

The Analysis of the Impact of the Capital Market Performance on Economic Growth in Nigeria: 1986 – 2017

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Abstract

The capital market is one sub-sector that is currently considered to drive production through its unique role as a channel of funds to investment that will impact positively on economic growth and development. The issuance of equity securities enables companies to acquire perpetual funds for development and to avoid the over-reliance on debt financing from the money market; thus, equity finance remains the cheapest and flexible source of finance. In view of this, this study addresses the impact of capital market performance on economic growth in Nigeria. It uses time-series secondary sourced data that cover the period 1986 to 2017 and relies on Ordinary Least Square method to analyse the long-run relationship. It also uses Pairwise Granger Causality test to examine the direction of causation between explanatory variables and dependent variable. Empirically, the results show relationship between economic growth (Y) and market capitalization (MCP) and degree of openness (OPN), while a negative relationship exists between Y and value of share traded (STV) and Portfolio Investment (POI). MCP significantly impact on Y at 5 percent level of significance and depicts a unidirectional causal relationship with Y. The coefficient of determination (R^2) is 0.913680, suggesting 91 percent variation in economic growth as accounted for by the explanatory variables. The study recommends government should liberalize the economy to encourage foreign investors and deepen the equity market, as well as contribute fund injection into the economy, as well as create policies that would encourage large participation of stock investors and quick access to securities trading.

Keywords: Capital Market Performance, Economic Growth, Nigeria.

1. Introduction

The basic problem every economy seeks to solve is what goods and services to produce, what techniques to adopt in the production and who are the beneficiaries. They seek these in order to achieve macroeconomic objectives such as: economic growth, balance of payments equilibrium, employment creation, price stability, equitable redistribution of income, and interest rate stability, among others. The achievement of these goals is expected to reflect in improvement in the living standards of the nationals and citizenry through development of the agricultural, industrial, financial (money and capital markets), information and communication technology, mining and exploration, and service sectors.

Successive governments in Nigeria have made attempts over the years to match the available resources with policies to achieve her economic objectives. Their attempts so far were centred on direct investment of government funds on production, provision of enabling environment for the private sector to thrive and invest; development of the financial institutions to mobilize funds for private and public investments and free trade by adopting liberalization policies, among others. Moreover, more is yet to be done to provide the needed environment that will spur the desire growth.

The capital market is one sub-sector that is currently considered to drive production through its unique role as a channel of funds to investment that will impact positively on economic growth and development. The issuance of equity securities enables companies to acquire perpetual funds for development and to avoid the over-reliance on debt financing from the money market; thus, equity finance remains the cheapest and flexible source of finance (Osinubi, 2002). In history, the world realized this importance of capital market development long ago from the early 17th century when the first stock exchange in Netherlands was established. This was due to public shares issued in the year 1602 by Vereenigde Oost-Indische Compagnie (VOC) to attract the capital needed for further expansion and led to the development of Amsterdam (Capital city of Netherlands) into the main trade centre of the world (Petram, 2011). In furtherance to create access to funds mobilization for new and expanding corporations for economic growth, countries all over the world established and developed their capital markets.

Shamsudeen (1998) espoused that the sector has not performed its goal of fund mobilization in Nigeria given the number of years of its establishment and the substantial financial resources available in the country, especially when compared with other developing countries such as Malaysia, Indonesia and South Africa.

In Nigeria, Abu (2009) identifies high tax, legal and regulatory barriers, liquidity, trade policy, infrastructure and operators' sharp practices as factors influencing capital market failure. Atoyebi, *et al.*, (2013) identified market index, value of transaction, market capitalization and government stock as variables that are capable of influencing economic growth in Nigeria. High cost of raising funds, institutional and regulatory

reform also influence capital market development and economic growth in Nigeria (Adeniyi, 2010).

1.1 Objectives of the Study

In view of the above, this paper seeks to examine the following research objectives:

1. To examine the impact of capital market performance on economic growth in Nigeria.
2. To determine the direction of causality between portfolio investment and economic growth in Nigeria.

