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Articles

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Mission Statement
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The mission of this journal is to publish empirical research that tests, extends or builds business management and economic theory and contributes to business and economic development. All empirical methods including qualitative, quantitative, field, laboratory and combination methods are welcome. In order to be published in IJBED, a manuscript must make strong experiential and theoretical contributions and highlight the significance of those contributions to the business management and economic field. Thus, preference is given to submissions that test, extend or build strong theoretical frameworks while critically examining issues with high importance for business management and economic theory and practice. The IJBED is not tied to any particular discipline, level of analysis or national context. IJBED is committed to working to uphold the highest standards of probity and academic rigor in all that its endeavours.

International Journal of Business & Economic Development (IJBED)

Editors and Editorial Board

Volume 3 Number 3 November 2015

Statement of Editorial Policy

The IJBED is a scholarly and refereed journal that provides an authoritative source of information for scholars, academicians, and professionals in the fields of business and economic development. The journal promotes the advancement, understanding, and practice of business & retail management. Manuscripts offering theoretical, conceptual, and practical contributions are encouraged.

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- Publish high quality and scholarly empirical based research papers, case studies, reviews in all aspect of business, management and commerce with theoretical underpinnings.
- Offer academics, practitioners and researchers the possibility of having in depth knowledge and understanding of the nature of business and management practices and.
- Create a forum for the advancement of business and economic development research.

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International Journal of Business & Economic Development (IJBED)
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Editorial Comments

This edition of the *International Journal of Business & Economic Development (IJBED)* contains ten scholarly articles conforming to the principal objective of the journal, namely the dissemination of both applied and theoretical knowledge. The papers provide a stimulating insight into a range of issues, both with local and global significance and afford us an opportunity to appreciate the way in which various sectors and economies are wrestling with various challenges. The findings of a number of these papers are significant not only for academicians, but also for professionals, policy makers and those responsible for local, regional and national strategy. It is evident that whilst there is clear of evidence of mankind's ingenuity in a range of circumstance, there is also a wealth of evidence presented herein for a lack of foresight in a variety of sectors and areas of human endeavour.

As ever the Editorial Board is grateful to the contributors for making IJBED the platform by which they have chosen to put their research into the public arena, and trust that they will use their good offices to ensure that others do the same. It also grateful for the essential role that reviewers play in the journey papers submitted for consideration take before they are finally accepted for publication, something which is far from a certainty.

The first paper of this edition is entitled: Day of the week effect on the Zimbabwean Stock Exchange: A non- linear GARCH analysis by Mazviona & Ndlovu. The many variables that impact on trading play a significant role in levels of risk and thereby profitability. Fluctuations in activity coupled with individual and group attitudes are thus something that no enterprise can afford to ignore. Whilst some might believe that internal and external factors even each other out, there is a growing body of evidence to suggest that in certain circumstances volatility is increased sufficiently to have a direct bearing on activity. It is worth noting that a recent study published in the British Medical Journal related to the National Health Services in the United Kingdom has shed some light on patient survival rates depending on which day of the week they were admitted to hospital; what is evident in health provision could well reflect similar trends to be found in the world of commercial activity.

This paper draws upon a fairly extensive literature review that manages to highlight patterns found in different countries. Naturally, different cultural contexts shape national and local trends. In the Middle East and some other parts of the world the weekend, such as it is begins on a Thursday evening, whilst elsewhere it traditionally begins on a Friday. Time zones would also appear to be significant. With markets being closed, whether for a day or two days each week we would expect to discover greater volatility on the first day of the week. The findings presented here about Wednesday and Friday give reason to reflect upon the peaks and troughs that speak volumes about temperament and manifestations of herd mentality. Such findings as have been presented here have a relevance beyond Zimbabwe and warrant consideration when a company is considering the likes of an IPO. Variations that impact on the business equilibrium are extremely important and whilst we must guard against exaggerating the role of days of the week, equally it would be folly to ignore the potential role played by such factors. Historically and culturally days have been viewed as holding particular significance, with some being seen as more auspicious or having negative associations that impact on our psychological response. This paper is a timely reminder that such factors should be given due consideration and by drawing on accrued data enterprises may well be better able to respond and plan accordingly.

The next paper explores the realm of care for those who may well have come to the end of their working life. Using empowerment theory in health promotion guided development the home for the elderly in Nakhon Ratchasimu, Thailand by Vongchavalitkul makes clear from the outset that societal and demographic changes are as much a part of the human landscape in Thailand as they are elsewhere. These changes have been further accelerated by a generational shift from rural to urban communities by those of working age in the quest to find employment. The Ottawa Charter (1986) helps codify aspirations and objectives for national health and well-being and as such this is a useful set of criteria with which to benchmark developments and progress.

A perennial complaint voiced, albeit quietly and with diffidence by the elderly, is that they are rarely consulted about their care and health pathway. This research articulates with clarity the value of providing the means by which the elderly are given a voice and as a consequence are more likely to feel that they have been given choice and made to feel valued. The dignity afforded is further consolidated by recognising that many elderly people have skills and knowledge that can be harnessed and utilised. Factoring in a degree of flexibility would appear to result in greater satisfaction and this in turn is likely to lead to an improvement in mental and physical well-being. Naturally, with a rising population of older people, there are serious monetary pressures that warrant consideration, yet this particular study makes clear that volunteers are capable of playing a purposeful role, one that helps reduce the sense of isolation and adds to a greater sense of dignity. This study should cause us all to reflect further upon how we ensure that people are kept engaged after retirement, initiatives such as The University of the Third Age (www.u3a.org.uk) offer some practical ways to ensure that the retired do not feel utterly redundant.

It would have been interesting to know whether there are any differences in gender aspiration and needs. In addition, some reflection on how best to anticipate future requirements would have been useful. Thailand is not alone in having to address this important issue and thus this paper underscores a subject that impacts on us all and deserves further analysis as we approach the thirtieth anniversary of the Ottawa Charter.

The third paper is entitled: A comparative study on the financial performance between Islamic and conventional banks - the case of Egypt by Youssef and Samir. A banking system where there is no element of *riba* (that is interest) may appear decidedly unorthodox to many, yet there is a growing interest in Sharia Finance, a system that adheres to the moral code and religious law of Islam. With some 90% of Egyptians being Muslim, it should come of little surprise that such finance should find a ready market in Egypt that said, this study makes clear that more conventional banking still predominates. Post-2008 global financial crisis, Muslims and non-Muslims have wanted to discover more about Sharia Finance and to see how it compares and measures up to conventional banking. In seeking to compare and contrast effectiveness across a range of instruments Youssef and Samir have highlighted a range of often subtle differences, a number of which show each form of banking in a favourable light. Islamic banking, is not as well established as conventional banking and thus is should come as little surprise that certain features and services warrant further attention and development. Within the limitations of the study size there are a number of salient observations that could well provide useful pointers for any future research.

Islamic Finance is attracting more and more interest, and as a result it is reasonable to suppose that new banks will emerge and thus more data be available for future research. Countries are eager to demonstrate their understanding of such a specialist financial offering and what is more to prove their worth in an increasingly crowded and competitive market place. With Egypt being the third most populous country in the Middle East and the third-most

populous in Africa demographic indicators would appear to point towards to a continued growth in demand for Islamic Finance.

Just as the banking sector is reliant on the trust and the confidence of its customers, the world's stock exchanges are dependent on those in dabble in them having sufficient confidence to remain actively engaged. The next paper in this edition is entitled: Evidence of the overconfidence bias in the Egyptian stock market in different market states by Metwally and Darwish. The psychology and sociological factors involved individual and collective behaviour warrant analysis, not least as a means of endeavouring to appreciate the dynamic of the Egyptian Stock Market. Whilst many aspects of investment, trading and capitalisation have been analysed in depth, "overconfidence bias" and the ramifications of such an outlook has not been as well appreciated or understood. The Egyptian economy and the Egyptian Stock Exchange has an additional factor to contend with, namely the hidden (and not so well hidden) yet omnipresent hand of the Egyptian military. Confidence is of paramount importance in all fields of human endeavour and this study appears to provide some compelling evidence for why there needs to be a greater appreciation of the part it plays. Some might well argue there is a case for Egypt emulating the United States of America by establishing a Consumer Confidence Index (CCI). The recommendations made in this research are significant ones that deserve serious consideration on the part of the relevant parties.

The next paper is entitled: Real economic convergence in the European Union from 1995-2013 by Siljak. The manner in which what was the Common Market has grown and morphed into the European Union is a subject worthy of study. Here we have a paper that examines the remarkable degree of convergence that has taken place over the last two decades and on the strength of what has been presented here there would appear to be strong evidence of the various economies becoming more and more integrated. EU regulations have been key drivers in this, yet whilst this paper chooses to sidestep the politics and national sovereignty issues connected with the European Union it would be foolish to deny that convergence such as it is has often come at a cost and has been a result of a diktat rather than consensus or a natural coming together. Some might question the nature of the project and for all the engineered convergence the picture presented in this paper is possibly not quite as rosy and harmonious as some would have us believe. That said, the real value in this research lies in the fact that it provides an extensive overview of the challenges faced in aligning often quite different economies, as well as the exploration of absolute and conditional convergence. It would be churlish to deny that there is clear evidence of success, yet with many sources coming from the EU itself there may well be good reason to wonder whether we are being told the full story.

The analysis of growth rates provides food for thought and could well furnish some useful pointers for other organisations aimed at regional cooperation e.g. the East African Community (EAC). Equally the instruments deployed here certainly help to tease out some useful findings and as such add to our understanding of a venture that has provided a template for economic cooperation, albeit one that is not without its flaws. One of the most encouraging areas where there has been very real cooperation is at an academic level, something that has resulted in an unprecedented exchange of ideas.

For the next paper we move from the European Union to the Horn of Africa, more especially the regional powerhouse that is Ethiopia. Internationalisation Barriers of Small and Medium-sized Manufacturing Enterprises in Ethiopia: Leather and Leather Products Industry in Focus by Lakew and Chiloane-Tsoka elucidates something of a country that for far too long has been viewed as if stuck in a 1985 Band Aid time warp. The leather industry in Ethiopia is remarkably successful, yet for all its success it is dogged by multiple barriers and challenges. SMEs, as elsewhere, are at the sharp end and invariably face additional difficulties particularly

in regard to access to finance and equipment as well as the size of scale or connections to embolden them to enter into the export arena. Such challenges are not unique to the leather industry, all sectors in Ethiopia are hampered by foreign currency restrictions and a marked reluctance on the part of the national government to liberalise the banks and financial services.

The point made here about "defined brand" is a particularly pertinent one as often it is the end manufacturer who accrues the prestige associated with a product. Ethiopia may well produce the leather that goes in to making Italian shoes, gloves and handbags, but it is Italian manufacturers and designers who receive the plaudits, whilst the customer and the fashion writers are oblivious to the fact that leather was produced in Ethiopia. SMEs in Ethiopia also have to contend with an increasing number of foreign manufacturers who are moving into and basing their concerns locally; this is especially true of the Chinese.

The findings presented here provide plenty to ponder upon. Possibly a way forward for SMEs could lie in the cooperative movement. The extraordinary success of the Ethiopian Commodities Exchange (ECX) means that a mechanism already exists locally to act as a conduit for sales. Quantity and quality control are issues of concern and thus the issue of a national herd might well be one worthy of exploration. In truth there will be no quick fix for the challenges faced by SMEs in Ethiopia, but it is clear that much more needs to be done, not just for businesses in and around Addis Ababa, but nationwide.

New technology has had significant ramifications on the world of work, especially in regards to where and when an employee works. Traditional attitudes to work, whilst deeply entrenched, are having to change and as a consequence the perceived model of the working world is having to be adapted to meet changing expectations. Gauging Perceived Benefits from 'Working from Home' as a Job Benefit by Church presents the reader with some surprising findings concerning telecommuting and the extent to which it has become established in the United States of America. The fact that the percentage of employees working from home in the US has risen from 23% to 38% in just six years (2008-2014) is quite staggering. This development has evidently been accelerated considerably by the advent of the Internet and e-mail. Conservative attitudes persist both on the part of employers and employees that said, Church makes clear that the chief impediment for further change is the issue of trust, or rather the trust deficit. The workplace has often been seen as a place of 'Us and Them', something that employees, trade unions, workers and media seem happy to subscribe to, as a consequence attitude persists that believes that; 'Whilst the cat's away, the mice will play'. The fact that this research underscores the benefits that accrue from more employees working from home still comes as something of a revelation to many. That said, it has to be appreciated that not every role is suitable for telecommuting and that even some employees that work from home miss some of the traditional features and stimuli of the working environment. For all the current dynamic, it is worth noting that some major commercial concerns have begun to swim against the tide, with Yahoo and Google taking an increasingly hostile stance in regard to their employees working from home. Marissa Mayer, the President and CEO of Yahoo is on record as being particularly hostile to telecommuting, something that reminds us of the importance of a supportive leadership and management.

The eighth paper of this edition is entitled: Saudi Arabian Green Economy Infrastructure: Barriers, Strategies and Opportunity – an Analysis by Albanawi. For a country that has been wedded and dependant on hydrocarbons for so long it should hardly come as a surprise that it has not only embraced the ideas behind the Green Movement not only late, but with a fair degree of caution. Political stability, economic growth and the need to provide employment have been primary concerns and yet this paper makes clear that a nascent greening of Saudi Arabia, and here I am not referring to Burger King offering green burgers in Saudi Arabia (they

are literally the colour of the national flag). Issues such as water security and sewage management have begun to receive greater attention, although to date no city or region of Saudi Arabia has signed up to the Istanbul Water Consensus (www.istanbulwaterconsensus.org). These results clearly elucidate the fact that cost is a key concern, especially with the likes of desalination proving particularly expensive. An economy that has largely been enslaved to hydrocarbons has to wean itself off such a dependency and this will only come through education combined with legislation. What has been presented here are some interesting examples of how the green shoots of new approach are beginning to emerge, that said, the recent downsizing of Saudi Arabia's renewable energy program is indicative of how susceptible such initiatives are to political whim and political machinations. Whilst there are many who wish to see Saudi Arabia taking a far more robust stance right across the Green Economy, it is important to acknowledge that progress is beginning to be made.

The reasons why we make the decisions that we do influence every aspect of human endeavour. Intuition in decision making is an area of research that is attracting more and more attention and thus it is appropriate that the penultimate paper of this edition is entitled: Intuition in decision making – theoretical and empirical aspects by Malewska. As well as giving a comprehensive overview of the literature appertaining to the role of intuition, this research paper endeavours to discover to what extent intuition plays a part in the decision making process of various groups of individuals within a particular commercial entity – in this case bakery business in the Polish city of *Poznań.* Experience and gut instinct are things we all draw upon to some extent, but here we see a methodical and spirited attempt to quantify the degree to which intuition plays a part in the decision making progress. The findings, whilst not exactly a revelation, are useful in that there is clear evidence that intuition is a significant factor, one that whilst not the primary element in decision making, certainly shores up a decision or has a bearing on making it. The findings presented here are sufficiently interesting to raise questions about why the subject of intuition is not explored in business, management and leadership schools. Far from being nebulous, Malewska has demonstrated that intuition can be defined with sufficient clarity so as to make it capable of study with a view to examining its use and purpose.

The final paper of this edition is entitled: Factors of Economic growth in the Kingdom of Saudi Arabia – an empirical analysis from 2000-2014 by Esmail. Saudi Arabia has emerged as a regional powerhouse in more ways than one and as a consequence some commentators and analysts are eager to discover how this has come about and to what extent Saudi Arabia has begun to flex its muscles. Whilst petrodollars tend to dominate proceedings, there is a growing body of evidence to suggest that the Saudi economy is beginning to broaden and diversify. Changes are afoot for a variety of reasons, some internal and others external. Fluctuations in the world oil price, as well as a recent International Monetary Fund (IMF) report that estimated that Saudi Arabia's public debt would hit 33% of GDP by 2020 have begun to concentrate minds. The paper presented here highlights a number of the reasons for Saudi Arabia's current success, but must be tempered by an appreciation that foreign policy adventures, regional instability and deep fissures within the ruling house all have the potential to blow the economy off course.

All these papers remind us of the increasing complexity of issues related to economic development and thus challenge us all to ensure that education be relevant and exacting and that we continue to strive to ensure that the next generation is equipped with the skills to reason, question and seek solutions.

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Editorial

Day of the week effect on the Zimbabwe Stock Exchange: A non-linear GARCH analysis

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Keywords
Day of the week, Zimbabwe Stock Exchange, GARCH, EGARCH.

Abstract
   This study analysed the day of the week effect on the Zimbabwe Stock Exchange (ZSE) by taking into account volatility of returns. The purpose of the study was to establish whether daily mean returns across a trading week differ from each other. We employ a non-linear approach in modelling the day of the week effects. In particular, we used the Generalised Autoregressive Conditional Heteroscedasticity (GARCH) and the Exponential GARCH (EGARCH) models. We used industrial and mining daily closing indices data from 19 February 2009 to 31 December 2013. The data was retrieved from the ZSE website. EViews 7 software was utilised for data analysis. In order to test the null hypothesis of equality of daily mean returns, a Wald test was carried out. The Wald F-statistic rejected the null hypothesis of equality of mean returns for the industrial index. We found the traditional negative Monday and positive Friday effect for the industrial index in GARCH (1,1) and EGARCH (1,1) models. The GARCH (1,1) detected a negative Friday effect and the EGARCH (1,1) detected negative Wednesday effect for the mining index. We found evidence of model dependency for the mining index results.

1. Introduction
   The efficient market hypothesis (EMH) is a central issue of the literature of finance. This theory argues that if stock prices reflect all the information available and immediately incorporate all new information then the market can be considered efficient (Enowbi, Guidi & Mlambo 2009). The three forms of the EMH (namely the weak form, semi-strong form, and the strong form) define efficiency relative to the information set available to investors in the markets (Mazviona & Nyangara 2013).

   Weak form market efficiency assumes that current stock prices fully reflect all security market information including the historical sequence of prices, rates of return, trading volume data, and other market generated information such as odd lot transactions, block trades and transactions by exchange specialists (Reilly & Brown 2006) and it implies that trend analysis is fruitless because price and volume movements follow a random walk such that price changes are independent of prior movements. The test for weak form efficiency is often conducted by testing for serial correlation or, at least, patterns which can be identified in share price movements.

   The semi-strong form EMH asserts that security prices adjust rapidly to the release of all public information, that is current security prices fully reflect all public information, which includes, in addition to past prices, fundamental data on the firm's product line, quality of management, balance sheet composition, patents, accounting practices and earnings forecasts. The semi-strong form hypothesis encompasses the weak form hypothesis because all the market information considered by the weak form hypothesis such as stock prices, rates of return and trading volume is public (Smith, Jefferis & Ryoo 2002). This implies that excess risk-adjusted investment returns cannot be obtained using only publicly available information.

The strong-form EMH contends that stock prices fully reflect all information from public and private sources and this means that no group of investors has monopolistic access to information relevant to the formation of prices (Chikoko & Muparuri 2013). The strong form EMH encompasses both the weak form and the semi-strong form EMH. Tests for the strong form efficiency are concentrated mainly on finding whether any group of investors, especially those who can have access to information otherwise not publicly available, can consistently enjoy abnormal returns.

Most studies on the ZSE have found it to be weak form inefficient and these include Mazviona and Nyangara (2013); Chikoko and Muparuri (2013); Magnusson and Wydick (2002); Simons and Laryea (2005); Jefferis and Smith (2005); Smith (2008); Sunde and Zivanomoyo (2008). Some of the studies that conclude that the ZSE is consistent with a random walk include Appiah-Kusi and Menyah (2003); Mlambo and Biekpe (2007). The oversimplified assumptions of the EMH has stimulated a plethora of studies that looked at, among other things, the reaction of stock markets to information announcements, the predictability of stock returns, and stock market anomalies (Mbululu & Chipeta 2012). An anomaly can be defined as an incidence that cannot be explained by a current finance theory (Al-Loughani, Al-Saad & Ali 2005) and in the case of stock markets; anomalies are occurrences that dispute the EMH (Brooks & Persand 2001). Among the more well-known anomalies are the size effect, the January effect and the day of the week effect.

The study of market efficiency is quite crucial for investors, investment managers and policy makers. Individual and institutional investors' understanding of market efficiency can assist in improving their returns. If markets are weak form inefficient, this entails that there is a potential to utilise technical expertise to identify patterns and earn abnormal returns in the short run. Investment managers can profile capital markets based on their efficiencies, this aids in portfolio diversification. Policy makers who set rules and regulations governing operations of capital markets can monitor and track the impact of reforms. Tests of market efficiency on the ZSE have been mostly centred on testing the weak form market efficiency by determining whether the returns follow a random walk or not but no extensive work has been done on calendar anomalies like the day of the week effect. Hence, this study provide a platform for further research to be carried out on the day of the week effect on the ZSE and provides evidence for or against efficiency of the ZSE. The study contributes to the body of knowledge in the market efficiency arena.

2. Literature review

The day of the week effect, also referred to as weekend effect or Monday effect is an important area of study and many researchers tried to find observable patterns by testing equality of returns across all days of the week. Literature has documented various methodologies in studying the day of the week effect, this range from simple ordinary least squares (OLS) techniques to the latest GARCH models. Some researchers have investigated the various influences on the day of the week effect. The day of the week effect literature is summarized and organized into three categories: studies that document the existence of the weekend effect, studies that seek to explain the source of the effect, and studies of the trading effectiveness of the effect (Pettengill 2003). The two most developed veins of research regarding the day of the week effect include investigations into the reversal or shift of the traditional weekend effect and order flow-based explanations for the weekend effect (Philphot & Peterson 2011).

Al-Loughani and Chappell (2001) examined the evidence of a day of the week effect by employing a non-linear GARCH (1,1) model in daily stock returns in the Kuwait Stock Exchange

(KSE) and there was presence of day of the week in the KSE, with returns for the first day in the trading week being higher than other trading days. Similarly, Al-Mutairi (2010) found evidence of presence of the day of the week effect in Kuwait Stock Exchange, and results showed positive and higher returns on Saturday compared to other days of the week except for Wednesday, hence suggesting inefficiency of the Kuwait stock market. Tonchev and Kim (2004) investigated the day of the week effects in the newly developing financial markets of three European countries Czech Republic (PX-50 and PX-D), Slovakia (SAX) and Slovenia (SBI-20 and SBI-20NT) using OLS for mean and GARCH for variance. No significant day of the week effect was found to be present except that the returns on Wednesday were significantly lower than on Monday in both Slovenian SBI-20 and SBI-20NT indices. Ulussever, Yumusak and Kar (2011) studied the Saudi stock exchange using the GARCH model and day of the week effects were found in the daily return of the Saudi stock market. Sutheebanjard and Premchaiswadi (2010) concluded that the stock exchange of Thailand (SET) showed significant evidence of the day of the week effect, and Monday and Friday had the highest and lowest per cent of prediction error respectively.

Agathee (2008) found that the stock exchange of Mauritius exhibited support of the day of the week phenomenon, with Friday having higher returns. However, the mean returns of the five week days were jointly insignificant and different from zero. Dicle and Hassan (2007) employed GARCH in mean (GARCH-M) models on the Istanbul market for a period of approximately twenty years and found significant day of the week patterns. Chukwuogor-Ndu (2007) obtained similar results where he found a presence of the day of the week effect in some East Asian financial markets. Hui (2005) compared various Asia Pacific markets with the US and applied non-parametric tests that demonstrated no significant day of the week effects except in the market of Singapore. Apolinario, Santana, Sales, and Caro (2006) examined 13 European stock markets using the GARCH and Threshold GARCH (TGARCH) models and their findings revealed the presence of a normal behaviour of returns in these markets.

Kiymaz and Berument (2003) tested the presence of the day of the week effect on stock market volatility by using the S&P 500 market index during the period of January 1973 and October 1997 and their findings indicate that the day of the week effect is present in both volatility and return equations. While the highest and lowest returns are observed on Wednesday and Monday, the highest and the lowest volatility are observed on Friday and Wednesday, respectively. Further investigation of sub-periods reinforced their findings that the volatility pattern across the days of the week is statistically different. Kamath and Chusanachoti (2002) tested the Korean stock market using the OLS and the GARCH model. They found conflicting results where a strong evidence of the day-of-the-week effect was found during the 1980's, after which it disappeared in the 1990's. On the other hand, Choudhry (2000) analysed this phenomenon on seven emerging Asian stock markets namely India, Indonesia, Malaysia, Philippine, South Korea, Taiwan, and Thailand and his findings provided evidence the day of the week effect on both returns and volatility.

Ndako (2013) examined the day of the week effect for the Nigerian and South African equity markets over pre-liberalisation and post-liberalisation periods, using EGARCH model to estimate the day of the week effect both in the mean and variance equations. The post-liberalisation period for the Nigerian equity market exhibited day of the week effect on Fridays only in the mean equation. While in the variance equation, there is evidence of day of the week effect on Tuesdays and Thursdays respectively. In South Africa, there is significant evidence of the day of the week effect on Mondays and Fridays during the pre-liberalization period. During the post-liberalisation period, there is evidence of day of the week effect on Thursdays in the mean equation and Fridays only in the variance equation.

Enowbi, Guidi and Mlambo (2009) investigated the day of the week effect on stock returns and volatility in four emerging African stock markets namely Egypt, Morocco, Tunisia and South Africa, by employing a GARCH framework. The sample covered the period from January 2000 to March 2009. They found the existence of various significant days of the week effects, including the typical negative Monday and Friday positive effects in several stock markets. Even after making adjustments for the equity risks, these effects seemed to be present also in multivariate EGARCH (M-EGARCH) models estimated.

Rahman (2009) examined the presence of day of the week effect anomaly in the Dhaka Stock Exchange (DSE), using dummy variable regression and the GARCH (1, 1) model. The findings show significant negative Sunday and Monday returns and significant positive returns on Thursdays. Furhermore, the mean daily returns between two consecutive days differ significantly for the pairs Monday-Tuesday, Wednesday-Thursday and Thursday-Sunday and statistically different average daily return of every trading day of the week. Dummy variable regression results shows that only Thursdays have positive and statistically significant coefficients and results of the GARCH (1, 1) model show statistically significant negative coefficients for Sunday and Monday and statistically significant positive coefficient for Thursday dummies. The day of the week effect was found to be present in DSE. Al-Jafari (2012) investigated the day of the week effect on the Muscat securities market by employing a non-linear symmetric GARCH (1, 1) and EGARCH (1, 1) models. The results showed no evidence of presence of day of the week effect and hence the Muscat securities market was found to be weak form efficient.

During the last three decades numerous studies examining the returns at index level have found evidence of day of the week effect, for both well developed and emerging countries. Existing literature for emerging countries have been investigated using numerous techniques. Mixed results were found, some reported day of the week effect and others show no evidence of the phenomenon. Most of the studies regarding day of the week effect are mostly for developed markets, and even though studies on emerging markets are being considered, they have not received much attention to date. This study examined the day of the week effect on the industrial and mining indices, an arena which has not been researched much in Zimbabwe. There is limited literature regarding day of the week effect on the ZSE. We believe that this is the first study to be carried on the ZSE after introduction of the multi-currency system in Zimbabwe. This study contributes to the body of knowledge on the efficiency of the ZSE. It also opens up some areas of further study to better understand the weak form efficiency and complement existing literature.

3. Methodology

We used daily closing industrial and mining indices from the ZSE over the period February 2009 – December 2013 period. Data for the period before 2009 was not included because that period has significant problems like thin and infrequent trading and the effects of hyperinflation. The industrial index is the main index as it constitutes at least 90% of the stocks on the ZSE. In order to analyse the day of the week effect, daily returns were grouped separately into different days of the week. EViews 7 software was used to carry out data analysis. Daily closing indices were converted into natural logarithms returns as follows:

$$R_t = ln\left(\frac{P_t}{P_{t-1}}\right) \times 100$$

Where:

R_t is the daily returns,

P_t and P_{t-1} are the closing indices at time t and time t-1respectively.

For non-trading periods shorter than five days, the return for those days was taken as zero.

3.1   GARCH models for the day of the week effect on return

The Generalised Autoregressive Conditional Heteroscedasticity (GARCH) framework, which was introduced by Bollerslev (1986), provides a framework in order to capture various dynamic structures of the conditional framework in order to capture various dynamic structures of conditional variance and it allows simultaneous estimation of several parameters of interest and hypothesis (Enowbi, Guidi & Mlambo 2009). Deyshappriya (2014) explains that OLS regression may be affected by ARCH effect due to the highly volatile daily data therefore there is a higher possibility to change variance of the error term with time and as a result of this, it is crucial to introduce an Autoregressive Heteroskedastic model in order to capture the ARCH effect of the OLS regression otherwise the results drawn from the OLS method may not be valid. The following GARCH (1,1) model was estimated:

$$R_t = \beta_1 D_{1t} + \beta_2 D_{2t} + \beta_3 D_{3t} + \beta_4 D_{4t} + \beta_5 D_{5t} + \sum_{i=1}^{k} \alpha_i R_{t-i} + \varepsilon_t \ldots \ldots \ldots (1)$$

Where:

$$\varepsilon_t = \sigma_t z_t$$
$$\sigma_t^2 = \omega + \alpha \varepsilon_t^2 + \beta \sigma_{t-1}^2$$
$$\frac{r_t}{\sigma_t} \approx N(0,1)$$

D_{it} is a dummy variable that is equal to zero prior to the chosen event date and one thereafter.

Thus:

D_{1t} = 1 if day t is a Monday   = 0 otherwise

D_{2t} = 1 if day t is a Tuesday   = 0 otherwise

D_{3t} = 1 if day t is a Wednesday   = 0 otherwise

D_{4t} = 1 if day t is a Thursday   = 0 otherwise

D_{5t} = 1 if day t is a Friday   = 0 otherwise

ε_t = error term

β_1 , β_2, β_3, β_4 , β_5 are coefficients to be estimated.

If the *p*-value of the F-statistic is found to be greater than 5%, the null hypothesis is accepted otherwise if it is less than 5%, this will indicate differences in mean daily returns. Angelovska (2013) explains that GARCH models assume symmetrical behaviour of market reactions to positive and negative news, whereas in actual fact, the most commonly seen is that the negative returns are followed by higher volatility than positive. Anomalies of the day of the week effect was further analysed using the EGARCH model, which can hit possible asymmetry in the behaviour of the stock market.

An EGARCH model was specified as follows:

$$\log(\sigma_t^2) = \delta_0 + \sum_{j=1}^{q} \beta_j \log(\sigma_{t-j}^2) + \sum_{i=1}^{p} \alpha_i \left| \frac{\varepsilon_{t-i}}{\sigma_{t-i}} \right| + \sum_{k=1}^{r} \gamma_k \frac{\varepsilon_{t-k}}{\sigma_{t-k}} \quad \ldots \ldots \ldots (2)$$

The, EGARCH was estimated for the industrial index and mining index data. A Student's *t*-test was employed to determine whether the results obtained for each test were significant or not. A t statistic of 2 is equivalent to a p-value of 0.05. A *p*-value of less than 0.05 is considered significant which entail rejection of the null hypothesis indicating that there is no effect or there are differences in mean returns across different days of the week.

1.   Results and discussion

Table 1 highlights the descriptive statistics for industrial index. The lowest and highest average returns were observed on Monday and Friday respectively. We note that the conventional phenomenon of negative Monday returns and positive Friday returns seem to be present in the industrial index. The greatest risk as measured by the standard deviation is observed on Friday. This explains why Friday has the highest return since investors would require compensation for taking on increased risk. Wednesday has the lowest risk. There is generally a negative skewness across trading days, with exception of Tuesday. The distribution of the trading days' returns is more peaked than the normal distribution as reported by a positive kurtosis in all trading days.

Table 1: Descriptive statistics for industrial index

	Mean	Standard deviation	Skewness	Kurtosis
Monday	-0.0010	0.0161	-2.4415	22.5298
Tuesday	0.0005	0.0150	0.0026	20.5053
Wednesday	0.0002	0.0135	-0.7709	15.2594
Thursday	0.0014	0.0145	-0.4688	21.2336
Friday	0.0017	0.0171	-5.2219	68.1521
All	0.0006	0.0153	-2.1895	35.5306

The descriptive statistics for mining index reported in Table 2 show completely opposite results from Table 1. Firstly, we observe a negative trend of average returns across trading days. The only day with positive return is Tuesday. Although Tuesday has a positive return, it is less risk than Thursday with negative return. Secondly, we note that the standard deviations shown in Table 2 are higher than those in Table 1, indicating that the mining sector is more risky than the industrial sector. The mining index has a positive skewness unlike the industrial index with negative skewness. The findings in Table 2 agree with those in Table 1 on the kurtosis. We therefore conclude that the daily returns for mining and industrial indices are not symmetrically distributed. This indicates that returns distribution cannot be modelled by a normal distribution.

Table 2: Descriptive statistics for mining index

	Mean	Standard deviation	Skewness	Kurtosis
Monday	-0.0010	0.0275	-1.3629	16.1284
Tuesday	0.0007	0.0379	4.6973	56.3187
Wednesday	-0.0003	0.0295	1.4800	13.8393
Thursday	-0.0007	0.0413	-0.4241	15.5890
Friday	-0.0018	0.0283	-0.1086	8.6544
All	-0.0006	0.0334	1.2598	30.1755

Models 1 and 2 highlighted in section 3.1 were employed. Before estimating the parameters, we checked the Ljung-Box (LB (Q)) statistics for up to 16 lags for each series, which were statistically significant, indicating that the models suffer from the problem of serial correlations. One way to determine the lag specification of the models is to use the partial autocorrelation function (PAC) in which we choose the lag order which has the highest absolute PAC (Xun 2012). The PAC and Q-stat for the industrial and mining indices are given in Table 3 below.

Table 3: PACF and Q-stats for the industrial and mining indices

Lag	PACF INDUSTRIAL			PACF MINING		
	PAC	Q-Stat	*p*-value	PAC	Q-Stat	*p*-value
1	**0.467**	266.17	0	0.105	13.573	0
2	0.098	372.41	0	0.037	16.313	0
3	0.017	413.59	0	0.097	29.638	0
4	-0.091	415.67	0	**-0.107**	38.077	0
5	0.012	416.1	0	0.084	43.933	0
6	-0.108	424.76	0	0.015	45.483	0
7	0.112	424.79	0	-0.041	48.442	0
8	0.124	437.37	0	0.045	52.884	0
9	0.029	450.62	0	0.035	54.225	0
10	-0.006	464.56	0	0.027	55.203	0
11	0.008	474.57	0	0.012	57.59	0
12	0.077	495.58	0	-0.019	58.101	0
13	-0.005	504.54	0	0.003	58.125	0
14	0.069	514.63	0	0.052	62.374	0
15	0.092	538.37	0	-0.031	63.19	0
16	-0.013	550.77	0	0.012	63.587	0

Hence, a lag of four is specified for the mining index since this is where it has the highest absolute PAC and a lag of one was used for the industrial index.

Table 4: GARCH (1,1) model results

Coefficient	Mining	Industrial
R_{t-1}	0.144	0.435
	(0.000)	(0.000)
R_{t-2}	0.027	
	(0.474)	
R_{t-3}	0.040	
	(0.317)	
R_{t-4}	0.026	
	(0.437)	
β_1	0.001	-0.001
	(0.619)	(0.014)*
β_2	-0.002	-0.001
	(0.095)	(0.190)
β_3	-0.002	0.000
	(0.261)	(0.848)
β_4	0.001	0.001
	(0.234)	(0.002)*

β_5	-0.003	0.002
	(0.049)*	(0.000)*
Variance Equation		
ω	0.000	0.000
	(0.000)	(0.000)
α	0.140	0.576
	(0.000)	(0.000)
β	0.825	0.476
	(0.000)	(0.000)
R^2	0.012	0.217
Wald test	8.851	13.073
	(0.065)	(0.011)*

*significant at 5% level

Table 4 reports the GARCH (1,1) modelling results. We observed a negative Monday effect, and a positive Thursday and Friday effects for the industrial index. The industrial results confirm the phenomenon we noted in Table 1 of negative Monday returns and positive returns on other days. We found that the average returns for industrial index differ significantly (Wald test is significant) across trading days indicating a weak form inefficient ZSE. The results from the industrial index are consistent with those of (Enowbi, Guidi & Mlambo 2009; Angelovska 2013). A significant negative Friday effect was found for mining index, this is not suprising since the average daily returns reported in Table 1 for mining index are generally negative. The Wald test was found to be insignificant entailing that the daily mean returns for mining index do not vary from each other.

