred to as sustainable mobility is defined in three basic ways.

2.1.1 The first one, has literal economists’ view point. The proposals were presented at Organization of Economic Cooperation and Development (OECD) international conference on Towards Sustainable Transportation held in Vancouver in 1996 by Nelson and Shakow; and Schipper.

- Nelson and Shakow 1996 propose that sustainable transportation is achieved when the total future discounted per capital social costs, both market and non-market related to the transport system, are equal to or less than the costs in a selected reference year. This proposal argues that increased costs are not passed to succeeding generations.

- Schipper (1996) proposes that transportation where beneficiaries pay their full social costs including those paid by future generations is sustainable.

The two proposals were criticized on the following grounds:

i. Recognition of system as sustainable or not will depend on the estimation of future costs, which is difficult to determine;

ii. Transport system could be seen as unsustainable even while meeting the sustainability requirement and

iii. The proposals failed to clarify the present and future services required of transportation (cst, 2005).

2.1.2 The second type of definition, is concerned with environmental sustainable transport proposed by the OECD. The OECD (2000) proposal has two versions:

The first version defines sustainable transport as:

i. An environmentally sustainable transport system is one that does not endanger public health or ecosystems and meets needs for access and consistent with:

ii. Use of renewable resources at below their rates of regeneration and

iii. Use of non renewable resources at below the rates of development of renewable substitutes.
The second version states that an environmentally sustainable transport system:

i. Allows generally accepted objectives for health and environmental equality to be met, for example, those concerning air pollutants and noise proposed by the World Health Organization (WHO);

ii. Is consistent with ecosystem integrity, for example, it does not contribute to exceedances of critical loads and levels as defined by WHO for acidification, eutrophication and ground-level ozone; and

iii. Does not result in worsening of diverse global phenomena such as eliminate change and stratospheric ozone depletion.

The first OCED definition recognizes the need for access and use of sustainable resources while the second focuses on the need to avoid impacts on environment and health. The CST argues that both neither captures what may be regarded as the key feature of sustainability as shown in the Brundtland’s Commission (1987) which defines sustainable development as development that meets the need of the present without compromising the ability of future generations to meet their own needs.

2.1.3 The third type of definition of sustainable transport is often referred to as the comprehensive type of definition. It is developed by the CST and is best known example of definition of sustainable transport widely acceptable in European Union (EU) and many other countries of the world. The definition adopted by EU Ministers of Transport is sustainable transport system is one that:

i. Allows the basic access and development needs of individual companies and societies to be met safely and in a manner consistent with human and ecosystem health and promotes equity within and between successive generations;

ii. Is affordable, operates fairly and efficiently, offers choice of transport mode and supports a competitive economy as well as balanced regional development;

iii. Limits emissions and waste within the planet’s ability to absorb them, uses renewable resources at or below the rates of development of renewable substitutes, while minimizing the impact on the use of land and the generation of noise (CST, 2005). The CST, also contends that the EU definition was adopted from the CST definition of sustainable transportation system in 1997.
The CST defines a sustainable transport system as a system that:

i. Allows the basic access needs of individuals and societies to be met safely and in a manner consistent with human ecosystem health and with equity within and between generations;

ii. Is affordable, operates efficiently, offers choice of transport mode and support a vibrant economy;

iii. Limits emissions and waste within the planets ability to absorb them minimizes consumption of non-renewable resources, limits consumption of renewable resources to the sustainable yield level, reuses and recycles its components and minimizes the use of land and the production of noise.

The difference between the CST definition and the version adopted by EU Council of Ministers are:

i. “Access needs of individuals and societies” has been expanded in the EU version to “access and development needs of individuals, companies and societies”;

ii. The word “fairly” and the phrase “as well as balanced regional development” have been added to the EU version;

The phrase “minimizes consumption of non-renewable resources, limits consumption of renewable resources to the sustainable yield level, reuses and recycles its components” has been replaced in the EU version by “uses renewable resources at or below their rates of generation and uses non-renewable resources at or below the rates of development of renewable substitutes”.

Perhaps, it could be argued that the two definitions –CST and EU have not been criticized because they allow the setting of goals and the assessment of performance. It is worthy of note that definition of sustainable transport is imperative in order to focus attention on policies and action required to ensure viable transport system.

2.2 Social Dimension of Sustainable Transport Performance Indicators

Indicators are things we measure to evaluate progress towards goals and objectives (Litman, 2009). The indicators are used to measure progress towards realization of sustainable transportation. CST (2005), and can be used to identify trends, predict, problems, assess options,
set performance targets and evaluate organization or particular jurisdiction (Litman, 2009). On the importance of indicators, Henrik Gudmundsson asks:

“How do we know if our transportation systems are in fact, becoming more or less sustainable and how do we know if the transportation policies are helping to achieve the goals they are meant to serve? Such questions have increased the demand for indicators to measure the performance of transportation systems and policies” (Gudmundsson, 2001 p.9).

