The Influence of Capital Market Development on Economic Growth among MENA Region Countries

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Abstract- Series of financial crisis in the last two decades has motivated the countries in the MENA region to adopt market oriented approach to stimulate their economies. The governments in the region suffering from locked savings phenomenon explored modernizing their economic procedures with establishment and development of capital market approach. These transformations were carried out in the aim that the region would elevate its growth rates to meet stability requirement prescription that would avoid widening the gap between economic and demographic growth. Much research were done in this area but most of them focused on evaluating the contribution of newly established or reactivated capital markets on the GDP growth. Some have accounted for the fact that better results could be achieved through the collaboration of the markets through easing the flows between them. This research takes these shortcomings into account and attempts to develop a framework that assists policy makers in the region to foresee the potential benefits in the future from collective actions. The sample of the study will be four main countries: Saudi Arabia, Egypt, Kuwait and Tunis. The selection accounted for representing oil exporters and oil importers categories. The data will be analyzed using three statistical techniques; Anova, simple and multiple regression technique and path analysis. The results of this study will hopefully contribute to previous academic studies as well as decision-makers in MENA to predict the effect of the transformation of the economies in the region.

Keywords: Capital markets, economic growth, financial intermediaries, Middle East and North Africa Mena region.

I. Introduction

Over the past two decades, capital markets as an economic stimulator have attracted a considerable number of public interested as a result of their vital role in mobilising savings and activate investment (Alghamedi et al, 2012). According to Har, Ee, and Tan (2008) Capital markets are closely related to economic growth and a strong economic growth is always related with bullish capital market performance.

Traditionally, stock market are considered to be the main predictor for economic growth and in order to determine stock prices, investors estimate future earnings of the firms that are closed attached to economic environment. Gurusamy (2009) has defined capital market as a market for borrowing and lending long term capital funds required by industries. Capital market offers an excellent source of external finance. It represents all the facilities and the institutional arrangements for borrowing and lending medium term and long term funds.

Capital market development is a key policy issue that goes forward to foster savings, investment and absorptive capacity in the contexts of prosperity for sizable capital flows in the medium terms. Equity market has gone rapidly in terms of both market capitalization and transaction volumes. Total equity capitalization is based on investors including individuals, institutional investors, financial institutions, and foreign investors (Fund, 2012).

OECD (2011) stated that increasing international capital flows can support long-term income growth through a better international allocation of saving and investment. However, they can also make macroeconomic management more difficult, as currently being experienced by several emerging economies, because of the faster international transmission of shocks and the increased risks of overheating, credit and asset price boom-and bust cycles and abrupt reversals in capital inflows.

The history of capital market development in MENA region is fascinating as very few stock exchanges have been established so far and that too have been established in the past five years (2007 to 2012). Some stock exchanges have been active from the 19th century and had emerged with different
economic contexts (OECD, 2012). For the last two decades the MENA region did not show the rising trend like that of other developed and emerging markets and remained pre-dominantly state owned or organized as public institutions. According to World Bank (2011) in terms of market integration from the empirical evidence it was known that MENA market are relatively decoupled from international capital markets due to some major effect of global financial crisis. Only Egypt and some GCC countries managed to provide high correlation with international capital markets. With respect to the second independent variable the size of the capital market in the economy, it will be measured by accounting for three main market factors: market capitalisation ratio, number of shares traded and value of shares traded. The market capitalisation ratio is a relationship between real GDP, instability of macroeconomic and total value of the market. Number of share traded will reflect the market liquidity and through considering time-series growth of these numbers for different markets studied it allows for comparisons between their strengths in terms of liquidity. Lastly, value of share traded will be considered in terms of unified currency (i.e. US dollar), this allows to make cross-section comparison between the markets across the region. This needs to investigate the restrictions of money flow between the countries on one side between the countries and international funds on the other side.

II. Literature review

Several empirical studies have been conducted on the relationship between stock market development and economic growth with varying results.

Levine and Zervos (1996) examine empirical association between stock market development and long-run economic growth, using pooled cross-country time-series regression of forty-one countries from 1976 to 1993. The finding revealed a strong correlation between overall stock market development and long-run economic growth, implying a positive relationship between stock market development and economic growth.

Agarwal (2001) examines the relationship between stock market development and economic growth using a time series cross-section data for nine African countries from 1992-1997, using simple correlation between some stock market variables and investment. The result suggests a positive relationship between several indicators of the stock market performance and economic growth.

