Capital Formation in the Nigerian Capital Market and Its Effect on Economic Growth.

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Abstract
The capital market is established to principally channel long term investible funds through intermediation process for financing long term strategic projects. It thus occupies an important position in the transformation of an economy. This study therefore investigated the factors that affected long term capital formation through the Nigerian capital market and their effect on economic growth.

The study covered a period of twenty-five years spanning from 1990-2014. The econometric methodology adopted is the Ordinary Least square method (OLS). Secondary data was obtained from the Central Bank of Nigeria (CBN) statistical bulletins, Nigerian Stock Exchange (NSE) fact books, Security and Exchange Commission (SEC) market Bulletins and relevant journals.

The independent variables of market capitalization, number of quoted companies and traded value and the dependent variable of gross domestic product. Result revealed that the stock market had a significant but weak impact on the Nigerian economy. Absence of an efficient stock market starved economy of long term funds for sustainable growth and development. Government should formulate policies that will improve and develop the capital market for accessibility of long term investment funds by the industrial sector. A stricter regulatory environment is recommended for the capital market to curb their nebulous activities and relaxing some of the stringent requirements for viability of the Small and Medium Enterprises (SME's) listing on the stock exchange.

Key words: Capital formation; gross domestic product; Investment fund; Capital Market; Sustainable growth

Introduction

Diversification is a very effective means of achieving economic growth. The diversification of the economy can be facilitated by the capital market through the flow of long term funds into various mal-nourished sectors of the economy for investment. For instance, the secondary sector of the economy can be promoted by developing oil refineries and food processing industries in order to transform the oil sector and agricultural sector surplus into finished and unfinished goods and services. According to Gerald (2006), the stock market may help the economic growth through growth of savings, efficient allocation of investment resources and alluring of foreign portfolio investments. The stock market encourages savings by providing the household having investable funds the opportunity to partake in investment projects which meet their risk and liquidity needs. Stock market is therefore a financial backbone that eases the transfer of funds to productive activities for economic growth.

Investment in the primary, secondary and tertiary sectors is promoted by variety of financial instruments that enable the pooling of domestic savings by individuals into assets with attractive

yields than liquidity needs. It is far more strategic to concentrate on Foreign Direct Investments (FDIs) rather than portfolio investment to revive the economy at this time. Investors should be allowed to make investment (in Dollar terms) in already existing public assets. This can be done by Government scaling down its equity holdings from 51% or 49% as the case may be to 25% on some specific demand. This is best done through the capital market for transparency, accountability and completeness. At the same time, it serves to deepen the country's capital market activities. Other than direct borrowing which come with costs and conditionality, this is potentially the quickest option available for the government, investors and industries. With this, the assets are run more efficiently with less political interventions, free up government financial contributions to the asset maintenance and increase tax revenues. It also allows government to function efficiently as an industry regulator as opposed an operator and a regulator with inherent conflicts of interests and distractions. Critics have argued that the capital market might not be so effective in developing countries and that it may be unreasonable for these countries to promote stock markets given the huge costs and the poor financial structures. The major limitations of the Nigerian capital market are the structure of the economy, which is dominated by oil production and the low level of savings. The indirect effect of volatile and falling commodity prices, particularly crude oil, on export revenue and the inflow of capital into Nigeria cannot be ignored. This is because the country depends on revenue from oil to finance its budget and these trading countries are the primary market for our oil. It is advantageous that the capital market should be used to promote manufacturing, industrial activities, infrastructure development, health and education (Mtango 2008). The Nigerian stock markets suffer from a lot of inadequacies in its capacity to contribute to the growth of the economy. The market over the years has been characterized by little deepness with few securities, poor liquidity partly due to inefficiency, and poor infrastructure for secondary market operations. The equity market is dominated with inactive bond market, high costs of transactions, lack of refined goods investments and instruments.

Objectives of the study
Foreign investors exit from the market when there is economic crisis and this in turn adversely affects the market capitalization. This study therefore explains the contributions of the capital market to the growth of Nigeria's economy. The specific objective of this study is to analyze the impact of the Nigerian capital market on economic growth, other objectives are as follows:
1.   To show the factors that affect long term capital formation in Nigeria.
2.   To assess the level of stock market stability in Nigeria
3.   To identify the major growth drivers of the capital market.