1.2 Scope of the Study

This paper empirically investigates whether measures of capital market performance like market liquidity, market size, inflation, portfolio investment, savings and openness of the market to foreign investors correlate with economic growth, using data on the Nigerian economy from 1986 through 2017. The period is chosen in order to capture a significant part of operation of capital market in Nigeria to date. This is because it covers when measures undertaken as part of the Structural Adjustment Program (SAP) to developed the sector and when abandoned in 1994. Again, it is the period when the capital market was instrumental to the initial twenty-five Banks that were able to meet the minimum capital requirement of ₦25 billion during the banking sector consolidation in 2005.

2. Literature Review

2.1 Conceptual Issues

Financial market is categorized into money market and capital (stock) market. They serve the purpose of transferring funds from where it is idle to where it can be used for productive activity. Financial market is an intermediary that ensures the lenders and the borrowers have value for their transaction as the lenders' funds are interest-based whilst the borrowers take best advantage of the funds in production. By and large, more researches had been concentrated on the impact of money market financial intermediation and economic growth, until recently, when emphasis was shifted to capital market development and economic growth (Seetanaha, *et al.*, 2010; Levine and Zervos, 1996; and Valeriano and Liu, 1999).

The capital market has been described by Akingbohunge (1996) as the market where medium to long-term finance can be raised. Further expatiation was provided by Mbat (2001) who described Capital market as a forum through which long-term funds are traded. The capital market offers access to a variety of financial instruments that enable economic agents to pool, price, and exchange risk and through assets with attractive yields, liquidity and risk characteristics, it encourages savings in financial form and is very essential for government and other institutions in need of long-term funds and for suppliers of long-term funds (Nwankwo, 1991).

The stock market occupies a central place in the capital market which is the market for long term financial instruments and provides a framework channelling funds from the surplus unit of the economy to the deficit unit. It is seen as the nucleus of the capital market so much so that studies on the capital market development are incomplete without reference to the stock market. As a matter of fact, stock market development indicators are also used as capital market development indicators in numerous empirical works (Kolapo and Adaramola, 2012; Acquah-Sam and Salami, 2014). Thus a capital market cannot function efficiently without a well-functioning stock market.

According to Anyanwu (1998), capital market development of a country may affect economic growth through one or a combination of the following indicators; market liquidity, market size, volatility, shareholding (ownership) concentration, institutional development and openness to world capital markets. The essence of capital market development is to ensure the ease of portfolio investment transactions so that investment becomes less risky and more attractive to investors. It should improve the allocation of capital and enhance prospects for long-term economic growth. It could be done through information dissemination and reduction in cost of transaction. Sanda, Mikailu and Tukur (2005) believed that ownership concentration, which refers to the proportion of a firm's shares owned by a given number of the largest shareholders when high, tends to create more pressure on managers to behave in ways that are value-maximizing. They contended that at low levels of ownership concentration, an increase in concentration will be associated with an increase in firm value, but that beyond a certain level of concentration, it might be negative.

Valeriano and Liu (1999) identified three channels through which stock market development could affect economic development as; increase in saving rate, reduction in information asymmetry and transaction cost, and improvement in the allocation of resources. They further espoused on the channels that a developed capital market raises the saving rates of savers so long it is profitable to do so. Furthermore, exerting corporate governance by stakeholders will reduce the agency problem thereby lower the cost of information and transaction and finally transfer funds to where they are mostly needed for investment. Anyanwu (1998) adversely viewed the channel in terms of market liquidity that more liquid market leads to decrease returns to investment, it discourages investors from exerting corporate governance because investors will be naive of the

market situation, widen the gap of information, and reduce risk of investment. However, Sanda, Mikailu and Tukur (2005) observed that the free rider problem of the stakeholders in the market tends to prevent any of the numerous owners of equity from bearing the cost of monitoring the managers. Besides, the small number and value of stocks listed on the exchange are probably a manifestation of severe problems affecting the exchange; such problems include a serious liquidity problem, low demand for securities and low trading volume. Idowu and Babatunde (2012), in their contribution, reported that De la Torre and Schmulker (2007) identified five channels through which stock market development can positively reflect on economic growth. They are:

- i. Reduction in the cost of information acquisition and as a consequence improvement in resource allocation and economic growth.
- ii. Helping investors to mitigate the investment risks and diversifying risk. This is because investors typically dislike risk.
- iii. Helping investors to deal with liquidity risk.
- iv. Improving corporate governance through reduction in monitoring costs, and
- v. Reducing transaction costs associated with collecting savings from disparate investors thereby increasing savings, exploiting economies of scale and overcoming investment indivisibilities.