Going by these assertions sustainable transport performance indicators are important tools to measure the progress of transport systems towards or away from sustainability. As literature review shows, a number different sets of indicators measuring sustainability in transport are proposed by different Institutions Yevdokimov (n.d.) and organizations like the Centre for Sustainable Transportation (CST), the European Commission (EC) and other agencies identify appropriate sustainable transport indicators (Litman, 2009). Litman outlines the social sustainability aspect of the sustainable transportation indicators recommended by the Canadian Transport Research Board are:

- Trip –to – school mode split; (non motorized travel is desirable)
- Per capita traffic crash and fatality rates;
- Quality of transport for disadvantaged people (disabled, low incomes, children etc.)
- Affordability (portion of household budgets devoted to transport, or combined transport and housing);
- Overall transport system satisfaction rating (based on objective user surveys).
- Universal design (transport system quality for people with disabilities and other special needs);
- Portion of residents who walk or bicycle sufficiently for health (15 minutes or more daily);
- Portion of children walking or cycling to schools;
- Degree to which cultural resources are considered in transport planning
- Housing affordability in accessible locations;
- Transit affordability;
- Comprehensive
- Inclusive
- Accessibility factors;
Portion of total transport cost efficiently prices and
- Neutrality

The last five (5) indicators apply also to all the three dimensions of sustainability – economic, social and environmental sustainability.

Another set of indicators worthy of note is from Sustainable Mobility Policy Measures and Assessment (SUMMA). SUMMA is funded by the European Commission’s Directorate-General for energy and transport and is concerned with sustainable transportation referred to as sustainable mobility. The SUMMA aims to operationalize the concept of sustainable mobility by quantifying the concept to facilitate the measurement of performance.

According to CST (2005) the SUMMA social sustainability aspect of the indicators are:

i. Accessibility and affordability i.e. access to basic services, public transport, car independence, affordability and trip length;
ii. Safety and security these include accident related fatalities and serious injuries, vehicle thefts and other crimes, securities on public transport;
iii. Fitness and health i.e. walking and cycling as transport means for short distance trips;
iv. Liveability and amenity i.e. walkability, pedestrian friendliness, traffic calming, children’s journey to school, open space availability and accessibility
v. Equity i.e. horizontal equity (fairness), vertical equity (income); vertical equity (mobility needs and ability);
vi. Social cohesion i.e. public opinion profile on transport and transport policy issues; violation of traffic rules, and long distance commuting; and
vii. Working conditions transport sector i.e. occupation accidents, precarious employment coordinations and work absence due to accidents and illness.

In the same vein Victoria Transport Policy Institute (VTPI) (2006) identifies a number of sustainable transport indicators for the three dimension of sustainability. The indicators are:
Quality of overall accessibility; land use mix; land use accessibility; children’s accessibility; electronic accessibility; commute speed; transport diversity; motor split; transit service; motor transport options; congestion delay; consumer transport costs; affordability; facility costs; freight and commercial, transport efficiency; delivery services, market principles; planning practices; user rating, citizen involvement, crash costs, planning process; health and fitness; community liveability cultural preservation, basic access, horizontal equity, progressivity, mobility for non-
drivers, mobility for people with disabilities, non motorized transports, climate change emissions, other air pollution, land use impacts; water pollution; habitat protection; and roadway aesthetic conditions.

Cato, (2006) identifies convenience, comfort, and affordability as important social sustainability factors of any public transit system.

The convenience element includes:
- Availability of services, frequency of trip, travel speed (amount of time required to commute), reliability of service; integration (easy of transferring between transit modes), accessibility (easy of reaching transit stations and stops), information; customer service; and payment options.
- Comfort factor is concerned with seating capacity and aesthetics.
- Affordability is critical for equity objective because it affects the cost burdens and opportunities available to disadvantaged users and includes; transit fare pricing and fare price structure.

Furthermore, Litman (2009), VTPI (2006) argue that transport activities have many impacts on sustainability and these impacts on social sustainability include:
- Equity fairness;
- Impacts on mobility disadvantaged
- human health
- Community cohesion
- Community livability and
- Aesthetics.

Obviously transport activities provide access, mobility and other benefits and at the same time putting pressures on the human and natural environment. To deal with the negative effects of transportation many countries of the world adopt sustainable transport policy, to increase the economic prosperity and quality of life (Gudmundsson, 2001). In light of the foregoing by these analysis there is need to assess transport system in Nigeria, using selected social sustainable transport performance indicators itemized in this paper to determine the extent to which the system enhances social equity in Nigeria.