Research hypothesis
This study will find a solution to the hypothesis formulated as follows;
H_0:   There is no significant relationship between the capital market and the growth of the Nigerian economy.
H_1:   There is a significant relationship between the capital market and the growth of the Nigerian economy.

Theoretical Framework
The Capital Market theory; the theory of financial intermediation
This research will focus on the doctrines of the theory of financial intermediation. Traditional theories of intermediation are based on transaction costs and asymmetric information. They are designed to account for institutions which take deposits or issue insurance policies and channel funds to firms. However, in recent decades there have been significant changes. Although transaction costs and asymmetric information have declined, intermediation has increased. New

markets for financial futures and options are mainly markets for intermediaries rather than individuals or firms. These changes are difficult to reconcile with the traditional theories. These are specifications, functions and features relevant to the financial services industry.

Diamond and Dybvig (1983), consider banks as coalitions of depositors that provide households with insurance against idiosyncratic shocks that adversely affect their liquidity position. Another approach is based on Leland and Pyle (1977). They interpret financial intermediaries as information sharing coalitions. Diamond (1984) shows that these intermediary coalitions can achieve economies of scale. Diamond (1984) is also of the view that financial intermediaries act as delegated monitors on behalf of ultimate savers. Monitoring will involve increasing returns to scale, which implies that specializing may be attractive. Individual households will delegate the monitoring activity to the financial intermediary. The households will place their deposits with the intermediary. They may withdraw the deposits in order to discipline the intermediary in his monitoring function. Furthermore, they will positively value the intermediary's involvement in the ultimate investment (Hart, 1995).

According to Hart and Moore, (1995), there can be assigned a positive incentive effect of short-term debt, and in particular deposits, on bankers. For example, Qi (1998), Diamond and Rajan (2001) show that deposit finance can create the right incentives for a bank's management. Illiquid assets of the bank result in a fragile financial structure that is essential for disciplining the bank manager.

Diamond and Rajan (2000) show that bank capital affects bank safety, the bank's ability to refinance, and the bank's ability to extract repayment from borrowers or its willingness to liquidate them. The legal-based view sees regulation as a crucial factor that shapes the financial economy (La Porta et al, 1998). Many view financial regulations as something that is completely exogenous to the financial industry. However, the activities of the intermediaries inherently ask for regulation. This is because they, the banks in particular, by the way and the art of their activities (i.e. qualitative asset transformation), are inherently insolvent and illiquid (for the example of deposit insurance, Merton and Bodie, 1993). Furthermore, money and its value, the key raw material of the financial services industry, to a large extent is both defined and determined by the nation state, i.e. by regulating authorities par excellence. Safety and soundness of the financial system as a whole and the enactment of industrial, financial, and fiscal policies are regarded as the main reasons to regulate the financial industry (Kareken, 1986; Goodhart, 1987; Boot and Thakor, 1993).The financial intermediaries act as coalitions of individual lenders or borrowers who exploit economies of scale or scope in the transaction technology. The notion of transaction costs encompasses not only exchange or monetary transaction costs (Tobin, 1963; Towey, 1974; Fischer, 1983), but also monitoring and auditing costs (Benston and Smith, 1976).

Empirical Literature
Okodua and Ewetan (2013), examined the relationship between stock market performance and economic growth in Nigeria. It utilized the bounds testing of co-integration procedure also known as autoregressive distributed lag estimation procedure. It found out that in the long run, overall output in the economy is less sensitive to changes in stock market capitalization as well as the average dividend yield, thereby casting doubts on the ability of the Nigerian stock market in its present level of development to serve as a barometer for measuring or predicting the overall health of the Nigerian economy.