Table 5: EGARCH (1,1) model results

Estimated Coefficients	Mining	Industrial
R_{t-1}	0.135	0.441
	(0.000)	(0.000)
R_{t-2}	0.027	
	(0.439)	
R_{t-3}	0.059	
	(0.116)	
R_{t-4}	0.015	
	(0.601)	
β_1	0.000	-0.001
	(0.917)	(0.001)*
β_2	-0.002	-0.001
	(0.225)	(0.161)
β_3	-0.003	-0.001
	(0.014)*	(0.142)
β_4	0.000	0.001

	(0.767)	(0.113)
β_5	-0.003	0.002
	(0.063)	(0.000)*
Variance equation		
δ_0	-0.636	-2.057
	(0.000)	(0.000)
α_1	0.301	0.848
	(0.000)	(0.000)
γ_1	-0.005	-0.110
	(0.617)	(0.000)
β_1	0.940	0.847
	(0.000)	(0.000)
R^2	0.018	0.217
Wald test	1.536	15.383
	(0.189)	(0.000)*

*significant at 5% level

We took into account the asymmetry of market reaction on the ZSE and used the EGARCH (1, 1) model. The results in Table 5 show only two statistically significant days effects for industrial index. A negative Monday effect and positive Friday effect which is similar to the findings from the GARCH (1, 1) model presented in Table 4. However, the Thursday effect disappears when using an EGARCH (1, 1) model. The evidence reported in Table 5 is consistent to findings obtained in (Enowbi, Guidi & Mlambo 2009; Ndako 2013). The F-statistic from the Wald test is statistically significant for the industrial index indicating differences in mean returns across different days of the week. We found the presence of Wednesday effect for the mining index using the EGARCH (1, 1) model which is in contrast to the negative Friday effect obtained in the GARCH (1, 1) model. The mining index results are model dependent as we have noticed that the negative Friday effect vanished when using the EGARCH (1, 1) and the negative Wednesday effect surfaced. Similarly to what was found in (Nghiem et al 2012), we could not rule out model dependency in modelling day of the week effect for the mining index. The average daily returns for mining index were not significantly different from each other using the EGARCH (1, 1) model.

The implication of the day of the week effect is that it provides evidence of the weak form inefficiency of the ZSE and it adds to the existing body of knowledge on the ZSE (including Mazviona & Nyangara 2013; Chikoko & Muparuri 2013; Magnusson & Wydick 2002; Simons & Laryea 2005; Jefferis &Smith 2005; Smith 2008; Sunde & Zivanomoyo 2008) by providing further explanation on the nature of efficiency on the ZSE. Theoretically, the day of the week effect implies violation of the efficient market hypothesis in the weak form and benefits of a well-functioning stock market are not being realised in the economy during the multiple currency exchange rate regime (Chikoko & Muparuri 2013). The inefficiency follows from the violation of conditions necessary for an efficient market and also implies financial and institutional imperfections. These informational inefficiencies can lead to investors adopting strategies designed to reap abnormal profits by exploiting the informational inefficiencies.

4. Conclusions

The aim of the study was to test the day of the week effect on the ZSE using a non-linear approach. We used econometric models from the GARCH family namely GARCH (1, 1) and EGARCH (1, 1). Data used in this study spanned from 19 February 2009 to 31 December 2013. We utilised daily closing indices for industrial and mining sector from the ZSE. The GARCH (1,1) and EGARCH (1,1) models show consistent negative Monday effect and positive Friday effect for the industrial index whereas for the mining index, a negative Wednesday effect was detected by the EGARCH model and a negative Friday effect was detected by the GARCH model. The results from these models are supported by Kiymaz and Berument (2001), Enowbi, Guidi and Mlambo (2009), Angelovska (2013), Ndako (2013), Paul and Theodore (2006), Basher and Sadorsky (2004), Bayar and Kan (2002), Abdalla 2012, Deyshappriya (2014) and Aly, Mehdian and Perry (2011). We found the industrial index of the ZSE to be weak form inefficient though we would need to carry further studies to supplement these findings. We could not conclude the weak form efficiency for the mining index as we found evidence of model dependency. We would therefore recommend some studies on the mining index using different models.

One major implication of weak form inefficient for the industrial index of ZSE is that investors may consider buying shares on days with negative significant returns and selling them on days with significant positive returns in order to generate higher profits. The interest of financial theorists and practitioners to detect some market anomaly stems from the fact that they find this information on market inefficiency useful for creating profitable market strategies or for use in forecasting and the predictable movements in asset prices can also provide investors with opportunities to generate abnormal returns and in addition, many psychologists believe that investor's psychology can play an important role in causing this anomaly (Angelovska 2013). We acknowledge that our results may be limited by the fact that we did not take into account transaction costs and dividends.

Islam and Gomes (1999) highlights positive weekend effect emanates from combinations of factors which include inadequate financial information, thin and discontinuous trading, reliance on price momentum as a basis for trading and manipulation by the market makers. Therefore regulators should take appropriate steps to remove such anomaly to bring efficiency of the market. We recommend for further study the use of other GARCH models to analyse the day of the week effect. Furthermore, it will also be interesting to investigate the holiday effect and the January effect on stock market returns using linear and non-linear models.

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Using empowerment theory in health promotion guided development the home for the elderly in Nakhon Ratchasima, Thailand

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Keywords
Elderly, Health Promotion, Empowerment.

Abstract
In 1986, the Ottawa Charter identified community empowerment as being a central theme of health promotion discourse. Community empowerment became a topical issue in health promotion literature. Examining two cases in the Home for the Elderly in Nakhon Ratchasima, Thailand, study identifies actors, institutions and processes that provided health promotion for the elderly. The article deals with a range of opportunities and possibilities for optimizing care for elderly, both individual and group, through promoting their empowerment. Collaborative partnerships in community networks as well as in intergenerational interaction, these "models" demonstrate how care-givers, including the Home for the Elderly staff and university, are also empowered in these processes. These discussions reflecting empirical reality and conceptual insights provide the basis of health promotion policies. In addition, this article concludes with a discussion of the challenges and opportunities of facilitating empowerment for health and development.

1. Introduction

In Thailand, people has resulted in shifts from rural agricultural societies to more urbanized industrial landscapes with accompanying changes in social and family structures, improved life expectancy and more people living into advanced old age. Young adults must migrate to cities for job opportunities, older adults are left behind without family members living nearby. In addition, Thailand where fertility rates have fallen sharply over the past decades, has a series of nationally representative surveys of the older population that permit determining important trends in the well-being of the older age population (John and Napaporn, 2008). The growing number of older adults increases demands on the public health system and on medical and social services. Chronic diseases, which affect older adults disproportionately, contribute to disability, diminish quality of life, and increased health- and long-term--care costs (Kinsella and Velkoff, 2001). Under these circumstances, there were more elderly who lived on their own and who were placed in care institutions, often isolated from society. Empowerment individual elderly and the assistance from university will be enabling the elderly to improve their live. This article is concerned with promoting the dignity and wellbeing of the elderly health promotion through the empowerment activities emphasizing to develop their capacities.

2. Literature Review
Health promotion

Health promotion has been defined by the World Health Organization's (WHO) as "the process of enabling people to increase control over their health and its determinants, and thereby improve their health" (Wikipedia, 2014).The prerequisites to health are no longer simply disease prevention, or "proper" lifestyles, but include "peace, shelter, education, food, income, a stable ecosystem, social justice and equity" (Ranald Labonte, 1993). Participation is essential to sustain health promotion action. Health promotion is not just the responsibility of the health sector, but goes beyond healthy lifestyles to wellbeing (Better Health Channel, 2015). The

principles of social justice - equity, diversity and supportive environments - are an essential part of effective health promotion. The Ottawa Charter promotes social justice as it is designed to provide access to health opportunities for all members of a community and aims to reduce the level of health inequalities (NSW HSC, 2015). The Ottawa Charter identifies three basic strategies for health promotion (Helen Ward., etc., 2012).

o   Advocate – good health is a major resource for social, economic and personal development, and an important dimension of quality of life. Political, economic, social, cultural, environmental, behavioral and biological factors can all favor health or be harmful to it. Health promotion aims at making these conditions favorable through advocacy for health (Wise, 2001).

o   Enable – health promotion focuses on achieving equity in health. Health promotion action aims at reducing differences in current health status and to ensure equal opportunities and resources to enable all people to achieve their fullest health potential (Milio, 1976). This includes a secure foundation in a supportive environment, access to information, life skills and opportunities to make healthy choices (Saan and Wise, 2011).

o   Mediate – the prerequisites and prospects for health cannot be ensured by the health sector alone. Health promotion demands coordinated action by all concerned, including governments, health and other social and economic sectors, by non-government and voluntary organizations, local authorities, industry and the media. People in all walks of life are involved as individuals, families and communities (Saan and Wise, 2011).

The Ottawa Charter's concept of health promotion and community psychology's use of empowerment as an "exemplar of practice" are such vehicles (Labonte, 1993).Many health promoters are concerned about community empowerment, which is defined as the means by which people experience more control over decisions that influence their health and lives (Laverack and Labonte, 2000).Community empowerment which Laverack and Labonte (2000) define as shifts towards greater equality in the social relations of power. Labonte (1994) argues that health promotion remains an open. It presents the health system's response to the knowledge challenges of progressive social movements such as the environment and social justice movement. Thus, health promotion is concerned with community empowerment than changes in unhealthy lifestyles or particular disease risks. It focuses on achieving equity in health and increases public participation in health programme decision-making (Robertson and Minkler, 1994)

3. Empowerment

The term 'empowerment' has two distinct meanings, one referring to a state of the individual, group or community and the other referring to the process (or means) to attain the goals sought (Tengland, 2008). The first meaning, empowerment as a state concerns the individual's (or group's) controls over her (their) life (Tengland, 2007, 2012). The ability for autonomy (self-determination) has a central place in this approach, because the higher it is, the better the individual will be at determining her authentic goals (Tengland, 2007, 2008, 2012). The second definition of empowerment (as a process) is more important, since it has to do with the means of working toward health, empowerment and quality of life. Empowerment as a process (a means) is directly related to professional practice on the 'local' level, i.e. working together with the people involved. Empowerment as a process is about letting the client, group or community have as much control as possible over the change processes they are involved in (Tengland, 2008,2012; Laverack, 2009). They should therefore actively participate in the problem formulation, the solutions to the problems and the actions performed to solve them. The professional should primarily be an enabler or a facilitator.

4. Empowerment and Heath Promotion

Empowerment fits with the new perspective this new perspective of Health Promotion that was taking shape since the 1980s (Ferreira and Castiel, 2009). Empowerment should be based on pluralistic thinking that encourages diversity by means of participation by different social groups in the search for solutions to their health problems (Rappaport, 1981; Ferreira and Castiel, 2009). In the 1980s, especially beginning with the Ottawa Conference in 1986, empowerment was mentioned as one of the central ideas in Health Promotion (Wallerstein and Bernstein, 1994; Simpson and Freeman, 2004). This centrality is due to the fact that empowerment incorporates in the strong similarity between the two concepts as follow:

Empowerment is generally defined as "a process through which people gain greater control over decisions and actions affecting their health" (Nutbeam, 1998: 6; Simpson and Freeman, 2004).

Health Promotion as "the process of enabling people to increase control over, and to improve, their health" (Simpson and Freeman, 2004:69).

Empowerment is a phenomenon that can occurat different levels (Robertson and Minkler, 1994). At the organizational level, it includes processes and structures that enhance personal skills and allow the members of a community to support each other and produce changes in it (Simpson and Freeman, 2004). At the community level, it refers to joint organized work aimed at improving collective living conditions (Zimmerman, 1995). Some authors (Israel., etc, 1994; Wallerstein and Bernstein, 1994) use the term "community empowerment"rather than simply "empowerment". Rissel (1994) states that the notion of community empowerment includes: (a) an increased level of psychological empowerment among the community members; (b) political action by these members; and (c) redistribution of resources or decision making in favor of this community.

In the following sections, there are two cases of caring for the elderly in Nakhon Ratchasima or KORAT in order to discuss how these practices resonate with empowerment.

5. Model 1 Small-Scale and Multi-functional Care

In 2004, Nakhon Ratchasima Provincial Administration Organization (Nakhon Ratchasima PAO) took care the home for the elderly or home for the aged for the elderly people in Nakhon Ratchasima or KORAT. In this home for the elderly, the older people are take care by nurses and staff very well. They are accommodated within shared rooms, provided of at least 3 meals a day plus snacks, provided of social work service (e.g. assessment, counseling, referrals, programme activities, etc.); nursing services, including administration and supervision of medication; regular visits by a registered medical practitioner; personal care services, including assistance with activities of daily living; the rapeutic exercise and treatment, on a group or individual basis, to maintain or improve the functioning of residents. In 2012, the New President of Provincial Administration Organization of Nakhon Ratchasima (or Korat) gave her policy that the home for the elderly needs to provide both health and psychosocial support for the elderly. Therefore, consulting team from Vongchavalitkul University suggested two models of empowerment health for the Elderly in Nakhon Ratchasima (or Korat).

After gathering information from the elderly in the home for the elderly of Nakhon Ratchasima (or Korat) at the beginning of 2014, we found that some of them were expertise in cookery and arts. Some of them have knowledge of herb. Most of them would like to share their experiences to others and to the community. Thus, consulting team from Vongchavalitkul University discussed to the POA_KORAT team setting the program "Small-Scale and Multi-functional Care." For this program, we asked for volunteers, from the home for the elderly who willing to teach or to provide care to the people (including children) with disabilities in the same environment. Some elders in this program were also involved in taking

care of the children. The main belief behind this program was the creation of a welcome and empowerment with a small multi-functional care facility for the elderly, the disabled and the children under a single roof.

In this program, the volunteers could discuss with the other older people from the home for the elderly and the community, actively participate to be able to name and to formulate the problems and then to perform to solve the problems. They could share their experiences and help to transform in the process of changing oppressive circumstances. This experiment showed such small-scale multifunctional centers improved the well-being and dignity of all the parties involved. In these small-scale care settings, normal daily life was emphasized, and visitors and residents were encouraged to participate in useful and meaningful activities. It was found that some of those who feel lonely or meaningless, when placed in the company of the older people or children, could also take care of the other older people or the children, and were able to respond better to their circumstances. In most cases, the elderly were able to exercise both their bodies and their brains thus becoming happy and cheerful. They felt that they could make the other older people including children happy and taught the children important life lessons. These interactions also enabled the elderly to realize that they had valuable experiences to share with the younger generation or the other elderly. The parents felt a sense of security as their children were under the guidance of experienced older people. Individual older people felt more valued, satisfied and productive. Overall, there was also greater understanding by the home for the elderly members about the importance of intergenerational interactions, and the need to promote such participation and empowerment of each older people.

6. Model 2: Multi-functional Care Link to University

After implementing Model 1: Small-Scale and Multi-functional Care, we found that individual volunteers felt more valued, satisfied and productive. Recognizing the importance of elderly's participation in promoting the health of elderly, Nakhon Ratchasima Provincial Administration Organization (Nakhon Ratchasima PAO) initiated the Elderly Health Volunteer from the home for the elderly (EHVHE) Program. For this program, consulting team envision a more democratic task where volunteers were empowered to get in touch with their creativity and make decisions without being strangled for their health. Thus, we went to the next step **Multi-functional Care Link to University** before start the Elderly Health Volunteer from the Home for the Elderly (EHVHE) Project.

For Multi-functional Care Link to University, we brought a group of nursing students group from Vongchavalitkul University. These nurse students were selected by Associated Prof. Sirirat Chatchaisucha who was the manager of this project. They study nursing care for the elderly course in the university and assigned for one more week practicing on basic training of the primary health care of elderly components. These students will be the training assistants (TA) for the Elderly Health Volunteer from the home for the elderly (EHVHE) project. The major role of the EHVHE project is to promote health and healthy behavior of older people and community members for the promotion of elderly heath and other basic health services, with the support of health personnel from the Nakhon Ratchasima Provincial Administration Organization (Nakhon Ratchasima PAO).

EHVHEs were selected by Elderlys' Group Members among the Home for the Elderly with the help of the Home for the Elderly staff. They were provided with 18 (9+9) days basic training on selected primary elderly health care components.Associated Prof. Sirirat Chatchisucha and her students gave the elderly health workshop. In addition, this workshop involved with the elderly in key stages in the process of health promotion in the community, promoting important and supportive relationships among people and collaboration between

(1) people and people (2) people and groups involved in elderly care. In addition, volunteers in EHVHEs were provided with opportunities to build social networks and participate in activities that are personally fulfilling.

Moreover, this workshop helped the elderly to understand various activities for their entertainment and empowerment. Priority was given to educational activities and social-cultural activities. The educational activities included gaining computer skills and learning bridge. In addition, volunteers in EHVHEs learned to encourage the elderly joining book clubs, dancing or sport clubs suited for the elderly as well as undertake creative handwork and flower arrangements. According to the results from the workshop, volunteers in EHVHEs could create an empowerment community such as

1. Everyone had an important role in a community and helped each other.
2. Everyone could live healthily and happily.
3. Everyone could support, learn and communicate with each other,
4. Everyone could feel comfortable and fulfilled.

Through the workshop, volunteers in EHVHEs contributed extensively to the health and well-being of their Home for the Elderly. On average, the volunteers in EHVHEs and nursing students were found to work for 2.5 -3.0 work hours per week and more than 70 % of them were willing to increase the amount of time they spend working as EHVHEs in the future.

In the end of 2014, volunteers in EHVHEs practiced health care activities for the elderly under the guidance of consulting team in order to prepare them for EHVHEs project. The role of the EHVHEs has been outlined as below;

o   To act as voluntary health educators and promoters in areas of health as per the training received.
o   To promote the good health practices, utilization of available health services and the adoption of preventive health practices among their Home for the Elderly members.
o   To create   awareness and provide information to the community on determinants ofhealth such as nutrition, basic sanitation and hygiene practices, healthy living and working conditions, information on existing health services and the need for timely utilization of healthand family welfare services.
o   To play a supportive role in linking the community with available elderly health promotion services and to continue to play an important role related to primary elderly health care at the community level.

7. Model 3: the Elderly Health Volunteer from the Home for the Elderly (EHVHE) project.
This project will be started in the mid-2015.
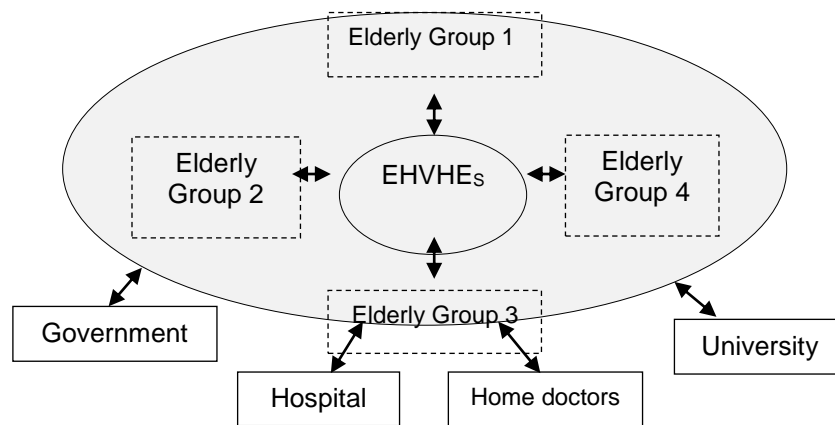
Figure 1: The Elderly Health Volunteer from the Home for the Elderly (EHVHE) project.

8. Issues and challenges

It is important to further promote this community volunteer scheme as it is one of the most successful empowerment projects in the health care of the home for the elderly in Nakhon Ratchasima. Strengthening it would ensure that the EHVHEs will be able to support the health staff and to provide good quality health care. Therefore, these following areas are suggested;

- o   To ensure strong health system supports through health promotion and an effective referral institutional establishment for training and retrainingfor the volunteer health people.
- o   To innovative incentive programs designed / supported to sustain the motivation of the volunteers.
- o   To support the distant learning program for EHVHEs through mass media and by radio in particular.

9. Conclusion

The discussion on two cases can inspire our thinking about empowerment.

For model 1: Small-Scale and Multi-functional Care, empowerment starts when each elderly understand their strangeness and weakness by working multi-functional care and identified their commonality. Being a multifunctional facility gave the elderly a role in caring for the disabled older people and children and in this process, even improving their health and mental faculties. Through dialogue, elderly can learn from one another's perspective and discover new ways of looking at problems. Each elderly volunteer ensure his/her value and honor individual contribution. Thus, there is an increase in an individual sense of empowerment.

Model 2: Multi-functional Care Link to University showed how the volunteer of the Home for the Elderly of Nakhon Ratchasima and university engage in the empowerment process.   Model 2 involved the elderly in a wide range of discussions and supportive relationships from the Home for the Elderly of Nakhon Ratchasima and university on key aspects that affected their lives, including preparing them to be Volunteers of EHVHEs to embed the elderly within the community services and facilities.

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A comparative study on the financial performance between Islamic and conventional banks: Egypt case

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Abstract

There is no doubt that banks have significant position in the welfare of any economy. In the last few decades, Islamic banking sector was introduced. This new banking type has demonstrated a competitive position with the traditional conventional banks. It has acquired the interest in many countries and regions. Islamic banking system has accelerated its growth globally in terms of total assets and market share. Egypt is the birthplace for this new system, although, it is not taking a leading role in the implementation as well as the academic research. A summary of Islamic banking principles and instruments are introduced before going through the details of the empirical study to compare the financial performance of both types of banks. The focus of this research is to investigate the effect of the inter-bank factors along with the size of banks on the financial performance of these banks working in the Egyptian market. The research main aim is to perform a comparative analysis on the financial performance of both Islamic and conventional banks. Research analyses adopted in this study are descriptive, correlation and regression analyses to test the research hypotheses. Findings of this research provide evidence that some of the inter-bank factors found to have significant effect on the financial performance of these banks; however, no considerable differences between the two groups were found which suggests that bank type is not a significant variable and that conventional and Islamic banks don't differ from each other with respect to the variables under investigation.

1. Introduction

We cannot imagine our modern life without banks; they fulfill the economy needs in fund sharing between the investors and the producers (Al-Jarrah and Molyneux, 2007). The regular conventional banking system is not satisfying a large number of Muslim populations, as some of its elements are contradicting with the Islamic law "Shareaa", so the introduction of the Islamic banking system was very important (Siddiqi, 2006). The Islamic Banking system created to provide financial products that are compatible with Islamic law "Shariaa" in Muslim countries, and then it has been recognized globally as an international banking system. More than 57 countries provide the Islamic banking services (Hamedian, 2013). This new banking system emerged in Egypt in 1963 and continued growing until now (Botiş, 2013). Ahmed El Naggar established the Mit Ghamr local saving bank in 1963 (Fayed, 2013). Mit Ghamr Islamic saving bank stop its operations in 1967 after launching nine branches. Mr. El Naggar helped the Egyptian government to initiate Nasser Social Bank in 1971, the bank that did not use any interest-based when borrow or lend the money. The main objective of Nasser Bank was to lend the money as a charity on the basis of profit and loss sharing system, mainly to support the needy people (Botiş, 2013). In 1974, the Organization of Islamic Countries OIC established the Islamic Bank for Development to support and fund the governments in the Islamic countries. The inspiration of Islamic Banking extended to other countries in the Islamic regions such as the Gulf States and South East Asia (Fayed, 2013). Today three full-fledged Islamic banks operate in

Egypt provide wide range of financial products and 14 conventional banks operating in Egypt provide Islamic products. Elise (2015) states that there are approximately 2.5 million Islamic banking clients in Egypt, who constitute 20% of the clients of the country's banks. Three full-fledged Islamic banks and about fourteen conventional banks provide Islamic banking services in the Egyptian market. Figure (1) shows the number of conventional banks which provide Islamic services.
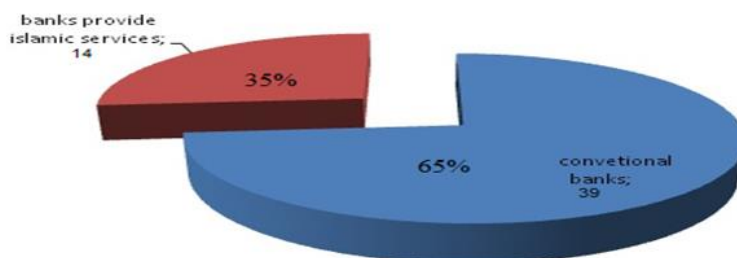
Figure 1: Number of conventional banks providing Islamic services.
Source: dailynewsegypt website

Globally, the Islamic banking and finance have become one of the fast growing sectors in the global financial market (Mashal, 2012). Based on Ernst and Young's world Islamic Banking competitive report (2014), Islamic Banking assets with commercial banks globally are set to cross US$1.7t in 2013, with suggested annual growth of 17.6% between 2009-2013 and expected average growth of 19.7% by 2018. Assets with Islamic banks and Islamic banking windows have grown at a compound annual growth rate (CAGR) of 40.3% between 2004 and 2011 to reach USD1.1 trillion according to the Islamic Financial Services Industry Stability Report (2013). This is illustrated in figure (2). These statistics show that the Islamic finance and banking industry is one of the fast growing segments in the international finance and it plays a significant role in their respective economies.
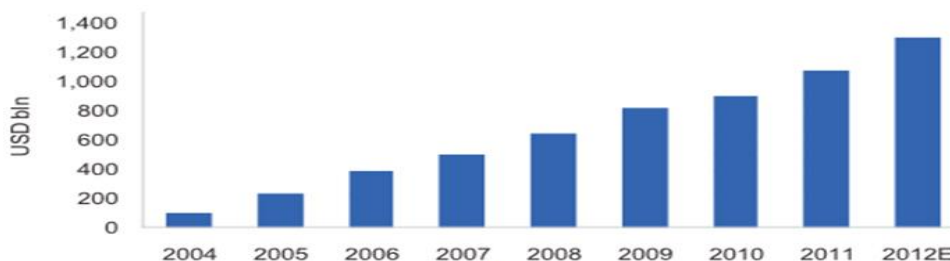
Figure 2: Islamic banking assets growth trend
Source: Regulatory authorities, Bloomberg, Zawya, central banks, individual institutions, corporate communications, The Banker, KFHR

2. Islamic Banking Principles

The Islamic banking system is built on "Shariaa" law, so the bank processes and the products or services provided should follow the main principles of Islamic law (Faizulayev, 2011). The main principles of Islamic banking system:

Riba (usury) is prohibited; Iqbal (2001) defines the usury as any excessive increase charged on the principal amount or rate of interest. Profit should not be pre-determined even if the sharing ratio is agreed upon prior to the actual activity. The exact amount that is considered a transaction profit will remain uncertain until the action is completed.

Gharar (Trading Risk), Islamic financing system prohibits Gharar which is defined as any trading occurring when the object, price, or time of payment in sale are not clearly identified in advance to the purchaser or in the transaction contract (Iqbal and Moleneux, 2005).

Maysir (Speculating) is the third trading type that is not allowed in the Islamic banks, gambling or betting are forbidden because it does not guarantee a return for the money and it contains ambiguity (Alkassim, 2005).

Shariaa board committee is required to be established in any Islamic bank or institute, this is a supervisory board that guides and validates all bank's transactions and verifies that they adhere to Shariaa's principles (Botiş, 2013).

Zakat is a mechanism to redistribute the money in the society, when the rich people pay part of their wealth to the poor people (Siddiqi, 2006).

3. Islamic Banking Instruments

Islamic Banking system provides a wide range of the financial products. The following is the list of these financial products:

Mudaraba (Passive Partnership), it is a form of partnership between banks as fund providers and customers or investors as project and resource managers (Faizulayev, 2011). The contract between both parties will determine the proportion of the profit sharing, fixed amount as a profit for the bank is prohibited.

Musharakah (Long-Term Partnership), it is a long-term relationship for sharing the profit and loss and contribution in running the business. Based on this contract both sides bank and customer or investor will share in supply the capital, labor and the project or business management (Iqbal and Moleneux, 2005).

Murabaha (Mark-Up/ Cost Plus), this is the most popular form of Islamic financing, it occupied about (80%-95%) of the financing form, and it is considered as replacement of the 'interest' in the conventional banks with 'mark-up fixed return' in the Islamic bank (Khan, 2011). Simply, it is sale transaction for a commodity at a profit. This transaction requires three parties, customer who identifies the commodity, the Islamic bank who purchases the commodity and third party who owns this commodity. Islamic banks re-sell the product to the customer with higher price (Hamedian, 2013).

Tawarroq (Reverse Murabaha), the bank uses this form to facilitate the personal loans or cover the credit cards. The bank purchases a commodity on a cash basis from a supplier based on a sales contract, the bank sells the commodity will less price to third party (Khan, 2011).

Ijarah W Iqtena (Lease to Buy), it is a leasing contract between the bank and the customer, to rent an asset like a machine, equipment or apartment. The customer will pay the value of the asset plus certain fixed amount; customer has the privilege to purchase the asset within the contact period (Hamedian, 2013).

Bay' Salam (Prepaid purchase with Deferred Delivery), mainly used in agriculture and can be used also in other industries. It is paying in advance in the time of the contract the full price of goods or services that will be delivered in the future. To remove the uncertainty "Gharar" the contract should include all needed specification (Khan, 2011).

Istisna (Manufacturing Contract), it is a contract to pay in advance a price of product that is not yet manufactured. To remove the uncertainty the contact should include all item design and measurement figures (Fayed, 2013).

Wadi'ah (Safekeeping) that is synonym of Amanah, it is like safekeeping , the bank hold the amount in current account without pay any interest, the bank only charge the customer with a service fees (Faizulayev, 2011).

Qard Hasan (Free Loan), this is a loan with free interest the borrower will repay only the amount he takes from the bank without extra amount under any justification as profit or gift (Khan, 2011).

4. Comparison between Islamic and Conventional Banks

Both Islamic and Conventional banking systems are financial intermediations that support the investors to capitalize their projects or investments. Nevertheless, there are vital variations between the products and processes between both systems as shown is table (1).

Conventional System	Islamic System
The conventional banks product and operations are based on manmade principles, its main target is to maximize the profit without restrictions.	The Islamic banks aim to maximize the profit it should follow the Shariaa complains in design their products or process.
The relation between the conventional banks and their clients is one of two types' creditors or debtors. Therefore, the banks give the credit worthiness the created weight, and little importance to develop expertise in project evaluations.	The relation between the Islamic banks and their clients is partner, investors or traders; also, they are buyers or sellers. Therefore, the banks give more weight to validate the viability of the projects; also, the banks provide more attention in preparing projects evaluation and management.
Money is used as commodity, a medium of exchange and store a value. Figure 2.1 explain how the conventional banks transfer the money between the bank and client and gain interest from the money transaction.	Money is tools and utility to facilitate the operations and trading activities. Figure 2.1 show how the Islamic banking system show the money as a tool to produce or move goods or services
Lending and borrowing money with compounding interest rate are the fundamental function of the conventional banks, the banks provide to the investor predetermined interest rate, based on the time value. Loss is not shared between the banks and investors.	Profit is gained from a partnership relation with the customers, and exchange of goods or services, the contract defines the profit sharing portion and risk sharing, so the banks may need to understand the customer's business very well and sometime contribute in the business management
Additional charge is allowed in case of failure.	It is not allowed to charge any extra money in case of failure.
It is easy to borrow the money from interest-based commercial banks.	It is more complicated to approve transaction in Islamic banks.
All the deposits in the conventional banks are guaranteed	Because of the profit-loss concepts, the deposits are not guaranteed, only the deposits based on *Wadi'ah* (Safekeeping) principles are guaranteed.
In the case of the project failure, the loans considered as non-performing loan.	In case of the project failure, bank and the investor still own the project and can do restructure in management and have better resource utilization.
Money can expand without have real backing from goods or assets, this will cause deficit.	The money never expand that will result in a balance in the budget

Table 1: Differences between Islamic and Conventional Banks*

*The table contents extracted from (Faizulayev, 2011) and (Hamedian, 2013)

5. Literature Review

Alkassim (2005) study measured the performance in Islamic and conventional banks in GCC countries for the period from 1997 to 2004. All data was extracted from Bankscope, the model used is the Ordinary Least zshow that Islamic banks are better in capitalization. Total loans for both types of banking have a positive relationship with profitability representing that lending has better progress for profitability. The conventional banks are better in the asset quality and finally Islamic banks reach fairly profitability from lending money without charging interest.

Siraj and Pialli (2012) conducted a performance comparison between Islamic and conventional banks operating in GCC countries during the period between 2005 and 2010. The Study uses data for six Islamic banks and six conventional banks, the selected twelve banks are

the major banks operate in the market. The comparative study was carried out based on performance indicators like OER, NPR, ROA, ROE, EOA, that measure the operating expense, profit, assets, operating income, deposits and total equity. The study used one-way ANOVA to determine if the operating profit in the Islamic and conventional banks has any sort of relationship. Results highlight that Islamic Banks in the GCC region has faster increase in the operation profit than the conventional banks. There is a difference in the movement of the operation profit, but the trend follows has significant correlation. Conventional banks have higher ratio for NPR, however, it does not follow the same pattern between the Islamic and conventional banks. Islamic banks report higher ROA; moreover, it does not follow the similar move as well. One-way ANOVA shows the existence of significant relationship in the movement in the financial indicator selected in the study.

Hamedian (2013) conducted a study to compare the Islamic versus conventional banks operating in Malaysia for the period from 2005 to 2011, the sample include seven Islamic banks and seven conventional banks. The study compared the bank's profitability ratio measured by the Return on Assets (ROA) and the Return on Equity (ROE). In addition, the study investigated the relationship between profitability as a dependent variable with the independent variables that consisted of capital adequacy (CAR), liquidity (LQR), asset quality (ASQ), and management efficiency (EFF). The study also analyzed the impact of the global financial crisis in 2008 on the selected banks. The study illustrates that conventional banks were doing better profitability than Islamic banks. In addition to that, the study proves that Islamic banks performance was better than conventional banks during the financial crisis 2008.

Ramin *el al.* (2014) performed a study to examine the profitability of Islamic banks and conventional banks. Research uses the data for six Islamic banks in Iran and six conventional banks in Turkey between years 2006 and 2011. Data was collected from the Bankscope database. The method used to analyze the data is the Pooled Ordinary Least Square (POLS). The method used to investigate the effect of total assets, equity, loans and deposits on the main profitability ratios; namely the return on asset (ROA), the return on equity (ROE) and the net interest margin (NIM). The study shows that the Islamic banks in Iran are doing better regarding profitability. The total asset that identifies the bank size represents a positive relationship with profitability for Islamic banks and a negative relationship for conventional banks. In addition, it shows a positive relation with the profitability for both Islamic and conventional banks for equity that measures the capitalization.

Fayed (2013) conducted a comparative performance study between the conventional and Islamic banking in Egypt. The empirical study analyzes and compares the performance of three Islamic banks and six conventional banks operating in Egypt. In order to perform the empirical study uses under-bank analyses for the data between years 2008 - 2010. The study collected the data from the financial statements and annual reports to measure the profitability, liquidity, credit risk and solvency. In addition to the financial comparison, the study elucidates that the Islamic banks still have many challenges in order to perform better. Some of these challenges are related to the conflict between the theoretical base and the real operation of Islamic banks in Egypt. Another challenge for the Islamic banks that they do not have a clear implementation for Profit and Loss Sharing (PLS) concept with their clients.

6. Data and Methodology
6.1 Research Questions

This study seeks to analyze the effect of some inter-bank factors on the financial performance of both conventional and Islamic banks in Egypt during the period from 2010 to 2013 to answer several questions:

- Do these inter-bank factors, namely; Capital Adequacy, Asset Quality, Management Quality, Liquidity and size affect the financial performance of banks work in the Egyptian market?
- Is there any significant difference in the relationship between these factors and the financial performance with respect to bank type –whether it is an Islamic bank or a conventional bank?

6.2 Research Methodology Design

A quantitative research approach will be used to answer the research questions, an exploratory analysis method performed to evaluate the collected data. The exploratory design is commonly used to answer specific questions from an operational perspective (Sreejash *et al.*, 2014). This method will be used to understand and evaluate the banks performance in terms of the inter-bank variables such as Capital Adequacy, Asset Quality, Management Quality, Liquidity and Size. Quantitative analysis is used for several reasons, such as measure performance and evaluate financial instruments; moreover, the quantitative research used to test relationships between relevant variables (Zikmund *et al.*, 2009). Secondary data will be used to carry out this study; the targeted data are pulled together from the banks financial statements published in the DataStream database and the official banks' websites.