2.2 Empirical Review

Kolapo and Adaramola (2012) studied the impact of the Nigerian capital market on economic growth from the period of 1990-2010. Their conclusion revealed a positive relationship between the activities in the stock market and economic growth. Anson and Zhou (2011) analysed whether capital market development is an important factor in economic growth. They adapted the model used in the work of Levine and Zervos (1996) and Demirguc-Kunt and Levine (1995) and estimated it over the period 1988 – 2008. Using cross-country panel data from China, USA, United Kingdom, Japan and Hong Kong, their result suggested that capital market development has independently a strong positive correlation with industrial production. Seetanaha, *et al.* (2010) also affirmed the view that stock market contributes positively to economic growth. This they examined in their work on banking sector development, stock market development, and economic growth in a unified framework. They employed panel VAR procedures to examine the complex linkages between stock market development, bank development and economic growth for the case of 27 developing countries over a period of 1991 - 2007.

Alvan (2009) compared the performance of the Nigerian stock market to that of five African countries (i.e., Ghana, Botswana, Egypt, South Africa and Kenya) over the period of 1997-2006. He concluded that regardless of the matrix used; nominal, real or risk-adjusted performance, the Nigeria stock market had performed well and reflected positively on the economic growth. However, Nigerian performance falls below Botswana, Egypt and South Africa, but above Ghana and Kenya. An attempt was also made by Abu (2009) to examine the relationship between stock market development and economic growth in Nigeria, by employing the error-correction method over the period of 1981-2007. He found that stock market development contributes positively to economic growth.

Salvatore (2003) and (2006) studied Stock Market Development and Economic Growth and empirically showed clearly that stock market activity correlated to real economic growth. Olofin and Afangideh (2006) investigated the role of financial structure in economic development in Nigeria using aggregate annual data from 1970 to 2005. They adopted three-stage least square estimation technique and found that a developed financial system alleviates economic growth. To examine the causal linkage between stock market development, financial development and economic growth, Guglielmo, Peter and Soliman (2004) used some selected countries including Argentina, Chile, Greece, Korea, Malaysia, Philippines and Portugal and covered period 1977:1-1998:4 using quarterly data. The empirical result showed that a well-developed stock market positively affects economic growth in the long run indirectly through faster capital accumulation, and better resource allocation.

Levine and Zervos (1996) used data on 49 countries from 1976 to 1993 and studied the empirical relationship between stock market development, banking development, and long-run economic growth and found that stock market liquidity positively and robustly correlated with economic growth, capital accumulation, and productivity growth. Hamid and Agarwal (1999), using data for 21 countries from 1977-1997 and employing a dynamic panel method and two-stage test, concluded that positive direct and indirect relationships exist between stock market development and long-run growth. Valeriano and Liu (1999) used pooled data from fifteen developed and developing countries from 1980 to 1995 and found that stock market liquidity has positive relationship with growth as well as stock market development and financial intermediary development are complements instead of substitutes.

On the contrary, Nicholas and Apostolos (1997) investigated the growth effects of stock-market development in Greece over the period 1958-95. Adopting time-series data for individual countries and using the technique of cointegration and the error correction, they reported that stock-market development does not affect positively the output growth rate in Greece. With the aid of panel and cross-section studies (Demirguc-Kunt and Levine, 1995) found that financial structure is irrelevant to economic growth. According to them, it is the

overall provision of financial services and not independent financial service that are important.