Beck and Levine (2001) investigate the impact of stock markets and banks on economic growth, using a panel data set for the period 1976-98 and applying recent GMM techniques developed for dynamic panels. On aggregate, they found that stock markets and banks positively influence economic growth.

Azarmi et al, (2005) examined the empirical association between stock market development and economic growth in India. The authors found no evidence of association between the Indian stock market development and economic growth in the entire period they studied. Whereas the authors found support for the relevance of stock market development in economic development during pre-liberalization, they discovered a negative relationship between stock market development and economic development for the post liberalization period.

Nurudeen, (2009) examines the relationship between stock market development and economic growth in Nigeria by employing the error-correction method. It was shown that stock market development (market capitalization) contributes positively to economic growth. The recommendations therein include among others- removal of impediments to stock market development in the form of tax, legal and regulatory barriers; improvement of the trading system in order to increase the ease with which investors can purchase and sell shares; development of the nation’s infrastructure so as to encourage firms to grow and increase the ease with which they raise capital or funds on the stock market; employment of policies that will increase the productivity and efficiency of firms as well encourage them to access capital on the stock market; enhancement of the capacity of the Nigeria Security and Exchange Commission to facilitate the growth of the stock market, restore the confidence of stock market participants and safeguard the interest of shareholders by checking sharp practices of market operators (particularly speculators) and strengthening the capacity of the Nigeria’s security and exchange commission to check the activities of stock market speculators.

Ezeoha et al (2009) investigated the nature of the relationship that exists between stock market development and the level of investment (domestic private investment and foreign private investment) flows in Nigeria. The authors discovered that stock market development promotes domestic private investment flows, thus suggesting the enhancement of the economy’s production capacity as well as promotion of the growth of national output.

Vazakidis and Adamopoulos (2009) explore the causal relationship between stock market
development and economic growth of France for the period 1965-2007, using a VECM. The estimated coefficient of error correction term found statistically significant with a negative sign, which confirmed that the economic growth caused stock market development in France. Therefore, the inference of this study was that economic growth has a positive effect on stock market development while interest rate has a negative effect on stock market development.

Adamopoulos (2010)\(^{17}\) examines the long-run relationship between stock market development and economic growth for Germany for the period 1965-2007, applying the Johansen co-integration analysis and a Vector Error Correction Model based on the classical unit roots tests. The results of Granger causality tests indicated that there is a unidirectional causality between stock market development and economic growth with direction from stock market development to economic growth.

Ake and Ognaligui (2010)\(^{18}\) investigate relationship between Douala stock exchange and Cameroonian economic growth, using Granger-Causality tests for 2006-2010. Their findings suggest that there is no relationship between Douala stock exchange and economic growth for Cameroon. Their results do not match with the other research findings confirming a positive relationship between stock market development and economic growth.

Oskooe (2010)\(^{19}\) investigates the relationship between stock market performance and economic growth in Iran by conducting causality tests. Findings imply the causality link between economic growth and stock price fluctuations in the long run and bilateral causality running between share prices and economic growth in the short run. Therefore, it can be inferred that the level of real economic activity is the main factor in the movement of stock prices in the long run and stock market plays a role as a leading economic indicator of future economic growth in Iran in the short run.

Regmi, (2012)\(^{20}\) examines causal relationship between stock market development and economic growth in Nepal for the period 1994-2011, using unit root test, co-integration, and vector error correction models and developing NEPSE composite index as an indicator of stock market development. The finding suggests that stock market development has significantly contributed to the economic growth in Nepal.

Alghamedi and Misfer (2012)\(^{21}\), stated that “the capabilities of the capital market has a substantial contribution to economic growth”. They further added that the capital market has a good performance in terms of size and liquidity and have positive impact on economic growth.

Okoye and Nwisienyi, (2013)\(^{22}\) investigated the impact the capital market has on the Nigerian economy, using time series data for 10-year period; 2000 – 2010. The model specification for the analysis of data is multiple regressions and ordinary least squares estimation techniques. The gross domestic product was adopted as the dependent variable while the all-share index, market value and market capitalization were the independent variables. The result showed that “there are significant relationship between share index, market value and market capitalization on GDP”.