6.3 Sample of the Study

The sample is selected from a list of banks listed in the Egyptian Exchange market. Thirteen conventional and Islamic banks are listed in this market (three Islamic banks and ten conventional banks). The study will use Non-probability sampling technique (purposive or judgment sampling) as the research design used is an exploratory (Kothari, 2004). The sample criteria for Islamic banks were simple as only three full fledge Islamic banks operate in Egypt. The full fledge Islamic banks are Faisal Islamic Bank, Al Baraka Bank and Abu Dhabi Islamic bank (ADIB). ADIB was excluded from the study sample as the bank reported high negative value of the ROE and ROA during the study period. The Study used the Net Asset value to select the conventional banks; the aim is to have a consistent sample between both types of banks. The final list of selected banks is represented in table (2).

Islamic Bank	Conventional Banks
Faisal Islamic Bank of Egypt (S.A.E.) (FAITA)	Bank of Alexandria S.A.E. (BALX)
Al Baraka Bank Egypt SAE (SAUD)	National Bank of Kuwait Egypt S.A.E (NBKE)
	Societe Arabe International de Banque (S.A.E.) (SAIB)

Table 2: The Selected Banks

6.4 Data Collection

Data was collected from the Thomson Reuters DataStream database, this database contains a full reliable data with a standard format for the financial statements, and it has standard calculation methods for the required financial ratios. The financial statements for the selected list were downloaded for the period between 2010 and 2013. Subsequently, data was validated and completed any missing ones from various resources to calculate the needed ratios for four years.

6.5 Variables Identification

Profitability is the dependent variable in this study, it is considered as one of the main variables in measuring banks financial performance (Fayed, 2013). Independent variables were

selected in line with Hamedian (2013) study, which identified the independent variables as Capital Equity, Assets Quality, Management Quality, Liquidity, Bank Size and Bank Type. Table (3) shows the list of variables used in the study with its classification as dependent, independent and moderator variables and their measurements.

Bank Factor	Variables	Measures	Notation
Dependent Variables	Profitability	Return on Assets = Net Income / Total Assets	ROA
		Return on Equity = Net Income/Total Equity	ROE
Independent Variables	Capital Adequacy (CAR)	Equity/ Total Assets	ETAR
	Assets Quality (ASQ)	Loans Loss Reserves / Total Loans	LLR
	Management Quality (MQR)	Loans / Deposits	LDR
	Liquidity (LQR)	Net Loans / Total Assets	NLTA
	Bank Size	Total Assets	TA
Moderator Variable	Bank Type	Dummy variable; 0 is a conventional Bank 1 is an Islamic Bank	BANK_TYPE

Table 3: Study Dependent, Independent and Moderator Variables

6.5.1 Dependent Variables

Profitability is considered as one of the most popular performance indicators, it is very important because the owners of the banks need to know if the bank is making profits and being well managed or not (Fayed, 2013). The profitability is measured by two ratios:

Return on Assets (ROA), which is the Net Profit / Total Assets. It proves how competent of management and allocating the resource of assets and gain profit. The higher ROA indicates a better performance (Alkassim, 2005; Ramin et al., 2014).

Return on Equity (ROE), which is the Net Profit / Equity Capital. ROE ratio indicates how much the bank earns on their equity investment. The higher ROE indicate to better performance and more efficient (Hamedian, 2013).

6.5.2 Independent Variables

The independent variables will be represented by the four inter-bank management factors, in addition to the bank size.

- Capital Adequacy (CAR), this variable is measured by the Equity/Total Assets (ETAR). This variable identifies the contribution of the shareholders in financing the total assets. The higher value is better (Samad, 2004).
- Asset Quality (ASQ), this variable is measured by Loans Loss Reserves/Total Loans (LLR), this ratio evaluates the strength of the bank's capital assets like investment and loans, and if the bank is able to secure its depositors and lenders from bank failure. The lower value of this ratio is better (Fayed, 2013).
- Management Quality (MQR), this variable is measured by Loans/Deposits (LDR); it is used to measure the level of efficiency and productivity for the bank's management to utilize the bank's loans in deposits for creditworthy customers. The higher ratio indicates more management efficiency (Faizulayev, 2011).

- Liquidity (LQR), this variable is measured by Net Loans/Assets (NLTA), it shows the bank's ability to deal and fund any contractual or financial obligations and deposit outflows. The higher this ratio means less bank liquidity and more banking risk (Hamedian, 2013).
- Bank Size commonly measured by the Total Assets (Hamedian, 2013), as from prior literature, size was proved to have a major influence on the financial performance.

6.5.3 Moderator Variable

The moderator variable in this study is the bank type, whether it is an Islamic or conventional bank. This variable is been measured as a dummy variable where (0) indicates that it is a Conventional Bank and (1) indicates that it is an Islamic Bank.

6.6 Data Analysis Methods

The research analyzes the data using descriptive, correlation and regression methods. The analyses executed using the SPSS software (Statistical Package for the Social Science).

- Descriptive Analysis: Calculates the mean, standard deviation, minimum and maximum to compare the financial performance between Islamic and conventional banks.
- Correlation Analysis: Correlation analysis will be employed to determine the relationships among the study variables. Afterward, the study will examine whether the variables are highly correlated or not.
- Regression Analysis: will be used to validate how much the changes in the independent variables would explain the changes in the profitability variable. The model is represented in the following equaion:

$Y_{it} = \beta0 + \beta1\ x1_{it} + \beta2\ x2_{it} + \beta3\ x3_{it} + \beta4\ x4_{it} + \beta5\ x5_{it} + \beta5\ x6_{it} + u_{it}$

Where:

Y_{it}: Represents Return on Assets (ROA, Return on Equity (ROE) for bank i at time t

$x1_{it}$: Represents Capital Adequacy for bank i at time t

$x2_{it}$: Represents Assets Quality for bank i at time t

$x3_{it}$: Represents Management Quality for bank i at time t

$x4_{it}$: Represents Liquidity for bank i at time t

$x5_{it}$: Represents natural Logarithm of Total Assets for bank i at time t

$x6_{it}$: Represents a dummy variable that indicates bank type, where 0 is for conventional bank and 1 for Islamic bank.

$\beta0$: Is Intercept

$\beta1, \beta2, \beta3, \beta4, \beta5, \beta6$: Coefficients of the regression relations.

u_{it}: Represents error

6.7 Research Hypotheses

Hypotheses tested in this study that reflect the relationships among the inter-bank factors and the financial indicators of banks working in the Egyptian market in addition to having bank type as a moderator for these relationships could be formulated as follows:

H_1: Capital adequacy is positively affecting the financial performance measured by ROE of banks work in the Egyptian market.

H_2: Asset quality is negatively affecting the financial performance measured by ROE of banks work in the Egyptian market.

H_3: Management quality is positively affecting the financial performance measured by ROE of banks work in the Egyptian market

H_4: Liquidity is negatively affecting the financial performance measured by ROE of banks work in the Egyptian market.

H_5: Size is positively affecting the financial performance measured by ROE of banks work in the Egyptian market

H_6: Capital adequacy is positively affecting the financial performance measured by ROA of banks work in the Egyptian market.

H_7: Asset quality is negatively affecting the financial performance measured by ROA of banks work in the Egyptian market.

H_8: Management quality is positively affecting the financial performance measured by ROA of banks work in the Egyptian market

H_9: Liquidity is negatively affecting the financial performance measured by ROA of banks work in the Egyptian market.

H_{10}: Size is positively affecting the financial performance measured by ROA of banks work in the Egyptian market

H_{11}: Bank type is significantly affecting the relationship between the inter-bank factors and the financial indicators.

7. Data Analysis

This section will include the extensive analysis of the empirical results. The data has been collected and verified using Excel application. Then the SPSS application used to perform the previously mentioned analyses in the data methodology section.

7.1 Descriptive Analysis

The descriptive analysis used to examine the differences in financial performance between Islamic and conventional banks. The below two tables (4) and (5) show the descriptive analysis of both Islamic and conventional banks that resulted from SPSS.

	N	Minimum	Maximum	Mean	Std. Deviation
ROE	8	8%	26%	14.38%	.06653
ROA	8	0%	2%	1.00%	.00535
ETAR	8	6%	7%	6.25%	.00463
LLR	8	2%	6%	4.00%	.01414
LDR	8	26%	74%	45.88%	.13789
NTLA	8	39%	71%	54.38%	.10743
TA	8	14.83	46.82	28.1488	12.27903
Valid N (listwise)	8				

Table 4: Descriptive Statistics Islamic Banks

	N	Minimum	Maximum	Mean	Std. Deviation
ROE	12	8%	23%	14.33%	.04163
ROA	12	0%	3%	1.17%	.01030
ETAR	12	8%	11%	10.00%	.00953
LLR	12	3%	20%	9.83%	.05797
LDR	12	22%	74%	49.17%	.17209
NTLA	12	21%	69%	45.50%	.15235
TA	12	11.07	24.12	16.8958	3.39263
Valid N (listwise)	12				

Table 5: Descriptive Statistics Conventional Banks

The study results clarified that the ROE for Islamic banks is 14.38%; it is slightly higher than the ROE for conventional banks 14.33%. This finding contradicted with Fayed (2013) in ROE as her study resulted a higher ROE for the conventional banks. The explanation for this variance is because Fayed (2013) included Abu Dhabi Islamic Bank data in the Islamic banks sample, this bank has a high negative value of ROE and ROA for three consecutive years. The ROA indicator show slightly better ROA for conventional banks as it was 1.10%, when the Islamic banks resulted in only 1.00%. This is consistent with Fayed (2013) finding. For the

Capital Adequacy the conventional banks are dominating, since they have better Equity / Total Assets which was 10%, when the Islamic banks resulted in only 6.25 %. This result is inconsistent with Alkassim (2005) finding when his research indicated that Islamic banks are dominating conventional banks in GCC countries. Asset Quality result showed that Islamic banks have relatively low ratio 4% in comparison with the conventional banks which have 9.83%. This indicates that Islamic banks have better Asset Quality. This result is consistent with Fayed (2013) which indicates that the conventional banks have higher LLR ratio. In addition, the results showed that the conventional banks have better management quality; the LDR shows 49.17 % for conventional banks compared with 45.88% for Islamic banks. This is contradicting with the findings of Faizulayev (2011) which declare that Islamic Banks are dominant in LDR. Finally, the liquidity indicated that Islamic banks have greater NLTA ratio of 54.38%, when conventional banks have only 45.5%. This finding is consistent with Fayed (2013) study, it is also supported by Alkassim (2005) results as it stated that the conventional banks have better NLTA ratio.

7.2 Correlation Analysis

Correlation analysis executed to figure out the relationship among the independent variables and the dependent variable in the two groups of banks; namely, Islamic and conventional ones. Correlation applied to examine the relationships beween the independent variables and the dependent variable which is bank's profitability.

Correlations			ROE	ROA	ETAR	LLR	LDR	NLTA	SIZE
Spearman's rho	ROE	Correlation Coefficient	1.000	.659	.760*	.186	-.154	-.343	.359
		Sig. (2-tailed)	.	.076	.028	.658	.715	.405	.382
		N	8	8	8	8	8	8	8
	ROA	Correlation Coefficient	.659	1.000	.577	.283	-.338	-.329	.327
		Sig. (2-tailed)	.076	.	.134	.497	.414	.426	.429
		N	8	8	8	8	8	8	8
	ETAR	Correlation Coefficient	.760*	.577	1.000	-.131	-.520	.000	.756*
		Sig. (2-tailed)	.028	.134	.	.758	.187	1.000	.030
		N	8	8	8	8	8	8	8
	LLR	Correlation Coefficient	.186	.283	-.131	1.000	.293	-.025	-.408
		Sig. (2-tailed)	.658	.497	.758	.	.481	.953	.316
		N	8	8	8	8	8	8	8
	LDR	Correlation Coefficient	-.154	-.338	-.520	.293	1.000	.062	-.921**
		Sig. (2-tailed)	.715	.414	.187	.481	.	.885	.001
		N	8	8	8	8	8	8	8
	NLTA	Correlation Coefficient	-.343	-.329	.000	-.025	.062	1.000	.012
		Sig. (2-tailed)	.405	.426	1.000	.953	.885	.	.978
		N	8	8	8	8	8	8	8
	SIZE	Correlation Coefficient	.359	.327	.756*	-.408	-.921**	.012	1.000
		Sig. (2-tailed)	.382	.429	.030	.316	.001	.978	.
		N	8	8	8	8	8	8	8
*. Correlation is significant at the 0.05 level (2-tailed).									
**. Correlation is significant at the 0.01 level (2-tailed).									

Table 6: Correlations Analysis of Islamic Banks

Table (6) represents the correlation relationships among different types of variables for the Islamic banks only. Both ROE and ROA as the measures of the dependent variable that is profitability, move together in a positive relation, this support with (AlKassim, 2005) finding and contradict with (Hamedian, 2013). Capital adequacy is the only independent variable that has a positive and significant correlation with ROE, which highlights that the major factor that counts for profitability in Islamic banks is their capital levels and whether it is adequate to be engaged in their operations. Bank size (TA) has a positive relation but insignificant with both ROA and ROE, which indicates that the size of the bank is not an influential factor to have a better profitability levels. On the other hand, bank size also has a significant positive

relationship with capital adequacy which does make sense that larger banks will have more adequate capital than the smaller ones. Finally, bank size has a significant but negative relationship with management quality; this might mean that management of these banks is more efficient in managing their operations while the bank is still of controllable size but not with larger banks.

Correlations			ROE	ROA	ETAR	LLR	LDR	NLTA	SIZE
Spearman's rho	ROE	Correlation Coefficient	1.000	.809**	-.034	-.011	.289	.208	.577*
		Sig. (2-tailed)	.	.001	.918	.974	.363	.516	.049
		N	12	12	12	12	12	12	12
	ROA	Correlation Coefficient	.809**	1.000	.199	-.156	.621*	.545	.380
		Sig. (2-tailed)	.001	.	.535	.629	.031	.067	.223
		N	12	12	12	12	12	12	12
	ETAR	Correlation Coefficient	-.034	.199	1.000	-.281	.259	.349	-.481
		Sig. (2-tailed)	.918	.535	.	.377	.416	.267	.113
		N	12	12	12	12	12	12	12
	LLR	Correlation Coefficient	-.011	-.156	-.281	1.000	-.481	-.501	.081
		Sig. (2-tailed)	.974	.629	.377	.	.114	.097	.803
		N	12	12	12	12	12	12	12
	LDR	Correlation Coefficient	.289	.621*	.259	-.481	1.000	.988**	-.133
		Sig. (2-tailed)	.363	.031	.416	.114	.	.000	.681
		N	12	12	12	12	12	12	12
	NLTA	Correlation Coefficient	.208	.545	.349	-.501	.988**	1.000	-.235
		Sig. (2-tailed)	.516	.067	.267	.097	.000	.	.463
		N	12	12	12	12	12	12	12
	SIZE	Correlation Coefficient	.577*	.380	-.481	.081	-.133	-.235	1.000
		Sig. (2-tailed)	.049	.223	.113	.803	.681	.463	.
		N	12	12	12	12	12	12	12

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 7: Correlations Analysis of conventional Banks

Table (7) shows the correlation relationships among different types of variables for the conventional banks. In consistent with Islamic banks group, the profitability measures have positive relationship between each other. Moreover, bank size represented by TA has positive significant correlation with ROE but not ROA. On the other hand, ROA has significant positive correlation with management quality and liquidity for the conventional banks. This means that for these well established and long history banks they have better ability and knowledge to manage their operations more efficiently and because of the large number of clients they have, they maintain better levels of liquidity to face their clients' demands which both result in better levels of profitability. Finally management quality and Liquidity has a high positive significant correlation that suggests that for these banks the more efficient they are in managing their operations, the high level of liquidity they remain to face clients demands.

7.3 Regression Analysis

The regression analysis runs to examine how the profitability (ROA, ROE) will be affected when the independent or explanatory variables (CA, ASQ, MGR, LQR, Bank Size and Bank Type) adjusted.

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-.261	.112		-2.328	.037		
ETAR	2.503	1.062	.994	2.357	.035	.125	7.969
LLR	.132	.182	.138	.729	.479	.620	1.612
LDR	.498	.136	1.516	3.648	.003	.129	7.727
NLTA	-.504	.147	-1.379	-3.440	.004	.139	7.191
TA	.007	.001	1.413	5.170	.000	.299	3.342
BANK_TYPE	.079	.049	.775	1.626	.128	.098	10.163
R	.842						
R Square	.710						
Adjusted R Square	.576						

Table 8: Regression Analysis Results with ROE as the Dependent Financial Indicator

Table (8) presents the regression analysis results for the sample of banks with ROE as the dependent financial indicator measure. The model summary for ROE illustrates R Square of 71%. This is considered as a high prediction probability level. This means that the inter-bank factors along with the size of banks could explain 71% of the changes in the ROE as the dependent variable measure.

- Capital adequacy represents a strong positive significant relationship with the ROE which suggests accepting the first hypothesis (H$_1$). Also, management quality explores positive significant relationship with the ROE, therefore, the third hypothesis (H$_3$) is accepted as well. Liquidity as expected has a negative significant relationship with the ROE so the fourth hypothesis (H$_4$) is accepted. And finally size of the banks proved to have a positive significant effect on financial performance represented by ROE which accepts the fifth hypothesis (H$_5$).
- Asset quality has not proved to have any significance level with the ROE, this might be because of the high level of uncertainty that the whole Egyptian economy suffers during the period of study and since the 25th of January revolution.
- Bank type, whether the bank is conventional or Islamic, did not have any sort of influence on the relationships between inter-bank factors and size on the financial indicators. Therefore, it is very untrue to say that these independent variables could affect the financial performance differently between the two types of banks. Hypothses number two and eleven were rejected.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-.050	.023		-2.163	.050		
ETAR	.291	.220	.697	1.325	.208	.125	7.969
LLR	.028	.038	.179	.756	.463	.620	1.612
LDR	.081	.028	1.491	2.878	.013	.129	7.727
NLTA	-.055	.030	-.907	-1.814	.093	.139	7.191
TA	.001	.000	1.020	2.992	.010	.299	3.342
BANK_TYPE	.008	.010	.496	.835	.419	.098	10.163
R	.740						
R Square	.548						
Adjusted R Square	.340						

Table 9: Regression Analysis Results with ROA as the Dependent Financial Indicator

Table (9) presents the regression analysis results for the sample of banks with ROA as the dependent financial indicator measure. The model summary for ROA illustrates R Square of almost 55%. This is considered as a high-moderate prediction probability level. This means that the inter-bank factors along with the size of banks could explain around 55% of the changes in the ROA as the dependent variable measure.

- Management quality has a positive significant relationship with the ROA, therefore, the eighth hypothesis (H_8) is accepted. Also, size of the banks proved to have a positive significant effect on financial performance represented by ROA which accepts the tenth hypothesis (H_{10}).
- Although capital adequacy has a positive relationship with ROA, it was not at a significant level. Asset quality has not also proved to have any significance level with the ROA, this might be because of the high level of uncertainty that the whole Egyptian economy suffers during the period of study and since the 25th of January revolution. Moreover, liquidity was not proved to be significant, although it has a negative relationship with ROA.
- Bank type, whether the bank is conventional or Islamic, did not have any sort of influence on the relationships between inter-bank factors and size on the financial indicators. Therefore, it is very untrue to say that these independent variables could affect the financial performance differently between the two types of banks. Hypothses number six, seven, ninth and eleven were rejected.

8. Conclusion

The results of the descriptive analysis illustrate that Islamic banks are dominating in some figures whereas the conventional banks are dominating in others. Regarding profitability ratios, values show minor differences between ROE and ROA in Islamic banks and conventional banks. It was clear that there are no significant differences between these groups regarding financial measures. The conventional banks are dominating in the capital adequacy that was measured by the equity to the total assets ratio (ETAR). This indicates that conventional banks have better risk management that supports the organization's efforts to avoid asset losses. On the other hand, Islamic banks have superior position in the assets quality that is measured by the loans loss reserved (LLR). This suggests that the Islamic banks have better management for their loans, this is an expected behavior specially that all Islamic banks instruments are based on profit/loss sharing. In addition to that the money is not moved to the client as a loan but as a business partnership. The management quality, which is evaluated by the loans to deposits ratio (LDR), shows that conventional banks have better performance regarding this issue. Finally, the conventional banks perform better on liquidity management. This contradicts with the asset quality management variable especially that the Islamic banks loans should be covered by assets, but this result maybe inconsistent because of the data limitation.

To sum it up, it can be stated that large sized banks that have enough capital along with the ability to manage bank's resources efficiently will definitely affect their finiancial performance positively, on the same time having good ability to manage their financial obligations and therefore decreasing the level of risk regarding liquidity will participate in enhancing the financial performance of these banks. Also, bank type, whether the bank is conventional or Islamic, was proved not have any sort of influence on the relationships between inter-bank factors and size on the financial indicators.

9. Recommendations and Future Research

In the light of the findings of the current study, it is recommended that Islamic banks management focus on improving the capital competence, management quality and liquidity, as their performance on these aspects is lower than their counterparts of the traditional banks. Moreover, they should keep the asset quality management at the same current level.

The study does not provide more detailed answers regarding what could gauge financial performance of banks? And what other independent variables that should be taken into consideration when study the relationship with the financial performance. Further research may be conducted to attempt to answer these questions. The findings of such studies would help the banks' management create their own strategies to increase their profitability.

Future studies can also examine and compare the performance of Islamic and traditional banks in more consecutive periods, more than one developing country, and larger sample than the one chosen in this study due to the very limited data or using different selection criteria. A comparison between the performance of banks before the revolution and after it should be conducted to see the progress. Finally, more detailed comparisons are needed between the performance of the two banking systems with regard to specific products, such as the profitability of Musharakah as a Long-Term Partnership in the Islamic system and the long term loans in the traditional one.

10. Research Limitations

The study experienced three main limitations. First, after collecting the required data and when performing the comparison analysis, some inconsistencies in the Islamic banks' data were discovered because of the high negative ROE and ROA values in Abu Dhabi Islamic Bank. Therefore, ADIB data had to be excluded from the sample in order not to distort the whole data.

Second, there are shortages of the available secondary data and financial statements. Although banks should publish all their financial statements for investors' relations, the reality shows that not all financial reports are published, or only parts of them are published. Although a professional database (Thomson Reuters DataStream) was used to collect the required data, in some cases, researchers realized that some important financial ratios were missing. This required extra effort to complete the missing information manually from other available annual reports.

Finally, the sample is relatively small due to the low number of Islamic banks working in the Egyptian market and due to the unavailability of data as shown earlier. Because of the limitation of the data, a full test for all profitability ratios could not be performed. For example, researchers were forced to exclude the net interest margin (NIM) since it was not available. For the same reason, the analysis in all CAMEL ratios [Capital Adequacy, Asset Quality, Management Quality, Efficiency and Liquidity] could not be conducted.

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Evidence of the overconfidence bias in the Egyptian stock market in different market states

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Keywords

Overconfidence bias, security markets, Egyptian stock market, behavioural finance, market return, market turnover

Abstract

Traditional finance theories fail to explain several anomalies observed in security markets. High levels of market turnover are among the most challenging market puzzles that have been documented in many security markets. Several studies assert the correlation between past market return and current market turnover. Behavioral finance theories assume that overconfidence bias is the reason behind this relation. Hence, this paper aims to study the impact of overconfidence – a behavioral bias stemming from the second building block of behavioral finance "cognitive psychology" and affecting traders' beliefs and thereby their trading behavior in form of excessive trading. DeBondt and Tahler (1995).

The study tests the overconfidence bias in the Egyptian Stock market during the period from 2002 till 2012 on the aggregate market level trough examining the relation between market returns and market turnover in different market states, seeking to document or deny whether overconfidence bias encourages investors to trade or not . The whole period is divided into four sub periods; two tranquil upward trending (2005-2005) and (2005-2008) and two volatile and down ward trending (financial crisis 2008-2010) and the (Egyptian Revolution Period 2010-2012)

A quantitative research using secondary data and applying time series statistical techniques is designed. The research is following Statman et al. (2006) methodology. Time series analysis, which is based on four statistical techniques; mainly Vector Auto Regression, Optimal Lag Selection, Impulse Response Function and Granger Causality Tests are being used. Market Turnover ratios are used as proxies for overconfidence.

The research finds a significant impact of past market return on current turnover in lag1, then turns negative in lag 2, and returns back positive in lag3, then remains positive and significant until lag5. This is in line with the overconfidence and self-attribution theory of Denial et al. (1997).
Market States are found to be strongly affecting the trading activity within the Egyptian Stock Market, especially in an upward trending market. Trading activity is triggered by investors' overconfidence when the Egyptian Stock Market is upward trending. There is also a positive significant impact of market gains on Market turnover in subsequent periods.

Introduction

According to the traditional finance theory, a market is efficient when a large number of rational investors act to maximize their profits in the direction of individual securities (Fama1960). In general, standard finance theories are designed to provide an elegant mathematical explanation that oversimplifies the reality. Nevertheless, some puzzles found on the financial markets, which previously could not be solved using these traditional finance theories are accounted for once the field of behavioral finance was assumed (Shleifer 2000).
The new paradigm of behavioral finance i.e., finance from a broader social science perspective including psychology and sociology is now the most vital research programs, and it stands in

sharp contradictions with the efficient market hypotheses. Many psychological and empirical studies in finance have found that people are not always rational, and systematic cognitive biases will lead to deviations from inferences drawn by classic theory.

The overwhelming empirical predication of the efficient market hypotheses anticipate that prices should react quickly and correctly to the news, hence investors who receive the news late will not be able to profit from this information. Also, prices should neither overreact nor under react to information and thus no trends nor price reversals should be observed in the market. However these predictions have been strongly challenged. One of the main observed puzzles is high trading volume which has been found in several developed financial markets. *Statman et al* (2006); *Chuang and Lee* (2006). The New York Exchange (NYSE) for example recorded an average monthly turnover in 2010 of approximately 100%.

High trading volume has been considered "the *single most embarrassing fact to the standard finance paradigm*" (DeBondt and Thaler 1994). Since the basic paradigm in classic finance cannot explain the excessive trading volume in financial markets, behavioral finance theorieshave been applied to enable better understanding of financial market and present theories that deviate from the assumption of rational agents.

Behavioral finance studies assume that the reason behind excessive trading is investors' overconfidence bias. DeBondt and Thaler (1995) states that "*perhaps the most robust finding in the psychology of judgment is that people are overconfident*." Overconfidence is a cognitive bias. It is the outcome of heuristic simplification (i.e., self-deception). It occurs when people tend to think that they are better than they really are (Trivers 1991). The psychology and behavioral science literature characterize people that behave as if they have more ability than they actually possess as being overconfident (Lichtenstein et al., 1982; Yates, 1990 and Goodie and Foster, 2004). Investors who attribute past success to their skill and past failure to bad luck are likely to be overconfident. An overconfident investor will seek to utilize his perceived superior ability to obtain large returns. Accordingly, overconfidence is characteristic of people, not of markets. (Odean 1998a)

As markets behavior is nothing more than aggregating the behavior of all market players, overconfidence bias will accordingly influence the behavioral ofthe overall Stock Market in return.Many scholars have tested the overconfidence bias theory in the finance literature. In *Daniel et al.* (1998), the author refers to overconfidence as being a result of biased self-attribution with regard to past investment outcomes. They argue that overconfidence implies over-reaction to private information and under-reaction to public signals and thus leads to market mispricing. Later, in *Gevias and Odean* (2001), the author improves the theory that some investors tend to exaggerate their own ability and ignore the fact that they are in a bull market. In *Statman et al.* (2006), Statman conducts empirical research regarding the impact of overconfidence on trading volume in the US market. Given that the level of overconfidence changes with market return, they use market return to measure the degree of overconfidence. They find a significantly positive relationship between market-wide turnover and lagged market returns and view it as evidence of overconfidence. Also, *Glaser and Weber* (2007) document that investors with higher degrees of confidence tend to operate more in the German Stock Market, which is in line with *Statman et al.*'s (2006) finding.

According to Morgan Stanley, the Egyptian Stock Market is one of the best emerging financial markets. In the last ten years, it has been considered the fourth highest growing market in all emerging markets with a growth rate of 19%. Thus, it deserves more attention and investigation Ansary (2013). Also, recent studies have clearly proved the inefficiency of the

Egyptian Stock Market and that it is characterized by noise and speculativetrading behavior. (Omran 2007 and Ansary2012)

Therefore, the overall aim of this research is to apply behavioral finance concepts to better explain the trading behavior within the Egyptian StockMarket. The study will try to advance an understanding of the physiological reasons that influence the relation between market return and the overall market turnover. More precisely, it will investigate the extent to which market return trigger inventors overconfidence and thereby affects the overall market turnover level. In other words, the research will examine the overconfidence hypothesis within the Egyptian Stock Market.

The study tests the overconfidence bias in the Egyptian Stock market during the period from 2002 till 2012 on the aggregate market level trough examining the relation between market returns and market turnover in different market states, seeking to document or deny whether overconfidence bias encourages investors to trade or not . The whole period is divided into four sub periods; two tranquil upward trending (2005-2005) and (2005-2008) and two volatile and down ward trending (financial crisis 2008-2010) and the (Egyptian Revolution Period 2010-2012)

Research objectives

Hence, the main research objectives are:

- Investigating the relation between past markets' return and current market turnover in volume and value.
- Discovering whether the Egyptian market and its investors are prone to the overconfidence bias
- Testing the variations in the turnover in volume and value resulting from different market status.

Literature Review

Examining the behavior of financial markets and its' players is of great interest and importance to most finance scholars. Several traditional finance theories have been introduced seeking to simulate the mechanism of both the markets and its investors from a normative and rational perspective. Statman (1999) mentions "*Standard finance is the body of knowledge built on pillars of the arbitrage principles of Miller and Modigliani, the portfolio principles of Markowitz, the capital assets pricing theory of Sharpe, Lintner, and the option- pricing theory of and Black, Scholes, and Merton.*"

The Efficient Market Hypothesis (EMH) that has emerged during the 1970s from the doctoral dissertation of Eugena Fama, is a further continuity of the rationality stream governing the traditional finance field. According to the theory, investors think and behave rationally when buying and selling stock, use all available information to form rational expectations, and thereby prices are accurate reflecting fundamental values. In turn, markets are stable and efficient and the overall economy is systematically moving toward general equilibrium.

Surprisingly, close observation of financial markets reveals that neither the markets nor the individual investors' trading behavior can be easily understood using the traditional finance framework. Even Eugena Fama states in a very important article that appeared in the *Wall Street Journal* that stock prices could become "*somewhat irrational*" Hilsenrath (2004).

In reality, investors do not think and behave rationally, but on the contrary, their decisions are driven by emotions and cognitive errors. Shiller (1999). In the early 1990 the field of behavioral finance has been developed, after the failure of the efforts that tried to defend the efficient market model. Siller (2002) argues that, "*Theoretical models of efficient financial markets that represent everyone as rational optimizer can be no more than metaphors for the world around us* ".

As previously mentioned, the basic paradigm in traditional finance is based on the assumption that agents are rational and markets are efficient. In such an ideal world, where investors are rational investors and markets are efficient, observing high trading volume is considered a puzzle. Statman (2003) argues that in a perfectly rational world, it is very difficult to explain why any trading activity takes place. Grossman (1976) and Milgrom and Stokey (1982) note that an offer to trade indicates to other counter parties that the trader might have private information. Rational traders refuse to trade under such conditions, and accordingly trading volume is equal to zero.

Kyle (1985), Admati and Pfleiderer (1988), and Foster and Viswanathan (1990) introduce the role of liquidity traders to get out of the no-trading trap, but this solution is incomplete. Later, Subrahmanyam (1991) shows that rational liquidity traders trade only baskets of securities, avoiding trades in individual securities. But baskets of securities cannot be traded unless individual securities are traded, since pricing of baskets requires pricing of the underlying securities. Statman (2003).

Then, Harris and Raviv (1993) and Shalen (1993) attempt to overcome the no-trading equilibrium through traders who differ in their assessment of common information. However, it is still unclear why rational traders would differ in their interpretation of common information Statman (2003).

Behavioral Finance

Behavioral finance emerges as a new paradigm, shedding the light on the role of the psychological aspects that influence the investor's financial decision making process Barber and Odean (1999). Hence, the new discipline seeks to better understand financial phenomenon which the traditional models failed to analyze.

"*The field of modern financial economies assumes that people behave with extreme rationality, but they do not. Furthermore, people's deviations from rationality are often systematic. Behavioral finance relaxes the traditional assumption of financial economics by incorporating these observable, systematic and very human departures from rationality into standard models of financial markets*". Barber and Odean (1999

Hence, in a market consisting of human beings, it seems logical that explanations rooted in human and social psychology would be of great importance in advancing our understanding of stock markets behavior. Recent research has attempts to explain the persistence of anomalies by adopting a psychological perspective. Evidence in the psychology literature reveals that individuals have limited information processing capabilities, exhibit systematic bias in processing information, are prone to making mistakes, and often tend to rely on the opinion of others Pompian (2004). Riccardi and Simon (2000) defines the field as following:"*Behavioral finance attempts to explain and increase our understanding of the reasoning patterns of investors, including the emotional process involved and the degree to which they influence the decision making process. Essentially, behavioral finance attempts to explain the what, why and how finance and investing, from a human perspective*".

Behavioral finance constitute of two building blocks which are cognitive psychology and limits to arbitrage. In a market where rational and irrational investors trade, irrationality may affect security prices, moving them away from their fundamentals and leading to the presence of the first block of behavioral finance called "Limits to Arbitrage". The second block "Cognitive Psychology " is concerned with describing the various forms of observed irrationality using behavioral models, which test the systematic biases that arise when people formulate their beliefs and preferences. While beliefs are related to how agents formulate their expectations, preferences deal in particular with how investors evaluate risky gambles. Barbaris and Thaler (2002)

Overconfidence in Finance

Economists started implementing psychological findings into economic models starting in the 1970s, but the most rapid development of that trend began in the 1990s. Since then, overconfidence has also become a field of interest for economists, mainly in the context of behavior on financial markets. Overconfidence is defined usually as an overestimation of one's knowledge or precision of private information, or the interpretation thereof. Alternatively, an underestimation of variance of signals or volatility of asset values is also considered.

Some puzzles found on the financial markets, which previously could not be solved using the standard economic theory, were successfully accounted for once overconfidence of investors was assumed. These issues include primarily continuing securities misevaluations, excessive trading volumes and the disposition effect, i.e. a tendency to sell well-performing stocks and to hold on to losing ones. The potential presence of overconfidence on the markets and its persistence in the longer term spurred an on-going discussion on the well-established idea of efficient markets and economic agent rationality. Despite some skepticism among economists on the existence and effect of overconfidence as such, its prevalence on financial markets has been proven repeatedly, through methods ranging from experimental and questionnaire studies to formal models and financial market data.

Overconfidence and Behavioral Finance Models

In most of the proposed behavioral finance models, overconfidence is often interpreted as:

- Investors overestimating the precision of their information (sometimes more specifically; overestimating private signals and underestimating the public ones),
- Investors underestimating risk, which makes them e.g. hold riskier portfolios.

Hence, considering the existence of such assumptions of overconfidence, the impact of overconfident investors is analyzed to define their effects on financial markets. Such effects are reflected as observed market anomalies such as: excessive trading volumes, trading profitability, short- and long-term asset misevaluations and stock returns.

In the following part of the chapter, we will highlight the main behavioral models that explain the impact of overconfidence bias on the trading behavior and return.

Overconfidence and Trading Volume

Consequently, various scenarios proving the persistence of overconfidence on the market are modeled. Odean (1998) assumes that traders, insiders and market makers may unconsciously overestimate the precision of their information and rely on it more than is warranted, while traders display the better-than average effect, evaluating their information as better than that of their peers. Such overconfident market participants cause an increase in the trading volume. The same results are demonstrated by Benos (1998) in his model of an auction market with informed traders, where again the participation of risk-neutral investors overestimating the precision of their information leads to an increased trading volume

Empirical studies of the overconfidence bias in financial markets

Despite the several experimental and questionnaire studies, as well as the rapidly developing field of theoretical modeling, it is the empirical analysis of financial market data that is considered the corner stone of studying the overconfidence bias.

Empirical studies contend that the people overestimating their trading and investment skills may be more likely to choose their career as traders or they may trade actively on their own. Moreover, these overconfident traders can survive and dominate the markets in the longer horizon (Benos, 1998; Daniel et al, (1998); Gervais and Odean, (2001); Hershleiffer et al. (2001) Therefore, if most investors suffer from overconfidence and if overconfidence is a systematic

cognitive bias, it is possible to trace investor overconfidence by analyzing the market level trading behavior (investors' aggregated trading behavior). Chuang and Lee (2006) and Chuang and Susmel (2011) using market level data, have found a positive relationship between current trading level and past returns that is consistent with overconfidence theory. These studies test the implication of investor overconfidence related to trading volume within the framework of vector auto regression (VAR).