Adam and Sanni (2005) examined the role of stock market in Nigeria's economic growth using Granger-Causality test and regression analysis. The study discovered a one-way causality between GDP growth and market capitalization and a two-way causality between GDP growth and market turnover. They also observed a positive and significant relationship between GDP growth and turnover ratios. The study advised that government should encourage the development of the capital market since it has a positive relationship with economic growth.

Guglielmo, Peter and Soliman (2004) examined the relationship between stock market development and economic growth. They provided a theoretical basis for establishing the channel through which stock markets affect economic growth in the long run. They examined the hypothesis of endogenous growth models that financial development causes higher growth through its influence on the level of investment and its productivity. The empirical part of this study exploited techniques recently developed to test for causality in VAR. The evidence obtained from a sample of four countries suggested that investment productivity is the channel through which stock market development enhances the growth rate in the long run.

Atoyebi, *et al.* (2013) addressed the problem of capital market and economic growth in Nigeria using annual data from 1981 to 2010 and test for the significant impact using ordinary Least Square technique and vector error autoregressive technique. Their analysis revealed that market index and market capitalization has positive impact on real gross domestic product.

Omigie, *et al.* (2013) analysed the linkages of government spending, stock market development and agricultural output in Nigeria. They applied error correction model and two-stage-least squares regression techniques on time series data from 1979 to 2008 and reported that total turnover of the agricultural sector of the stock market influenced output positively.

Lemma and Isaac (2008) addressed the African stock markets which have seen a rapid growth in the number of exchanges and stock market capitalization boom over the last fifteen years. They identified three challenging factors of stock market development in Africa. These are; gap in functional efficiency, gap in operational efficiency and risk factor. The gaps in liquidity and market depth were attributed to functional efficiency gap, and macroeconomic and political instability, fluctuations in African currencies, crisis of international confidence as risk factors.

Yarte and Charles (2007) examined the economic importance of stock markets in Africa and they discussed policy options for promoting the development of the stock market in Africa. In their research they selected 20 African countries (including Nigeria) and concluded that the stock markets have contributed to financial growth of large corporations in certain Africa countries and found positive and significant impact of value of share traded on growth. Though inconclusive, they suggested that African stock exchanges should integrate and need better technical and institutional development to address the problem of low liquidity.

Tobias and Kimani (2011) investigated the causal relationship between stock market performance and economic growth in Kenya for the period of 2001 to 2010 using quarterly secondary data. They statistically tested for the link through the use of Granger causality test and Vector Autoregressive model and concluded that there is unilateral causality.

Alajekwu and Achugbu (2012) examined the role of stock market development on economic growth in Nigeria using a 15-year time series data from 1994 to 2008. They employed Ordinary Least Square techniques to measure the relationship and arrived at the conclusion that stock market capitalization and value of share traded ratio have a very weak negative correlation with economic growth. They saw that market capitalization has strong relationship with turnover ratio which implies that liquidity has the propensity to spur growth in Nigeria.

2.3 Theoretical Framework

The theoretical foundation for this study is based on the new growth theory (endogenous growth) models which explicitly models the production of knowledge, or R&D. It was explained by Arrow (1962) and Romer (1986) that capital accumulation embeds technological improvements. The endogenous growth models emphasized technical progress resulting from the rate of investment, the size of the capital stock, and the stock of human capital. Thus, capital market development enters into this economic growth framework through the residual attributed to technical progress. It does enter by providing conducive environment for entrepreneurs to source for large funds for initial investments or to expand existing businesses which eventually translate into capital stock accumulation of the economy. Moreso, investment on education or research and development of a firm has not only a positive effect on the firm itself but also spillover effects on other firms and hence on the economy as a whole (Philippe and Peter, 1998).

3. Methodology

This study empirically investigates the impact of the capital market performance on economic growth in Nigeria using time-series data that cover 1986 to 2017. Since most time-series data are non-stationary, we carried out

unit root test to examine the existence of stochastic non-stationarity in the series before other analyses. This is because a non-stationary series would result to spurious regression output. A descriptive statistical analysis is run to ascertain the distribution and normality of the variables. Furthermore, correlation test is run to determine the direction of relationship between the variables under study and relies on Ordinary Least Square (OLS) to analyse the long-run relationship. It also uses Granger Causality Test to ascertain the direction of causation. This study adopts the endogenous growth model with a single parameter (usually A) to show the technological progress. It uses the assumption that the production function does not exhibit diminishing returns to scale to lead to endogenous growth.