3. Methodology

This work involved research with a survey method of selected transport companies in Nigeria. With the aid of Yamene’s (1964) statistical formula, random sample of transport companies were selected for the study, out of a population of 186 registered luxury bus and shipping companies
in Nigeria as of 2005. (ALBON (2005), NMA, 2005). For completeness a sample of 400 non transport workers were included in the study using Walpole (1982) formula. Structured questionnaire was data gathering instrument. In recognition that there are different sets of sustainable transport performance indicators led the author to select relevant indicators and formulate some more specific questions to illicit information on the extent to which the system enhances social equity in Nigeria. (See questionnaire items table 1 appendix 1).

On the whole a total of 1670 questionnaire were administered to respondents out of which 1452 questionnaire were completed given a response rate of 86.95 percent. To draw a valid conclusion for the study the hypothesis formulated (see section 1.3.) was tested with an aid of one sample z test statistic at 0.05 level of significance.

4. Data Presentation and Analysis

4.1. Data Presentation

4.1.1. Questionnaire Response Rate

The extent to which the Nigeria’s Transport System enhances social equity in Nigeria is considered under cohort “B” section of the questionnaire (see table 1 appendix 1). The respondents were expected to react to the questions along a 5-point Likert Scale: VH = Very High, H=High; U=Undecided; L=Low; VL= Very Low. The questions were scored 5, 4, 3, 2 and 1 for VH, H; U, L and VL respectively. The questionnaire response rate is presented in table 2 appendix 2. The table 2 appendix 2 shows that 1670 questionnaire were administered to respondents out of which 1452 were completed, returned and found analyzable given a response rate of 8.95 percent.

4.2. Data Analysis

The responses to the items in the questionnaire (cohort “B”), were analysed with the aid of means procedure to provide answer to the research questions, at 5 percent level of significance. The means procedure is presented in table 3 appendix 3.

The table 3 appendix 3, shows that six items were considered, in order to determine the extent to which the Nigeria’s Transport System enhances social equity in Nigeria. The items are:

- item 1; the overall injuries suffered by passengers in Nigeria
- item 6; overall accessibility of transport service in Nigeria
item 9; quality of non-motorised transport (walking and cycling) facilities in Nigeria.
- Item 7; the extent to which the public is involved in transport planning process in Nigeria.
- Item 10, the portion of Nigeria population with internet services within walking distances and
- Item 8; the quality of transport facilities and services for people with disabilities. All the six items were incidentally rejected as major areas, for which the Nigeria’s Transport System enhances social equity in Nigeria, since they all have mean score lower than the expected value of 3.00 on a 5-point Likert Scale. The item, with the highest score, in terms of the extent to which the Nigeria’s Transport System enhances social equity in Nigeria, is item 11, (the overall injuries suffered by passengers in Nigeria) with mean score of 2.92. This is followed by item 6, (the overall accessibility of transport services in Nigeria) with mean score of 2.44; while the item with the least score in terms of the extent to which the Nigeria’s Transport System enhances social equity in Nigeria is item 8, (the quality of transport facilities and services for people with disability) with mean score of 1.54.

The overall mean score of the six items is 2.22, which is lower than the expected value of 3.00. It is therefore, concluded, that the extent to which Nigeria’s Transport System enhances social equity in Nigeria is below average.

4.3. Test of Hypothesis

To draw a reliable conclusion from the above means analysis on the research question, the hypothesis (see section 1.3) was tested with the aid of one sample z-test at 5% percent level of significance.

The computed z-test is presented in table 4 appendix 4.

From the table 4appendix 4, the z-calculated value of hypothesis is -49.9563, with significant probability of 1.0000, which is greater than 0.05. Thus, the test is not significance at 5 percent level of significance. This means, that the null hypothesis is not rejected (P>0.05). It is therefore, concluded that the extent to which the Nigeria’s Transport System enhances social equity in Nigeria is not significantly above average.

5. Discussion of the Results and Conclusion

To provide answers to the research question (see section 1.2), six (6) questionnaire items were considered using means procedure to analyze the responses at 5% level of significance.
The analysis revealed that the six items were incidentally rejected, as major areas for which the Nigeria’s Transport System enhances social equity in Nigeria, (see table 3 appendix 3) since they all had scores lower than the expected value of 3.00 on 5-point Likert scale. The analysis also showed, that the overall mean score of the six items was 2.22, which was lower than the expected value of 3.00, on a 5-point Likert, and it was therefore concluded, that the extent to which the Nigerian Transport System enhances social equity in Nigeria was below average.

To draw a valid conclusion from the means analysis on the research question, the study hypothesis, (see section 1.3) was tested with the aid of one sample z-test at 5 percent level of significance.

The result of the one sample, z-test, (see table 4 appendix 4) indicated that the calculated-z was – 49.9563, with significant probability of 1.0000, which was greater than 0.05. Thus, the test was not significant at 5 percent level of significance. This mean, that the null hypothesis was not rejected (P>0.05). It was therefore, concluded, that the extent to which the Nigeria’s Transport System enhances social equity in Nigeria was not significantly above average.