There are other studies which analyze the predictions of overconfidence theory by focusing on trading activity of individual investors. These studies find positive link of trading activity with past returns using unique datasets consist of individual investors' accounts. Chou and Wang (2011); Glaser and Weber (2007); (2009); Odean (1999). Glaser and Weber (2009) analyze individual investors' portfolios. They posit that only high portfolio returns can lead investors to buy high risky stocks, therefore, dynamic changes in investor overconfidence can only trigger from their past portfolio returns rather than from prior market returns.

However, models of overconfident investors such as those by Gervais and Odean (2001) and Statman et al. (2006) tell that that overconfident investors trade aggressively following market gains especially in bull market. A recent study Chuang and Susmel (2011) test the predictions of overconfidence models and finds that both individual and institutional investors trade more aggressively following market gains. The findings of the study also indicate, investors' tendency to trade more in riskier securities following market gains.

Overconfidence in developing financial markets

As for developed financial markets, recent empirical studies examine the overconfidence bias in several emerging stock market. Results are controversial. Ziane (2013) investigates the overconfidence bias in the Tunisian and Chinese financial markets. In both markets, overconfidence bias is documented, but with little evidence in the Tunisia than China. Also, past market returns affect trading volume over some months in the two examined markets. Significant contemporaneous positive relation between volume and volatility is documented. Moreover the studies shows the predictability of stocks return depending on lagged volume, which a further violation of market efficiency (Karpoff, 1987, Gallant et al., 1992; Zhao and Wang, 2003; Wang and Huang 2012).

Two empirical studies investigate the investor overconfidence in Pakistan Stock market. Fayaz and Riaz (2012) study seek to test whether overconfident investors trade more aggressively, assuming that past returns lead investors to become overconfident, therefore turnover is positively related to past returns. Also, they hypothesize that trading by overconfident investors contributes to the returns volatility. The research is conducted using market data from Karachi Stock Exchange (KSE) for the period November 1999 to October 2010.

The study reveals significant positive response of turnover to market return shock after controlling for concurrent and lagged return dispersion and returns volatility. This response was persistent for quite a long time. Thus, results confirm the presence of investor overconfidence at KSE. Consistent with previous studies, the study finds significant contemporaneous positive relationship between turnover and returns volatility. Regarding portfolio rebalancing, investors take two months to respond to cross sectional variations in security prices to rebalance their portfolios for eliminating unsystematic risk. Moreover, returns predictability based on past turnover in the VAR and associated impulse response function analysis is found, this is another violation of the strict market efficiency hypothesis asserted before in emerging financial markets such as China and Tunisia.

The second research on the Pakistan stock market is presented by Tariq and Ulla (2013). The study results indicated that previous days returns have impact on today's turnover, which

indicates that Pakistani investor keep an eye on returns of the security and accordingly are overconfident. This may lead to irrational decision making leading to generating losses. The impulse response function predicts that returns are reverting to zero and yet the turnover is high. This will lead to correction in market and investor will suffer loss.

The Egyptian Stock market

The Egyptian Stock Market is one of the oldest in the world, and it comprises two exchanges that have been recently integrated allowing investors to have access to stocks listed on both of them; Alexandria Stock Exchange, which was established in 1888, and Cairo Stock Exchange that was established in 1903. It was the fifth most active stock exchange worldwide in 1940s, prior to the nationalization of industry and choosing the central planning policies in the early 1950s. These policies led to a significant reduction in the market activities, and as a result the market remained largely dormant throughout the 1980s.

In the 1990s, the market recovered again after the 40 years of stagnation, and since then it has been considered the premier capital market in the Middle East and North Africa that best serves its stakeholders (Mecagni&Sourial, 1999). In 2009, the Egyptian Exchange was announced thesecond best developing stock exchange in Africa (the Egyptian Stock Exchange, 2010). Also it was awarded the best stock exchange in Africa in a competition organized by New York Stock Exchange in 2008.

The Egyptian Stock market trading behavior

Girad and Omran (2009) examine the interaction of volatility and volume in 79 listed companies in the Egyptian Stock Market over a period from January 1998 to May 2005. The authors find that information size and direction have a negligible effect on conditional volatility and, as a result, the presence of noise trading and speculative bubbles is suspected. Also, the persistence in volatility is not eliminated when lagged or contemporaneous trading volume is incorporated into a GARCH model. It is shown that, when volume is further broken down into its expected and unexpected components, volatility persistence decreases. This is especially true after May 2001, which marks the beginning of a succession of major stock market reforms. It was also found that anticipated information shocks can have a negative impact on the volatility of return, particularly prior to May 2001

The study of Habib (2011), tested empirically the relationships between stock return and trading volume in the Egyptian Stock Market. Using data from The Egyptian Stock Exchange about 26 securities during the period 1998 – 2005, the study establishes several regularities about the role of trading volume in predicting the volatility of stock return and return itself. The main conclusion is that lagged stock trading has little role to play in forecasting the future return volatility. The second finding of the paper relates to the predictability of returns. The analysis suggests that there is no relation between volume and first autocorrelation of stock return. Third the Granger causality tests indicate a bidirectional causal relation between volume and volatility. Specifically, any changes in return volatility leads to changes in trading volume, and vice versa. However, the study doesn't support any causal relation between stocksreturn and volume.

Anasary and Attuea (2012) conducted a further research that examines the relationship between trading volume and stock return. The study analyzes the informational arrival pattern within the Egyptian Stock Exchange. The sample included 26 securities out of the EGX 30 listed companies during the period from 2001 to 2010. The research reveals several interesting findings such as a positive correlation between trading volume (using both logarithms of turnover ratio and transaction number as measures of trading volume) and return, weak but high significant

contemporaneous relationship between trading volume using both measures and return indicating that the Egyptian Stock Market is informationally inefficient and that noise traders exists . The study results correspond to those finding of Omran and Girard (2007) and El Diftar (2008). Also, negative lagged relationship using two and five days lag period between trading volume (using both measures) and return which means that increasing (decreasing) trading volume in the previous two and five days lead to decreasing (increasing) return and vice versa, this result contradict the results reached by previous studies and ascertain the difference of the Egyptian security market from any emerging and developed markets. Moreover, they states that return in the Egyptian security market is characterized by persistence and clustering, which presents evidence that the Egyptian security market is informational inefficient. Bidirectional causality relationship using two and five days lag period were found which mean that Sequential Information Arrival Hypothesis (SIAH) is applicable in the Egyptian security market, also weak contemporaneous relationship confirms the applicable of SIAH in the Egyptian security market. Regarding the lags, using five days in testing causality relation, the results were more robust than using two days, which indicate the weak response of the Egyptian security market to information flow. Finally, transactions number is better in representing trading volume than logarithm of turnover ratio in the Egyptian security market

Most recently, a study by Abdeldayem and Mahmoud (2013) investigates the impact of trading motives on the dynamic relationship between stock returns and trading volume in Egypt by using the daily data of all listed 167 stocks traded in the Egyptian Exchange (EGX) for a period of 6 years, from January 2006 till December 2011. The study asserts that speculative trade is dominant in emerging markets and is also associated with positive serial autocorrelation in stock returns. More precisely, the research finds a positive serial autocorrelation prevalent in the Egyptian Exchange (EGX); that 83% of our sample has positive serial autocorrelations and 60% of the sample has significant positive autocorrelations. This result is consistent with the literature as market anomalies tend to be more dominant in emerging markets and that the Egyptian stock market efficiency is weak.

Methodology and Data

This quantitative research is applying empirical tests that are time series oriented. It is based on secondary data namely; monthly observations obtained from the Egyptian Stock Exchange. We use Vector auto regression, Optimal lag Selection, Impulse Response Function, Granger Causality test and Correlation Matrix to test how the market overall trading activities relate to lagged returns.

Data

Back to the literature relevant to this study, Statman (2003) uses daily and monthly observations. Accordingly, secondary data is purchased from two main resources:

1. Egypt of Information Dissemination (EGID)
2. Meta Stock

Data Sample

Due to data availability, the study sample covers the period form the January 2002 up to December 2012. The data set consists of two main data samples:

A) Daily based Data

- Daily records for EGX30 index return points.
- Daily stocks opening prices
- Daily stocks closing data
- Daily market trading value

- Daily market trading volume
    B) Monthly based Date
- Monthly market capitalization
- Monthly volume of traded shares
- Monthly Value of traded shares
- Monthly number of market listed shares

We focus on monthly observations under the perspective that changes in investor overconfidence occur over monthly or annual horizons (Odean, 1998; Gervais and Odean, 2001; Statman, Thorley and Vorkink, 2006).

The full sample data covers 11 years covering 132 month. The full sample is then divided into four sub periods; two representing tranquil sample and the other are volatile samples. The sub periods are:

Tranquil periods	Volatile periods
Sub-period 1 : 2002 – 2004	Sub-period 3: 2008 – 2010
Sub-period 2 : 2005 – 2007	Sub-period 4 : 2011- 2012

These sub periods is used to compare the obtained results in different market states.

Dependent Variable

Market turnover, *mturnt*, is the month *t* market-wide turnover measured in percentage points. As by Lo and Wang (2000) turnover can be calculated in volume which is based dividing monthly traded shares by the number of outstanding shares.

Independent Variable

Monthly Market return, *mrett*, *is* the month *t* return. Following Sheikh et al. (2012) in this study the returns of EGX 30 are used as proxies for the overall Egyptian Stock market return. The index return is calculated as the difference if natural log of ending value of the index daily and monthly basis.

$$R_t = L_n(P_t) \quad L_n(P_{t-1}) = L_n(P_t/P_{t-1}) \tag{1}$$

Hence, the Rt is market return for period t, Pt is current period closing value of index and Pt-1 is previous period closing value of the index.

Research Hypothesis

H1:   Investors are overconfident, therefore, the current trading activity is positively related to past market returns.

H2:   "Market States affect investors' overconfidence and so trading activity is affected in subsequent periods."

H3:   "Overconfident Investors trading activity levels change according to different market states."

H4:   Market gains affect investors' overconfidence and affect trading activity in subsequent periods.

Analysis and Results

Descriptive Analysis

Descriptive statistics are performed to describe the basic features of the data employed in the study. They provide a simple overview about the data sample and its measures.

Table 4.1   Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Value	118	.000000	.473650	.06441331	.052011276
Volume	131	.000000	12.731447	3.08726578	1.998769130
Return	131	-.022408	.015596	.00093224	.005219526
Valid N (list wise)	118				

Table 4.2   Descriptive Statistics for Sub Period 2002 - 2004

	N	Minimum	Maximum	Mean	Std. Deviation
Value	36	.000000	.034000	.01315111	.011214711
Volume	36	.000000	2.695832	1.17406089	.578466371
Return	36	-.004073	.010650	.00249009	.003652975
Valid N (list wise)	36				

Table 4.3   Descriptive Statistics for Sub Period 2005 - 2007

	N	Minimum	Maximum	Mean	Std. Deviation
Value	36	.000000	.473650	.06603278	.072740497
Volume	36	.000000	6.552943	3.71118442	1.327990774
Return	36	-.009659	.015596	.00180735	.004467763
Valid N (list wise)	36				

Table 4.4   Descriptive Statistics for Sub Period 2008 - 2010

	N	Minimum	Maximum	Mean	Std. Deviation
Value	36	.053240	.193790	.09463917	.033355142
Volume	36	2.216282	12.731447	4.62976706	2.179006113
Return	36	-.022408	.010250	-.00032591	.006300374
Valid N (list wise)	36				

Table 4.5   Descriptive Statistics for Sub Period 2011 - 2012

	N	Minimum	Maximum	Mean	Std. Deviation
Value	23	.026510	.125160	.05839739	.024764699
Volume	23	1.527086	7.846391	2.69092919	1.425206854
Return	23	-.013048	.012471	-.00090656	.005787774
Valid N (list wise)	23				

Normality Testing

A data set should be normal or well-modeled by a normal distribution. As the table below shows the normality test of the dimensions under study, where it was found that all dimensions under study are found to be normal as P-value > 0.05, which means that the hypothesis of normality is accepted.

Normality Testing

	Kolmogorov-Smirnov[a]		
	Statistic	Df	Sig.
Value	.182	12	.200*
Volume	.237	12	.061
Return	.151	12	.200*

Unit Root Test

A unit root test has been applied to estimate the VAR model through the Augmented Dickey Fuller (ADF) tests, which are used to test for unit roots in the time series. The null hypothesis is that there is a unit root (Non Stationary) in the index under study, against the alternative that there is no unit root (Stationary) in the index under study.

The results of the ADFshows that the nullhypothesis of the series under consideration are not stationary (i.e., have a unit root) is significantly rejected at the 1% level in all cases. The stationarities o f those variables ensure that our empirical analyses below would not yield spurious outcomes. More importantly, we do not have to take into account the possible cointegration problem associated with stock return and trading volume when performing the (restricted) VAR model

Unit Root Test for the variables under study

Variables	P-value	Decision	
Turnover in Volume	0.000	Stationary	Level
Turnover in Value	0.000	Stationary	Level
Return	0.000	Stationary	First Difference

Inferential Analysis

Testing Investors' Overconfidence

H1:"Investors are overconfident; therefore, the current trading activity is positively related to past return."

In order to test the investors' overconfidence, VAR model is checked for the relationship between turnover and past returns.

$$Y_t = \alpha + \sum_{i=1}^{P} A_i Y_{t-i} + \sum_{j=0}^{S} B_j X_{t-j} + e_t$$

WhereYt is an n x 1 vector of the endogenous variables at time t, Xt is a vector of exogenous variables and et is an n x 1 vector of residuals. The coefficient matrices Ai and Bj estimate the time-series associations between the endogenous and exogenous variables in the system. P is the number of lags included for endogenous variables and S is number lags included for exogenous variables

Estimate the relation between past market return and current   market turnover

1- *VAR Model*

Given that the market turnover in volume is the dependent variables, the estimated coefficient for the first lagged market return 73.48799 and it is significant at 5% confidence level and at the second lag -17.59822, but it is significant at 5%

2- **VAR Model for Volume in H$_1$**

	VOLUME	RETURN
VOLUME(-1)	3.309154	-9.40E-05
	(0.08171)	(0.00028)
	[4.15089]	[-0.33950]
VOLUME(-2)	4.202823	-0.000271
	(0.08126)	(0.00028)
	[5.26998]	[-0.98252]

RETURN(-1)	73.48799	0.228759
	(27.6283)	(0.09365)
	[2.65988]	[2.44272]
RETURN(-2)	-17.59822	-0.088389
	(27.9804)	(0.09484)
	[-0.62895]	[-0.93196]
C	0.689629	0.001999
	(0.27732)	(0.00094)
	[2.48673]	[2.12663]

The influence of past market return to the market turnover in volume only exists in the first lag, since the second lag of market return is not significant. The positive impact of the lagged market return on the market turnover fits our overconfidence hypothesis, although the affect is not as strong as we expected. The results are presented using the five lag selection criteria of the VAR model. It is found that that one criteria (Schwartz Criteria) is supporting the result at lag 2, while the other four criteria are all significant at lag 5.

Research Question No.1 (a)
What is the lead lag time between market's return and market turnover in volume?
**2- Optimal Lag Selection**
A model is fitted as VAR (p) models with different orders to determine a suitable lag length of the VAR model which will show the value of p minimizing the model selection criteria. Model selection criteria for VAR (p) could be based on Akaike (AIC), Schwarz-Bayesian (BIC),

Optimal Lag Selection for Volume in H_1

Lag	LogL	LR	FPE	AIC	SC	HQ
0	196.6911	NA	0.000116	-3.385933	-3.338195	-3.366556
1	220.5140	46.40284	8.22e-05	-3.730679	-3.587465	-3.672549
2	233.8974	25.60293	6.98e-05	-3.893867	-3.655178*	-3.796984
3	242.1135	15.43194	6.49e-05	-3.967191	-3.633025	-3.831554
4	243.4904	2.538382	6.80e-05	-3.921572	-3.491931	-3.747183
5	255.1530	21.09409*	5.95e-05*	-4.054835*	-3.529718	-3.841692*
6	257.9941	5.039883	6.08e-05	-4.034680	-3.414087	-3.782785
7	260.9045	5.061487	6.20e-05	-4.015730	-3.299661	-3.725081
8	262.1964	2.201946	6.51e-05	-3.968634	-3.157089	-3.639232

3- Impulse Response Function
According to Panel B, the response of market turnover in volume to shock of market return exists until the fifth lag. More specifically, in lag one the response is not evident, but turns to large and positive in lag two. The impulse becomes negative in the third lag and dies out after the fifth lag.
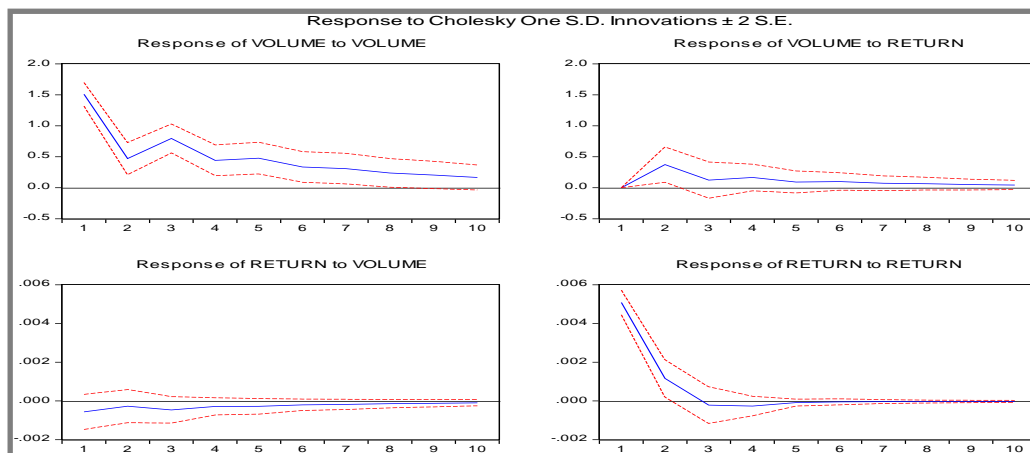
Impulse Response Function for Turnover in volume for H_1

4- Granger Causality

The Granger causality test is used to determine if one index could be used in forecasting another. A time series X is said to Granger-cause Y if it can be shown that those X values provide statistically significant information about future values of Y. A model is fitted using the method of least square and Granger causality analysis with F-statistics. If the calculated value of F-statistics is larger than critical value, the original hypothesis of variable X can't cause variable Y was not proved, that is to say variable X is Granger reason of variable Y. As shown below, it could be claimed that turnover in volume granger cause return as P-value < 0.05. Also, return is claimed to granger cause or forecast turnover in volume as P-value < 0.05.

Granger Causality for Volume versus Return in H_1

Null Hypothesis:	Obs	F-Statistic	Prob.
RETURN does not Granger Cause VOLUME	121	3.94594	0.0025
VOLUME does not Granger Cause RETURN		2.87007	0.0179

Research Question No.2

Testing the correlation between past and current market turnover

What is the impact of past turnover on current turnover in volume?

Turnover with itself

The results of the VAR for H_1, conclude that turnover is in high correlation with its previous values. Thus, market turnover is auto correlated. The coefficients of the first lagged and second lagged market turnover areinsignificant, with the estimated parameters of 0.339154 and 0.428231.

VAR Model for Volume in H_1

	VOLUME	RETURN
VOLUME(-1)	3.309154	-9.40E-05
	(0.08171)	(0.00028)
	[4.15089]	[-0.33950]
VOLUME(-2)	4.208232	-0.000271
	(0.08126)	(0.00028)

	[5.26998]	[-0.98252]
RETURN(-1)	73.48799	0.228759
	(27.6283)	(0.09365)
	[2.65988]	[2.44272]
RETURN(-2)	-17.59822	-0.088389
	(27.9804)	(0.09484)
	[-0.62895]	[-0.93196]
C	0.689629	0.001999
	(0.27732)	(0.00094)
	[2.48673]	[2.12663]

This suggests that the market turnovers isaffected by their own behaviors in past two periods. Hence, current turnover can predict the following two months turnover

Research Question No.3

Examining the contemporaneous relation between currentmarket return and current market turnover

a) *What is the impact of current market return on current turnover in volume?*

It has been observed that the impact of current return on current turnover is significant with coefficients of 55.24862 and p value equal 0.03652. This ascertains the contemporaneous and strong impact of market return on market turnover.

EstimatedEquation for Turnover in H$_1$

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RETURN	55.24862	60.80161	1.908670	0.03652

R-squared	-2.382606	Mean dependent var	3.087266
Adjusted R-squared	-2.382606	S.D. dependent var	1.998769
S.E. of regression	3.676108	Akaike info criterion	5.449191
Sum squared resid	1756.791	Schwarz criterion	5.471139
Log likelihood	-355.9220	Hannan-Quinn criter.	5.458109
Durbin-Watson stat	0.292942		

Testing the effect of market states on investors' overconfidence

H2: "Market States affect investors' overconfidence and so trading activity is affected in subsequent periods."

It had been mentioned that different market state may change the trading activity and thus investors' overconfidence. Accordingly, the whole research period will be divided 4 sub periods to reflect different market states in case of financial crisis (2008) and revolution (2011) in Egypt. The division performed was done, according to the graphs below and the effect had been tested for turnover.

Graphs to choose the sub periods intervals

RETURN

TURNOVERVOL
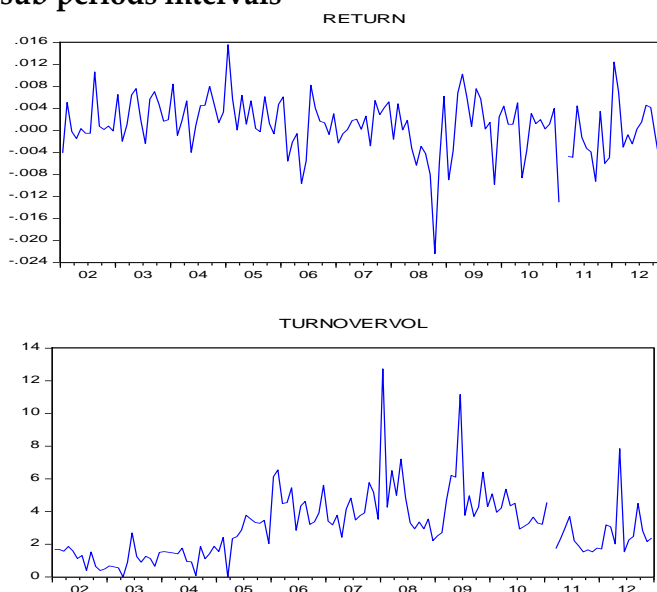
1- Estimated Equation

An equation had been estimated including a dummy variable to reflect different market states. The table below shows that there is a positive high significant effect at 0.05 significance level (P-value = 0.0140). This means that there is a significant change in turnover in volume with different market states.

Estimated Equation for Volume in H_3

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	3.274646	0.182211	17.97170	0.0000
C(2)	16.65567	42.17137	0.394952	0.6935
C(3)	-171.8139	68.97811	-2.490846	0.0140
R-squared	0.062123	Mean dependent var		3.087266
Adjusted R-squared	0.047468	S.D. dependent var		1.998769
S.E. of regression	1.950753	Akaike info criterion		4.196943
Sum squared resid	487.0962	Schwarz criterion		4.262787
Log likelihood	-271.8998	Hannan-Quinn criter.		4.223698
F-statistic	4.239191	Durbin-Watson stat		1.035948
Prob(F-statistic)	0.016495			

The level of overconfidence varies according to changes in market states

H3:"Overconfident Investors trading activity levels change according to different market states."

As shown in table below, it was found that variation in turnover in volume when market state is up (0.00607) is higher than that when market state is down (0.00406). This means that there is a higher impact of market state on investors' overconfidence when it is up than when it is down.

T-test for Turnover in H_3

	Dummy	N	Mean	Sig.
Value	1.00	59	.04831559	0.001
	.00	59	.08051102	

Volume	1.00		72	2.44262265	0.000
	.00		59	3.87394891	

As shown in table below, it was found that time of affecting turnover is at lag 4, which means 4 months of significant effect.

Estimated Equations for Turnover in H₃

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	0.066095	0.005114	12.92558	0.0000
C(2)	-1.445966	1.537959	-0.940185	0.3491
R-squared	0.007563	Mean dependent var		0.064413
Adjusted R-squared	-0.000993	S.D. dependent var		0.052011
S.E. of regression	0.052037	Akaike info criterion		-3.056916
Sum squared resid	0.314112	Schwarz criterion		-3.009955
Log likelihood	182.3581	Hannan-Quinn criter.		-3.037849
F-statistic	0.883948	Durbin-Watson stat		1.579263
Prob(F-statistic)	0.349076			

Testing the effect of market gains on investors' overconfidence
H4:"Market gains affect investors' overconfidence and affect trading activity in subsequent periods."

It had been mentioned that market gains may change the trading activity and thus investors' overconfidence. Hence, we will test the affect of positive and negative market returns to reflect different market gains.

Estimated Equation

An equation had been estimated including a dummy variable to reflect different positive and negative market returns. The table below shows that there is a positive high significant effect at 0.01 significance level (P-value = 0.0000). This means that there is a significant change in turnover in volume with different market gains.

Estimated Equation for Turnoverin H₃

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	0.844295	1.886111	0.447638	0.6552
C(2)	0.076662	0.047500	1.613925	0.1090
C(3)	-0.037735	0.008207	-4.598099	0.0000
R-squared	0.143280	Mean dependent var		3.087266
Adjusted R-squared	0.129893	S.D. dependent var		1.998769
S.E. of regression	1.864442	Akaike info criterion		4.106435
Sum squared resid	444.9464	Schwarz criterion		4.172279
Log likelihood	-265.9715	Hannan-Quinn criter.		4.133191
F-statistic	10.70349	Durbin-Watson stat		0.992511
Prob(F-statistic)	0.000050			

Findings and Recommendations
After analyzing the research results, the following findings are presented:
- The past two months' market return affectstrongly the current turnover i.

- There is a positive significant impact of past market return on current turnover in lag 1, than turns negative in lag 2, returns back positive in lag 3 and remains positive significant until lag 5.
- Past market return affects current turnover for a long time. This outcome is in line with the overconfidence and self- attribution theory of Daniel et al. (1997).
- Conducting a Granger Causality test to investigate the contemporaneous relation between market return and market turnover; it has been found that:
- Current market returns positively and strongly affect current turnover.
- Current turnover positively and strongly affects current market return.
  - The above-mentioned relation proves that noise trading is available in the Egyptian Stock market, which contradicts with rational investors' assumption of traditional finance theories.

When taking different market states into consideration, through dividing the whole research period into four sub periods ; two tranquil – upward trending (2002-2005) and (2005-2008) and two volatile- down ward trending (financial crisis 2008-2010) and the (revolution period 2010-2012), the researcher finds that different market states strongly affect the trading activity within the Egyptian Stock Market.

Also, when comparing the impact of different market states or sub periods on market turnover, it can be concluded that the variation of the first two tranquil periods is higher than that of the other two volatile ones.

- This indicates that investors mistakenly attribute past market returns to their trading and valuation skills. They overestimate the precision and accuracy of their information. Consequently, they trade more aggressively subsequent to higher market returns to maximize their trading utility. On the other hand, when market is down they decrease their trading activity in subsequent periods.
  - Hence, the increased trading activity is triggered by investors' overconfidence when the Egyptian overall Stock Market is trending upward state.
  - Furthermore, the study goes deeper in analyzing the market turnover reaction to past market gains on future market turnover. Research reveals positive significant impact of market gains on turnover in subsequent periods.

Conclusion

From the above stated findings, the research concludes the following:

a) The Egyptian Stock Market is a psychologically affected market. The investors within the market are proven to be overconfident, as past (up to five months) market returns affect the overall current market turnover.

b) The percentage increase in the overall monthly Egyptian Stock Market return will consequently increase the number of traded shares per month.

Recommendations

The following recommendations are addressed to the Egyptian Exchange Management:

a) Improve information dissemination mechanism, as the Egyptian Stock Market responsiveness to information flow appears to be very weak, for example publishing fair value for each stock.

b) Establish a comprehensive and accessible database that includes complete date for each stock. The database should include the stock prices, trading volume, closing prices opening prices, and stock capitalization. In addition to a historical database for the

Egyptian Stock Market indices that include the daily performance of each index. These databases will be of great importance for both researchers and policy makers.

c) Take actions that limit manipulating security price, like stop trading on the stock in case of increasing transactions number or number of traded shares for one investor up to specific limit.

d) Publish the results of such studies on the Egyptian Stock Market website.

e) Conduct behavioral finance awareness courses to individual traders and financial advisors to make them aware of the physiological biases that affect their trading decisions and accordingly the overall market behavior.

f) Include the Behavioral finance in the curriculum in all finance and investment course, especially those related to investment decision and financial management.

Future Research

a) The behavioral finance field as defined by Pompian (2007) is divided into Behavioral Finance Micro (BFMI) and Behavioral Finance Macro (BFMA). This dissertation has examined the overconfidence bias on the macro level which is related to detecting and describing anomalies in the efficient market hypotheses. But other studies argue that the level of overconfidence varies with the individual portfolio returns. Therefore, future research is required to test the implications of investors' overconfidence bias on the individual investors' level or from the Behavioral finance micro perspective.

b) Statman, Theorly and Vorkink argue that investors' overconfidence is a driver of the disposition effect which is the tendency to sell winners too soon and keep losers longer. They argue that overconfidence encourages investors to trade asymmetrically between gains and losses. Overconfidence differs from the disposition effect in two ways. First, the disposition effect refers to an investor's attitude towards a specific stock in the portfolio (Odean (1998), Ranguelova (2001) and Dhar and Zhu (2002). However, overconfidence affects the Stock Market in general. Second the Disposition effect explains the motivation for only one side of a trade. In contrast, overconfidence can explain both sides of a given transaction.

Therefore, future research is required to test the disposition effect together with the overconfidence bias on the market level as it has been claimed that disposition effect might be another behavioral explanation for the observed trading patterns within markets.

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Real Economic Convergence in Western Europe from 1995 to 2013

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Keywords

Real convergence, Beta convergence, Sigma Convergence, Economic growth, GDP per capita

Abstract

   The aim of the paper is to analyze the economic convergence of real per capita GDP in the Western European countries with two types of measurement methodology. The first is sigma convergence, based on the coefficient of variation of real per capita GDP. The second is beta convergence, absolute/unconditional and conditional, including economic and socio-political variables, based on the neoclassical growth theory. The hypothesis of the paper is that there has been real economic convergence in Western Europe in at least one analyzed sub-period. The relationships between selected macroeconomic variables and the rate of economic growth are econometrically tested. Both sigma and beta convergence are estimated for the period 1995-2013 and four sub-periods: 1995-2003, 2004-2013, pre-crisis sub-period 2004-2008 and the crisis sub-period 2009-2013. The empirical findings support the hypothesis of economic convergence, i.e. that the poorer countries tend to grow faster than the rich ones in per capita terms, for some periods. However, the countries had a tendency to diverge, confirming the negative effects of the crisis on per capita GDP growth. Sigma convergence is consistent with beta convergence. According to the results, the half-life of real convergence may take from 12 to 1078 years. Significant dissimilarities between the growth patterns among individual countries show the considerable heterogeneity of growth, i.e. the convergence clubs.

1. Introduction

   Convergence is defined as an equalization of levels of development and is a necessary condition for efficient and successful integration. According to the Balassa classification, the European Union is at the highest degree of integration in the world economy, economic union, with a single currency used by 19 Member States. The equalization has been a focus of the European Union since the Treaty of Rome (1957) when the common policies to promote "harmonious economic development and balanced expansions" were adopted. How important this matter is shows the process of joining the EU. In order to join the Union, countries have to fulfill so called Copenhagen criteria (1993) which include democracy, active market economy and obligations for the purposes of the EU. Once they join the EU, countries eventually have to join the Eurozone. The criteria they have to fulfill, the Maastricht criteria, include price development stability, fiscal stability, financial market stability and exchange rate stability. Before the biggest enlargement in 2004, the members of the EU were developed countries. Austria, Finland and Sweden did not join until 1995, after the collapse of the Soviet Union, since they wanted to stay neutral. These countries had a similar level of development and should have converged.

   In 2004 ten CEE countries joined the Union, and that was the first real test. It was expected that these countries would not perform well. However, the convergence rate in the EU-28 from 1995 to 2013 was 2.08%, consistent with Barro and Sala-i-Martin findings. In the pre-crisis period, these countries proved that they could cope with the challenges of being in the Union, with the convergence rate of 3.91%. Current literature on economic growth shows how the new Member States converge, since they have been less developed. But, in the EU-15 there are more and less developed Member States and some of them were hit hard by the crisis, even more than the new Member States and in this paper it will be shown if they converged as they should have.

The main purpose of this research is to have an overview of the real convergence process in the most developed countries in Europe, the EU-15 and Iceland, Norway and Switzerland, i.e. to determine real convergence rates in order to reject or not reject the convergence hypothesis. Iceland, Norway and Switzerland are included in the analysis because these countries have strong connections with the EU. Other purposes are to analyze the convergence process between different time periods, since it could show what might affect the convergence process and to determine whether there are convergence "clubs" within the group. The main research hypothesis is that there is real economic convergence in the most developed countries in Europe. Several sub-hypotheses are formulated: there is sigma convergence in Western Europe in at least one period; there is absolute/unconditional beta convergence in Western Europe in at least one period; there is conditional beta convergence in Western Europe in at least one period; there is club convergence in Western Europe; the crisis has impacted the economic convergence process in Western Europe.

2. A Brief Survey of Literature

Different empirical studies have used time series and cross section data to measure and analyze the convergence process among countries and regions in the world. Convergence was popularized by Barro and Sala-i-Martin (1992), who analyzed the U.S. states over various periods from 1840 to 1988, with the results s that convergence existed, with the speed of 2 percent per year, regardless the time period. Sala-i-Martin (1994) proved that there was ample evidence of conditional beta convergence, and that the speed of convergence was remarkably similar across data sets, 2 percent per year, with the lesson that transitions were important and quite slow. Barro (1991) analyzed the impacts of independent variables initial GDP per capita, primary and secondary school enrollments, number of political assassinations, investment rates and measures of distortions in capital markets on the GDP per capita growth. Four lessons emerged: education was an important determinant of the growth rate of the economy; investment rate was strongly positively correlated to growth; coefficient of the initial level of income was significantly negative once other variables were held constant; different measures of political instability and market distortions seemed to matter in varying degrees. Mankiw, Romer and Weil (1992) suggested that international differences in income per capita were best understood using an augmented Solow growth model, where the output was produced from physical capital, human capital and labor. The results indicated that these three variables explained most international variations. Ben-David (1993) examined the impact of trade liberalization on income convergence and the results supported the convergence hypothesis.

The most of convergence in the EEC occurred in the post-World War 2 era, during a period of increased trade liberalization. Only after the new Member States, the United Kingdom, Ireland and Denmark, started removing the trade barriers, the income differences among the six original Member States and them began to fall. Marques and Souikiazus (1998) analyzed sigma and absolute beta convergence process in the EU-12 from 1975 to 1995, with the results that the EU-12 Member States were converging at the rate of 1.18% in the entire period, from 1975 to 1984 the rate was 1.55% and from 1985 to 1995 1.61%. The results for sigma convergence were different. The countries were converging from 1975 to 1982 and from 1986 to 1991. The discrepancy in the results showed that the rate of beta convergence was not sufficient to ensure the approximation of the levels of per capita income in absolute terms. Yin, Zestos and Michelis (2003) analyzed sigma and beta convergence in the EU from 1960 to 1995. For sigma convergence, the results showed that the cross sectional standard deviation of the real GDP per capita for the EU-15, the EU-9 and the EU-12 had declined over the period 1960-1995. For the EU-6, the standard deviation increased in the last 15 years, even though it remained the lowest

one. The results for absolute and conditional beta convergence showed that the EU-15 countries were converging, other than from 1980 to 1985, and that convergence process in the EU-15 had been going strong and uninterrupted. Mathur (2005) examined the convergence process in the four regions, including the European Union, from 1961 to 2001. The EU showed the evidence of absolute convergence. Halmai and Vàsàry (2012) analyzed four groups of the EU countries: "developed", "Mediterranean", "catch-up" and "vulnerable" countries. They showed how convergence and potential growth rates were disrupted by the 2008 crisis through three different channels: capital accumulation, labor input and total force productivity. They estimated a longer period of divergence might ensue in Europe. Kaitila (2013) analyzed only sigma convergence of purchasing power adjusted GDP per capita in four groups of countries: the EU-15, the EU-27, the Eurozone and the EU-33 (the EU Member States and the candidate countries at the end of 2012; Croatia, Iceland, Macedonia, Montenegro, Serbia and Turkey). The countries were converging from 1960 to 1973 and from 1986 to 2001. The speed of convergence was different among the groups and it depended on time period. The Great Recession was a considerable shock to the development, resulting in divergence in the EU-15 in 2012.