3.1 Model Specification

This study adopts the endogenous neoclassical growth model of Arrow and Roman which was demonstrated by Levine and Zervos (1996); Anson and Zhou (2011). However, we modified the model in Abu (2009) which includes, market capitalization, turnover ratio, openness, all-share index, and discount rate by adding portfolio investment ratio, liquidity ratio, savings ratio and consumer price index. This model is also in line with Levine (1990), Anyanwu (1998), Osinubi (2002), Seetanaha, *et al.* (2010), Anson and Zhou (2011) and Kolapo and Adaramola (2012). Thus our model is as follows:

$$Y = \alpha_0 + \alpha_1(MCP) + \alpha_2(STV) + \alpha_3(OPN) + \alpha_4(POI) + U \quad (1)$$

Where;

Y is Real Gross Domestic Product (RGDP)

MCP refers to value of market capitalization

OPN refers to degree of openness of the economy

STV is Total Value of Shares Traded

POI is Portfolio Investment

U refers to the error or disturbance term.

In addition, all the variables are expressed in their natural logarithm form (ln).

A priori expectation requires that $\alpha_1, \alpha_2, \alpha_3,$ and $\alpha_4, >0$.

4. Data Analysis and Result Discussion

Table 1: Unit Root Test

Variables	ADF: At Level	ADF: At 1 st Difference	ADF: At 2 nd Difference	Order of Integration
Y	-0.156704 Critical Value 1% = -3.9991 5% = -2.9627 10% = -2.6200	-1.899470 Critical Value 1% = -3.6752 5% = -2.9665 10% = -2.6220	-4.521338 Critical Value 1% = -3.6852 5% = -2.9705 10% = -2.6242	I(2)
MCP	0.524964 Critical Value 1% = -2.6661 5% = -2.9627 10% = -2.6200	-4.684119 Critical Value 1% = -3.6752 5% = -2.9662 10% = -2.6220	-	I(1)
STV	-1.553691 Critical Value 1% = -3.6852 5% = -2.9705 10% = -2.6242	-5.288416 Critical Value 1% = -3.6959 5% = -2.9750 10% = -2.6265	-	I(1)
OPN	-2.419155 Critical Value 1% = -3.6661 5% = -2.9627 10% = -2.6200	-4.824752 Critical Value 1% = -3.6752 5% = -2.9662 10% = -2.6220	-	I(1)
POI	-4.119212 Critical Value 1% = -3.6661 5% = -2.9627 10% = -2.6200	-	-	I(0)

Source: E-views Extract, 2018

Table 1 shows the stationarity result using unit root test. Augmented Dicker-Fuller (ADF) statistic is used under constant linear trend equation. Given the sample data of 32 and 1lag difference, we compared the ADF statistic with the unit root critical t-value at 1%, 5% and 10% and observed the rate of real gross domestic

product (Y) is stationary at second difference I(2); market capitalization (MCP), total value of share traded (STV), and openness (OPN) are stationary at first difference while portfolio investment is stationary at level I(0). Thus, it implies that these variables can affect the long run prediction of Nigeria's economic growth level.

Table 2: Summary Statistics of Data Set

	Y	MCP	STV	OPN	POI
Mean	33416.67	4401.620	387070.9	0.341296	1654.993
Median	24477.91	567.4000	42918.45	0.359001	81.70000
Maximum	69023.93	19077.40	2350876.	0.589182	36851.80
Minimum	15237.99	6.800000	225.4000	0.073603	-1618.800
Std. Dev.	17281.67	6227.846	594559.9	0.108845	6743.922
Skewness	0.784741	1.170355	1.727969	-0.235014	4.972799
Kurtosis	2.200290	2.878862	5.487033	3.275146	26.47191
Jarque-Bera	3.878510	6.866999	22.66105	0.370790	812.3071
Propability	0.143811	0.032274	0.000012	0.830776	0.000000
Observations	30	30	30	30	30