5.1. Implications of the Results

The results of this study, based on the research question and hypothesis, have several implications to Nigerian society, in general and transport stakeholders in particular. For instance, one of the implications is that, the objective of this study has been realized to the extent, that the study has revealed that social sustainability in Nigeria is not sufficiently enhanced by the Nigeria’s Transport System, since the Nigeria’s Transport System has not significantly reduced the negative impacts on the social equity issues. This is evidenced by the fact that all the six items considered under social equity were rated below the expected value of 3.00 on a 5-point Likert Scale, (see tables 3 and, 4, appendices 3 and 4).

According to some writers such as World Resource Institute (WRI) (2004) (VTPI (2003); (2006); and Gudmundsson and Höjer (1996), social sustainability or equity issues include.

i. Accessibility of transport services

ii. Quality of non motorized transport

iii. Public participation in transport planning process

iv. Overall injuries suffered by passengers
v. Quality of transport facilities and services and
vi. Electronic accessibility.

Even though, the result showed that the overall injuries suffered by passengers in Nigeria, scored the highest mean of 2.92, it was still below the expected value of 3.00; none of the six items considered in the mean analysis had mean score up to 3.00 on a 5-point Likert Scale. This provides an indication of the extent to which the respondents rated Nigeria’s Transport System effectiveness, in enhancing social sustainability or equity in Nigeria, below average. Moreover, it is evident, that the rating of respondents was 1.54 and 1.95 in terms of the extent, to which the Nigeria's Transport System enhanced social equity in Nigeria, in areas of the quality of transport facilities and services, for people with disabilities and the portion of Nigerians with internet services within walking distances, respectively. To a considerable extent, the reason for this may lie in the fact, that the transport stakeholders over the years neglected to care for the transport needs of the “disadvantaged” people in Nigerian society. These people include:

i. The elderly people
ii. Illiterate people
iii. Vulnerable children
iv. The poor and
v. Other disabled persons.

To this effect, the scenario or situation generally, seems strong enough to account for all respondents ratings on the extent to which the Nigeria Transport System enhanced social equity in Nigeria,

Consequently, it can be concluded that to the extent, that one of the goals of the Nigeria’s Transport System is to enhance social equity; it served this end, only, in a very limited fashion with regards to:

i. Overall accessibility of transport services in Nigeria
ii. Quality of non mortised transport (walking and cycling) facilities in Nigeria;
iii. The extent to which the public is involved in transport planning process in Nigeria.
iv. The overall injuries suffered by passengers in Nigeria;
v. The portion of Nigeria population with internet services within walking distances; and
vi. The quality of transport facilities and services for people with disabilities in Nigeria.
5.2. Conclusion

As is evident from the result of the study that the extent to which the Nigeria’s Transport System enhanced social equity in Nigeria was below average. In view of the result, it was concluded that the Nigeria’s Transport System was not adequately supportive of social equity in Nigeria.

Conceivably, it appears that vulnerable social groups including poorer people are at risk of suffering disproportionately for the environmental damage caused by higher income groups. It follows that policies need to be designed to address inequitable scenarios. And one such concept to adopt is “Environmental justice” which is concerned with ensuring good environmental quality for all and a fair sharing of costs of achieving such high level of environmental quality.

The adoption of environmental justice entails:

i. Participation of all groups in policy formation and implementation process which includes addressing the engagement of disadvantaged groups in transport policy formulation.

ii. Providing adequate protection to those in the society who are exposed to worse environmental quality including transport services and

iii. Ensuring that financial burden of environmental policy and strategies do not disproportionately impact on lower income groups (Pye et al, 2008). In all the adoption of concept of environmental justice will go a long way in facilitating the provision of social sustainable transport system to care for the transport needs of the disadvantaged groups in Nigeria.
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Appendices

Questionnaire Cohort B: Table 1 Appendix 1

<table>
<thead>
<tr>
<th>S/No.</th>
<th>Social Equity of Nigeria Transport System</th>
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<tbody>
<tr>
<td></td>
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<tr>
<td></td>
<td>6. The overall accessibility of transport services in Nigeria is</td>
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<td></td>
<td></td>
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<td></td>
<td>7. The extent to which public is involved in transport planning processes in Nigeria is</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8. The quality of transport facilities and services for people with disabilities is</td>
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<td></td>
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<tr>
<td></td>
<td>9. The quality of non motorized transport (walking and cycling) facilities in Nigeria is</td>
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<td></td>
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<tr>
<td></td>
<td>10. The portion of Nigeria population with internet services within walking distances is</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11. The overall injuries suffered by passengers in Nigeria is</td>
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<tr>
<td></td>
<td>(Others please specify)</td>
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Table 2 Appendix 2: Questionnaire Response Rate

<table>
<thead>
<tr>
<th>Description of Sample</th>
<th>Sample Size</th>
<th>Response rate</th>
<th>% of stratum Response</th>
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<tbody>
<tr>
<td>Transport Workers</td>
<td>1270</td>
<td>1100</td>
<td>86.61</td>
</tr>
<tr>
<td>Non-transport Workers</td>
<td>400</td>
<td>352</td>
<td>88</td>
</tr>
<tr>
<td>Total</td>
<td>1670</td>
<td>1452</td>
<td></td>
</tr>
</tbody>
</table>

% of Total: 100% Response: 86.95

Source: Field work.