3. Methodology and Data

In this study, the convergence hypothesis that poorer countries, in per capita terms, tend to grow faster than the rich ones is tested through two measures of convergence, sigma and beta. Sigma convergence is a simple way of measuring convergence using the standard deviation or the coefficient of variation. In this study the coefficient of variation of purchasing power adjusted GDP per capita will be used as well as the minimums and maximums of GDP per capita relative to the simple average, introduced by Ville Kaitila (2013), from 1995 to 2013, with sub-periods 1995-2003, 2004-2013, 2004-2008 and 2009-2013. The coefficient of variation is calculated as the standard deviation divided by mean. Declining coefficient of variation indicates convergence, while an increase in this measure indicates divergence. In the spirit of convergence, only simple averages will be used, not weighted, since it is equally unwanted for any country to lag behind, despite the size of its population. Analyzing convergence through the lowest and highest GDP per capita level relative to the average in the group is an important addition, since sigma convergence can show convergence even if one country is for some reason left behind. The minimum value does not overlook this possibility. The narrowing spread shows that the poorest countries are catching up with the average.

Beta-convergence, based on the neo-classical growth model, was introduced by Barro and Sala-i-Martin (1992). There are two types of beta convergence; absolute/unconditional and conditional. When it is assumed that the countries converge to the same terminal point or the steady states point convergence is absolute. It is analyzed through regression with one dependent and one independent variable, where dependent variable is the growth rate of per capita GDP and independent variable is the initial level of per capita GDP in purchasing power terms:

$\log(y_{i,t}) = \alpha + \beta \log(y_{i,t-1}) + \varepsilon_i,$

α – the constant term

β – the convergence coefficient

$\beta < 0$

$\log(y_{i,t})$ – the growth rate of per capita GDP in period t for country i

$y_{i,t-1}$ – initial per capita GDP for country i

$\varepsilon_{i,t}$ – the stochastic error of the equation.

Beta coefficient is obtained without any other variable, since it is assumed that the economies do not differ significantly in their levels of technology, investment ration, industrial

structure, human capital qualifications and other factors. When the economies have different structures, they converge to a different steady state point, and convergence is conditional. (Marques and Soukiazis, 1998) Conditional convergence is analyzed through the multiple regression with the same dependent variable, but includes various economic, social and political variables as independent, next to the initial level of per capita GDP. In this analysis, included economic variables are inflation rate (measured by the consumer price index), economic openness and gross capital fixed formation and socio-political variables are unemployment rate, population growth rate and government debt.

$$\log(y_{i,t}) = \alpha + \beta \log(y_{i,t-1}) + \gamma X_{it} + \varepsilon_{i,t}$$

γX_{it} – a set of structural exogenous variables which can influence the growth of per capita GDP

Beta coefficient represents the rate at which a country's real GDP per capita approaches the steady state rate of growth or a speed of convergence. Negative beta coefficient indicates convergence, while a positive rate indicates divergence. Beta convergence measures the speed at which poor countries approach rich countries in real GDP per capita terms, in a specified time interval. Sigma convergence indicates whether the cross sectional variation of the real GDP per capita among a group of countries decreases over time. Beta convergence is a necessary but not a sufficient condition for sigma convergence.

Ben-David (1996) introduced another way of analyzing convergence, the half-life of convergence, defined as the number of years that it takes for the income gap to be cut in half. It is calculated as h= -ln(2)/ln(1+beta).
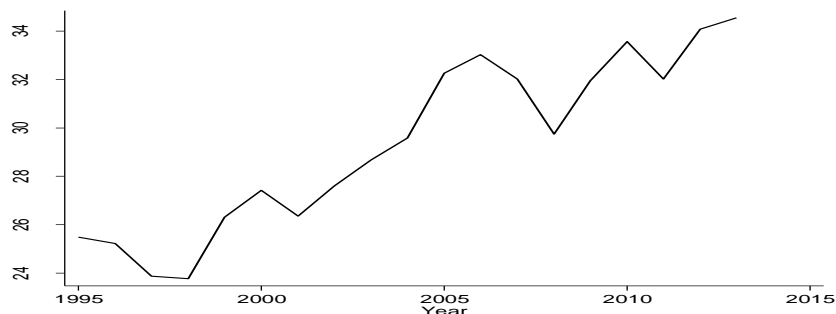
4. Sigma Convergence

Sigma convergence measures the dispersion of real GDP per capita among the countries. Table 1 presents the coefficient of variation and minimum and maximum to average GDP per capita ratio as measures of convergence in Western Europe.

| Year	Coefficient of Variation	Minimum to Average Ratio	Maximum to Average Ratio
1995	25.49	0.6218	1.7947
1996	25.22	0.6204	1.7803
1997	23.87	0.6264	1.7187
1998	23.77	0.6309	1.7406
1999	26.31	0.6372	1.8757
2000	27.42	0.6258	1.8984
2001	26.36	0.6281	1.8412
2002	27.60	0.6247	1.8863
2003	28.68	0.6240	1.9496
2004	29.59	0.6040	1.9720
2005	32.26	0.6236	1.9842
2006	33.03	0.6148	2.0888
2007	32.02	0.6126	2.1277
2008	29.75	0.6087	2.0473
2009	31.95	0.6371	1.9933
2010	33.57	0.6364	2.0681
2011	32.02	0.6096	2.0972
2012	34.09	0.6001	2.0693
2013	34.55	0.5919	2.095

Table 1: Coefficient of variation and the minimums and maximums of GDP per capita relative to the simple average in the Western Europe

Table 1 shows convergence and divergence in the Western European countries. It can be seen that the countries mostly diverged. There are only four periods of convergence: 1995-1998, 2001, 2007-2008, and 2011. However, this group of countries had lower coefficients of variation than the EU-28 in the analyzed period. The problem is that the value of the index has been increasing since 1998, when its value was the lowest, 23.77, which means that the dispersion of GDP per capita increased. These countries were diverging in 2013, when the index peaked at the value of 34.55.

Graph 1: Sigma convergence in Western Europe, 1995-2013

Even though the coefficient of variation is the most commonly used measure of sigma convergence, another way of analyzing is to compare the ratio of the minimums and maximums of GDP per capita relative to the average GDP per capita in the group (Table 1 and graph 2). This is an important addition, because sigma convergence can show positive convergence even if one country is for some reason left behind. (Kaitila, 2013: 10). The ratio of minimums to average was mostly declining since 2000. The highest ratio was in 1999, 0.6372. From 2000 to 2013, the only years of increasing ratio were 2001, 2005 and 2009. The lowest ratio was in 2013, 0.5919. This method is not consistent with the coefficient of variation as a measure of convergence for the Western European countries, because it shows that the poorer countries were catching-up. The ratio of maximums to average is more consistent with the coefficient of variation. There were four periods of declining ratio, 1996-1997, 2001, 2008-2009 and 2012. The lowest ratio was in 1997, 1.7187, while the highest dispersion was in 2007, 2.1277.
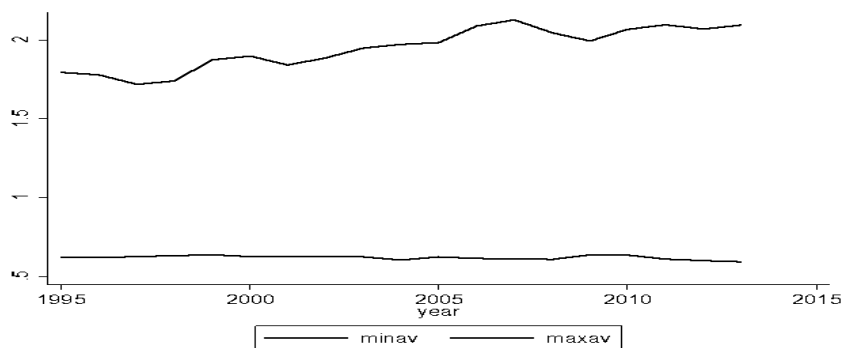
Graph 2: The minimums and maximums of GDP per capita relative to the simple average

5. Beta Convergence

Economic convergence requires a negative relationship between per capita GDP in the initial year and the average growth rate of the countries' real per capita GDP within a specified time period. In the table 2 are presented the results of the regression for the entire period and four sub-periods. The dependent variable in all regressions is the average rate of growth of GDP for the most developed countries in Europe. Economic variables are: inflation rate, economic

openness and gross fixed capital formation, and socio-political variables are general government debt as percentage of GDP, population growth rate and unemployment rate.

Period/Model	Basic Equation (1)			Equation with other Economic Variables (2)			Equation with Economic and Socio-Political Variables (3)		
	β (t)	R²	Half-life	B (t)	R²	Half-life	B (t)	R²	Half-life
1995-2013	-0.06 (-0.09)	0.0005	1078	-1.35 (-1.53)	0.33	51	-2.07 (-2.06)	0.52	33
1995-2003	-1.37 (-1.01)	0.006	49	-4.65 (-2.67)	0.58	15	-5.79 (-3.12)	0.73	12
2004-2013	1.85 (2.35)	0.26	-	2.57 (2.42)	0.40	-	1.88 (1.42)	0.58	-
2004-2008	0.25 (0.25)	0.004	-	-0.08 (-0.07)	0.41	863	0.6 (0.55)	0.69	-
2009-2013	2.43 (1.86)	0.12	-	3.72 (2.01)	0.28	-	4.15 (1.52)	0.48	-

Table 2: Absolute and Conditional Convergence in the West

The estimated value of beta for the period 1995-2013 is negative, 0.06, which means that, assuming that the EU Member States are similar in terms of steady state characteristics; they were converging to a common GDP per capita at the rate of 0.06%, because beta convergence, even at a minimum rate, is always sufficient to ensure approximation in the levels of per capita income in relative terms (Marques and Soukiazis, 1998: 8) This is not consistent with Barro and Sala-i-Martin (1992) findings. Statistically, beta coefficient explains for each one-point increase in initial income, how much the rate of GDP per capita would decrease. In this case, for one-unit increase in initial income level, we would expect a 0.06 unit decrease in GDP per capita. The half-life of the convergence process is defined as the number of years that it takes for the income gap to be cut in half. (Ben-David, 1996) The half-life of convergence supports the regression results, because it takes 1078 years to close half of the gap between initial income and the steady state income level. Graph 3 plots the GDP per capita in 1995 (X-axis) against the average annual growth rate of the GDP per capita from 1995 to 2013 (Y-axis). The graph supports the hypothesis of absolute convergence, since there is a negative relation between the variables, but it can be seen that beta coefficient is very low, because the fitted value line is almost flat. It also shows that there were „clubs "of countries.

An average growth rate of GDP per capita for the Western countries from 1995 to 2013 was 1.5%. Greece, Portugal and Spain, with their average GDP per capita in 1995 of 14654.59 euros, had an average growth rate of GDP per capita of 1.23%. Finland, Sweden and Iceland grew in per capita terms at an average rate of 2.1%, while their average initial GDP per capita was 21270.25 euros. Austria, Belgium, the Netherlands, Norway and the United Kingdom had an average rate of GDP per capita growth of 1.45%, with an average initial GDP per capita of 22229.63 euros. The highest average growth rate in per capita terms was in Ireland, 3.32%, with the initial GDP per capita of 18073.44 euros. Luxembourg, with the highest initial GDP per capita of 38895.9 euros had an average growth rate in per capita terms of 1.68%. Italy had the lowest rate of only 0.39%, with the initial GDP per capita of 21195.92 euros. Low beta coefficient from 1995 to 2013 is consistent with sigma convergence for the same period, when there were only two periods of convergence, 1994-1998 and in 2001. From 1995 to 2013, the rate of conditional convergence with economic variables is 1.35%, faster than the almost inexistent unconditional convergence, but slower than conditional convergence in the EU-28 in the same

period, 2.34%. The t-value is 1.53 and it is statistically insignificant. The half-life of convergence is 51 years. With socio-political variables, the convergence process is faster from 1995 to 2013; with the rate of 2.07%. The half-life of convergence is 33 years, 18 years shorter than conditional convergence with only economic variables.
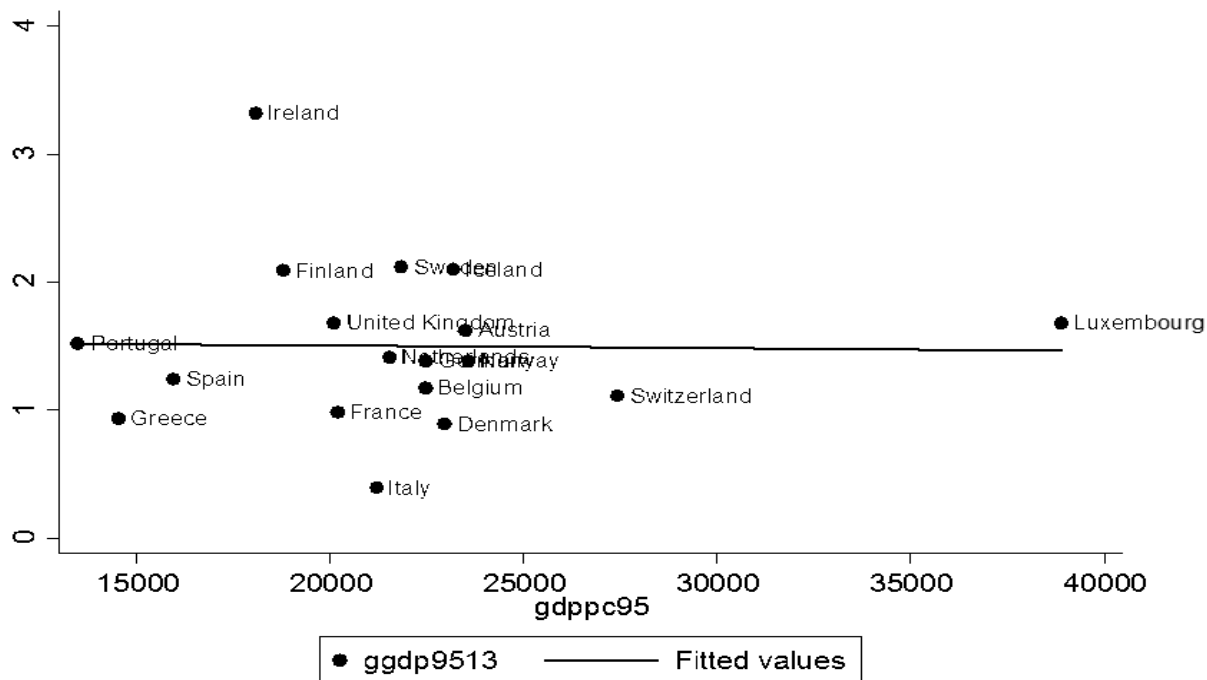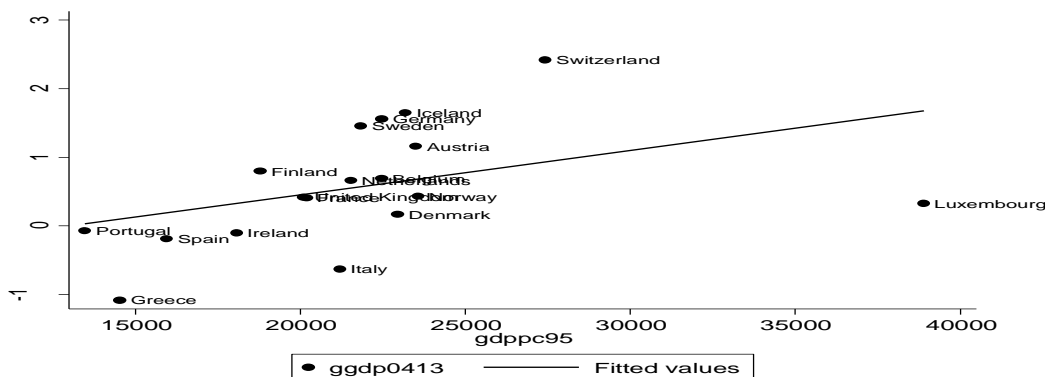

Graph 3: Absolute convergence in the West, 1995-2013

The regression results for the period 1995-2003 confirm the convergence hypothesis. The estimated value of beta for the period is negative, 1.37, but with the t-value of 1.01, it is insignificant. Since beta coefficient shows convergence, but t-value is lower than 1.96, this can suggest conditional and not absolute convergence. Convergence process is again very slow, with the half-life of 49 years. Graph 4 supports the hypothesis of absolute convergence, since there is a negative relation between the variables, and the fitted value line is steeper than for the 1995-2013 period. It can be seen that there are three „clubs", but with Ireland, Luxembourg and Switzerland being outliers. An average growth rate in per capita terms in this period was 2.61%. Greece, Spain and Portugal grew at an average rate of 2.83%. Finland, the United Kingdom, Sweden and Iceland had an average growth rate of 3.02%, while Germany, Italy, France, Denmark, Belgium, Austria, the Netherlands and Norway grew as a "club" at an average rate of 1.9% in per capita terms. Ireland had the highest growth rate of GDP per capita of 7.1%, while the lowest was in Switzerland, 1.1%. Low beta coefficient from 1995 to 2003 is consistent with sigma convergence for the same period, with three years of divergence; 2000, 2001 and 2003. From 1995 to 2003, the rate of conditional convergence with economic variables is 4.65%. This is the highest rate of convergence among the analyzed periods. The t-value is 2.67, so it is statistically significant. The half-life of convergence is 15 years, comparing to 51 years for the entire period. With socio-political variables, the rate of convergence is 5.79%, with the t-value of 3.12. The half-life of convergence is 12 years, 3 years shorter than conditional convergence with only economic variables.
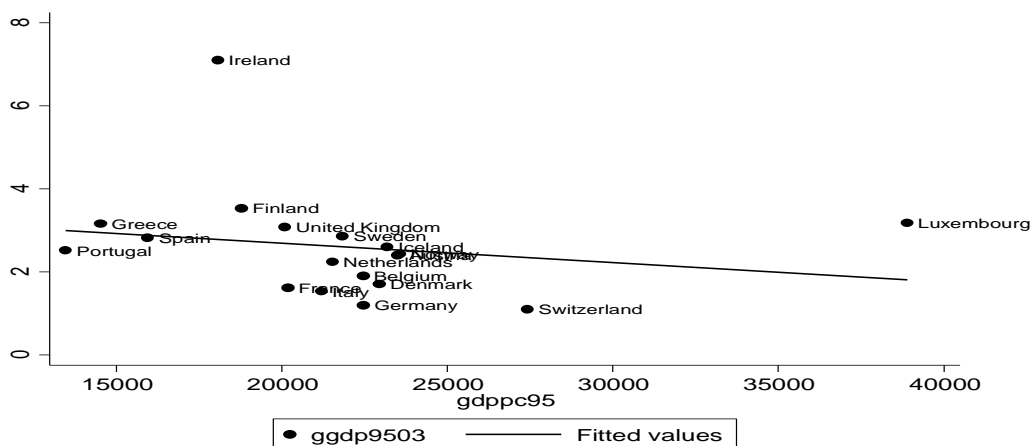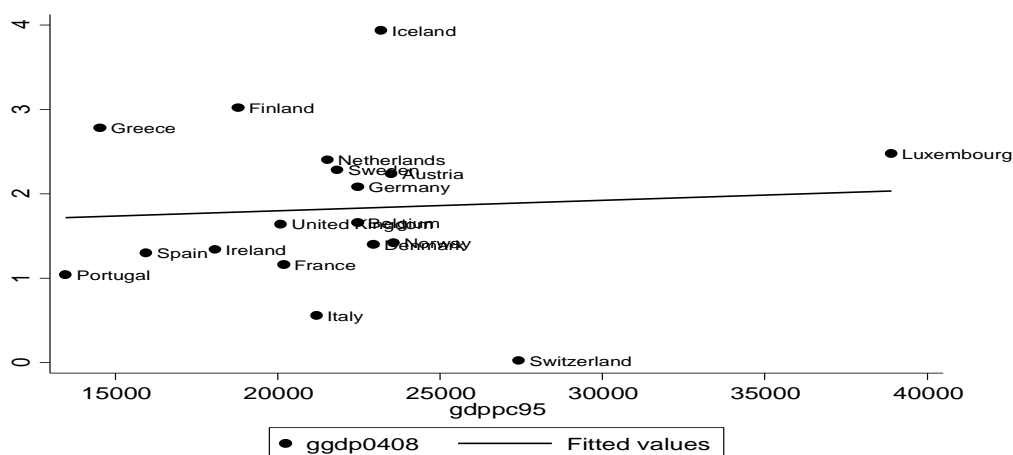
Graph 4: Absolute convergence in the West, 1995-2003

The regression results for the period 2004-2013 cannot confirm the absolute convergence hypothesis because beta coefficient for log of level of GDP per capita is positive for the most developed countries in Europe. The estimated value of beta for this period is 1.85. T-value is 2.35, so the estimated beta coefficient is statistically significant. Graph 5 does not support the hypothesis of absolute convergence, but divergence. The line of fitted values has an upward slope, showing a positive relation between the variables. It shows that countries with higher levels of GDP per capita in 1995 achieved higher growth rates. An average growth rate in per capita terms in this period was 0.56%. There are three convergence clubs. Iceland, Germany, Sweden and Austria were forming a club with the highest growth rate in per capita terms of 1.46%. Norway, the United Kingdom, the Netherlands, Denmark, Belgium and Finland grew at an average rate of 0.53% in per capita terms. However, Portugal, Spain and Ireland had a negative average growth rate of GDP per capita of 0.12%. Switzerland had the highest growth rate of GDP per capita in the group, 2.42%, while Greece's GDP per capita declined at the rate of 1.08%. Divergence from 2004 to 2013 is consistent with sigma divergence for the same period. These countries were converging only in 2007, 2008 and 2011. As a result of the regression with economic variables from 2004 to 2013, beta coefficient is positive, 2.57%, thus confirming divergence. This is consistent with absolute convergence for the group at the same period. The t-value is 2.42. With socio-political variables, the rate of divergence is 1.88%, with the t-value of 1.42, so it is statistically insignificant. The result of every analysis in this period is that the West countries were diverging from 2004 to 2013.

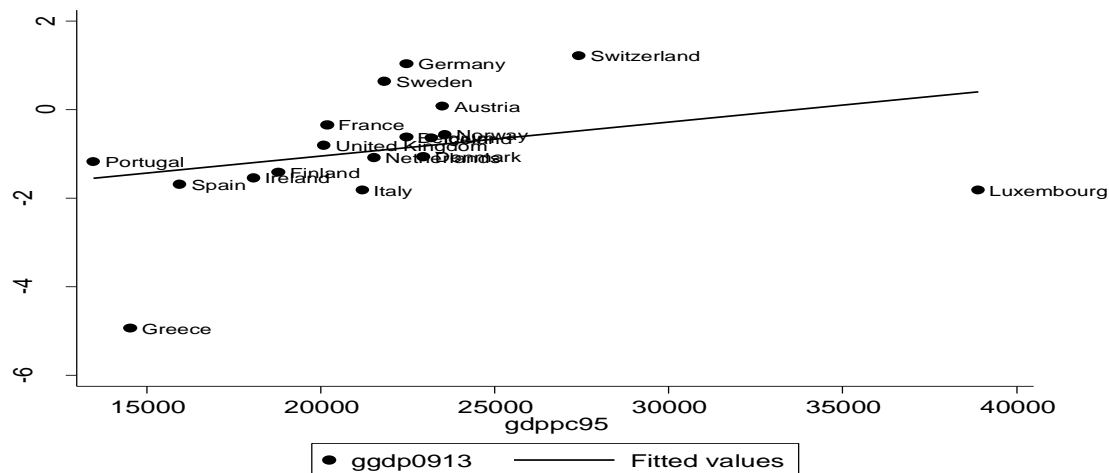**Graph 5: Absolute convergence in the West, 2004-2013**

From 2004 to 2008, beta coefficient for log of level of GDP per capita is positive, with the estimated value 0.25. T-value is low, 0.25, so the estimated convergence coefficient of 0.25 percent is not significant. Graph 6 shows a positive relation between the variables, and the fitted value line is flatter than for the 1995-2013 period. An average growth rate of GDP per capita in this period was 1.83%. From the graph can be seen that the Netherlands, Austria, Sweden and Germany formed a „club", with an average growth rate in per capita terms of 2.25%. Portugal, Spain, Ireland and France grew at an average rate of 1.21%, while the average rate in the United Kingdom, Belgium, Norway and Denmark was 1.53%. Three countries with the highest growth rates in per capita terms were Iceland (3.94%), Finland (3.02%) and Greece (2.78%). The lowest rate was in Switzerland, 0.2%. Positive beta coefficient from 2004 to 2008 is consistent with sigma divergence for the same period. From 2004 to 2008, the rate of conditional convergence with economic variables is 0.08%. The t-value is 0.07, so the initial GDP per capita is statistically insignificant variable. The half-life of conditional convergence with economic variables is 862 years, consistent with the low rate of convergence. With socio-political variables, the countries were diverging at the rate of 0.6%. The t-value is 0.55, so it is statistically insignificant.

Graph 6: Absolute convergence in the West, 2004-2008

The results for the period of the crisis, 2009-2013, show the highest divergence rate. For the period 2009-2013, beta coefficient for log of level of GDP per capita is positive, 2.43, and insignificant with the t-value of 1.86 for the countries of Western Europe. Assuming that these countries are similar in terms of steady state characteristics, for one-unit increase in initial income level, we would expect a 2.43 unit increase in GDP per capita. Graph 7 shows a positive relation between the variables, and the fitted value line is flatter than for the period 2004-2013, but steeper than for the period 2004-2008. In this period, an average growth rate in per capita terms was -0.92% and the countries were acting mostly as „clubs". Portugal, Spain, Ireland and Finland had a negative average growth rate in per capita terms of 1.46%, while the United Kingdom, Belgium, Norway, Denmark and France's GDP per capita was declining at an average rate of 0.68%. The Netherlands, Sweden, Austria and Germany formed the only club with the positive growth rate of 0.17%. Greece's average rate of GDP per capita was -4.94%. Only four out of eighteen analyzed countries had positive average GDP per capita growth rates in this period; Austria (0.08%), Germany (1.04%), Sweden (0.64%) and Switzerland (1.22%). Positive and high beta coefficient from 2009 to 2013 is consistent with sigma divergence for the same period, when the only year of convergence was 2011. Including economic variables it can be concluded that in the time of the crisis, the West countries were diverging at the rate of 3.72%. The t-value is 2.01,

so it is statistically significant. Including socio-political variables in the analysis, the West countries were diverging at the rate of 4.15%, which is the highest rate of divergence for this group of countries, including absolute and conditional convergence with economic variables. The t-value is 1.52, so it is statistically insignificant. Even though it cannot be determined why countries converge or diverge, a large difference between the divergence rate between the pre-crisis and the crisis period can be explained by differences in unemployment rates and general government debts as percentage of GDP among the periods. Spain, Portugal and Ireland are among the countries that were hit by the crisis the hardest. In the period 2004-2008 their unemployment rates were 9.8%, 7.52% and 4.76% and in the period 2009-2013, the rates jumped to 22.36%, 13.02% and 13.66%. An average unemployment rate in these countries increased from 7.36% to 16.35%. General government debt as a percentage of GDP increased from 29% to 101.2% in Ireland, 38.9% to 105.6% in Iceland 67.7% to 109.3% in Portugal and 40.3% to 71.7% in Spain. Out of eighteen analyzed countries, only six of them fulfilled the convergence criterion that general government debt must not exceed 60% of GDP. Those countries are: Luxembourg (20%), Norway (27.7%), Switzerland (34.5%), Sweden (37.7%), Denmark (44.1%) and Finland (49.2%).

Graph 7: Absolute convergence in the West, 2009-2013

6. Conclusion

The paper examines the real convergence process in Western Europe from 1995 to 2013, with four sub-periods, 1995-2003, 2004-2013, 2004-2008 and 2009-2013. Two measures of convergence were used; sigma convergence, which measures the dispersion of the real GDP per capita through the coefficient of variation, and beta convergence, based on the neoclassical growth theory. The empirical results suggest that the Western European countries were mostly diverging in the analyzed periods. The highest rate of convergence was in the sub-period 1995-2003, with economic and socio-political variables, 5.79%, while the same rate for the EU-28 was 1.24%. The highest rate of absolute beta convergence was in the period 1995-2003, 1.37%, comparing to the divergence rate of 2.43% in the crisis period. The highest rate of absolute convergence in the EU-28 was 3.91% in the period 2004-2008, while in the period 1995-2003 was 1.71%. In the crisis period this rate was 1.15%. Including economic variables, the highest rate of convergence was in the period 1995-2003, 4.65%, comparing to the rate of divergence of 3.72% in the crisis period. Including economic and socio-political variables, from 1995 to 2013 the countries were converging at the rate of 2.07%, consistent with Barro and Sala-i-Martin (1992) findings. The highest rate of conditional convergence with economic variables in the EU-28 was

3.38% from 2004 to 2008, while including economic and socio-political variables, the highest rate was from 1995 to 2013, 1.91%. The only period of divergence in the EU-28 was 2009-2013, 0.61%, including economic and socio-political variables. Other than conditional convergence with economic variables in the period 2004-2008, the results for absolute and conditional convergence are consistent. The highest rates of convergence were in the period 1995-2013, and the highest rates of divergences were in the period of the crisis. The shortest half-life of convergence was in the period 1995-2003, with economic and socio-political variables, 12 years, while the longest was for absolute convergence from 1995 to 2013, 1078 years.

All of the graphs illustrate a characteristic that there are convergence clubs in Western Europe. Portugal and Spain are always in the same club, while Luxembourg and Switzerland are outliers. The countries that were hit the hardest by the crisis; Greece, Ireland, Spain, Portugal and Italy, had the lowest growth rates from 2009 to 2013, an average rate of -2.23%. Greece had the lowest rate of GDP per capita growth, -4.94%. However, analyzing other periods, it can be seen that these countries had high growth rates, an average rate of 3.42% in the period 1995-2003, with Ireland having the rate of GDP per capita growth of 7.1%.

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Internationalisation Barriers of Small and Medium-sized Manufacturing Enterprises in Ethiopia: Leather and Leather Products Industry in Focus

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Abstract

The purpose of this study was to examine internationalisation barriers of manufacturing SMEs operating in Leather and Leather Products Industry located in the capital city of Ethiopia. The small and medium sized enterprises (SMEs) sector in Ethiopia is a significant group within the economy in terms of firm numbers and total employment. However, the SMEs sector's share of exports is disproportionately small, which raised considerable research concerns. Firm export propensity was the dependent variable and internal and external export barrier factors were used as explanatory variables. The study was conducted through mixed research design of quantitative survey and case study. From the population of manufacturing SMEs operating in the Leather and Leather products Industry, a sample was selected through the use of stratified random sampling to ensure the effective representation of the population of exporting and non-exporting SMEs in the capital of Ethiopia.

In order to complement survey results nine (4 exporting and 5 non-exporting) SMEs were selected through critical case purposive sampling and an in-depth interviews were conducted. Statistical package for the social sciences (SPSS 20) was used to analyse the quantitative data whereas, qualitative data were analysed manually. Exploratory factor analysis with Varimax rotation and Binary logistic regression analysis are the analytical methods used. The statistical result showed that, logistics problem, insufficient finance, functional barriers, lack of export knowledge and information, procedural barriers and international trade barriers are the most significant obstacles of export trade in Ethiopia. The overall results revealed that explanatory variables used in the analysis significantly predict the dependent variable at 95% confidence level. Taken together, these results prompted the presentation of numerous implications for theory, practice, and future research. Finally, the paper recommended that internationalization of SMEs has to be encouraged by mitigating both internal and external barriers identified in this study. Achievement of this will make manufacturing SMEs to be more competitive in export trade that results in a better positioning of Ethiopia in global leather and leather products market.

1. Introduction

Internationalisation and international entrepreneurship, among small and medium-sized enterprises, is a topic of considerable relevance, principally owing to the observed growth effects of cross border venturing, and the demonstrated capacity of SMEs to drive economic development at national, regional, and global levels. This realisation was at the heart of an OECD study on removing barriers of SME access to international markets, which provided general findings on the major barriers to SME internationalisation as perceived by SMEs and policy makers in OECD member economies (OECD, 2008). The internationalisation process of many small and medium-sized (SMEs) manufacturing firms in Ethiopia is hindered by various problems. Many nations have acknowledged the value of small and medium sized enterprises (SMEs). Ethiopia is not an exception, as establishment of SMEs agency and the recent

phenomena of industrial cluster of footwear manufacturers in Addis Ababa are exemplary in this regard (UNIDO, 2008).

The benefits of SMEs to any economy are easily noticeable, and they include: creation of jobs at relatively low capital cost, a vehicle for reducing income disparities, and development of a pool of skilled and semi-skilled workers. Researchers argue that promoting SMEs has been described as one of the best strategies for achieving national development goals such as economic and industrial growth. Although a great deal of research on SMEs and export development has been conducted, such as the works of (Crick, 2007; Johanson and Vahlne, 2009; Kocker and Buhl, 2008; Stanton, et al., 2011), these studies are primarily conducted in the context of advanced economies.

It is known that, there are more animals producing hides and skins in Ethiopia than in any other countries of Africa. With an estimated 40 million head of cattle, 30 million sheep and 20 million goats, it would appear that, there is little to stop Ethiopia from playing a major role on the international market for leather products. In fact, hides and skins represent one of Ethiopia's largest earners, after coffee, oil seeds and spices. It produces some of the world's most exclusive leathers: Cabretta (used, for example, in golf gloves), Bati (softsuede) and Selallie (high quality sheepskin) (UNIDO, 2008). This in itself is sufficient to merit the study of Leather and Leather Products Industry. Moreover, one cannot confidently say that Ethiopia has a large competitive advantage in the leather industry because it ranks number one in Africa and 10th in the world with respect to livestock population. In addition, the SMEs working in the Leather sector even though working mainly with backward technology has built up some advantages over time, such as skills, networks, infrastructure and institutions. Aboveall the sector provides ample employment, and has the potential of increasing it substantially in global arena.

Nevertheless, Ethiopian exporters encounter different challenges when planning to join export market. Even though the country is geographically at ideal location for different markets, the competitiveness of firms in global market is still problematic. Problems of defined brand, product diversification and foreign currency shortage are still one of the critical factors to be considered. Existence of other strong competitors in the leather industry like India, Italy and china makes competition for Ethiopian firms a further more difficult task. Shortage of working capital, finance and inter-firm cooperation as well as lack of international marketing knowledge added the burden to Ethiopian SMEs (Ciuriak, 2010; Azmera, 2013). Thus, the objective of this study was to thoroughly examine internal and external export barrier factors constraining internationalization of Ethiopian small and medium-sized manufacturing enterprises operating in leather and leather products industry in Adddis Ababa Ethiopia. The study is important because in the industrial strategic development plan of Ethiopian government the leather and leather products sector is one of the seven priority areas identified as potential for the industrialisation of the country taking in to consideration the resource advantage of the country and the job creating opportunities for its nationalities(GTP,2010/11).

The research question answered in this study is:

What are the factors that hinder internationalisation process of SMEs in manufacturing industries in Ethiopia?

The objective of the study is;

To examine internal and external internationalisation barriers of manufacturing SMEs in the leather and leather products industry in Ethiopia.

Accordingly the research intends to test the hypothesis that:

Ho1: Internal export barriers as measured by informational, functional and marketing related factors do not negatively associated with the likelihood of SMEs internationalisation in Ethiopia.

Ho₂: External export barriers as measured by procedural, task, governmental and environmental related factors do not negatively associate with the likelihood of SMEs internationalisation in Ethiopia.

The rest of the paper is organised as follows: section two presents the literature review and overview of Ethiopian economy as well as challenges faced by manufacturing SMEs operating in the leather and leather products industry. Empirical methodology, analysis and hypothesis testing are performed in section three, section four deals with results and discussions while section five presents limitations of the research and directions for further research.

2. Literature review

Internationalisation is a term that has been used widely in the literature and is not only confined to exporting but also encompasses trade, cross-border clustering, collaboration, alliances, subsidiaries, branches, and joint ventures that extend beyond the home country environment (Singh et al. 2010). However SMEs mainly internationalise through exporting due to the minimal business risks and the low resource commitment(ibid).Small Enterprises varied in their involvement in internationalisation and at which age of their life (Singh et al. 2010), while many businesses are globalizing at an earlier age in comparison to previous decades (Andersson et al. 2011). Internationalisation is found to be a significant aspect of the maximization of business opportunities and over the last few decades, many SMEs started it as a requirement of business success (Rundh, 2007; Saixing et al., 2009).