Oluwantunsi et al, (2013), used data from the central bank of Nigeria from 1999 to 2012 to

investigate the impact of capital market and economic growth in Nigeria. Ordinary least square method of analysis was employed. The result shows that all capital market variables can jointly predict economic growth, but at an insignificant rate. The value of the total transaction is a significant independent predictor of economic growth. However, the result further shows that market capitalization and number of listed companies have a negative impact. Thus, they do not make an independent impact on economic growth. The study concluded that there is potential growth in the Nigerian capital market, but the market failed to do so because of low market capitalization, low absorptive capitalization, illiquidity and misuse of funds among others. Beckaert et al (2005), demonstrated that capital market development increases economic growth. This is similar to the World Bank (1994) report that the stock market has the power to predict the growth rate of Capital, efficiency and real per Capital GDP.

Niewerburgh, et al (2005), investigated the long term relationship between stock market and economic growth in Belgium. Their result shows that the market causes economic growth in Belgium. Ujunwa and salami (2010), used ordinary least square technique to observe the relationship between the stock market and economic growth. The study employed annual time series data from 1986 to 2006. Value of the share traded, rate of turnover and market capitalization ratio were used to represent the stock market development variables while the dependent variable is represented by per capita gross domestic product. The result shows that market capitalization and rate of turnover are positively associated with economic growth. While the stock market liquidity is negatively correlated with economic growth. This contradicts the empirical work of Levine (1996) which shows that stock liquidity is important in determining economic growth.

Ezeoha et al (2009), examined the nature of the relationship that exists between the stock market development and level of domestic private investment and foreign private investment flows in Nigeria. The study discovered that the stock market development promotes the economy promotes domestic private investment flows, that is increase in productivity as well as promotion of the growth of national output. However, the results show that stock development has not been successful in promoting foreign private investment in Nigeria.

Demetriades, et al (2001), utilized time series data from five developed countries, to examine the relationship between stock market and economic growth, monitoring for other effect of the banking system and stock market instability. Their results support the view that although bank and stock market may promote economic growth, the effect of bank is more. They suggested that the contribution of stock market to the economy may have been exaggerated by studies that use cross country regressions. Bashorun and Bakare-Aremu (2013), examined the link between the development of capital market and economic growth in Nigeria, The authors use data from CBN over a period of 30 years (1981-2011). The capital market variables are all-share index, market capitalization and numbers of deals. The authors employ vector autoregressive model and Granger causality technique. The result shows that All-shares index, number of deals and market capitalization have individual positive and significant. The pair-wise Granger causality test indicates that there unidirectional causality running from the capital market for economic development and feedback causality between market capitalization and economic growth thus; the findings support the endogenous growth theory. Ihendinihu and Onwuchekwa (2012), employed endogenous growth model on annual time series data from 1984 to 2011. The data-were used to examine the relationship between the stock market performance and economic growth. The result indicates that All-share index market capitalization and number of listed companies are positively correlated with gross domestic product. Also, value of the total transaction and market capitalization are positively

associated with gross fixed capital formation on the economic growth.

The empirical work of Yadirichukwu and Chigbu (2014), examined the impact of capital market on economic growth in Nigeria. The study used annual time series data from 1985 to 2012. They utilized regression analysis where multivariate and error correction is used to observe four formulated hypotheses. The result shows that there is an inverse relationship between the stock market capitalization ratio and long-run economic growth. This is statistically significant. However, a long run relationship is observed between value of total transaction and economic growth. The authors recommend that to improve investor's confidence, efficiency, and transparency, the favorable macroeconomic environment should be achieved.

A fifteen-year time series analysis was conducted by Alajekwu and Achugbu (2012). The study investigated the relationship between the stock market and economic growth. While stock market capitalization was used as a proxy for market size, the value of traded ratio and turnover ratio were used as a proxy for market liquidity. The econometric result shows that the market capitalization and value of traded stock have a very weak and negative relationship with economic growth this contradicted the finding of Mary and Elizabeth (2012) which show that there is a positive correlation between the rate of transactions in the capital market and the development of Nigerian economy. However, stock market capitalization has a strong positive association with stock turnover. They concluded that the liquidity has a propensity to spur economic growth. Therefore, government should boost interest of domestic investors to invest so that as to promote stock market. Ojo and Adeusi (2012), examined the relationship between capital market performances on economic growth over a period of 1981 to 2012. The authors use variables such as gross domestic product, market capitalization all share index, total value of transactions and number of deals. The model is used in this study based on Demirgue-kunt and Levine (1996). Though using ordinary least square method, the study shows that capital market has a positive impact on economic growth. The authors recommend that the government should be objective in enacting laws and reform agenda that will improve the market