Table 3 Appendix 3: The Means Procedure For Research Question

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std dev.</th>
<th>Variance</th>
<th>Decision</th>
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<td>Item 11</td>
<td>2.9174</td>
<td>1.1132</td>
<td>1.2392</td>
<td>Reject</td>
</tr>
<tr>
<td>Item 6</td>
<td>2.4421</td>
<td>1.2629</td>
<td>1.5949</td>
<td>Reject</td>
</tr>
<tr>
<td>Item 9</td>
<td>2.3829</td>
<td>1.4774</td>
<td>2.1827</td>
<td>Reject</td>
</tr>
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<td>Item 7</td>
<td>2.0620</td>
<td>1.3305</td>
<td>.7701</td>
<td>Reject</td>
</tr>
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<td>Item 10</td>
<td>1.9477</td>
<td>1.1175</td>
<td>1.2488</td>
<td>Reject</td>
</tr>
<tr>
<td>Item 8</td>
<td>1.5427</td>
<td>0.9320</td>
<td>0.8686</td>
<td>Reject</td>
</tr>
<tr>
<td>Overall 2</td>
<td>2.2158</td>
<td>0.5982</td>
<td>0.3578</td>
<td>Reject</td>
</tr>
</tbody>
</table>

Source: Field Work (Computer Results).
Table 4 Appendix 4: One sample Z-Text for the hypothesis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Overall 2</th>
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<tr>
<td>Mean</td>
<td>2.2158</td>
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<td>Known variance</td>
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<td>Observations</td>
<td>1452</td>
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<tr>
<td>Hypothesized mean</td>
<td>3.0</td>
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<td>Z-calculated</td>
<td>-49.9563</td>
</tr>
<tr>
<td>P(Z&lt;z) one tail</td>
<td>1.0000</td>
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Source: Field Work (Computer Results)
GENDER AND REPRODUCTION: THE POLITICS OF REPRODUCTIVE CHOICES AMONG THE ESAN PEOPLE OF NIGERIA.

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Abstract
This study examined gender relationship among couples, pressures from “significant others” to be prolific and how these relationships affect reproductive choices among the Esan people. Focus group discussion was employed as the major instrument of eliciting information from the respondents sampled from the five local government areas where the Esan people are located in Edo State. Seventeen sessions were organized distinguished by Age, Sex, Educational Attainment and Traditional Leadership roles among the sampled geographical units. The data collected were qualitatively processed in line with the pattern of content analysis. The results revealed that couples are often pressures by “significant others” to be prolific even if they had the intention to limit family size. Secondly, there is gender inequality among the sexes to the extent that, the men play very significant roles in the final decision to have or not to have additional children. It was also observed that the level of educational attainment of the couples, the attitude of extended family members to be prolific, the liberal nature of traditional rulers and other leaders of thoughts, to the interpretation of societal values, statuses and roles also have significant effect on the process of reproductive choices among couples within the area of study.

Keywords: Gender, Educational attainment, Politics, Reproductive choice, Decision-making.

1. Introduction

In the beginning, “God made them males and females”. This biological classification of human specie goes beyond the interpretation of sex in diverse communities and even at different times in the history of world societies. What this implies is that the culture of a society plays a
role in social classification as well as the roles and responsibilities attached to them. The social, cultural and political interpretation of this biological difference is referred to as gender. Gender is central to the way a family or a society is organized. It is the social and cultural practice that influences the lives of men and women in every society.

For Riley (1997), gender affects both “power to” and “power over”. This means that gender specifies that ability to act and define the limit of such actions. It defines what you can do and what you cannot do and specifies the limit in terms of decision and authority. It influences “all aspects of our lives – the schooling we receive, the social roles we play and the power and authority we command”. These influences however vary from males to females. In other words, there is no gender equality and equity among the sexes in most of our societies. Women are generally viewed in some cultures as “helpers” to men and therefore have less power and authority”over” a lot of things. They usually have less say than their husbands in family matters and less authority than men even in work places.

This gender inequality has generated a lot of outcries at both individual and societal levels, that in 1994 at the International Conference on Population and Development (ICPD) in Cairo, it was agreed that “advancing gender equality and equity and the empowerment of women and the elimination of all kinds of violence against women and ensuring women’s ability to control their own fertility, are cornerstone of population and development related programmes”. Most other governmental and non-governmental and even women groups have become very strong in clamoring for women empowerment as a major instrument against gender inequality.