Export barriers can be defined as the attitudinal, structural, operational and other constraints that hinder a firm's ability to initiate, develop or sustain international operations (Koksal and Kettaneh, 2011). It is important to achieve a better understanding of export barriers, since these barriers waste the resource of firms and threaten the efficiency and effectiveness of a firm's operations. The negative impact that export barriers can have on medium and small enterprises' internationalisation behaviors and activities has attracted the attention of many researchers in international business (ibid). Studies have employed different perspectives to establish a set of notable barriers, especially with regard to the specific industry or geographical area. Accordingly, this study aimed at understanding different internal and external export barriers faced by Ethiopian SMEs due to the scarcity of past studies in the country in the area of SMEs internationalisation.

Export barriers are understood as the internal and external constraints that dissuade firms from initiating and/or expanding export activities (Leonidou, 2004). Export barriers are found in many forms and are subject to different categorisation. However, most barriers fall under the following dimensions: lack of knowledge and information, lack of strategic resources to undertake export operations, and exogenous barriers (Arteaga-Ortiz &Fernandez-Ortiz, 2010).Informational barriers relate to problems in identifying, selecting, and contacting international markets because of information inefficiencies. Examples of these barriers are locating and analysing foreign markets, finding international market data, identifying foreign business opportunities, and contacting customers abroad.

Functional barriers refer to inefficiencies in functions within the firm, such as human resources, production, and finance. These barriers generally have a moderate impact on export behaviour. Examples are limited management time to deal with export, inadequate export personnel and shortage of working capital to finance export (Leonidou, et al., 2007).Export knowledge and informational barriers are associated with unfamiliarity with important aspects of export activities and export market environments. The barriers are found in several dimensions. They can be a result of difficulties in identifying export opportunities (Pinho & Martins, 2010), a lack of understanding of foreign culture and business practices, or the lack of knowledge on the availability of export support programs (ibid). Others are in the form of

limited information to locate and analyse markets and inability to communicate with potential overseas customers (OECD, 2009).

A number of researchers (Rutihinda, 2008; Pinho and Martins, 2010; Ortiz and Ortiz, 2010) included limited or insufficient information on foreign markets in their study of barriers. Some researchers tested the difficulty to gather information that is accurate on the foreign market (Craig and Julian, 2005) while information on products and services is highlighted by Ortiz and Ortiz (2010). Export knowledge and information barriers are particularly salient in Ethiopia due to two main reasons. First, the market for information in Ethiopia is underdeveloped because the institutions providing export market information or facilitating its acquisition are inadequate and/or inefficient. Second, the majority of firms in Ethiopia are small to medium (CSA, 2012). Hence, they lack other resources required to invest in knowledge and information generation activities such as research and development (R & D) and, information and communication technologies. Based on this evidence it is reasonable to suggest that internal information and knowledge related barriers, financial barriers, managerial and marketing barriers will negatively affect export behavior of Ethiopian firms. On the other hand, external barriers originate from the home and host country environment the firm operates in (Leonidou, 2004). Different categories of external barriers are: procedural barriers, governmental barriers task barriers and environmental barriers (ibid).

2.1 An overview of Ethiopian economy

With a population of 84 million in 2012, Ethiopia is the second largest country in Sub-Saharan Africa. It is a federal country composed of nine regional governments and two city administrations. Most (84%) of its people live in rural areas making agriculture one of its dominant economic sectors. Ethiopia is among the fastest growing economies in the world and has maintained an average GDP growth rate of 11percent in the last ten years (UNIDO, 2013).Ethiopia is a large, diverse and complex country with political dynamics resulting from its unique history. Up to 1991, the country had seen a century of increasing state centralisation, underpinned by a political culture reflecting strong hierarchies and social stratification that had deep social roots (ibid). The current government, led by the Ethiopian People's Revolutionary Democratic Front (EPRDF), came to power in 1991 after almost two decades of armed struggle, overthrowing the repressive military Dergue regime. EPRDF introduced three key reform processes: federal decentralisation of the previously socialist state; market liberalisation of a command economy; and democratization under a multi-party constitution. Each of these reform processes has progressed to different degrees and enjoyed some notable successes, but also faced significant constraints (NBE, 2009).

Export growth of goods and services has been strong, averaging close to 10 percent annually during 2000-10. Agriculture remains a major earner of foreign exchange, accounting on average for about 90 percent of the country's exports over the past decade. Ethiopia has made good progress in growing and diversifying processed exports, with double digit growth volumes in export categories such as leather and leather products, and meat and meat products over recent years. The economy, however, remains dependent on primary products (principally coffee) to a larger extent than other African and Asian comparators. This may change in the coming years, if Ethiopia is successful in maintaining recent growth of foreign direct investment (FDI) (NBE, 2011).

2.2 Ethiopian leather and leather products industry

Leather industry in Ethiopia is the long lived and more established manufacturing venture in the modern as well as traditional mode of production. It is an indigenous industry not only

because it has been practiced to produce traditional artifacts since long ago because the country is well-endowed with the basic raw materials, manpower and local ownership and to some extent with machinery and technological know-how(UNIDO,2008).

The leather industry bases itself on the country's livestock resources. Indeed Ethiopia possesses one of the world largest livestock populations of which is 52 million cattle population that makes the country ranking 1st in Africa and 6th in the world, 27 million sheep population which makes 3rd in Africa and 10nth in the world and 23 million goat population which makes 3rd in Africa and 8th in the world. The off-take rate for cow hides 13.87%, goat skins 27.34% and sheep skins 40.29%. The hides and skins supplied to the tanneries are reached 1.4 million cow hides, 6.7 million goat skins and 13.2 million sheep skins (ELIA, 2013). The sheep skins are well known for their quality. The goat skins in particular are known for their quality and international acceptance. Both goat and sheep skins are preferred for leather garments and gloves manufacturing in addition to being used for shoe upper. The resource endowment of the country illustrates considerable potential of the country in the leather industry (CSA, 2012; ElIA, 2013).

The Ethiopian Leather and Leather Products Industry comprises three major industrial sub-sectors or components: the tanneries processing and producing the leather, the footwear manufacturers (shoe producers), and the leather goods and garments manufacturers. They are medium and large enterprises operating in the formal sector, whereas the micro enterprises particularly in footwear manufacturing area operate in the informal sector (ELIA, 2013). The Ethiopian leather and leather products industry occupies a unique place in the Ethiopian economy due to its strong linkage with the national resource base, namely hides and skins. Considering the export activities of the country, the industry is the fifth largest foreign exchange earner in Ethiopia, earning about 8% of foreign exchange in the year 2006-2007. More importantly, the leather industry comes as the leading exporter, within the manufacturing sector, accounting for, on average, up to 67% of the total manufacturing export. Ethiopia's share in the global leather and leather products market is lower than its position in leather trade. The contributions of SMEs in Ethiopia's international trade is very low which needs critical intervention compared to the involvement of other countries SMEs in global trade activities. To this end the current study can create awareness about the status of SMEs in the share of country's export market by investigating export barriers constraining internationalisation of Ethiopian manufacturing firms.

A study conducted under the Engineering Capacity Building Project (ECBP) has scrutinised the constraints of the LLPI along the value chain from animal husbandry to slaughtering, tanning, manufacturing, sourcing of inputs and marketing issues such as poor delivery time, poor customer communication, poor sample development etc. In addition firms in the industry faced difficulties in getting access to export markets and low profit margin. Especially shoe manufacturers find it difficult to access export markets directly. They often depend on brokers who provide linkages to buyers but keep the lion share of benefits from such arrangements. As a result, export profit margins tend to be low, often extremely low or even inexistent. The Ethiopian leather goods market, such as shoe market, is of considerable and increasing size but the Ethiopian shoe industry seems to be unable to make full use this opportunity. Low cost shoe imports in particular from China have been an issue. The survey conducted by the Ethiopian Economic Association identified that finance, physical infrastructure and institutions constrain the sector (EEA, 2011).

In terms of finance, the main problem is lack of access to finance due to collateral requirement, high transaction cost, high interest rate and low credit ceilings. As a result

Ethiopian SMEs operating in Leather and Leather Products Industry incounters constraints to penetrate international market. Poor trade logistics also impose additional costs on the competiveness of the leather industry in Ethiopia (Dinh et al., 2012). In this regard, the biggest challenge is the long lead time in imports. Timely imports of chemicals and other inputs are vital to the smooth running of the production process. In general, Ethiopia has many problems which hurt its export expansion.The most important problems are: Low levels of productivity and living which resulted in low income lead to lowInvestment in education and health as well as plant and equipment manufacture and inoverall infrastructure development. This in turn led to low productivity and economic stagnation. Problems intertwined one with another could be listed as follows. These include dependence of export on primary and traditional sector products and their low volume of supply, land lockedness of the country; under developed financial and other markets, low levels of private sector's role in sectors with exportable and value added products in the economy, low saving or capital formation share of GDP, low level of financial service facility for the private sector, low administrative and financial support, low inflow of FDI in the country and a few engaged in service and non-exportable industry(Ciuriak, 2010; Azmera, 2013).

3. Research design and methodology

An explanatory mixed methods approach was adopted for data collection which includes a survey, semi-structured interviews and a review of theoretical and empirical literature. Mixed method approach was used and considered helpful in eliciting information from the respondents from different business experiences. The research participants in this study fall within the categories of: SMEs owners, general managers and marketing managers. The researchers' idea to use key informant approach is that these managers are mostly involved in the internationalisation and export planning and executing process and are familiar with the export management environment within the context of leather and leather products industry in Ethiopia.

The target population for the study was all SMEs manufacturing firms engaged in leather and leather products industry in Addis Ababa. A questionnaire was administered to 90 managers/owners of (36 exporting and 54 non-exporting) SMEs. Through disproportionate stratified random sampling method 40 % exporting and 60 % non-exporting firms were included in the survey. This was justified due to the fact that the variability within the group is minimum compared to variability for the population as a whole. Similarly, a total number of 9 SMEs managers were identified for interview and all participated in the interview.

The measuring instruments used for this study were questionnaires and in-depth interviews. Respondents were required to complete the questionnaires and return them to the survey administrator. Using SPSS for Windows version 20, reliability statistics were conducted for Cronbach's Alpha value. Past researchers, like Okpara, J.O. (2010); Ojala, A. (2009); Leonidou, L.C. (2007) used Alpha value of >.75 in the study of firm internationalisation. This was used as a bench mark in determining item reliability in the current study. Accordingly internal consistency for the current study was >80 on average.

3.1 Empirical analysis and hypotheses testing

The respondents were selected through stratified random sampling from Manufacturing SMEs operating in Leather and Leather Products Industry in Addis Ababa. The total questionnaires distributed were 125, and out of the distributed 105 questionnaires were returned. Out of these returned questionnaires 90(85%) were appropriately filled in and returned while 15 (14%) questionnaires were incorrectly completed and not used in the analyses.

The response rate for the study is 85% which is considered adequate and representative of the population under study. Table 1 shows summary of response rate for this study.

Sample	125
Total Responses	105
Total Response Rate	96%
Unusable Responses	15
Unusable Response Rate	14%
Usable Responses	90
Usable Response Rate	85%

Table 1: Survey Response Rate

Source: Field survey (2015)

After the data were coded, examined and cleaned, the following data analysis techniques were employed in this order: reliability test of scales with Cronbach's alpha indicator, exploratory factor analysis (EFA) with Varimax rotation with testing for validity and reliability of the model, binary logistic analysis. The statistical parameters of each step were compared with the criteria applied in the analysis of multivariate data (Hair, et al., 2010). Accordingly, factor analysis criteria were set for this study as follows:

Kaiser-Meyer-Olkin (KMO): from 0.50 to 1.00;

Number of factors to retain was decided according to the result of PA;

Significant level: less than 0.01;

The cumulative percentage of variance: 60.0 % or higher

The results from Exploratory Factor Analysis were then used in binary logistic regression to examine the most significant barrier factors.

The logit model was formed as follows:

Logit (ρ) = Log $[\rho i/(1- \rho i)]$ = $\beta 0 + \beta 1 F1 + \beta 2 F2 + \beta 3 F3 + \dots + \beta n Fn$, of which:

ρi = the probability of an SMEs is being an exporter;

$\beta 0$= log odds of firms which is considered as non-exporter (when all Fi = 0)

βi= log odds of firms which is considered as exporter (when Fi = 1)

The 31 items measuring internal export barrier factors were subjected to principal components analysis (PCA) using SPSS for Windows Version 20. Table 2 shows the result of factor analysis.

Internal barriers	Dimension			
	1	2	3	4
Insufficient information about overseas market	.951			
Lack of knowledge on export assistance	.928			
Difficulties in gaining access to some data sources	.913			
Difficulty in making customer contacts	.859			
Inaccessible Market Information	.825			
Lack of knowledge about export markets	.811			
Lack of competitive price to customers in foreign markets		.811		
Accessing export distribution/advertising channels		.806		
Difficulty in matching competitors' prices		.801		
Difficulty in supplying inventory abroad		.767		
Complexity of foreign distribution/advertising channels		.758		
Need to adapt promotion to the foreign market		.744		
Difficulties in offering technical/after sales service		.811		
Lack of Managerial Capacity			.811	
Lack of export skills			.871	
Shortage of working capital to finance exports			.853	
Lack of personnel trained to handle export operation			.833	
Lack of excess production capacity for exports			.806	
Lack of managerial time to deal with exports			.742	
Lack of financial resources to finance exports			.734	
Lack of own internationally recognized brand				.733
Narrow product lines/absence of diversification				.822
Poor product quality				.718
Actual product unsuitable for overseas markets				.621
Challenges in meeting export packing/labeling requirements				.600
Difficulties in developing new products for foreign markets				.879
Difficulties in adapting export product design				.681
Eigen Value	10.49	6.62	3.90	2.263
Percentage of Variance explained	33.85	21.36	12.60	7.299
Cumulative Percentage	33.853	55.218	67.819	75.118

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.912
Bartlett's Test of Sphericity	Approx. Chi-Square	2305.431
	df	161
	Sig.	.000

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 8 iterations.

Table 2: Rotated Component Matrix for Perceived Internal Internationalisation Barriers

Source: Analysis of survey Data (SPSS 20, Factor Analysis output, 2015)

External Barriers	Component				
	1	2	3	4	5
Lack of Ethiopian governmental incentives	.914				
Inadequate government support schemes	.899				
Complex government bureaucracy	.807				
Foreign government restriction	.760				
Lack of financial assistance	.713				
High Tariffs and non-tariffs barriers	.620				
Unfamiliar exporting procedures/paperwork		.811			
Slow collections of payments from abroad		.695			
Difficulty in choosing a local representative		.690			
Difficulty in accessing distributors in foreign markets		.688			
Inadequate communications with overseas customers		.679			
Complexity of export documentations		.711			
High cost of establishing an office overseas		.691			
Strict foreign rules and regulations		.840			
Language differences overseas			.895		
Different socio-cultural traits			.775		
Special customer requirements			.738		
Different foreign customer attitudes			.721		
Cultural differences overseas			.574		
Unfamiliar foreign business practices			.546		
Lack of acceptance of Ethiopian products			.806		
High insurance costs				.864	
High transportation costs				.817	
Poor infrastructure				.709	
Unavailability of warehousing facilities abroad				.599	
Political instability in foreign markets					.776
Currency fluctuations					.750
Intense competition in foreign markets					.652
Poor/deteriorating economic conditions abroad					.612
Eigen Value	13.35	5.59	3.62	2.74	2.18
Percentage of Variance explained	40.45	16.954	10.98	8.308	6.603
Cumulative Percentage	40.45	57.41	68.38	76.69	83.29

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.842
Bartlett's Test of Sphericity	Approx. Chi-Square	3105.431
	df	561
	Sig.	.000

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 23 iterations.

Table 3: Rotated Component Matrix for Perceived External Internationalisation Barriers
Source: Analysis of Survey Data (SPSS 20 output 2015)

The results of the Varimax rotation PCA revealed that, internal exporting barriers are grouped under four factors: informational barrier factor, marketing barriers, functional barriers and product related barriers. The four barrier factors explained about 75.12 percent of the total variance and used as input in further binary logistic regression analysis. According to factor analysis results, as seen in Table 3, the 33 external exporting barriers are grouped under five dimensions: governmental barriers, procedural barriers, socio-cultural barriers, logistics related barriers and environmental barriers.

Further analysis was conducted using binary logistic regression analysis to determine the most significant barrer factors and the result is shown in Table 4.

Explanatory Variables		β	S.E.β	Wald's χ^2(df=1)	Sig.	Exp(β)	95% C.I.for EXP(β)	
							Lower	Upper
Step 1[a]	Inforbarr	-5.725	106.90	19.066	0.03	16.3	9.93	42 .1
	Marktbarr	-34.07	52.63	4.605	.004	.000	.114	.895
	Functnbarr	-27.8	78.28	15.945	.023	.000	3.73	29.44
	Productbarr	-11.7	44.03	3.081	.002	130 .7	.008	.726
	Govebarr	-.246	39.14	.415	.035	1.29	.453	3.77
	Procedbarr	-3.53	176.90	13.167	.042	34.13	.395	43.5
	Scoculbarr	-19.3	52.663	6.324	0.03	262 .7	2.34	80.32
	Logstbarr	-5.725	78.278	17.066	.004	36.3	9.93	22 .1
	Envirnbarr	-34.07	46.34	4.322	.023	76.3	6.33	52 .1
	Constant	-38.76	126.6	.000	.997	.000		

Table 4: SMEs Export Barriers Results of Logistic Regression Analysis
Source: Analysis of Survey Data (Logistic Regression SPSS 20 output, 2015)

The Wald statistic in table 4 indicated that all variables significantly and negatively influence export involvement of SMEs in Ethiopia. However, odds ratios for these variables indicate little change in the likelihood of export involvement. It can further be observed that informational barriers is having the highest predictive power as the Wald's statistic is the highest in this case (19.066), followed by logistics related barriers (17.066), functional barriers (15.945) and procedural barriers (13.167). From the result of logistic regression analysis, Wald statistic indicated that, the following factors are significant: informational barriers (Wald=19.066), logistics related barriers (Wald=17.066), functional barriers (Wald=15.945), procedural barriers (Wald=13.167), government related barriers (Wald=0.415), product related barriers (Wald=3.081) and environmental barriers (Wald=4.322). Consequently the following hypotheses 1 and 2 are partially supported.

Ho[1:] *Internal export barriers as measured by informational, functional and marketing related factors do not negatively associate with the likelihood of SMEs internationalisation in Ethiopia.*

Ho[2:] *External export barriers as measured by procedural, task, governmental and environmental related factors do not negatively associate with the likelihood of SMEs internationalisation in Ethiopia.*

4. Discussions and conclusions

As stated in reviewed extant literatures, there are many potential barriers that can impede internationalisation in developing countries like Ethiopia (ranging from high cost of transportation, inadequate infrastructure, bureaucratic red tape, poor product quality for international market, and so on) but a main barrier identified in the literature was shortage of working capital, managerial capacity problem, and lack of export related information. In this current study it was found out that informational barrier (Wald19.066), logistics related barriers (Wald 17.066), functional barriers (15.945) and procedural barriers (Wald 13.167), government related barriers (Wald=0.415), product related barriers (Wald=3.081) and environmental barriers (Wald=4.322). The empirical findings show that internationalisation barriers identified in the literature related to export barriers of developing countries can also be barriers encountered by Ethiopian firms; however, there was perceptual difference between exporting and non-exporting SMEs regarding different barriers. The conclusion that can be drawn from this current study on barriers to SMEs export involvement is that three main barriers hindering internationalisation of Ethiopian manufacturing firms in the leather industry are informational barriers, logistics related barriers and functional barriers (Lack of Managerial Capacity, Lack of financial resources to finance exports, Shortage of working capital to finance exports and Lack of managerial time to deal with exports).Thus, it can be concluded that, SMEs not only have more difficulties in

financing their international activities, they often have limited international experience in their management team. Therefore, managerial skill training and experience sharing must be considered. There should be a sound collaboration between governments, international agencies and the private sector to address these issues with the view to reaping the significant potential benefits that should accrue from the creation of a simpler, more business friendly, and more integrated Ethiopian economy at international levels.

5. Limitations of research and the new direction for further research

The first limitation of this study is that, since the study was carried out on SMEs operating in one country, Ethiopia. Hence, caution should be taken when generalisation across cultures is considered and the findings cannot be generalised to fit all developing countries. Moreover, within Ethiopia this study only focused on SMEs from one geographical area, the capital city Addis Ababa and surrounding industrial zones, therefore the research results may not be generalisable to other areas. This current study was based on data from one country setting thus, the findings cannot be generalised to fit all developing countries. Therefore, comparative future studies could benefit from cross-country comparisons in this respect and worth investigating to explore patterns of similarity and differences between the internationalisation process of Ethiopia SMEs and that of SMEs from other developing economies. Furthermore, another interesting research direction is to extend these research findings to study internationalisation development for other organisational processes in Ethiopian SMEs. The sample for this current study was made up of respondents residing in Addis Ababa and nearby industrial areas, since these were the areas where the most manufacturing industries in the Leather sector is said to be found. However, in order to get an overall Ethiopian perspective, future researchers might wish to consider broadening the sample frame to include all industrial regions with in Ethiopia.

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Gauging Perceived Benefits from 'Working from Home' as a Job Benefit

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Key Words

Telecommuting, working from home, employee benefits, organizational behavior, virtual employees, and employee satisfaction.

Abstract

This paper covers working from home as an employee benefit and looks to gauge the advantages and disadvantages for both employees and employers. The focus is on employees that work from home on behalf of an employer, not self-employed individuals. The article reviews secondary research on working from home.

The primary research included in this paper was conducted via anonymous online surveys. Respondents were assured of anonymity, and ranged in their functional roles. The survey included ranking questions, as well as freeform short answer questions. This primary research is not positioned to be statistically representative of all employees and employers. This primary research does reflect a gauge on perspectives on working from home as a job benefit.

Ultimately the results suggest that employees hold a very positive perspective on working from home, however, more can be done to help ensure perceptions on workplace promotional opportunities remain consistent for employees that work in an office or for home. Research also suggests that the greatest challenge for managers remains a lack of trust in results from employees they cannot physically see in the same location. Managers will find driving their employees' performance through clearly defined metrics which will improve the trust.

1. Introduction

Currently many organizations allow select employees an opportunity to telecommute, also known as working from home. The rationale is that the employee benefits by avoiding time lost in traffic, and instead can spend that wasted time engaging in work activities (Bernard, 2014). This situation is considered to be ideal for those employees who are not customer facing. The employer is expected to benefit from fewer dollars necessary for office space and increased productivity from the employee. There are advantages as well for the macro-environment, such as environmental benefits and fewer commuters adding to traffic congestion. (Rapoza, 2014) As with any job benefit there are also some potential disadvantages, some employees may be distracted, or perceived to be distracted, by their home environment (Bernard, 2014). Other disadvantages may include reduced sense of team cohesion as employees who work from home may feel less connected to their fellow team members, and there can be a perception of reduced likelihood for promotional opportunities.

This article will assess select secondary research, as well as conduct high-level primary research, in order to better gauge the effectiveness of working from home as a job benefit.

This article looks to conduct a "pulse check" on working from home as a job benefit for select employees, and to provide some thoughts on whether this benefit is perceived to add value to the employee and the employee. The article is focused on those employees working for employer organizations, and not individuals that are self-employed.

This paper covers working from home as an employee benefit and looks to gauge the advantages and disadvantages for both employees and employers. The focus is on employees that work from home on behalf of an employer, not self-employed individuals. This research has

a working hypothesis that both employees and managers find working from home an attractive job benefit; however, specific perception may challenge adoption.

2. Literature Review

2.1 Growth Trend

Looking at the overall market in the United States, more employers are allowing employees to work from home on a regular basis. According to research conducted by the Families and Work Institute, the percentage has gone from 23% of US based employers allowing select employees to work from home in 2008 to 38% in 2014 (Bernard, 2014). Consulting firm Global Workplace Analytics approximates an increase of 80% of those companies allowing employees to work from home, between the years of 2005 to 2013. This brings the total projected number of employees that work from home at least half time to 2.6% of the US employee workforce, or 3.3 million employees. This number excludes self-employed individuals (Lister, 2013). The number is larger when we look at employees allowed to work from home at least one day a week, with over 30 million US employees taking advantage of this opportunity (Rapoza, 2013).

It is interesting to look at the 2013 Forbes' "Top 25 Companies for Work-Life Balance," and notice that the #2 company listed, National Instruments, states the benefit of working from home is a large factor to why it has been in the Top 50 Best Places to work for five consecutive years (Smith, 2013).

2.2 Technology

Technology has proved to be a strong factor enabling this job benefit for more organizations, as improved broadband access for residences enables many categories of employees to work seamlessly from their home. Technology tools such as email, video conferencing, screen sharing, file sharing, VPN (Virtual Private Network), Telepresence and many more tools help to enable an option to work from home (Rapoza, 2013).

According to a survey conducted by Staples Advantage of 140 employees that worked from home for various employers, their respondents indicated email as the single largest communication tool leveraged (96%), followed by instant messaging (68%) and videoconferencing (44%) (Akerley, 2011).

2.3 Perceived Benefits

There are several perceived benefits to both employers and employees when working from home. Several advantages are highlighted below.

1) Increase Productivity. The time that it takes for an employee to travel from home to the office can be spent on being productive. An organization by the name of Telework approximates employees that work from home save an estimated 15-days of time, which would have been spend commuting (e.g. driving, buses, subways, etc…) (Rapoza, 2013). Telework also highlighted employers that witnessed increased productivity between those employees working from home versus in-office employees. "…Best Buy's average productivity had increased 35% through its flexible work program. British Telecom estimates productivity increased 20% through telecommuting… Alpine Access, one of the nation's largest all-virtual employers, attributes a 30% increase in sales and 90% reduction in customer complaints to its home-based agents. American Express teleworkers handled 26% more calls and produced 43% more business than their office-based counterparts…" (Rapoza, 2013).

2) Nicholas Bloom set up an experiment with a company by the name of "Ctrip," where some workers were allowed to work from home for nine months, while others remained in the office. "The results we saw at Ctrip blew me away. Ctrip was thinking that it could save money on space and furniture if people worked from home and that the savings would outweigh the productivity hit it would take when employees left the discipline of the office environment. Instead, we found that people working from home completed 13.5% more calls than the staff in the office did—meaning that Ctrip got almost an extra workday a week out of them" (Bloom, 2014).

3) Reduction in Sick Days. Approximately 78% of sick days are actually due to stress or personal issues. Working from home allows employees to take fewer sick days as they can better handle those issues without requiring an entire day off from work (Hendricks, 2014). This allows employees to better achieve a work / life balance, as well as ties back to increased productivity. Additionally, many employees that work from home are able to return to work more quickly given the fact they work from home (Rapoza, 2014).

4) Cost savings. Working from home permits you to save precious time fighting the traffic to get to work, you save time, you save on gas and mileage, on clothing, accessories, grooming and etc. In addition to saving money for employee, this setup saves money for organizations. It saves on overhead and variable costs. The company in return can invest some of that money to expand and some to promote or increase benefits for their employees. Research by the organization Telework, has approximated employers save more than $10,000 per employee annually. This is seen a consequence of "the increased productivity, reduced facility costs, lowered absenteeism, and reduced turnover" (Rapoza, 2013). The employees are expected to save as well. Telework approximates an annual saving to the employee between $1,600 to $6,800 (Rapoza, 2013). According to research conducted by Global Workplace Analytics, 36% of employees would be willing to trade a salary increase for the ability to work from home. 10% of technology professionals even indicated willingness to take a 10% pay-cut for the ability (Hendricks, 2014).

5) Job satisfaction. This benefit appears to be a large factor in increased job satisfaction from those employees allowed to leverage the option. Standard University Professor Bloom's experiment with Ctrip observed the same result. Bloom observed that employees "…quit at half the rate of people in the office—way beyond what we anticipated. And predictably, at-home workers reported much higher job satisfaction" (Bloom, 2014). The Staples Advantage study also reflected higher job satisfaction rates. "Home workers reported 25% lower stress levels, 73% said they ate healthier working from home, 76% were more loyal to their company and 80% reported a better work-life balance" (Hendricks, 2014). A whitepaper by Microsoft called "Work without Walls" included survey results from employees that work from home, and the number one benefit stated by far was work / home life balance at 60% (Kruse, 2012).

2.4 Perceived Challenges

Like any benefit there is a spectrum of perceptions, which include several possible challenges. It is key to note that some of these are perceptional based challenges, or challenges that may not meet the facts.

1) Manager perception. The Microsoft whitepaper "Work without Walls" indicated one of the greatest challenges associated to employees working from home is the perception from a company's management. Many managers are more comfortable when they are able to witness their employees' work first-hand. "Business leaders assume employees

who work remotely and take advantage of the policy are not really working. This is because of the loss of control. Employers lose direct oversight and cannot witness productivity firsthand" (Kruse, 2012). Managers who set specific, measurable goals for all employees are more likely to have increased trust for any employees they select to work from home (Kruse, 2012).

2) Self-discipline. Not all employees are a right fit for working from home. Working from home does require self-discipline, and avoiding distractions at home. As with any benefit there are employees that will not use the benefit properly and set a bad example (Russell, 2013).

3) Face-to-face contact. Employees that work from home can often feel that they are missing out on face-to-face contact, including collaboration. There are several technology applications that can help counter-balance this aspect. Additionally, employees that work from home may find it helpful to make occasional trips to the office in order to engage in collaboration or networking opportunities (Russell, 2013).

4) Visibility. Indications seem to imply that those employees well suited for working from home work longer hours than their counter-parts that are in the office, however, it can be more difficult for that work to be visible (Russell, 2013). Employees can improve their visibility by increasing their diligence around communication (Healy, 2013).

5) Work / Life Balance. Although working from home can help many employees achieve a better work / life balance, it can also make it more difficult to do so. Working from employees' homes can complicate their process by no longer providing a physical separation between work and home. Employees who work from home may neglect to take breaks, or are not as structured on what time to end their work day (Russell, 2013).

3. Primary Research
3.1 Research Methodology

Secondary research was conducted via business related periodicals and articles.

Primary research was conducted via an online survey. The primary research conducted on this paper was via an anonymous descriptive online survey. The results were exported to spreadsheets, reviewed and tallied. All rating related questions were tallied and analyzed, including the average score based on the respondent size, as well as deriving the percentage of the total response per question. Freeform comment questions were analyzed for key words and consistent themes.

Employees were asked to self-select if they work from home on behalf of an employer. A total of 84 survey responses were submitted for employees that selected they do work from home on behalf of an employer. Respondents reflected employees that range from technology, project management, sales, marketing, insurance, training and education.

Managers were asked to self-select if they are a manager with employees that work from home. A total of 9 survey responses were submitted for managers that selected they do have employees that work from home. Respondents reflected employees that range from technology, project management, finance, recruiting and research.

Specific questions for both the employees and managers' surveys can be found in the appendix.

3.2 Results – Employees that work from home

The results below reflect that employees do seem to have very positive perceptions on working from home. All results reflect average responses that exceed the neutral state, or are greater than "3."   Respondents do have a self-perception that they are highly motivated

employees, which aligns to the secondary research that working from home does require a more self-driven employee. It is interesting to note that the lowest ranking score can be seen around promotional opportunities. The results for this question have also been summarized in Figure 4 to highlight the distribution of responses. This observation aligns with the secondary research in that employees that work from home may feel that their work is harder to notice, or that their general visibility is less than those employees in the office.

Over half of the respondents (46 out of 84 respondents, or 54.76%) indicated that their manager also works from home. The comment analyses for those respondents suggest a trend that an employee may be more comfortable working from home when his or her manager works from home as well. The freeform comment analyses also indicated that the location of an employee's manager had little to no impact on the employees' perception of job satisfaction.

A vast majority of the employees felt that they did have the discipline to start their work on time; however, many felt that working from home does often have them working longer hours than when they worked in an office.   This does support the secondary research that suggests working from home can increase productivity, which will likely see a lift due to these increased hours.

	Average	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
More productive working from home	3.99	33	26	16	9	0
Improved job satisfaction	4.42	48	25	8	1	1
Working from home cost benefial	4.57	57	20	5	2	0
Employer saves money	4.14	41	22	13	8	0
Promotional opportunities remain strong	3.35	13	26	25	17	3
Able to maintain work / life balance	3.65	28	25	7	19	4
Able to work on team assignments	3.82	24	34	12	12	1
Highly motivated individual	4.54	50	29	3	1	0
Miss face-to-face interaction	3.71	17	35	24	7	1

Table 1 – Primary Research Results: Employees that work from home
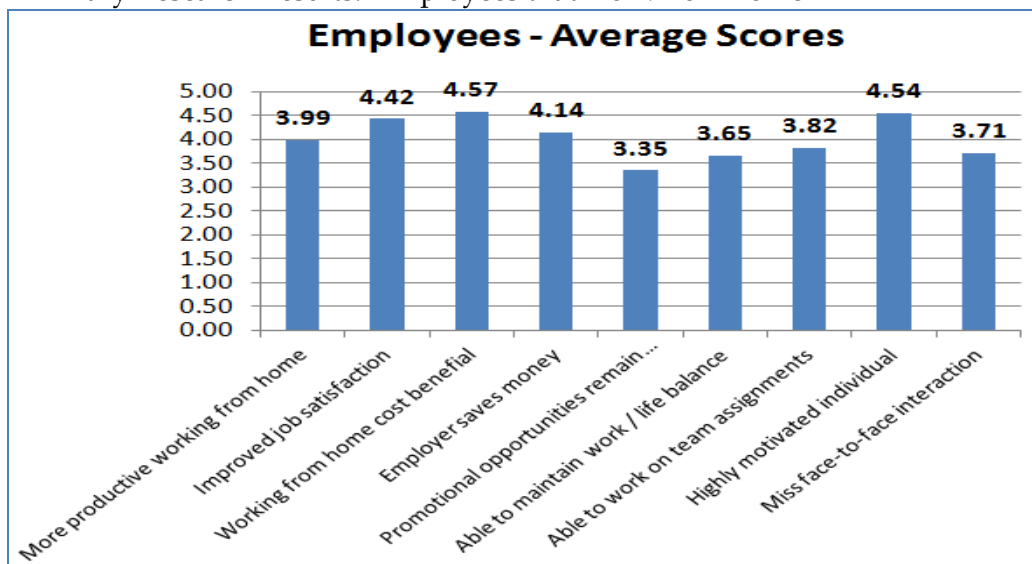
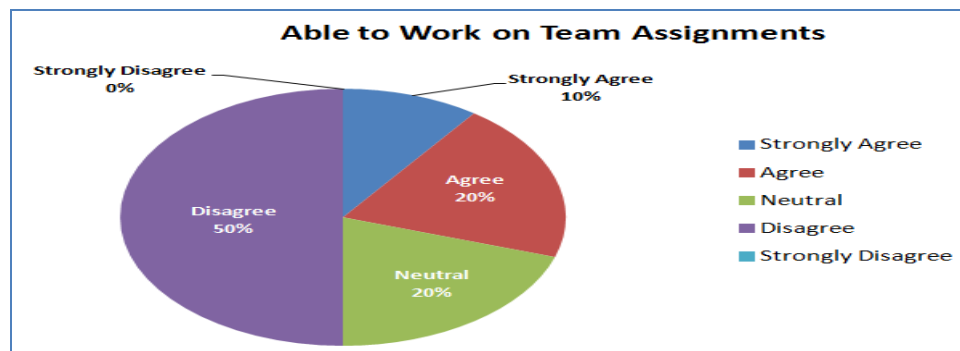Figure 1 – Primary Research Results: Employees that work from home
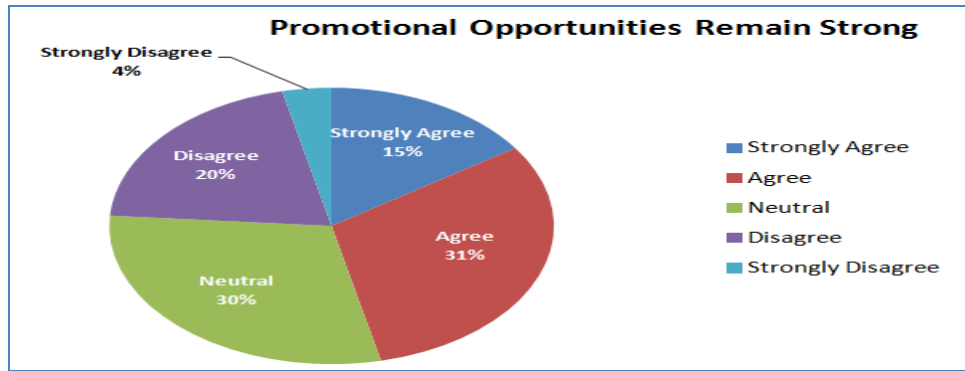
Figure 2 – Primary Research Results: Promotional Opportunities for employees

3.3 Results – Managers of employees that work from home

Although the number of respondents for managers was roughly 10% of the respondents for employees, one observation is that the averages for the managers are lower across all questions. In this survey the lowest ranking question is actually around the employees' abilities to work in team assignments when working from home.