### III. General characteristics of capital markets in the MENA region

Cherif and Gazdar, (2010),\(^{23}\) explored macroeconomic and potential institutional determinants in order to understand what drives the stock market development in MENA region providing new evidence through using data from 14 MENA countries over the period of 1990-2007 using both panel data and instrumental variables and found that stock market development is highly influenced by income level, saving rate, stock market liquidity and interest rate. Similarly, Billmeier and Massa (2009),\(^{24}\) suggested three points: firstly, financial deepening influences economic growth, secondly, economic growth stimulates financial development and finally, economic growth and financial development influence each other.

Despite considerable diversity among MENA countries, some broad generalizations can be made. In the first place, there is a striking imbalance between the large amounts of savings that have accumulated in certain MENA countries and the rather early stage of development of the financial markets. According to (OECD, 2013)\(^{25}\), many studies have concluded that the MENA region lags behind other major regions in terms of financial development, which in turn has made it more difficult to attain the objectives of economic diversification and employment creation. Moreover, while the level of development of financial markets in the MENA region was comparable to that of other emerging areas in the early 1980s, the gap has widened in ensuing years. A recent study by the IMF(2012a)\(^{26}\) using various measures of financial development found that
all other regions of the world except sub-Saharan Africa, had achieved higher rates of financial development in the past two decades than the MENA region.

Although Gulf oil exporters accumulated very large amount of assets at various times in past decades, limited domestic opportunities for investment in markets and the lack of financial systems capable of deploying those funds within the region, have meant that oil-related surpluses have often been placed with financial intermediaries based in OECD countries and invested offshore. One measure of mobilisation of financial assets is that bank assets and stock market capitalization account for relatively low shares of GDP. Some of the Gulf States that aspire to become international financial centres have high ratios of financial assets to GDP and Jordan also has a rather high degree of financial intermediation.

As per the stock market capitalization in MENA region, the percentage is too low as compared to the world capital market structure. In MENA region bank assets is too high whereas debt securities are too low. (Goaied & Sassi, 2010) investigated the relationship between financial development and growth in MENA region using a unbalanced panel data from 16 countries and found that financial indicators are negatively related with growth, but theoretically it has positively demonstrated.

Beyond the low aggregate rates of financial intermediation, the concentration of financial intermediation in the banking sector is an additional challenge. It is widely seen as desirable to have balance among the three possible sources of financing a) bank credits, 2) bonds, and 3) equity. However, the financial systems of MENA countries are more heavily bank oriented than in any other world region. In the Global Financial Stability Report of 2004, the IMF estimates that bank credit amounted to 33% of worldwide financial assets. Bank assets accounted for 85% of financial assets in the MENA countries, compared to 48% in emerging Asian countries, 41% in Emerging Europe and 35% in Latin America.

Similarly, a report by analysts at the World Bank, (2013) notes that financial intermediation has been transformed by technology, innovation and liberalization and that MENA countries face serious challenges in adapting to the new highly competitive environment. Another recent research study by IMF (2012b) staff identified four main factors that underlie lagging financial performance in MENA countries a) excessively large government sectors, b) weak institutions, c) underdeveloped financial sectors, and d) inefficient investment.

IV. Capital Market and Economic Growth in MENA Regions

Theoretical and empirical evidence suggests that the stock market has a long lasting effect on the economy of a country. For example, the stock market of Dubai clearly suggests that it has a great impact on the economy of Dubai. The impact of the global recession did have some impact on the economy of Dubai but with revival in domestic demand there has been a revival in the economy of Dubai. UAE is showing interest in lending money to banks located in Dubai and this could be very helpful in reviving the economy of Dubai (Bose, 2001).

Mona Kamal (2013) studied on the relationship between financial development and economic growth in Egypt and stated that In light of the political and economic conditions that Egypt has challenged during the last two years and its influences, it is crucial to reinvestigate the link between financial sector and economic growth using recent data sample. The banking sector development has a unidirectional causal impact on economic growth. However, stock market development does not cause growth. The interpretation of such outcomes has to be taken with caution since other relevant factors are more likely to affect this link.

Al-Awad and Harb (2005) consider the relationship between financial deepening and economic growth for ten emerging Middle Eastern economies (Algeria, Egypt, Iran, Jordan, Kuwait, Morocco, Saudi Arabia, Syria, Tunisia and Turkey)using novel methods of panel co integration together with more widely-used time series methodologies, i.e. Johansen’s Co integration, Granger Causality tests, and the variance decompositions. They offered empirical evidence, suggested by the Johansen’s co integration tests and the panel that there may be a positive relationship at some levels between financial development and economic growth. However, the Granger Causality tests for panel data and the variance decompositions tests for time series data showed that this relationship was vary in the short term.