Methodology

The method of Ordinary Least Square (OLS) is employed to carry the analysis on the subject matter. Thedata for this study is obtained mainly from secondary sources particularly from Central Bank of Nigeria (CBN) statistical bulletins, Nigerian Stock Exchange (NSE) fact books, Security and Exchange Commission (SEC) market bulletins and relevant journals. Regression analysis of the ordinary least square is adopted to test the relationship between the Nigerian Capital Market and economic growth measured by the numbers of independent variables offers by the markets, which are, capital market index (Proxied by growth of market capitalization), traded value, all share index etc.

Model specification

The purpose of the study a multivariate econometric model is specified and estimated. The model examines the relationship between the capital market and economic growth using selected market variables such as Market capitalization, Volume of shares traded, Number of listed securities etc. The relationship between capital market and economic growth has occupied a central position in development literature. In examining this on Nigeria's data, the two gap theory is used. It is resultant model of the Harrod-Domar model is generalized to take care of foreign trade. The gap model posits that developing countries face two gaps in their economy which they have to fill which are;

1. The domestic gap which is equal to Investment minus Savings

2. Foreign investment which is equal to Import minus Export (M-X).
Therefore,
M - X = I-S
The application of this method, however, has been extended and augmented to incorporate the capital market variables such as Market Capitalization, All Share Index, Traded Value, Total New Issue, Quoted Companies. The model in its functional form is presented as follows:
$GDP = f(MC, TV, QC)$ ……….. (2)
$GDP = \alpha_0 + \alpha_1 MC + \alpha_2 TV + \alpha_3 QC + \mu$ ………………(3)

The Apriori Expectation
$\alpha_0, \alpha_1, \alpha_2, \alpha_3 > 0$
Where
GDP – Gross Domestic Product
TV - Traded value
MC - Market Capitalization
QC - Total Number of Quoted Companies
α- Stochastic Variable

Apriori Expectation
As earlier stated the variables include Gross Domestic Product, which is taken as the dependent variable, MC, TV and QC which are the independent variables. It is expected that all the explanatory variables will have a direct relationship with the dependent variable. That is a unit increase in any of these variables will lead to an increase in the dependent variable.
This can be expressed mathematical as: $\alpha_0, \alpha_1, \alpha_2, \alpha_3 > 0$.

Data Analysis
The procedure of multiple linear regressions is employed. The t-test is employed to ascertain the significance of each of the constant parameters, while the diagnostic test based on the coefficient of determination (R^2) is used to check for the goodness of fit of the model.
From the data used and the analysis of the model specification, data on Market Capitalization, Traded Value, Quoted Companies and Real Gross Domestic Product (RGDP) at 1990 constant price were gathered and used for regression analysis. Simple Linear Regression was used as the best and most suitable model for showing relationships among variables. These relationships are shown via hypothesis testing. Model estimation shows the relationship between the RGDP as the dependent variable and market Capitalization, Traded Value, Quoted Companies as the explanatory variables. The period of observation considered is 25 years (twenty five years period) which covered 1990 to 2004.

Table 1: Model Analysis

Predictor	Coefficient	St. error	T. statistics	Probability
C	4.651829	0.911415	5.103964	0.0000
LMC	0.281737	0.062820	4.484804	0.0002
LQC	-0.958415	0.375816	-2.550224	0.0186
LTV	-0.098953	0.047308	-2.091678	0.0488

R-squared	0.931910
Adjusted R-squared	0.922183
S.E. Regression	0.044804
F- statistics	95.80517
Prob(F-Statistics)	0.000000

The R^2 (goodness of fit) of the entire regression, shows the value of 0.931910 = 93.1910 approximately 93%. This indicates that the independent variables account for about 93% of the variation in the dependent variable. The probability value for each test, tests the null hypothesis that the coefficient is equal to zero (no effect). A low value (<0.05) indicates that you reject the null hypothesis. The value of the intercept shows that the Nigerian economy will experience a 4.651829 increase when all other variables are held constant.