Managers' comments did suggest that employees do have the discipline necessary to work from home; however, there was an emphasis that such programs are best aligned to specific type of high-performing employees.

Managers were asked for suggestions on how organizations can better be structured to ensure success when having specific employees that work from home. Comments included this benefit only being available for specific employees that have proven track records. Organizations should ensure to manage based on results, and have clear expectations. Suggestions also included attempting to ensure employees of various time zones had an overlap of working hours that help to ensure 6-hours where employees are all online at the same time.

	Average	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
More productive working from home	3.11	0	4	2	3	0
Improved job satisfaction	3.56	1	4	3	1	0
Employer saves money	3.44	1	4	2	2	0
Promotional opportunities remain strong	3.22	1	3	3	1	1
Able to maintain work / life balance	3.44	1	4	2	2	0
Able to work on team assignments	2.89	1	2	1	5	0
Highly motivated individual	4.33	3	6	0	0	0
Miss face-to-face interaction	3.67	1	5	2	1	0

Table 2 – Primary Research Results: Managers of employees that work from home
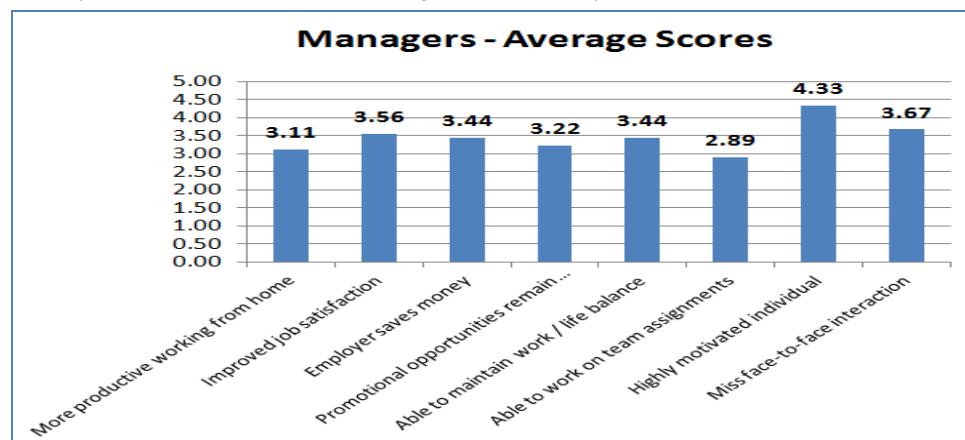
Figure 3 – Primary Research Results: Managers of employees that work from home

Figure 4 – Primary Research Results: Managers of Employees thoughts on Team Assignments

4. Discussions and Conclusion

The primary research in this article tracks very well to the secondary research in that many employees do have a strong, positive satisfaction associated with the flexibility to work from home.

Managers' results seem positive, although not to the degree of the employees' responses. The primary research here also seems aligned to secondary research in that managers may struggle to gauge effectiveness of employees that are not physically in the same location.

In general managers will find it beneficial to leverage smart, measurable metrics to ensure their employees are meeting expectations. Managers will find it even more beneficial to use metrics when dealing with employees that work from home, in order to help increase trust and visibility.

As organizations find themselves attempting to be more efficient with their budgets, they may want to seriously evaluate allowing select employees to work from home. Employees have indicated there is willingness to trade-off salary increases for an ability to work from home. This helps to signify how strongly desired this work-place benefit is perceived.

5. Limitations and further research

This primary research is not positioned to be statistically representative of all global employees/employers given the fairly small sample size. Expanding the primary research would continue to yield additional insight. Additionally, the primary research was derived from a survey and as such is subject to sample collection and related errors.

Further research that would extend this qualitative assessment may include research into performance evaluations for employees that work from home full time versus those in an office setting. This information would augment the productivity data available in secondary research, and may help to highlight if employees that work from home do encounter visibility issues.

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Appendix

Primary Research Questions - Employees who work from home

Please rate the following statements on a scale of 1-5, where 5 is strong agreement and 1 is strong disagreement.

1) You are more productive in your work when working from home.
2) Your job satisfaction has improved since working from home.
3) Working from home has been cost beneficial for you (e.g. cost of clothing, make-up, and gas & so on...).
4) Your employer saves money by allowing you to work from home.
5) Your promotional opportunities with your employer remain as strong as when you worked in the office.
6) You are able to balance work and life at the same level as when you worked in the office.
7) Your ability to work on team assignments remains as strong as when you worked in the office.
8) You are a highly motivated individual.

9) You miss face to face interactions with your co-workers.

Please answer the following questions.
1) Does your manager also work from home? (Yes / No)
2) How does your manager's work location impact your job satisfaction, if at all?
3) Please briefly explain what type of work you do.
4) Do you feel that you have the discipline to start on time, and finish on time, when you work from home? Please briefly explain your thoughts.

Primary Research Questions - Managers with employees who work from home

Please rate the following statements on a scale of 1-5, where 5 is strong agreement and 1 is strong disagreement.
1) Your employee(s) are more productive in his / her work when working from home.
2) Your employee(s)'s job satisfaction has improved since working from home.
3) Your organization saves money by allowing your employee(s) to work from home.
4) Your employee(s)'s promotional opportunities with your organization remain as strong as when he/she worked in the office.
5) Your employee(s) are able to balance work and life at the same level as when he/she worked in the office.
6) Your employee(s)'s ability to work on team assignments remains as strong as when he/she worked in the office.
7) Your employee(s) are highly motivated individual(s).
8) You feel your employee(s) miss face to face interactions with co-workers.

Please answer the following questions.
1) Please briefly explain what type of work your employee(s) conduct.
2) Do you feel that your employee(s) have the discipline to start on time, and finish on time, when working from home? Please briefly explain your thoughts.
3) Do you have any suggestions for organizations that want to leverage a work from home model for specific employee roles?

Saudi Arabian Green Economy Infrastructure: Barriers, Strategies & Opportunity – An Analysis

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Keywords

Saudi Arabia; green initiatives; environment; desalination; sustainability; economy; economic impact; investment opportunity

Abstract

Saudi Arabia is finally catching up with the rest of the developed world in terms of environmental awareness. In the past, while much of the rest of the world spent its time pondering issues such as global warming, water, air, and soil pollution, over-exploitation of resources, and a myriad of other environmental concerns, the Saudi people and government seemed to be primarily focused on expanding their capital in a globalized economy. However, in 2015, for the first time, this trend began to show legitimate change. This new emphasis on environmental concerns has caused some interest and uproar, specifically in the economic sector. The research, therefore, concentrated on the barriers, strategies, and opportunities that might impede or encourage Saudi Arabia in its quest to develop a greener and more sustainable economic infrastructure. After carefully considering the available literature, data, and reliable statistics, the report concluded that, while change will be difficult and, possibly slow, Saudi Arabia should expect to see greener projects and initiatives transpiring in their homeland over the course of the next several years.

1. Introduction

In the past, little attention and low budget has been dedicated by the Saudi government to address environmental concerns. While much of the rest of the world has spent its time pondering issues such as global warming, water, air, and soil pollution, over-exploitation of resources, and a myriad of other environmental concerns. Many developed economies have managed to turn environmental challenges into profitable businesses rather than problems that constitute a burden and high cost for the economy (Taher & Al-Hajjar, 2014). Through collaborations between public and private sectors, companies in those economies have been able to make environmental issues a core part of their business strategy. The Saudi people and government seemed to be primarily focused on expanding their capital in a globalized economy (Ali & Al-Aali, 2012). However, in 2015, for the first time, this trend began to show legitimate change. The 2015 budget, written by Saudi officials, consisted of an expenditure section specifically allocated for environmental issues, to include water supply, sewage issues, and other environmental concerns particularly relevant to Saudi Arabia (Saudi Arabia Sustainable Energy, 2015). Finally, two decades later than some nations, Saudi Arabia was entering into the ongoing dialogue regarding the need to protect the environment. Probably, Saudi Arabia is looking ahead to create opportunities with dedicated strategies to handle the environmental issues.

This new emphasis on environmental concerns has caused some interest and uproar, specifically in the economic sector. With any change, there is always room for new products, services, and technologies to become in demand and useful. This paper, therefore, will focus on the barriers, strategies, and opportunities that might impede or encourage Saudi Arabia in its quest to develop a greener and more sustainable economic infrastructure.

2.   Methodology

This research will consist of carefully analyzing the literature available regarding certain major environmental concerns that Saudi Arabia is currently facing. Peer-reviewed, scholarly journal articles, expert testimony, statistics, and other raw data from government and reliable sources will be scrutinized to help determine the major concerns present. Then, the obstacles that could stand in the way to fixing these aforementioned problems and transitioning Saudi Arabia into a greener, healthier nation will be highlighted. Afterwards, strategies will be explored that could help to facilitate the necessary transitions. Next, opportunities in green infrastructure for public and private companies and investors will be highlighted, and evaluated for feasibility. Based on these findings, a final analysis will be carried out to assess the likelihood of Saudi Arabia making the necessary changes to protect their natural resources.

3.   Saudi Arabia's Major Environmental Concerns

The Kingdom depends heavily on oil revenues for government budget; it is the largest exporter of oil, as it owns 25 % of the world's oil reserves, and has an approach of balancing between production and consumption of resources in addition to looking to balance economic growth and environmental challenges (Taher & Al-Hajjar, 2014).

Highly aggregated indices have been developed to quantify social and environmental aspects of sustainable growth. Such indices aim to reflect all the different dimensions of sustainability in a single measurement (ESCWA, 2013). For example, the Environmental Sustainability Index evaluated national environmental performance in terms of 21 indicators covering natural resource endowments, pollution levels, environmental management efforts, contributions to protection of the global commons and the capacity of a society to improve its environmental performance over time. A high score on the Environmental Sustainability Index or the Environmental Performance Index signifies high achievement. Table 2 provides a sample of those rankings, which clearly indicates that Saudi Arabia (49.97) ranked third amongst the Arab world, after United Emirates (50.91) and Egypt (55.18), in the year 2010.

Table 1: Ranking of Selected Arab Countries on Environmental Indices.

Country	Environmental sustainability index	Environmental performance index	
	2005	2006	2010
Algeria	46.0	66.2	48.56
Egypt	44.0	57.9	55.18
Iraq	33.6	-	25.32
Jordan	47.8	66.0	42.16
Kuwait	36.6	Na	35.54
Lebanon	40.5	76.7	47.35
Libya	42.3	-	37.68
Mauritania	42.6	32.0	-
Morocco	44.8	64.1	45.76
Oman	47.9	67.9	44.00
Saudi Arabia	37.8	68.3	49.97
Sudan	35.9	44.0	46.00
Syrian Arab Republic	43.8	55.3	42.75
Tunisia	51.8	60.0	46.66
United Arab Emirates	44.6	73.2	50.91
Yemen	37.3	45.2	35.49

Source: http://epi.yale.edu

By the year 2014, the statistics of Environmental Performance Index, (figure 1), showed improvement in the country rankings, reflected Saudi Arabia as the second highest (35), behind United Emirates (25), amongst the Arab Nations.

Figure 1: The overview of the Saudi Arabia performance in 2014.


Source: http://epi.yale.edu
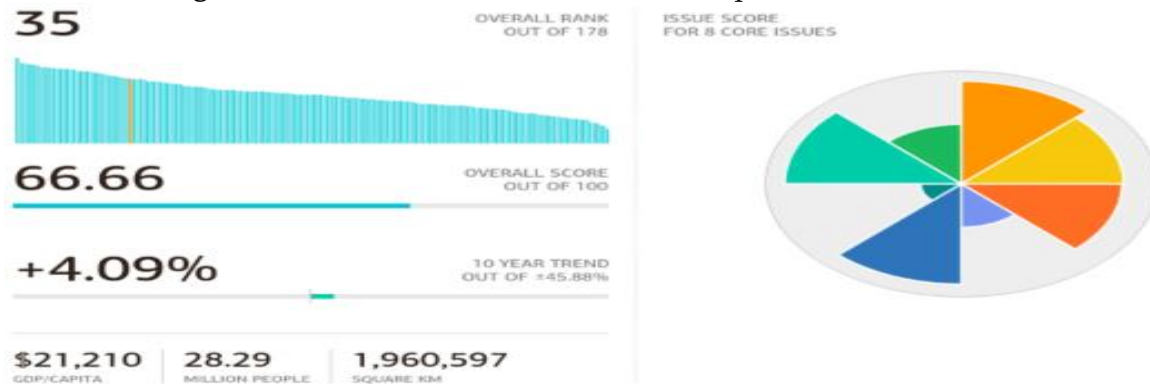
3.1. Water and Sewage Issues

It is a well-known fact that the Arabian Gulf's hyper-arid climate creates major problems for potable water which, in turn, results in many, related problems such as the disposal of waste via a sewage system (Kajenthira, Siddiqi, & Anadon, 2012). Most Gulf and Middle Eastern nations, to include Saudi Arabia, lack sufficient water sources for its people and agricultural needs (Barau & Al Hosani, 2015). Importantly, Saudi Arabia is the third-largest per capital water user in the entire world (Kajenthira, Siddiqi, & Anadon, 2012). Therefore, Saudi Arabia, as well as its neighbors, have major problems obtaining the high quantities of water necessary to serve the basic needs of its people and industries. More often than not, the country tends to rely, heavily, on seawater desalination and the abstraction of underground water. Unfortunately, both of these options are not eco-friendly and are not renewable (Barau & Al Hosani, 2015).

The water desalination process is a very extensive and environmentally damaging process that turns salt water into potable water. Desalination is an energy-intense procedure that raises domestic as well as global environmental concerns (Sadrzadeh & Mohammadi, 2008). Over the course of the past several decades, the Saudi government has expressed a desire to rethink its water options. Moreover, the current water desalination process requires so much energy that Saudi Arabia has to use all its natural gas reserves to support it (Figure 2). This has resulted in the government and its industries having to develop more expensive and environmentally damaging high-sulfur energy sources, thereby augmenting the problem even more (Kajenthira, Siddiqi, & Anadon, 2012).

Figure 2: Saudi domestic demand for oil, primary energy (oil plus natural gas), and electricity (1976-2011).
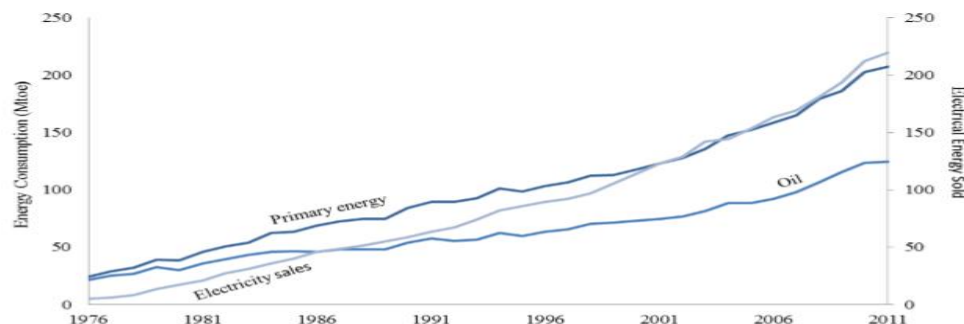
Source: Electricity sales: Saudi Arabian Monetary Agency (SAMA, 2012), oil and primary energy consumption: BP Statistical Review (2013)

3.2.   Clean Energy

Ironically, despite the fact that Saudi Arabia is amongst the leading petroleum producing nations in world, it still has plans to transition its own energy supply to sustainable and renewable resources. Currently, it use of petroleum-based energy products has caused major problems. Not only does these energy sources pollute the air, they also wreak havoc on the limited water supply and degrade the quality of the soil (Rahman, Rehman & Abdul-Majeed, 2012). Moreover, initial studies have indicated that the process of extracting the oil is just as damaging, if not more so, to the Saudi and global environment than the burning of fossil fuels. This has caused great concerns, to include an increase in health-related issues (Wise, 2015).

3.3.   Greener Construction

In recent years, the Saudi government, as well as private investors, have created a mass amount of new infrastructure and building complexes in the Kingdom. For the most part, little to no attention was given to sustainable building practices. Rather, buildings, roadways, and other development was simply done as quickly and cost-effectively as possible (Medallah, 2015). This has begun to cause some environmental problems for the state, making greener options seem more enticing. Increased costs of energy, building materials, higher regulatory standards and greater consumer interest are driving the expansion of the green building market in many countries, although the trend in the Arab region is not yet widespread. New housing and even new cities are being developed in the United Arab Emirates and Saudi Arabia (ESCWA, 2013). The chief sustainability officer of UTC Building & Industrial Systems recently reported "Saudi Arabia has already shown strong interest in strengthening its green building presence", (Al Bawaba, 2014). Undoubtedly, this is due, in part, to the consequences already experienced by Saudis, such as an increase in health-related ailment to include asthma (Medallah, 2015).

In sum, Saudi Arabia has many environmental issues that need to be addressed. These include, but are not limited to, water shortages that lead to sewage issues, a strong reliance on non-renewable, petroleum-based dirty energy, and unsustainable construction. The next section will carefully explore some of the major obstacles that stand in the way of creating greener infrastructure in Saudi Arabia.

4.   Obstacles

Unfortunately, there are always obstacles that prohibit positive change. Cost is a major obstacle that stands in the way of Saudi Arabia developing sustainable, green infrastructure. Dr. Kok, a professor of economics at Maastricht University in the Netherlands, has studied the economic implications of green energy in Saudi Arabia for several years. His findings suggest that higher rent rates are associated with energy-efficient buildings, making Saudis less likely to choose these types of infrastructure for their homes and businesses. Petroleum-based energy options are so plentiful and inexpensive that it makes it incredibly hard for renewable energy sources to compete. Most of the time, they cost significantly more money and, therefore, lack a competitive advantage (Al Bawaba, 2014). Moreover, there is an overarching thought amongst many Saudis that the nation should use its own natural petroleum resources and not invest in other forms of energy. Such thought is hard to break because oil has been such a strong part of the Saudi economy for decades. It is excruciatingly difficult to convince people to invest in renewable energy whenever non-renewable energy resources are so plentiful (Taher & Al-Hajjar, 2014).

Additionally, there are not a lot of options for obtaining potable water. Options, other than desalination of seawater, are costly and extremely difficult to carry out (Figure 3). Importantly, technology is still in its infancy regarding other, more environmentally friendly

methods of obtaining water in areas such as Saudi Arabia. For the most part, new technologies are still being developed to help meet this need in a cost-effective, greener way (Barau & Al Hosani, 2015). Right now, most experts agree that Saudi Arabia has to spend a large bulk of its resources investing in new methods of obtaining potable water, as well as put stricter limits on water consumption. Unfortunately, the petroleum industry is the number one user of water in the nation, making it extremely difficult to monitor water usage (Barau & Al Hosani, 2015).

Figure 3: Demand for desalinated water in Saudi Arabia.
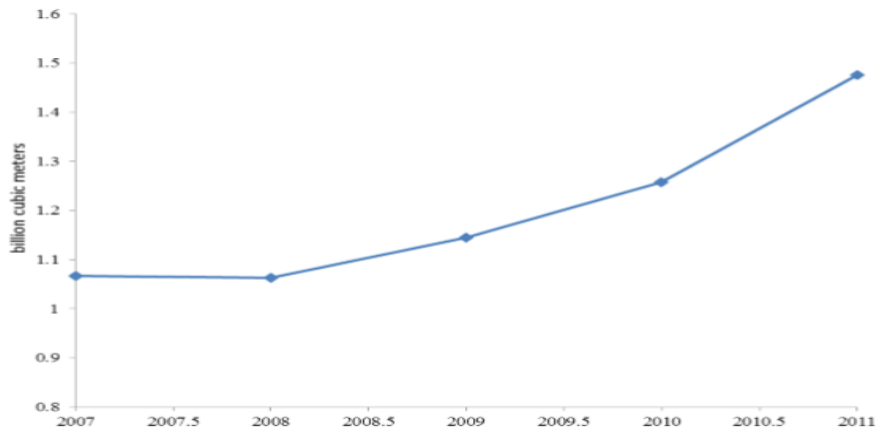
Source: Ministry of Water and Electricity (2012).

5.   Strategies

One strategy being employed to encourage Saudi businesses, government agencies, and individual people to support and develop greener infrastructure is through education. For instance, one environmental group started the Distinguished Sustainability Lecture Series. This program helps to keep the public and investors abreast to sustainability issues in Saudi Arabia as well as throughout the world (Al Bawaba, 2014). It also makes people aware of problems inherent with current operating procedures, such as desalination processes and petroleum / natural gas extraction (Al Bawaba, 2014). Through education initiatives, this program, and others like it, are attempting to win the support of big businesses, the Saudi government, and the people. Studies show that, oftentimes, investors and everyday citizens are not aware of the benefits associated with green infrastructure (Taleb & Sharples, 2011). Not only are there health benefits to environmental sustainability, there are also investment opportunities that, theoretically, could make investors huge sums of money.

Another strategy implemented is to train investors and workers, alike, on sustainable planning and construction. This includes green building training. The Leadership in Energy & Environmental Design (LEED) is sponsored by the Saudi government, forward-thinking, and timely. As of 2015, the Saudi government has given businesses five full years to meet the newly established noise, water, and air pollution standards. These trainings will help facilitate the transition, and make it as smooth and economic as possible (Al Bawaba, 2014).

Since numerous studies have shown, unequivocally, that solid waste management, electricity generation, and the agriculture industry are the sectors in Saudi Arabia that are culpable of producing the highest amounts of greenhouse gasses. The Saudi government is trying to encourage investors to find new, innovative methods of providing the same services in a greener manner. This appeal to technology industries is very effective since the government offers subsidies and grants to innovative investors and inventors (Coad, 2012). This is just one more strategy to try to get people to recognize the issues at hand and develop cost-effective and feasible means to compensate (Coad, 2012).

6.   Opportunities

With any major infrastructure or operational change, there are always new opportunities that emerge. This is a prime time in Saudi history for new businesses to enter into the marketplace and provide greener strategies and infrastructure. Smart investors will leap at the opportunity to take part in this changing norm. For instance, as per the Saudi Green Building Forum, 76 green projects are underway that exceed $26 billion U.S. dollars (Al Bawaba, 2014). Included in these projects is the King Abdullah Financial District, which is lauded as the world's largest green building development expanding over 1.6 million square meters. Moreover, the Ministry of Islamic Affairs is currently planning to make a minimum of 90,000 Saudi mosques eco-friendly via the use of various types of renewable energy sources, to include solar, wind, and hydro energy (Al Bawaba, 2014).

Also, the government is currently looking for companies that are able to provide software packages designed to monitor water consumption in existing Saudi households and businesses, and provide a cost-analysis estimate of the amount of savings that would result in various proposed changes. These programs should calculate the prospects for applying different measures to everyday Saudi houses and apartments in order to manage energy and water usage in a more sustainable manner. Then, based on these findings, the Saudi government will be looking for companies and investors to put the best methods into practice (Al Bawaba, 2014).

Yet another opportunity would be for companies to invest in technologies and mechanisms that would permit the oil and natural gas sectors to reuse their water. Already, the government has stated that it is willing to provide significant subsidies to companies able and willing to create the technology necessary to reuse and conserve water. Its overarching goal is to increase "wastewater treatment and reuse in six high-altitude inland cities could save a further $225 million dollars and conserve 2% of Saudi Arabia's annual electricity consumption" (Kajenthira, Siddiqi, & Anadon, 2012, p. 184).

7.   Conclusion

In sum, while there are, undoubtedly, obstacles that stand in the way of Saudi Arabia transitioning to a greener and more sustainable nation, no obstacle is so significant that it cannot be overcome with ingenuity and dedication. Moreover, the new push towards greener infrastructure will create many new jobs and investment opportunities for proactive, forward thinking individuals. The coming changings are much needed and well-supported by the Saudi government. Saudi Arabians should expect to see major changes to their nation in the coming years, to include cleaner water, soil, air, as well as more sustainable and renewable energy sources.

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Intuition in Decision Making –Theoretical and Empirical Aspects

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Keywords

Intuition, rational analysis, decision making process

Abstract

In an economy dominated by information and knowledge, analysis ceases to be the sole and sufficient source of knowledge. Managers seek alternative ways of obtaining and interpreting information and knowledge. Here, managerial intuitive potential begins to play an important role.

The aim of this paper is to present the issue of intuition in decision making in both theoretical and empirical terms. The first part presents the essence of intuition and its role in management, especially in decision making. Then, the empirical part attempts to identify the intuitive potential of managers and the extent of its use in practical decision making. The case study method was used in order to achieve this goal. The analysis involved a Polish food company "Fawor" that employs more than 300 workers.

These literature and empirical studies in the area of intuition were conducted within the research project „The impact of managerial intuitive potential on the effectiveness of decision making processes", financed by the National Science Centre, Poland (funds allocated on the basis of decision No. DEC-2014/13/D/HS4/01750)

1. Introduction

Intuition is considered to be one of the least defined and operationalized elements of human capital (Fields, 2000). However, it has long been the subject of unabated interest as one of the key factors influencing the effectiveness of decision making. Its importance in management was already stressed by such researchers as C. Jung (Jung, 1934), Ch. Barnard [Barnard, 1938] and A. Maslow (Maslow, 1954). In recent years, there has been an increased interest in intuition. This is due to the characteristics of the environment in which modern managers are forced to work. This environment is characterized by complexity, significant dynamics and unpredictability. Therefore, organizations find it increasingly difficult to survive in the competitive market, and even harder to ensure their development. To achieve this goal, managers must stay ahead of trends and customer expectations, as well as identify and seize new occasions, and this in turn is possible through the use of intuition in decision making. Intuition enables decision making in situations of lack or excess of information, in conditions of risk and uncertainty, under time pressure and in the case of individual problems. It can be noted that contemporary decision-makers, especially at the strategic level, deal with exactly such situations and conditions.

The aim of this paper is to present the issue of intuition in decision making in both theoretical and practical terms. The first part presents the essence of intuition and its role in management, especially in decision making. Then, the empirical part attempts to identify the intuitive potential of managers and the extent of its use in practical decision making. The case study method was used in order to achieve this goal. The analysis involved a Polish food company "Fawor" that employs more than 300 workers.

2. The nature and role of intuition

In the past, the word "intuition" was often associated with the word "irrationality". This could result from the definition of "intuition" proposed by Bergson who interpreted it as a "mystical force" that cannot be explained by rational arguments (Bergson, 1911). Since then,

numerous empirical studies of intuition have been conducted, especially in the area of psychology, neuroscience and management, which have changed the way it is perceived. It is no longer regarded as something mystical and irrational, but as important and desirable competence of modern managers (Jędrzejczyk, 2013). Modern literature suggests that there is no basis for associating intuition and irrationality since it results from many years of practice, experience, learning process, which translates into huge amounts of facts, patterns and concepts that take the form of tacit and explicit knowledge. This knowledge is stored in both the consciousness and the subconscious of the human mind. Managers have begun to accept such an interpretation of the concept of intuition and treat it as part of their business knowledge. It should be emphasized, however, that this is not a common phenomenon yet (Paprika, 2006).

Based on the literature, it can be stated that intuition is most often defined as the act of cognition without rational inference. Optionally, it is recognized as a way of learning that takes place beyond consciousness, in which a decision-maker acquires knowledge, but is unable to identify the source of this knowledge. According to M. Westcott, however, intuition is a rational process of thinking, in which a decision-maker creates a solution for a decision problem based on their tacit knowledge (Westcott, 1968). Thus, it can be noticed that the authors do not agree on whether the intuitive process of thinking takes place in consciousness (Westcott, Simon, Agor) or in the subconscious (Betsch, Sadler-Smith, Sinclair, Ashkanasy, Hogarth, Khatri, Alvin). Striving to find a universal definition that links the views of these authors, we can suggest a definition according to which intuition is a non-sequential process of obtaining and processing information, which takes into account both rational and emotional elements, and the result is direct knowledge without the participation of rational inference.

Intuition can be considered a cognitive ability of the human mind that is distinct from traditional forms of objective knowledge. This process is very difficult or sometimes even impossible to reproduce, because it is often unconscious. It differs from the classical rational cognition in that the process itself does not satisfy intersubjective verifiability. In contrast, the result of this process can be logically justified. Therefore, one can conclude that intuition is not an irrational process related to premonitions or revelations, but a process of thinking whose mechanisms differ from the classical rational inference and are difficult to reproduce. However, the results of this process are verifiable and communicable. Therefore, intuition is often referred to as thinking without consciousness or knowledge without consciousness (Mikołajewski, 2007, p. 21).

Intuition is used in every decision-making process, but with varying intensity. The extent to which intuition is used depends on many internal determinants (e.g., a decision maker's personality traits, abilities, attitude to life, experience) and external determinants (conditions of decision making, the type and structure of a decision problem, effective organizational culture within an organization). Despite the fact that decision-makers are often not aware that they use intuition, it can significantly increase the accuracy and effectiveness of the decision-making process. However, the conscious use of intuition enhances its benefits. Firstly, it allows for the identification of key information relevant to a decision. It may also be additional information in the event of an information gap. It acts as a kind of "signpost" that directs a decision-maker towards a favourable solution. It often speeds up and simplifies the decision-making process by reducing the range of available alternative actions (Cooper, Sawaf 2000, p. 99).

The discussed characteristics of intuition are summarized in Table 1.

Characteristics of intuition
• It is a cyclical process of thinking associated with the overall cognition of reality
• It is not the opposite of logic
• It is not an irrational action
• It refers to the use of "deeper" knowledge resources collected over a lifetime
• Every person has intuitive potential (but at different levels)
• It is a capability that can be trained and developed
• It participates in any decision-making process
• It uses induction (the conclusion precedes the premises, the whole picture precedes getting to know its parts)
• It is a fast, sometimes even automatic process

Table 1: Characteristics of intuition
Source: own study.

Empirical studies indicate that managers ascribe a significant role to intuition in the process of effective decision making. W.H. Agor shows that top-level managers consciously use intuition in making key decisions. In their opinion, it plays a creative role and enables them to generate more inventive solutions to a decision problem. Besides it helps them make the final choice. According to respondents, it also appears in the "background" allowing for a smooth transition through various stages of the decision-making process (Agor, 1998, pp. 206-207).

The cognitive results of empirical research conducted by L. Buchanan and A. O'Connell indicate, however, that managers equally use their intuitive and analytical abilities, but they attribute up to 80% of success to intuition (Buchanan, O'Connell, 2006). According to H. Mintzberg, this can be explained by the fact that strategic decision making requires both creative and synthetic thinking, and such a combination is more characteristic of the intuitive rather than the rational approach (Mintzberg, Westley, 2001).

According to active top-level managers, intuitive potential is one of the most important abilities that are used in decision making and influence the improvement of managerial efficiency. Managers often make wrong decisions because they underestimate or deliberately block their intuitive potential (Agor, 1998). Studies show that people have a natural, innate tendency to synthetize and select information quickly and efficiently. This process, however, can be affected by too much use of time-consuming, rational and often not very useful analytical work and related formal procedures of data processing, which in turn may adversely affect the efficiency of decision-making processes (Data, Pratt, 2007, p. 33). Restrictions on the use of intuitive potential can be eliminated by improving the potential and raising the level of its use, but this requires awareness and acceptance of the existence of intuition (Bernais, 2001, p. 220).

The literature indicates that the use of intuitive potential in decision-making processes plays an important role mainly at the strategic level (Clarke, Mackaness, 2001, p. 148; Shapiro, Spence, 1997, p. 63). Trying to determine the role of intuition in strategic thinking, it appears advisable to define the term "strategic thinking". According to H. Mintzberg, strategic thinking is a process of synthesis that uses intuition and creativity, and the result is an integrated vision of a company's future. According to the author, data and the process of analysis are not sufficient to effectively investigate a decision problem. It is necessary to use intuition, which creates opportunities for a more comprehensive solution (Mintzberg, 1994). The previously mentioned empirical studies show that managers are willing to make greater use of intuition when dealing with difficult and complex problems. Therefore, it can be concluded that intuition is used in making strategic decisions that are characterized by a high degree of complexity and are taken by top-level managers.

The assumption about the legitimacy of resorting to intuitive potential in decision-making processes does not constitute grounds to deny the purposefulness of rational analysis. Intuition should be an important component of any decision-making process, complementary to rational analysis. It can thus be assumed in line with the Cognitive Continuum Theory that in management practice both rational and intuitive approaches should be jointly used in decision making. Pointing to the advantages of the mixed modes of cognition (a combination of intuition and analysis) over the "pure" forms of rational analysis and intuition, this theory suggests that they should not be opposed to each other (Hodkinson, Sadler-Smith, 2003, pp. 234-268). Intuition is an indispensable component of a comprehensive decision-making process. It can be used in different ways and at different stages of the decision-making process, but its role is crucial.

3. Characteristics of the research subject–Baking and Confectionery Cooperative "Fawor"

The subject of the empirical study was a Polish food company –Baking and Confectionery Cooperative "Fawor," located in Poznań, Poland. The company specializes in the production of bakery and confectionery products and ice cream. This organization is proud of its more than 100-year tradition. It was launched on 30 November 1908, and has been operating under its present name since 1997. The company enjoys a leading position in the production of bread in Poznań. The company's products are manufactured in their own bakeries and pastry shops by highly-qualified employees.

"Fawor" offers a wide range of bakery (about 100) and confectionery products (over 200) of different shapes and weight, with and without additives, packaged and unpackaged). The company offers:

- bread (rye, wheat, mixed, organic and on special request).
- cakes (tortes, tortes for special occasions, pies, cakes and biscuits, pound cakes, rolls, poppy seed cakes, cheesecakes, gingerbread)
- ice cream (six types)
- durable products (packaged products, prolonged shelf life).
- bread to be baked in the shop (eight types).

"Fawor" has an extensive network of its own retail outlets which sell fresh bakery and confectionery products and ice-cream manufactured in the company's production facilities. In addition, its brand stores offer bread "straight from the oven", meaning baked directly in the store, as well as a wide range of food products and press (http://www.fawor.com.pl).

4. The use of intuition in the decision-making process – the results of the empirical study

The empirical study was conducted using the case study method in order to determine the intuitive potential of decision-makers and the extent of its use in decision-making processes, which is the objective formulated in this article. The study involved the use of a questionnaire and a direct interview. The questionnaire consisted of three main parts:

- respondent's particulars also containing some questions about respondents' opinions on the use of intuition in the decision-making process (there were three closed-ended questions and two cafeteria questions)
- a part diagnosing the intuitive potential of decision-makers (12 closed-ended questions).
- a part defining the actual use of intuition in the decision-making process (14 closed-ended questions).

In Parts 1 and 2 of the questionnaire, respondents were able to choose one of two possible answers.

The part of the questionnaire that identified the intuitive potential of managers was formulated based on the characteristics of an intuitive manager presented in the literature, and it contained questions related to characteristics, abilities and aptitudes attributed to an intuitive manager.

The starting point for the part of the questionnaire that specified the extent to which intuition is used in decision making was the characteristics of two extreme approaches used in decision making: analytical and intuitive. These approaches were characterized based on the following criteria: the location of a decision problem, the way to solve the problem, the evaluation of alternative variants of the decision, attitudes to risk and uncertainty, sources of information, the use of information processing procedures, documenting the decision-making process, the involvement of a decision-maker, the logic of thinking, consciousness in action, the possibility of presenting the decision-making process (its communicability).