According to Ceil, (2012), several factors have contributed to the growth of the economy of UAE. One of the most important factors has been the increased oil revenues and the low interest rates.
The boom in the real estate sector also helped in developing tourism and infrastructure of Dubai. This in turn increased the amount of foreign investments in Dubai. The Dubai stock market witnessed a substantial growth in activity during 2007 on account of large IPOs such as Air Arabia, Deyaar and DFM (Oxford, 2008)\textsuperscript{34}. In 2007, the Dubai stock market showed strong operating growth and the three IPOs together accounted for nearly 48% of the total traded activity in FY 2007 (Oxford, 2008). The Dubai financial crisis also affected the stock market. The main reasons for the downfall were (Woertz, 2006)\textsuperscript{35}: 1. Extreme volatility of the dollar as most GCC countries were dependent on the dollar. 2. Crash of equities and stock market in most of the countries also led to the stock market of Dubai. 3. Liquidity squeeze as a result of the global real estate crash affected the stocks. 4. Weak regulatory framework and inconsistent policies accompanies with lack of transparency in governance were other major factors behind the downfall.

However, with the establishment of regulatory frameworks in Dubai, most of the effects of the recession have subsided. Today, Dubai stock market is once again booming with several foreign investors looking to invest in this market.

V. Research Contribution

This study aims to contribute to the understanding the capital market development policy simulations using multivariate regression analysis. This focuses on the linkage between capital market development and economic growth by performing time series analysis of firms listed in the capital market indices of four major MENA countries (Kuwait, Saudi Arabia, Egypt and Tunisia). MENA countries need to improve on its knowledge on policy making linking both economic and social factors that can enhance sustainable development policy. Theoretically, all previous researchers are consistent on the view of capital market development and its relationship to economic growth. Economic growth theory states that real GDP is not the only factor determining economic growth. This study would focus on corporate control as significant factor to monitor capital market and avoid speculation by large shareholders.

VI. Theoretical framework and methodology

The research will adopt a quantitative approach in order to measure the impact of capital markets development on the economic growth of the MENA region. The chosen approach corresponds to the fact that the data used in the analysis will be derived from totally reliable on secondary data method.

The expansion of the capital markets in the MENA region in the last two decades has impacted the macroeconomic variables in the region starting from the GDP and including the savings and investments patterns. This paper attempts to build a framework that achieves the following aims: (1) to understand the relationship between the realized growth of the economies and the development of the capital markets in the region, (2) to predict future trends based upon the findings and depict range of growth area that could be realized by implementing different.

The key hypothesis in this study is to assume that capital markets have significant impacts on the economies of the MENA countries through different channels. Figure 1 demonstrates the research model of this paper.
The independent variables in this model are the economy in terms of GDP and the size of capital markets related to GDP. The economy will be measured using three main factors: instability of macroeconomic, investment and savings. Instability of the macroeconomic in terms of inflation, interest rate and exchange rate; a stable economy takes number 1, unstable economy takes number 0. An index will be established ranking 1-10, any economy below 5 points will be considered as unstable others will be considered stable. Investment will be measured calculating gross investment of private and public sectors in the countries studied.

With respect to the second independent variable the size of the capital market in the economy, it will be measured by accounting for three main market factors: market capitalisation ratio, number of shares traded and value of shares traded. The market capitalisation ratio is a relationship between real GDP, instability of macroeconomic and total value of the market. Number of share traded will reflect the market liquidity and through considering time-series growth of these numbers for different markets studied it allows for comparisons between their strengths in terms of liquidity. Lastly, value of share traded will be considered in terms of unified currency (i.e. US dollar), this allows to make cross-section comparison between the markets across the region. The paper relies on secondary data method to collect the data from 1995 to 2012. Data for macroeconomic will be collected from national accounts published by either the countries themselves or the IMF and World Bank. The data of capital markets will be gathered from annual reports of Exchanges in the related countries. This paper will employ Statistical Package for Social Sciences (SPSS) to analyze data. Three statistical analysis techniques will be performed for this study; Anova, simple and multiple regression to discover the impact of capital market on economic growth of Mena region.

VII. Reference

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