The coefficient of Market Capitalization is a 0.281737. This implies that Market capitalization has a positive relationship with GDP, that is, a unit change in market capitalization will cause a 0.281737 increase in GDP. This is a good performance in terms of Apriori expectation as it is a positive value. Market capitalization is positively related to GDP, as a result of increased domestic savings channeled into investment to boost economic activities. Market capitalization was also increased by the creation of second tier securities market (SMM) which allowed the small and medium sized enterprises (SME's) to participate in the stock market. Through the use of measures such as the privatization of public enterprises, launching of the exchanges intranet system and the transition to the automated trading system, market capitalization has increased the turnover of the exchange. This finding is in concordance with Ujunwa and salami (2010), who observed that market capitalization, is positively associated with economic growth. The overbearing influence of market capitalization on economic growth contradicts Okodua and Ewetan, (2013), conclusion that the overall output in the Nigerian economy is less sensitive to changes in the stock market capitalization as well as the average dividend yield. Similarly, Oluwatunsi et al, (2013), concluded that market capitalization does not have a significant pact on the Nigerian economy.

The coefficient of the quoted companies is -0.958415. This implies that unit change in number of quoted companies will cause a -0.958415 decrease in GDP. This is inconsistent with the Apriori expectation as it has a negative value. A reduction in the number of quoted companies during 1990 to 2014 due to the introduction of the bank consolidation program in 2005, fear of public control and others contributed to the decrease in GDP. This is in contrast with Ihendinihu and Onwuchekwa (2012), who observed that the number of listed companies is positively related to economic growth.

Further, result shows that a unit change in total value will cause a -0.098953 decrease in GDP. The cause of this may be traced to the mismanagement and misallocation of funds generated from shares by companies. For example, the financial reports of a company states that it will use the funds from s traded shares to improve its production technology but it ends up using the funds for other uses which are not productive. This leads to loss of profit which in turn causes payment of lower salaries and retrenchment of workers and non-payment of dividends to shareholders. This is in consonant with Alajekwu and Achugbu (2012), whose econometric result shows that the market capitalization and value of traded stock have a very weak and negative relationship with economic growth. However, it refuted or contradicted the findings of Mary and Elizabeth (2012), Ojo and Adeusi (2012) in their various studies which showed that there is a positive correlation between the rate of transactions in the capital market and the development of Nigerian economy.

Conclusion and Recommendation
The results of this study confirm that there exists a positive relationship between the stock market and the Nigerian economy. However, the relationship is statistically insignificant; this in essence means that the impact of the stock market on the Nigerian economy is weak and insignificant. The number of quoted companies and the traded value does not impact significantly on the GDP as given by the regression results. The government is therefore

advised to put up measures to boost investors' confidence and activities in the market, so that it can contribute significantly to the Nigerian economy. It is also observed that market capitalization, number of quoted companies and total value traded are influenced by external policies from the government in an attempt to achieve economic goals. There is, therefore the need to attract individual investors to the market by creating policies that will curb the various market limitations facing them. With the low number of quoted companies, individual investors are potential alternative contributors to the market capitalization. According to Kaur and Vohra (2010), these individual investors may accept the high risks in order to take advantage of high yield returns. Therefore their joint investments can lead to the growth of the economy. Policies that will facilitate an efficient capital market should therefore be enacted and encouraged. An efficient capital market should be characterized by low transaction costs, liquidity, flexibility, timely information and absence of unnecessary resistance. Efforts should also be made to ensure the availability of a liquid secondary market. Investors are willing to place their funds in the capital market if they know that their holdings are easily convertible to cash. High level of liquidity is important for investors who supply funds as well as listed companies or corporations who issue their securities in order to obtain funds.

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