In terms of reproduction, researches on human biological reproduction have been dominated by medical concerns such as normal and abnormal physiological processes but increasing sociological literature have now started to address reproduction as a socio-cultural process which can even be influenced by some political undertones. The cultural patterning of reproduction includes menstrual beliefs and practices, restrictions on the circumstances in which sexual activity may occur, beliefs and practices surrounding pregnancy, labour and post partum periods, understanding and treatment of infertility and the significance of the menopause. This account for why Browner and Sergent (1990:215) believed that the ways societies structure human reproductive behaviour reflect core social values and principles and is informed by changing political and economic conditions.
2. Literature Review

All over the world, concern with population growth has often focused on women as the potential users of contraceptives, but recent findings revealed that women’s potential desire to limit fertility may not be translated into actions because of opposition from “significant others” such as husbands, female relations, in-laws or others with influence or decision making power within the extended family set up and society at large. It therefore means that sociological research of this nature have important contribution to make in examining such factors as culture concepts regarding fertility and family size, the value of children, dynamics of decision making within the family and community and the relationship between women’s reproductive and productive roles. In other words, sociological interest has now turned to the linkages between cultural construction of gender, the cultural shaping of motherhood and reproductive beliefs and practices.

Browner (1993) has observed that while reproduction is culturally patterned, not all individuals in a society share same reproductive goals. She noted that reproductive behaviour is influenced by the interest of a woman’s kin, neighbours and other members of the community and these interests may conflict. Government policies regarding the size and distribution of population may differ from the interest of reproducing women. Women’s goals, in turn, may not be shared by their partners (Husbands) and other individuals and groups in the society. Browner examined the ways in which access to power in a society determines how conflicts concerning reproduction are carried out and dealt with by analyzing population practices in a Chinatic-Spanish speaking township in Oaxaco – Mexico.

In this community, she observed that the government’s policy to encourage fertility reduction was imposed on a pre-existing conflict between the local community as a whole, which encouraged increased fertility and women of the community who sought to limit family size. Women and men manifested very different attitudes concerning fertility desired as women were noted to desire much smaller families compared to men. As children increasingly attend schools, their economic benefits appeared slight to their mothers. Furthermore, women viewed pregnancy as stressful and debilitating. Despite these negative views, women felt they could not ignore pressures to reproduce. Such pressures come from the community for the interest of the defense and well-being of the collectivity and from other women, who while not desiring more children
themselves, wanted other women to bear children in the interest of the group. In this cultural, political and economic context, local women experienced conflict between personal desire to have fewer children and local pressures to be prolific.

Some other demographers have also been interested in the effect of societal and community institutions on fertility. Obermeyer (1994) studied reproductive choice in Islam in relation to the doctrinal principles defining it and the social structures that limits it. He observed that the impact of Islam on gender and reproduction is largely a function of the political context in which these issues are defined. It was observed in this study, that variability in indicators of reproductive choice in the Middle-East contradicts the notion of a uniform effect of Islam on reproduction; the conditions that affect women’s options are the outcome of political strategies rather than the result of implementing a religious code. It was noted that like other religious doctrines, Islam has been used to legitimate conflicting position on gender and reproductive choice in Tunisia and Iran though both are Islamic states. The ways in which the ethical code of the religion is translated into policies affecting women’s status, have been a function of the ideology of groups in power and have been influenced by changes in the economic, political and social spheres. His conclusion was that in all cultures, images of women are characterized by a degree of ambivalence and government policies related to gender are sometimes inconsistent. Such contradiction makes it possible for individuals to define their own strategies, either by manipulation of the rules or by resisting them. Locating these contradictions is the key to understanding the potential for change and identifying the possibilities for an expansion of reproductive choices for women.

Flowing from the above, Bankole (2000) observed that the elderly member of the extended family do at times persuade young couples to embrace large family size by echoing the traditional belief among the Yorubas that a woman would fall sick if she does not bear all the children in her womb.

It has often been argued that the existence of low gender equity in favour of men in household decision- making in the society is attributable to men’s role as being solely responsible for the upkeep of the family in the traditional setting. The truth of the matter as expressed by Adedokun (2000:144) is that the “traditional division of family role and responsibilities along instrumentally expressive lines has to a very large extent, been changing
with women taking up or sharing the roles of the provider with men by contributing directly to the family budget”.

All these put together may be responsible for McDonald’s (2000:23) conclusion that:

“Family organization is a vital aspect of cultural identity… In all societies, family organizations are protected from radical changes by an idealized family morality, a moral conservation that is often enshrined in the prevailing religion. More often, idealized family morality confines women to the hegemony of men. Radical change usually occurs only through changes in political power or through changes in the attitudes of those in power. Otherwise change is gradual. Increased gender equity within the family can be a gradual process that does not portend radical family change. This social norm may allow women increased control over their own fertility within what is in most respect, a male dominated family system so long as their increased independence does not threaten the prevailing family system”.