According to the objectives of the Cognitive Continuum Theory, mentioned in the theoretical part of this article, the study was based on the assumption that analytical and intuitive approaches to decision making coexist in management practice. Decision-makers rarely represent the "pure" analytical or intuitive orientations in the decision-making process; most often it is a combination of these two styles of cognition and thinking (referred to as the quasi-intuitive style in which the intuitive approach has an advantage over the rational approach, the adaptive style which implies a balanced blend of the two cognitive modes and the quasi-rational style which denotes a tendency towards the analytical approach) (Hayes, 2012, pp. 4-5).
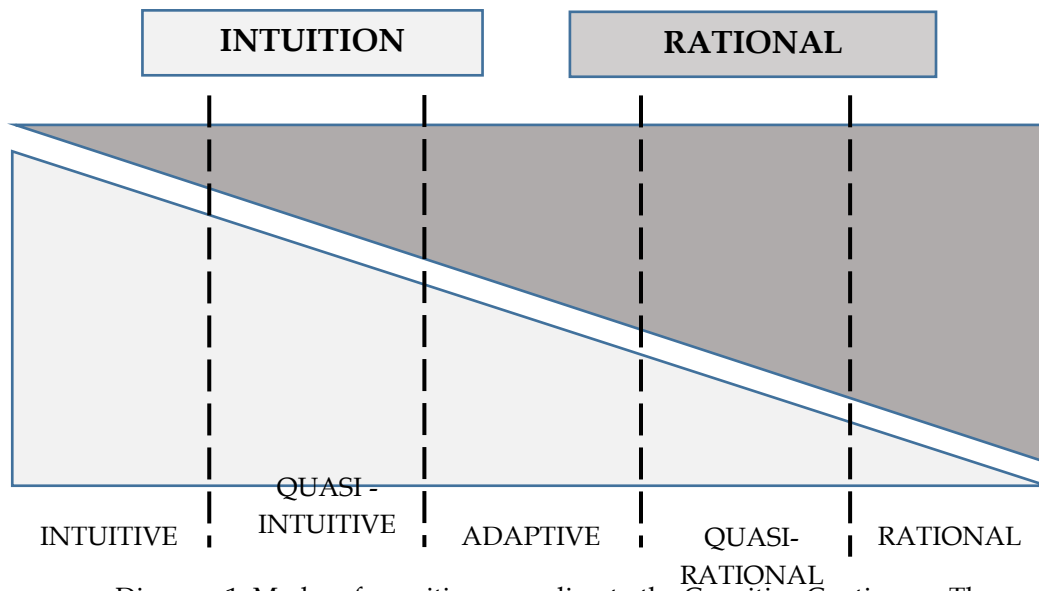
Diagram 1: Modes of cognition according to the Cognitive Continuum Theory
Source: [Hayes 2012, p. 4].

The study involved all managers at all levels of management in the number of 48 people. Women, who accounted for 63% of all respondents, were the prevailing group. As for experience, the largest group consisted of managers with more than 20 years of seniority. Then there were young workers with an experience ranging from 1 to 5 years. The third largest group included former employees with a work experience ranging from 10 to 20 years. The group of workers with a work experience ranging from 5 to 10 years was the smallest. Lower-level managers were dominant in the research sample (they accounted for 63% of all respondents). The second largest group included middle-level managers who constituted 30% of respondents.

The smallest group of respondents consisted of top-level managers who accounted for 7% of the research sample.

Figure 1: Characteristics of the research sample with respect to age
Source: Own study based on the conducted survey.
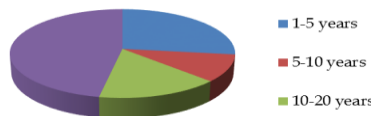
Figure 2: Characteristics of the research sample with respect to experience
Source: Own study based on the conducted survey.

Figure 3: Characteristics of the research sample with respect to the management level
Source: Own study based on the conducted survey.

In the part of the questionnaire that contained respondent's particulars, the surveyed were asked to answer the question of whether they use intuition in decision making in the professional sphere. All respondents answered in the affirmative to this question, which means that they treat intuition as an important part of any decision-making process.

Further, respondents were asked to clarify the concept of intuition or give a synonym of this term. The diagram below shows the most frequent answers.
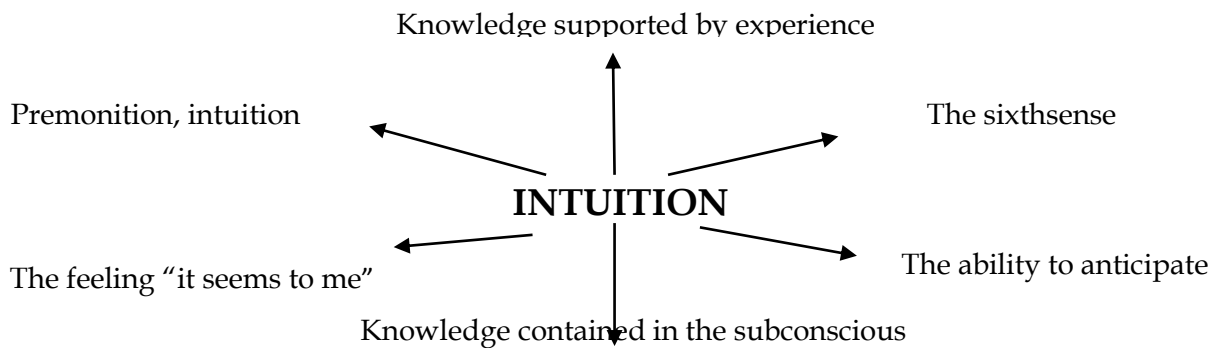
Diagram 2: Synonyms of the concept of intuition (according to respondents)
Source: Own study based on the conducted survey.

One of the primary purposes of this empirical study was to determine the level of intuitive potential of the surveyed managers. The research objective was to verify whether the identified intuitive potential is used indecision-making practice or whether it is suppressed or stimulated by both internal and external factors. The study procedure was based on the assumption formulated by W.H. Agor who claimed that intuitive potential and the level of its use are not always identical (Agor, 1998). The cognitive results show that this assumption does not clearly apply to managers of the company in question, as in most cases higher rational potential translated into the use of the quasi-rational approach in the management practice, and significant intuitive potential entailed the use of the adaptive approach or the quasi-intuitive approach in decision making (58% of respondents). Twenty-one percent of respondents were characterized by considerable intuitive potential, but in practice they used the quasi-rational approach signifying the advantage of the rational approach over the intuitive approach. The same number of respondents was characterized by low intuitive potential, yet in decision-making processes they used the quasi-intuitive approach characterized by the predominance of the intuitive approach over the rational mode. Factors that limit or stimulate the use of intuitive potential by decision-makers will be the subject of further empirical research conducted by the author.

The study shows that most of the managers of the organization in question (53% of respondents) adopted the quasi-rational approach, which is characterized by the predominance of the rational approach over the intuitive style, in their decision-making practice. The second most numerous group of managers used the adaptive approach which implies a balanced blend of the rational and intuitive modes (an equal number of respondents (26%) pointed to the characteristics of both the analytical and intuitive orientations). The smallest group turned out to be managers who used the intuitive approach rather than the rational style. They accounted for 21% of the total research sample. It should be emphasized, however, that the quasi-intuitive approach prevailed among top-level managers. In contrast, the quasi-rational and adaptive approaches were dominant among middle-and low-level managers.

In summary, it can be stated that all respondents use intuition in decision making by adopting approaches that integrate intuition and rational analysis. They differ only in the extent to which they use it compared to rational analysis.

Figure 4:The use of intuition in decision-making processes
Source: Own study based on the conducted survey.

5. Summary

Summing up the empirical study results, it should be emphasized that the obtained cognitive results are contributory, rather than general as the study was carried out using the case study method.

Based on the analysis of responses given by the managers of the cooperative "Fawor", it can be stated that not only do they rely on rational plans and reliable information, but they also resort to intuition in the decision-making process (all respondents claimed that they used intuition in the decision-making practice). This means that they consciously use it to obtain and

acquire information. Although the quasi-rational approach, which implies the advantage of the rational style over the intuitive mode, was dominant in the studied sample, it should be emphasized that the quasi-intuitive approach prevailed among top-level managers. This is consistent with the opinions formulated in the literature, according to which intuition plays an important role precisely in the strategic area. The quasi-rational and adaptive approaches (a balanced blend of the rational and intuitive orientations) predominated among middle- and top-level managers. This can be explained by the fact that at lower levels of management decision problems are often predictable, repeatable and have a clear and complete structure. This promotes the use of the rational approach that requires fuller information, and is often based on previously tested solutions.

The study results also allowed for a positive verification of the assumption that styles which integrate the intuitive and rational approaches are dominant in the decision-making practice. On the other hand, decision-makers do not use extreme styles, i.e., "pure" intuitive or "pure" rational.

To recapitulate the above conclusions, the case study of the cooperative "Fawor" confirms the growing role of intuition in decision making. It may be noted that managers more often treat the intuitive and rational approaches as complementary, rather than exclusive styles. This is presumably a growing trend. This stems largely from the environment in which modern enterprises operate. It is characterized by strong competition, unpredictability, volatility and complexity. As the traditional decision support techniques become less useful, managers look for new ways to enhance the effectiveness of decisions. Therefore, they resort to intuition which enables them to acquire and synthesize a large amount of information necessary to make the right decision.

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Factors of Economic growth in KSA An empirical analysis from 2000:2014

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Keywords
Oil Revenue, Investment, GDP, financing, Economic stability.

Abstract
This paper aims to conduct analysis of the impact of Oil Revenue and its relationship with all factors that affect growth in domestic product and also focuses on investment opportunity and economic growth in Saudi Arabia which has made the country an increasingly attractive destination of investment for foreign investors.

Introduction
Saudi Arabia has one of the largest economies in the Middle East and Africa. Its gross domestic product depends on oil revenues making up around 90-95% of total KSA export earnings with oil having contributed hugely to economic development. Oil was discovered in 1930 and its production started after World War II. The KSA oil reserves are the largest in the world, and the country is the world's leading oil producer and exporter. Saudi Arabia achieved economic growth which exceeded world growth in spite of the global crisis. The global rise in energy prices, as the non-oil sectors in the Kingdom has achieved remarkable growth in recent years, which accelerated in growth rates and achieved economic diversification.

Due to the stability of the economic factors in the Kingdom, the consumer confidence exceeded the regional average. On the other hand, the clear growth in private debt and credit, and increasing public spending on infrastructure and other projects, has created enormous opportunities across the Middle East. These factors have combined to achieve tangible development steps.

Objectives of the study
This study try to achieve the following objectives:-
1. To know all factors that affect in Saudi Arabia Economy during the period.
2. To know the effective of foreign direct investment on growth domestic product in KSA.
3. To test the basic factors that responsible for economic growth.
4. To suggest the necessary recommendations that will raise economic growth level.

Methodology of the study
This study will follow some recent previous studies that related to economic growth, then proposed econometric model to testify the variables that be responsible of growth in KSA.

Hypotheses
1. There is a positive relationship between growth level and oil Revenues
2. There is an inverse relationship between growth level and percentage of exports

Limitation of the study
The present study will be limited to analyze the basic factors of growth in Saudi Arabia during period of (2000-2014).

Theoretical Background

The main theory of economic growth was presented by neo-classical model Solow (1956). The model had difference assumptions to depend on such as, constant returns to scale, diminishing marginal productivity of capital, exogenously determined technical progress and substitutability between capital and labour. However, the Solow's model highlights the saving or investment ratio as important determinant of short- run economic growth and technological progress is the important determinant also in long – run.

Solow model predicts growth rates in poor economies will grow faster than rich economies. Technological progress is considered an engine of long run economic growth that includes knowledge, innovation and other technological application that will induce economic growth. These studies (Romer's 1986) and (Lucas' 1988) mentioned three sources of growth as new knowledge m innovation and public infrastructure.

Review of literature

(Abu-Eideh, 2013) this study aimed to analyze performance of Palestinian exports and its impact on economic growth to identify the relationship between exports and GDP. The results of the study there is a positive impact of Palestinian exports on the GDP, there is significant effect on the structural change of the manufacturer industrial sector on the growth of exports, the results were unclear and also data showed appositive effect of the growth of labour force of both exports and manufacturer industrial growth , and inverse effect in GDP.

On the regional level (AL- Raimony, 2011) determinants of economic growth in Jordan. This study aimed to analyze the relationship between elasticity's of labour, real capital, real export and real import and economic development .the study results showed that there is negative relationship between real import growth and real GDP growth.

The basic recommendations were that Jordan needs to adopt a comprehensive training program to improve labour productivity also, it also has to pay more attention to the export sector which plays a significant role in the improvement of the balance of trade as well as the balance of payments enables the country to import the essential capital goods to raise productivity.

Another study by the (IMF) 2011, that aimed to study the macroeconomic and fiscal framework for the West Bank and Gaza, according to this study the sources of economic growth in Palestine is the capital and labour force and the productivity of the factors of production .

In another international study, (Petrakos, at, al, 2007) in this paper prepared questionnaire to explore experts' views on the factors underlying economic dynamism. The results of the survey were:-

- First, the survey determine a number of important determinants of economic dynamism at the global scale. These determinants are consistent with the relevant mainstream literature but also with most recent development, highlighting the increasing influence of political   and institutional factors.
- Second, it was found that the determinants of economic dynamism don't have the same influence in advanced and less advanced countries don't have the same influence in advanced and less advanced countries. There are different indicators between developed and developing countries.

    In general, the result of this part of questionnaire raise a question for the efficiency of a number of existing development.

- Third, respondents tend to select overall balanced combinations of opposite characteristics related to theoretical or policy dilemmas in their effort to promote economic dynamism.
- Fourth, satisfaction with different theoretical paradigms varies among respondents according to their occupation (academia, private sector, public sector). These three indicators represent a different understanding of the main functions of the economy among three groups. Theoretical examples highly popular in the academia appear in the last places of preference for people working in private sector.

Another study in Egypt, (Anton & Iqbal, 2005) this study examined determinants of growth in Egypt during 1980s by using econometric techniques. The result of the study trends in government consumption, credit to the private sector and the average growth rate of OECD countries have been significant of growth in Egypt in the past. (Bosworth & Collins 1998) studied the sources of economic growth in 88 countries during the period (1960 – 1996) this study reached to miracle in the countries of East Asia as a result of increasing in saving and capital accumulation, not to technological development in short run, but technological development were the main reason of economic growth in the long run.

Another international study by (Martin, 1997) which determines various variables that have strong effect on economic growth like political factors , contains the quality of government , the strength of law and protection of property rights , and the factors related to investment level , the concentration of exports on raw materials , the level of openness in the economy , education standards and the stability in the macro economic variables such as inflation , exchange rate and public budget deficit .

Factors that changed the economy of Saudi Arabia
There are many factors affect in economy in Saudi Arabia:-
First: oil (petroleum) sector
Saudi Arabia is an important oil producer in the world. The discovery of huge reserve of oil by an American company in 1938, establishment of the Arab American Oil Company "Armco"

To improve earnings from its hydrocarbon reserves, Saudi Arabia began building a string of refineries in the 1960s, which produced gasoline, fuel and diesel oil, liquefied petroleum gas (LPG), jet fuel, kerosene and other petroleum products for the domestic market and for export. The Kingdom now has nine refining complexes with an output of eight million barrels per day (bpd), most of which is exported to customers around the globe.

Saudi Arabia also possesses vast reserves of natural gas, including dissolved, associated and non-associated. Until the 1970s, most of the natural gas produced in the Kingdom was in association with crude oil production and was flared at the wellhead.

Second: Economic stability
Saudi Arabia achieved economic stability largely because of government spending, fiscal policies, low cost rates of loans addition its controls to inflation. Although there have been many global liquidity crises effect Saudi Arabia has remained economically stable and has become an attractive environment for investment. The Saudi Arabian economy is considered an economic powerhouse in the region and ranked No (19) in the world, where the KSA is considered a commercial crossing point between East and West , making it a gateway to the global economy and a gate way to regional markets.

Third: Agriculture Sector
Saudi Arabia suffers from a marked lack of rivers, thus periodic and unpredictable rainfall is the main source of water for agriculture. By addressing the issue of water security Saudi Arabia

has made that dream a reality, producing a wide range of agricultural products from barley to watermelons; achieving self-sufficiency in many areas, such as wheat, dairy products and fruits; and exporting to other countries a variety of farm products, from strawberries to flowers.

The key to agriculture throughout the world historically has been the availability, or the absence, of water. Most of the Kingdom is covered by desert and arid land, yet there are fertile areas, such as the Asir in the southwest, that receive rainfall, as well as oases, such as Al-Qatif and Al-Hasa, that have for centuries produced dates and limited quantities of cereals and vegetables. In recent decades Saudi Arabia has undertaken to expand agricultural production in the traditionally fertile areas as well as extend it to other regions that have fertile soil.

The Kingdom of Saudi Arabia is now considered a major producer of agricultural goods, and whereby previously output was limited to a few crops, this sector now enjoys great diversity. The country is producing nearly nine million tons of cereals, fruits, vegetables and fodder every year on 11 million acres of land under cultivation. Saudi farmers produce some 2.2 million tons of wheat and barley, 2.7 million tons of vegetables, 1.2 million tons of fruit and nearly three million tons of alfalfa and other types of fodder for the livestock industry.

Fourth: Commerce and finance

The financial system in Saudi Arabia represents a center of commerce for centuries. The finance sector has brought about a parallel expansion of the commercial sector, especially in the past three decades. Generous government incentives, including the provision of long-term interest-free loans and support services and facilities, have encouraged the rapid expansion of the commercial sector. The establishment of chambers of commerce and industry in the major cities and regions of the Kingdom has also promoted the formation of new, and expansion of existing, commercial companies. The existence of a modern banking industry capable of meeting the requirements of businesses large and small has further promoted commercial operations in recent years.

As a result, there are currently some 9,800 firms, mostly joint stock companies, involved in commercial activities in the Kingdom. Their total invested capital is estimated to be more than 170 billion riyals (more than 45 billion dollars). Saudi Arabia has established specialized credit institutions to support all investment small or large businesses.

-Saudi Industrial Development Fund (SIDF):

Provides low-cost medium and long-term capital for industrial projects. In addition the Fund provides marketing, technical and financial advice to all Fund-financed projects to enhance their chances of success. With the issuance of the new foreign investment law, SIDF will extend its loans to projects fully owned by foreigners.

-Public Investment Fund:

Provides medium and long-term loans to the large-scale government and private industrial projects that Saudi commercial banks fail to finance.

- Real Estate Development Fund:

Provides medium or long-term loans to individuals or organizations for private or commercial housing projects.

-Saudi Arabian Agricultural Bank:

Provides loans to farmers and agricultural projects.

-Saudi Commercial and Islamic Banks:

Saudi commercial banks also provide investors with various types of loans.

Fifth: Private sector

These private sector companies represent 48% of the nation's gross domestic product (GDP) of 618 billion riyals. In addition to handling the manufacture, distribution and sale of domestic

products, these companies also handle the bulk of imports of consumer and industrial goods, as well as much of the export of non-oil products. Saudi Arabia is among the top 20 exporters and import markets in the world. Exports of non-oil products to some 90 countries worldwide average some six billion dollars per year.

Sixth: Investment

Saudi Arabia offers a dynamic and strong economy, perfect for serving the world's most demanding markets. There are many reason for invest in Saudi Arabia:-

- Saudi Arabia is the largest ICT market. Removing barriers, privatization and WTO accession promoting private-sector opportunities that supported by investment incentives.
- Public, private funding partnerships such as R&D co-funding initiatives by King Abdel Aziz City.
- Strong commitment to e-commerce and e-governance initiatives.
- increased enterprise and government usage of web-based services provide large-scale opportunities for contractors and service providers
- Massive public investment in connectivity for Economic Cities provides unique opportunities for green-field projects covering millions of users
- Public investment in computer and Internet literacy programs.

Study Model

According to the effect of exports, imports, labour, and oil revenue on growth level in Saudi Arabia, so we will use multi regression model where:

$Y = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5$

b_0, b_1, b_2, b_3, b_4, b_5 Are represent the variable Parameters but (b_0) is constant , and :-

x_1 : Exports

x_2 : Imports

x_3 : FDI(foreign domestic investment)

x_4 : Labour(w)

x_5 : OR (oil revenue)

Y : GDP

The predictable values of coefficient are

$b_1 < 0$, $b_2 > 0$, $b_3 > 0$, $b_4 < 0$, $b_5 > 0$

The value of degree (coefficient) of independent variable measured the responsiveness dependent variable (growth level GDP).

Empirical Study

The following table shows the empirical results of the OLS Model, table (1) is showing Excluded variable.

Table (1)

Model		Beta In	T	Sig.
1	Exports	-.159[a]	-.218	.831
	Imports	.005[a]	.017	.987
	FDI	.010[a]	.044	.965
	WL	-.023[a]	-.092	.928

This means the equation of multi regression equal (oil revenues is represent the main effect in gross domestic product)

Table (2)

Variables	B	T	F	R²	Adjusted R²	DW
(Constant)	- 6.735	-1.788	10.877	0.475	0.43	1.445
x5 OR	0.273	3.298				

Where R^2 =47% it means the model is suitable to determines the effect of oil revenue on gross domestic product level in Saudi Arabia.

X_5 (Oil Revenue) approximately illustrate 47% from Y (dependent variable)

Table (3)

ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	54.653	1	54.653	10.877	.006[a]
	Residual	60.295	12	5.025		
	Total	114.949	13			

a. Predictors: (Constant), OR

b. Dependent Variable: GDP

From this table, we can test significance of regression by comparing P. value =0.006 with significant level = 0.05.

P. value **<** significant level where regression = 0.006, it means regression is significant model.

Also we can test B5 (oil Revenue) from coefficient table.

Table (4)

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
	B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1 (Constant)	-6.735	3.766		-1.788	.099	-14.941	1.471
OR	.273	.083	.690	3.298	.006	.093	.453

We will compare P. value with sig. level

If P. value < Sig

0.006 of Oil revenue is less than of sig 0.05 it means OR is significance, The equation of Model will be :-

$$Y = B_0 + B_5 OR$$
$$Y = - 6.735 + 0.273 \ OR$$

Table (5)
Correlation Matrix

Pearson correlation	GDP	Exports	Imports	FDI	WL	OR
GDP Correlation Sig	1	.644* 0.013	.460 0.098	.166 .570	.292 311	.690** .006
Exports Correlation Sig	.644* .013	1	.713** .004	.265 .359	.592* .026	.954** .000
Imports Correlation Sig	.460 .098	.713** .004	1	.573* .032	.712** 0.004	.662** .010
FDI Correlation Sig	.166 .570	.265 .359	.573* 0.032	1	.685** 0.007	.227 .434
W L Correlation Sig	.292 .311	.592* .026	.712** .004	.685** .007	1	.450 .106
O R Correlation Sig	.690** .006	.954** .000	.662** .010	.227 .434	.450 .106	1

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

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

Results:

As this study aim to analysis main factors that effect of economic growth in Saudi Arabia we reach to these results:-

- There is positive relationship between Growth Domestic Product and oil revenue at significance level (0.006).
- There is a strong positive relationship between exports and oil revenue at significance level (0.000).
- Finally after analyzing factors that affect in Saudi Arabia economy we should know that Saudi Arabia ranked at number forty in the world. And it had ability to attract lot of investment and also increase the income resources instead of depending on oil revenues as a unique resources for income.

The Kingdom's economy is expected to continue its robust performance in coming years. The government is fully committed to continue implementation programs of economic growth in perusing the achievement of sustainable development and improved competitiveness Saudi economy.

Recommendation

- Petroleum is consider non-renewable resources, so government should give non petroleum exports maximum importance to increase level of gross domestic product.
- Motivate governments on taking over effective policies to attract local and foreign investment.
- Governments should grow relations with private sector in order to increase the growth domestic product.
- Motivate the relations with private sector especially in non-oil sector.
- Governments should create laws that motivate and diversification the sources of income and increase fields of exports.

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Authors are invited to submit original research papers, case studies, reviews, work in progress reports, abstracts, student's papers or research proposals within the broad scope of the Journal.

The following guidelines must be adhered to when submitting the papers: **No manuscript will be accepted without the Required Format. All manuscripts should be professionally proofread before the submission**

1. **Introduction**
    1.1 Manuscript should be written in English and should be submitted to the Editor-in-chief electronically through the online system as e-mail attachment to **editor@abrmr.com**
    1.2 If electronic media is not available, the original paper may be submitted on standard CD to the Editor by using full postal address which is, **The Academy of Business & Retail Management, 183 Exeter Road, Harrow, Middlesex HA2 9PG**.
    1.3 Manuscripts are to be submitted as **MS Word** documents for Windows. Other formats will not be accepted.

2. **General Manuscript Guidelines**
    2.1 **Margin:** Set the paper size to A4 with One (1) inch on all sides (Top, bottom, left, right)
    2.2 **Font size and type**: The fonts to be used are **Book Antiqua** in 12 point pitch. Main headings-14 and subheadings-12. Please use **BOLD** for paper title.
    2.3 Major and secondary headings must be **BOLD**, left-justified and in lower case.
    2.4 **Spacing and punctuation**: Space once after commas, colons and semicolons within sentences. The body of the papers should be single spaced.
    2.5 **Line spacing**: Single spaced throughout the paper, including the title page, abstract, body of the document, tables, figures, diagrams, pictures, references and appendices.
    2.6 **Length of the Paper**: The paper length should not exceed 15 pages maximum including figures, tables, references and appendices.
    2.7 **Paragraphing**: A blank line between paragraphs should be left without indent.

3.   Structure of the Manuscript
3.1   Cover page
The front page of the manuscript must be organised as follows:
  (i)   **Title of the Article** –Paper title to be centered on the page, uppercase and lowercase letters, Font size 14, bold
  (ii)   **Author (s) name (s):** Uppercase and lowercase letters, centered on the line following the title, font size 12, bold
  (iii)   **Institutional affiliation**: name of the institute and country, Uppercase and lowercase letters, centered on the line following the author(s) name, font size 12
  (iv)   **Authors note**: Provide information about the author`s departmental affiliation, acknowledgment for any financial and non financial assistance, mailing address for correspondence, email addresses for all co-authors
  (v)   **Key words:** Maximum 6 key words, font size 11

3.2. Abstract: The abstract is self contained summary of the most important elements of the paper
  (i) **Pagination**: The abstract begins on a new page
  (ii) **Heading:** Upper and lower case letters with 12 font size bold and align text to the left.
  (iii)**Length and format:** Abstract should be the summary of the paper, not more than 300 words, abstract should include purpose of the paper, design/methodology employed, findings, practical implications and originality statement. Font size 11.

3.3.   **Bod**y **of the manuscript**
From the second page the rest of manuscript should be included the introduction/background, main body of the paper which can be divided into section and sub-sections. Section and sub-section should be numbered and should be typed in BOLD. The manuscript should be organised as follows:
  1. The Introduction
  2. Main body of the paper with sections and sub-sections
  3. Discussions and conclusions
  4. Research limitations and direction for further research
  5. References
  6. Appendices (if any)

3.4.   **Use of Table, Figures and Equations**
  (a) All tables are to be centered and numbered sequentially, with their title cantered below the table.
  (b) All figures must be reproduced black and white. A good quality graphic software to be used and figures are to be cantered with the caption to be cantered below the figure
  (c) All equations must be typeset with the same word processor and type in Math type (please visit the website at www.mathtype.com for free limited trial).

4. References
The Harvard System of referencing should be used for all manuscript(s) submitted to ABRM`s Conferences and Journals for **all** sources. All sources should be listed together; there should not be separate lists for books, journal articles and electronic sources. Making a list of what you have used must be appropriate to the type of source used; the **details you need to record will vary according to the source**.

Call for Papers
Journal of Business & Retail Management Research
ISSN (Print) 1751-8202   ISSN (Online) 2056-6271

The JBRMR, a scholarly and refereed journal, provides an authoritative source of information for scholars, academicians, and professionals in the fields of business and retail management and is published twice a year. The journal promotes the advancement, understanding, and practice of business & retail management. It is peer reviewed and is the main research platform of The Academy of Business & Retail Management (ABRM). Scholars across borders are encouraged in advancing the frontiers of management education, particularly in the area of retail trade. Contributions should therefore be of interest to scholars, practitioners and researchers in management in both developed and developing countries targeting a worldwide readership through both print and electronic medium.

Although broad in coverage, the following areas are indicative and nurture the interests of the Academy with a "retail" underpinning:

» Business Ethics and Legal Issues
» Business Environment
» Business Policies, Strategies, and Performance
» Business and Retail Research
» Business Security and Privacy Issues
» Consumer Behaviour
» Emerging Advances in Business and its Applications
» Innovation and Product Development
» International Business Issues
» Management and Retail Marketing
» Marketing Management and Strategies
» Relationship Management
» Risk Management
» Retail Management and Communication
» New Venture Start-up
» Retail Buying
» MIS and Retail Management
» Demographics and Retail Business
» HRM and Retail Business
» Innovation in Retail Management

Preference will be given to papers which are conceptually and analytically strong and have empirical relevance. All papers will be reviewed according to the Journal's criterion. The Journal's website is www.jbrmr.com. For further information please write to Editor via editor@abrmr.com

This journal is indexed by SCOPUS, ProQuest, EBSCO Host, Cabell's Directory, J-Gate and ISI

Call for Papers

INTERNATIONAL JOURNAL OF BUSINESS & ECONOMIC DEVELOPMENT
(Print) ISSN 2051-848X (Online) ISSN 2051-8498

The IJBED, a scholarly and refereed journal, provides an authoritative source of information for scholars, academicians, and professionals in the fields of business and economic development and is published four times a year. The journal promotes the advancement, understanding, and practice of business & economic development. It is peer reviewed and is the main research platform of The Academy of Business & Retail Management (ABRM). Scholars across borders are encouraged in advancing the frontiers of management education, particularly in the area of economic development. Contributions should therefore be of interest to scholars, practitioners and researchers in management in both developed and developing countries targeting a worldwide readership through electronic medium.

Authors are invited to submit their original research papers, case study, review, work in progress, reports, abstract, students' papers or research proposals within the broad scope of the journal. Although broad in coverage, the following areas are indicative and nurture the interests of the Academy with an "economic development" underpinning:

- Agriculture and development
- Demography and development
- Disaster management
- Diversification and business performance
- FDI, Free trade – theory and practice
- Gender and socio-economic development
- Geopolitics of development
- Globalisation, liberalisation and development
- Health service management
- Industry sectors and development
- Information technology and business performance
- Institutions ,business and development
- Jobless growth, Labour relations and business
- Land reform – theory and practice
- Macro economic parameters and growth
- Microfinance and development
- Multinational enterprises and business strategy
- Natural resources and their internationalisation as leverage factors
- Natural resources and their internationalisation as leverages
- NGOs and entrepreneurship development

Preference will be given to papers which are conceptually and analytically strong and have empirical relevance. All papers will be reviewed according to the Journal's criterion. The Journal's website is www.ijbed.org. For further information please write to Editor via editor@abrmr.com

Call for Papers for the forthcoming conferences

ICGEEE-2016, Alexandria, Egypt
In Association with Arab Academy of Science & Maritime Technology

15-16th February 2016
2nd International Conference on Globalisation, Entrepreneurship & Emerging Economies

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ICBED-2016, New York, USA

4-5th April 2016
5th International Conference on Business & Economic Development (ICBED)

ROGE-2016, University of Oxford, UK

20-21st June 2016
6th International Conference on Restructuring of the Global Economy

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IACP-2016, Paris, France

15-16th August 2016
4th International Academic Conference in Paris

ITARC-2016, London, UK

7-8th November 2016
7th International Trade & Academic Research Conference

Authors are invited to submit original research papers, case studies, review, work in progress reports, abstracts, students' papers or research projects within the broad scope of each conference. All papers should be professionally proofread prior to submission. These conferences will be jointly organised by the *Academy of Business & Retail Management* and the *Journal of Business & Retail Management Research*.

For further detail please visit: **http://abrmr.com**

CALL FOR PAPERS
International Journal of Higher Education Management (IJHEM)
(Print) ISSN 2054-984 (Online) ISSN 2054-9857

Aims and Objectives

IJHEM is a peer reviewed journal and is a research publication platform for international scholars. Their research can be in any aspect teaching & learning covering the interests of developed and emerging countries alike. The Journal seeks to reach a worldwide readership through print and electronic media. The main aims of the Journal are:

- Publish high quality and scholarly empirical based research papers, case studies, reviews in all aspect of teaching & learning, education management and leadership with theoretical underpinnings.
- Offer academics, practitioners and researchers the possibility of having in depth knowledge and understanding of the nature of teaching and learning practices and.
- Create a forum for the advancement of education management research for the High Education sector.

Subject coverage

λ Educational policy and Policy impacts on education

λ Management of education and Relations between lecturers and students

λ Psychology of education, Psychology of student and teacher/lecturer

λ Quality of education and Improvement method

λ Global education and Its challenges and opportunities

λ E-teaching/E-learning, Educational software and multimedia for education

λ Teacher education

Distance education and Education quality

¬ Methodology of educational research, Adult and continuing education

¬ Special education, Gender, diversity and difference, Vocational education

¬ Assessment processes and mechanisms

¬ Language Education, Listening and acoustics in education environment

¬ Education History

¬ Innovative teaching and Learning methodologies; Multi-virtual environment

¬ Application of educational technology

¬ Education reforms and Practical teaching reform

Frequency:	Twice a year: February & August
Review process:	Blind peer review
Indexing with:	Ebesco Host, ProQuest, Open J-Gate, Cabell`s Directory

Preference will be given to papers which are conceptually and analytically strong and have empirical relevance. All papers will be reviewed according to the Journal's criterion. The Journal's website is www.ijhem.abrmr.com . For further information please write to Editor at editor@abrmr.com or call on +44(0)2088689883

CALL FOR PAPERS
INTERNATIONAL JOURNAL OF BUSINESS & CYBER SECURITY (IJBCS)
(Print) ISSN 2059-660X   (Online) ISSN 2059-6618

IJBCS is a scholarly and refereed journal that provides an authoritative source of information for scholars, academicians, policy makers and professionals regarding business and cyber security. It is peer reviewed journal that is published twice a year and serves as an important research platform. IJBCS is committed to publishing articles that provide insight and informs best practice. Contributions should therefore be of interest to scholars, policy makers, practitioners and researchers internationally. The Editors and Editorial Board of the IJBCS are committed to championing original academic papers that demonstrate academic rigor, originality and integrity. IJBCS seeks to minimise cyber-risk through insight and vigilance.

Authors are invited to submit their original research papers, case study, review, work in progress, reports, abstract, students' papers or research proposals within the broad scope of the journal. Although broad in coverage, the following areas are indicative and nurture the interests of the Academy with a "cyber security" underpinning:

- Business & Cyber Security; Risk awareness & mitigation
- eCrime and Cyber Terrorism
- Identity Fraud & Access Management; Information haemorrhage
- Cryptosystems and Data Protection
- Compliance, Legal Safeguards and Obligations
- Foresight Leadership and Planning; Industrial Espionage & Counterfeiting
- Critical Infrastructure Protection; Building and maintaining cyber resilience
- Security architecture and network defence
- Vigilance and scrutiny; Attitudinal change
- Knowledge transfer & training; Addressing the skills deficit
- Brand Protection; Pre-transaction customer verification
- Customer protection, reassurance and recovery
- Information Risk Management & Governance
- Digital Forensics, Evidence and Intelligence
- Costing cyber attacks; Ethical Hacking
- Financial Analysis & Control Systems
- Privacy, Surveillance and Control; Identity, Trust and Trustworthiness
- Human Factors and Behavioral Dynamics
- Security Economics, Incentives and Liabilities
- Globalisation and Outsourcing
- Crisis management following a cyber attack

Preference will be given to papers which are conceptually and analytically strong and have empirical relevance. All papers will be reviewed according to the Journal's criterion. The Journal's website is www.iijbcs.abrmr.com . For further information please write to Editor via editor@abrmr.com

Frequency: Twice a year: January and June
Review process: Blind peer review

ANNOUNCEMENT OF JOINT CONFERENCE

Academy of Business and Retail Management (ABRM)
London, United Kingdom

In association with

Arab Academy of Science, Technology and Maritime Transport (AASTMT), Egypt

Present

International Conference on Globalisation, Entrepreneurship & Emerging Economies (ICGEE), 15-16th February 2016, Alexandria, Egypt

It gives us immense please to inform you that Academy of Business and Retail Management (ABRM) is hosting the **International Conference on Globalisation, Entrepreneurship and Emerging Economies (ICGEE)** in Alexandria, Egypt scheduled during 15-16th February 2016, at Arab Academy of Science, Technology and Maritime Transport (AASTMT), Alexandra, Egypt

ICGEE-2016 offers various tracks which include: The Finance, Accounting and Organisational structure, The Growth and Economic Development, the Globalisation and International Trade, Education and teaching for the Life Long Learning Sector, The HRM, Marketing & Information Technology, Health and Social care Management. Authors are invited to submit their original research papers, case study, review, work in progress, reports, abstract, students' papers or research proposals within the broad scope of each conference. Author's submission will be published in both the conference proceeding under **The Business & Management Review** (Printed copy) and online. ABRM utilises double blind review process for all submitted papers.

For further details please see the conference brochure and visit our website on www.abrmr.com or send us an email on editor@abrmr.com.

International Journal of Business & Economic Development (IJBED)
Editorial Review Board