Source: E-views Extract, 2018

The common summary of statistics of the capital market indicators are presented in Table 2. The mean of real growth rate (Y) is ₦33,416.67b, market capitalization value (MCP) is ₦4401.620b, value of share traded (STV) is ₦38,7070.9m, openness of economy (OPN) to GDP is 0.341296, portfolio investment ratio (POI) is ₦1654.993m. This shows the variability of the variables in terms of magnitude, suggesting bias result in level estimation. OPN has the highest maximum value of 88.24 at the same time STR has the lowest maximum value of 2.68. The Jarque-Bera statistics test whether the variables are normally distributed. It measures the difference of the skewness and kurtosis of the series with those from the normal distribution. Therefore, the probability indicates that variables MCP, STV, and POI are significant and non-normally distributed at 5% level, whilst Y and OPN are insignificant and normally distributed at 5% level.

Table 3: Correlation matrix

	Y	MCP	STV	OPN	POI
Y	1.000000	0.946734	0.833841	0.029968	-0.109350
MCP	0.946734	1.000000	0.909619	-0.072842	-0.075967
STV	0.833841	0.909619	1.000000	-0.022594	-0.073854
OPN	0.029968	-0.072842	-0.022594	1.000000	0.026857
POI	-0.109350	-0.075967	-0.073854	0.026857	1.000000

Source: E-views Extract, 2018

Table 3 presents the correlation matrix of the variables. The result shows direct relationships between real growth rate (Y) and market capitalization (MCP), total value of share traded (STV) and openness of the economy (OPN) at 0.946734, 0.833841 and 0.029968, respectively; while indirect relationships exist between Y and portfolio investment (POI) at -0.109350.

Table 4: Pairwise Granger Causality Tests

Null Hypothesis:	Obs	F-Statistic	Probability
MCP does not Granger Cause Y	30	0.20158	0.81875
Y does not Granger Cause MCP		14.4515	6.7E-05
STV does not Granger Cause Y	28	0.77847	0.47083
Y does not Granger Cause STV		10.1221	0.00070
OPN does not Granger Cause Y	30	0.22702	0.79853
Y does not Granger Cause OPN		1.58885	0.22409
POI does not Granger Cause Y	30	0.25034	0.78046
Y does not Granger Cause POI		0.95877	0.39701

Source: E-views Extract, 2018

The causality test results suggest a unidirectional causation between the real GDP (Y) and the value of market capitalization (MCP), as well as Y and value of share traded (STV). That is, there is no "reverse causation" from MCP to the Y. These are evident as the probabilities are less than 0.05 level of significance. Furthermore, there is independence "no causation" between the Y and OPN as well as Y and POI. This is a clear indication of the relative positive impact the capital market played on the economic growth of the country

Table 5: Regression Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	16112.54	3492.900	4.612942	0.0001
MCP	3.112208	0.395697	7.865136	0.0000
STV	-0.005433	0.004135	-1.314015	0.2008
OPN	17233.13	9409.249	1.831510	0.0790
POI	-0.104726	0.151062	-0.693266	0.4945

Source: E-views Extracts, 2018

Table 6: Regression Statistics

R-squared	0.913680	Mean dependent var	33416.67
Adjusted R-squared	0.899869	S.D. dependent var	17281.67
S.E. of regression	5468.512	Akaike info criterion	20.20241
Sum squared resid	7.48E+08	Schwarz criterion	20.43595
Log likelihood	-298.0362	F-statistic	66.15541
Durbin-Watson stat	1.364755	Prob(F-statistic)	0.000000

Source: E-views Extracts, 2018

Table 5 presents the long-run analysis showing the relationship between real gross domestic products (Y) and explanatory variables-market capitalization (MCP), value of share traded (STV), openness of the economy (OPN) and portfolio investment (POI). The results depict that Y has a direct relationship with MCP and OPN, which means that for every one-naira increase in the value of MCP and OPN independently keeping other variable constant, Y will increase by ₦3.1b and ₦17,233.13b respectively and vice-versa. However, Y has inverse relationship with STV and POI. That is, a naira increase in STV and POI independently, Y will decrease by ₦0.005433b and ₦0.104726b respectively and vice-versa.