3. Methods

The data were derived from focus group discussion sessions conducted in 2007 and 2008 among the five local government areas where the Esan people are located in Edo State, Nigeria. Esan is one of the more than 250 ethnic groups in Nigeria. It is the second major group in Edo state after the Binis and occupies Edo central senatorial district. They occupy five local government areas and share similar but peculiar social, cultural, economic and linguistic characteristics. It therefore constitutes a unit of study in Edo state.

Esan is a patriarchal society where male authority and superiority are visible in all spheres of life. Gender inequality is a common phenomenon in this locality. Women traditionally live in separate apartments from their husbands and to disobey a husband, a woman pays some fines and in serious cases divorce could be the outcome. But with increased female education, urbanization and development, some of these values are gradually being dislocated and transformed. These changes however, have not been so significant as to create an upset in the
overall issues of gender inequality and value placed on children, especially male children.

Since eliciting information from respondents in these five local government areas would be rather time consuming, three local government areas were randomly selected. In each selected local government area, five geographical units were further selected randomly. There was no attempt to separate the headquarters from other communities as they all still shame or exhibit basically similar characteristics.

Based on the sensitive nature of the topic under investigation and the report of a pilot study earlier conducted, the focus group discussion was adopted as the major instrument of eliciting vital information from the respondents. This means that in the clusters randomly selected, certain respondents were sampled into a group for discussion sessions.

In each of the fifteen units finally selected, seventeen samples were drawn, made up of between 6 to 12 persons with certain chosen characteristics to discuss. Age, Sex, and level of educational attainment formed the major criteria for selection. The males had four groups, made up of two educated respondents distinguished by Age (50 years and below and 50 years and above) and another two groups distinguished by the same age but with no form of schooling. The same four groups distinguished by age and educational attainment were also created for the females but 45 years of age was used as the dividing line because we needed to know how those within the reproductive age group and those who are through with reproduction, will react to the issues of gender and reproduction. It was hoped that the age and level of educational attainment will influence thought towards gender issues and fertility.

To have a more objective discussion session, we had four groups of educated men and women and another combination without any form of schooling relative to age, discuss gender and fertility issues. This was done to give a more balanced discussion. Finally, two sessions each were organized for traditional rulers and their chiefs and women leaders who could be opinion leaders in their communities, while a session was organized for religions leaders. On the whole, seventeen focus group discussion sessions were held.

The researcher probed such issues as value of children, contraceptive use, general beliefs and attitudes surrounding contraception, pressures from “significant others”, social status of men and women, family discussions and decisions and other related issues affecting fertility. The analysis was done manually and qualitatively, using the content analysis approach. Summaries of
the discussion were developed in line with the objectives of the study while striking expressions were quoted verbatim.

4. Results

The focus group discussion participants are of the view that women are often given lower status compared to men among the Esan people. The reasons for this lower status according to them are numerous. First, From the religious point of view men and women were not made equal. God made man in his own image and likeness and women as helpers. This to a large extent has given rise to patriarchy system of societal organization and family inheritance. Secondly, women’s emotional instability, weaker sex and the traditional role of the man as the head and family bread winner are other factors. This low status attributed to women affects their powerlessness not only in family decision-making but also their worth in the society at large. She is unable to adopt family planning without approval from husbands and does not have full control over her body once she is married. In some other situations, such as inability to have a child or a male child or even sustain a marriage, the woman is blamed. When children are well behaved and responsible, the man is praised but when they are irresponsible, the woman is castigated not only by family members but the community at large. The major reason for the above conclusion is that these children stay more with women than men.

It was also observed that when men fail in their traditional role responsibility they are not sanctioned by their wives or even other family members. Rather than castigate the man, the women is encouraged to work harder to make sure that the children do not suffer. Even when such cases are reported by wife to family members, they may only admonish the man to try to live up to his responsibilities. In some cases, family members may come to the aid of their brother either by taking some of the children away or assist in providing some of the family needs.

On the other hand, men are traditionally empowered to sanction their wives when their actions and behaviors fall short of expectations. It may be in form of fines. If women refuse to pay, the man can refuse her food or abandon some family responsibilities, till the women show some remorse. This is one angle to the family politics involving gender relationships.
Still on family responsibility it was observed that it is not in all cases that the man whose decision it is to have additional children, take full responsibility for the upkeep of such numerous children. In most cases other family members, friends and even in-laws can assist the couples in providing the needs of family members. What this means is that the man can take the reproductive decision to have additional children and cleverly shift the responsibilities first to the wife and later to family members and society at large. This is more problematic if the couples have only female children.

We noted from the responses that while the government in Nigeria prescribes four children per couple, family members can persuade or pressure couples to be prolific for fear that not all four children may survive till adulthood to cater for their parents. Poor living standard, inadequate medical facilities, poor environmental sanitation, superstition, poverty etc. may account for this fear. These pressures often come as side comments, advice or in some cases outright family decisions. Some of these comments come when wives are advised by family members or friends to “wean their children early”. “This boy is too big to still breastfeed; he should reserve the breast milk for those coming”. “This child playing alone needs younger brothers and sisters to reduce his loneliness”. This is because they are aware that weaning a child early means that the period of lactation amenorrhea is shortened. At other times, men are told that their wives are “becoming too smart, they need to be made heavy and lazy”. To make a wife heavy and lazy is to make her pregnant. When couples have only female children, the pressure becomes more forceful, intense and frequent. In most, cases the men are advised to “do something”. This advice of “do something” is interpreted to mean “marry another wife” or “indulge in extra marital affairs” to “prove himself” potent and strong. True to expectation, these pressures are capable of making couples have more than the numbers of children they bargained for. This also means having children for whom the means to cater for may not be available.

On whether they have been pressured by others to have more children, some of the discussants have these to say;

“My mother in-law and friends have actually pressured my husband and I into having more children by making such comments as “your wife is getting too smart”. At other time she
told me that my child needs “brothers or sisters to make him grow faster”. Though these comments may be harmless, it sends a lot of ideas to both of us, that we need more children (A 34 year old petty trader).

Another discussant, a 55 year old civil servant has this to say about the pressures he has also experienced.

“My mother and auntie have even called me to ask what I was waiting for by not putting my wife “in the family way”. They complained that she was looking more like a ‘student’ than a ‘married woman’. Talks like these are common but the onus is on you to know what to do. I did not go to school for nothing.”

Some of these thought pattern are so strong and deep rooted among the people that it forms part of the names given to children. For example “AILEONOATOR” means that you do not know for sure who will live long. This is why they have numerous children. In other words, the fear of high death rates acts to stimulate couples to be prolific. Another name “Otuokpaikhian” mean that it is not ideal to go alone. It is therefore not ideal to have only one child. He or she must have brothers or sisters to play and grow with. “Omonefo” means child is more than wealth while, “Omonigho” means children is valued more than money. These names when interpreted mean that children mean more to the couples, families and society than wealth. If they grow and survive then they can create or become sources of wealth to all. The more numerous the number of children, the more the wealth expected from then in old age.

On whether some of the pressures are only geared towards increasing family size, discussants are of the view that some family members and friends can also pressure couples into extending the post – partum abstinence period. They do this by advising men to give “their wives more time to heal up well” before sexual intercourse is resumed after child birth. The longer this abstinence period, the more the space of time In-between children. This period of abstinence give room for some men, traditionally to have extra marital affairs. This is because though there is no law that encourages extra marital affairs,
every one is less hostile to a man caught having extra marital affairs during this period of abstinence from the wife who just delivered. Such affairs could also be another source of producing children for whom the means to cater for may not be available.

It would appear that these comments and pressures are still common place among the Esan people in-spite of urbanization and modernization. First, relatives, in-laws and parents still visit couples even in urban areas to assist the mother of the new baby after child birth. Their presence in the home means that opportunity is created for such “advice” which can help increase, reduce or space children as the case may be. Secondly, the couples living among their kins, as was found very common among the discussants are constantly under these pressures to be prolific. It was however revealed that the level of educational attainment of the couples greatly affect their capacity to absorb these pressures.

One of the interesting findings with the group of elders and traditional rulers was that, the age, educational attainment and set of advisers a traditional ruler has, to a large extent affect some of the interpretation attached to most of our traditions and customs. This means a lot of the traditional interpretation are gradually changing with educational attainment and exposure or contact with outsiders. What this portends is that just as the relationship between couples are changing due to exposure and educational attainment, so also are the changing relationships among the larger family unit and society at large.

5. Concluding Remarks

This study revealed that the way gender relationship is interpreted and the way reproductive choices are made reflect core societal values. The ways these social values are interpreted is influenced by age, sex and level of educational attainment. Some of those traditional hard line values are gradually being subjected to diverse interpretations due to educational attainment and exposure to other cultures where things are done differently.

It was observed that one of the factors that can change the low status of women is education, as most discussants believe that educated women “know a lot of things that can help their husbands, children and society at large”. The attitude of men was also noted to be influenced greatly by educational attainments which encourage migration and cultural diffusion. To change this inferiority status of women and the superior attitudes of men, we need to guide and educate our youths on the true meaning of sexual equality and make our school curricular
more gender-sensitive. Training the girl-child and gradual education and enlightenment can help to quench this fire of prejudices against women in all facets of life in our society.

The world has become a global village and world policies and politics have become more gender-sensitive. The way we react and relate to others in our environment including our attitudes to reproduction must now reflect not just the traditional values and family pressures but global values which reduces the inequality between the sexes and make couples responsible fully for their reproductive choices.
References