Statistically, the probability indicates that only MCP is significant at 5% level while other variables are not statistically significant, except OPN that is significant at 10% level. It means that only MCP that can create impact on Y. Table 6 presents the diagnostic statistic of the OLS analysis such that the coefficient of multiple determination (R^2) shows that the joint association of the explanatory variables account for about 91% of the variation in Y. F statistic is significant and confirm the adequacy of the model. Durbin-Watson test is 1.37 showing some presence of positive auto-correlation.

4.1 Policy implications

The following are the policy implications drawn from the empirical results presented above.

Firstly, it was observed that market capitalization (MCR) posits a significant positive relationship with the growth to signal that the size of the market does contribute to economic growth as it accommodates investment on securities that will be channelled to real production of goods and services which eventually translates to increased economic growth over time. This means that stock market creates impact on economic growth in Nigeria. This is in line with Demirguc-Kunt and Levine (1996) and Abu (2009).

Secondly, the Share Traded Value (STV) shows negative relationship with economic growth (Y). It implies that more liquid market will lead to decreased returns to investment. According to Anyanwu (1998), it discourages investors from exerting corporate governance because investors will be naive of the market situation. It thus emphasizes better policies that will improve the level of shares trading through large participation of investors and the ease to convert their stock into liquid assets. This will automatically raise the overall liquidity ratio and active stock market over time (Valeriano and Liu, 1999).

Thirdly, in terms of trade openness, it is observed that degree of openness (OPR) has positive relationship with economic growth (Y). This in fact supports liberalization as wide and uncontrolled liberalization will not pose threat to the economy. Therefore, emphasis should be placed on the role of liberalization to support investment and growth.

Finally, portfolio investment which is expected to positively affect economic growth proves opposite. This suggests more policies implementation on sustainable liberalization of the economy so as to accommodate foreign investors directly or indirectly on stock trading that will eventually impact positively on economic growth. It was also observed that portfolio investment does not Granger cause economic growth and vice-versa.

5. Conclusion and Recommendations

The Nigerian capital market by now should have been reckoned with as the major purveyor of economic growth, since the idea is that deregulation of the market in 1986 Structural Adjustment Programme (SAP) would guarantee the transfer of funds from idle balances to productive activity.

Over the years, researchers have studied the relationship between economic growth and capital market development using different or similar macroeconomic or/and institutional variables as proxies. By and large,

they revealed in separate studies positive and negative relationships (Levine and Zervos, 1996; Demiguc-Kunt and Levine, 1995; Nicholas and Apostolos, 1997; Alvan, 2009; Abu, 2009; Seetanaha, *et al.*, 2010; and Kolapo & Adaramola, 2012).

Therefore, this research investigated the impact of capital market development on economic growth in Nigeria. It used real gross domestic products as the dependent variable and capital market indicators values (market capitalization and liquidity) as explanatory variables. Other controlled variables included are portfolio investment and degree of openness of the economy. The study used Ordinary Least Square method to analyse the long-run position with data that covered 1986 to 2017 drawn from Central Bank of Nigeria Statistical Bulletin (CBN, 2017).

This study found out that capital market indicators have relationship with economic growth in Nigeria but does not create impact except market capitalization. The result also showed unidirectional causation between market capitalization and economic growth.

We therefore recommend the following:

- i. Government should liberalize the economy to encourage foreign investors and deepen the equity market as well as contribute capital injection into the economy. This is to reverse the negative relationship of the portfolio investment as suggested by the result. Though, the free movement of goods and service across borders be controlled to avoid abuse and threat to local investors.
- ii. Government and policymakers should create policies that would encourage large participation of stock investors and quick access to security trading. This would improve the liquidity of the market well enough to create the necessary impact required for growth.

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