# CAPITAL MARKET PERFORMANCE INDICES AND ECONOMIC GROWTH IN NIGERIA

**AFANG Helen Andow**          **Department of Business Administration**
                               **Kaduna State University, Kaduna.**

**MUHAMMAD Ahmad Ahmad**        **Department of Accounting**
                               **Army University Biu, Borno State.**

**Abstract**

*This paper investigates the impact of Nigerian Stock Market performance on the economic growth of Nigeria using a 36-year time series data from 1981-2016. The study measures the relationship between stock market development indices and economic growth. ADF test was adopted for stationarity data employed; multiple regressions were used in analysing the time series data. The dependent variable of the study is the Nigerian economy proxy by Gross Domestic Product while the independent variable is Capital market proxy by Aggregate bank lending (adopted as a proxy for financial intermediation), Market Capitalization (adopted as a proxy for market size) and turnover ratio (adopted as a proxy for market liquidity). Results show that GDP is stationary at 1st differencing while the dependent variables where stationary at levels. Also, the results from co-integration proved that all the variables are integrated and have a long-run relationship whereas the VECM results showed that only aggregate bank lending has a negative and significant short-run relationship with GDP while market capitalisation and turnover ratio are the short-run adjustment mechanisms that capture response in order to boost GDP. The study concluded that Aggregate bank lending; Market Capitalization and Turnover Ratio played a significant role towards spurring economic growth in Nigeria. Therefore, the study recommends that banks should be encouraged by Central Bank of Nigeria to improve in their intermediation role and also to set interest rates at a low level so that the public can afford to take loans from the banks without a high interest rate which will lead to growth through the real sector and also Security and Exchange Commission should be more pro-active in its monitoring role in order to ensure that rules and guidelines are strictly adhered by the capital market so that investor's confidence will be enhanced*

**Keywords***: Economy; Growth; Stock Market; Gross Domestic Product; Market Capitalisation.*

## Introduction

The Nigerian economy like many is divided into so many sectors, these sectors are managed by different ministries, government institutions and parastatals which are expected to enhance the economic well-being of its citizens. To be sustainable, economic growth must be constantly nourished by the fruits of human development such as improvements in workers' knowledge and skills along with opportunities for their efficient use: more and better jobs, better conditions for new businesses to grow, and greater democracy at all levels of decision making. Economic growth is one of the most pressing issue that require a concerted effort between businesses, government and society. Over long periods of time, economic growth comes mainly from one source: productivity, the value of goods and services each worker can produce in a unit of time. In turn, productivity comes from new ways of doing things: New ideas, new inventions, new products, new processes, new technology; new ways of organizing companies; new and better skills among workers. Financial systems also contribute to economic growth by providing funding for capital accumulation and by helping the diffusion of new technologies. A well-developed financial system is likely to mobilise savings by channelling small savings of individuals into profitable large-scale investments, while offering savers a high degree of liquidity. The capital market by the nature of its activities is among the most heavily regulated financial sector in both developed and developing economies (Sa'eedu, 2014). Globally, the stock market status gives a clear picture of the level of soundness of a country's economy, as it measures how stable a country's economy is to the extents that a stable economy may rely upon it. The level of Economic Development in a nation and the state to which most of activities in an economy can rely effectively on the stock market safety are the major

indicators of a sound balance between a healthy financial system and a stable macro economy. Osaze and Anao (1999) opined that, the cornerstone of a financial system anywhere is the capital market since it helps to provide the needed funds for financing businesses, economic institutions and activities, and also some of the government programs. Capital market as a vehicle for channelling investment opportunities played a vital role in achieving greater economic activities in Nigeria. Its major role is identifying alternative sourcing to where capital is lagging (Salmanul-farisi, 2013).

The stock market has helped the Nigerian government and corporate entities in Nigeria to raise long-term capital for financing new projects, and expanding and modernizing industrial/commercial concerns (Nwankwo, 1991). Moreover, as concluded by Bencivenga, Bruce, Smith and Rose (1996) that a stock market that is highly-developed will induce a long-run growth in an economy. In any country, the capital market is amongst the main pillars that bring about long-run economic growth and development. The stock market also serves range of broad clientele, including government of different levels, individuals and corporate bodies inside and outside the economy. The formation of capital consists of savings that are accumulated out of either individual's current incomes or organizations current incomes (Sa'eedu, 2014). In other to achieve growth in an economy savings have to be allocated by way of identifying entrepreneurs first, and then funding it with the clear intention of the implementing newly invented products and new processes of production. This process is done only through financial intermediation, and this financial intermediation will only be possible if there are instruments as well as financial institutions such as banks and other not bank suppliers of loan (financial institutions that are well-developed, mortgage lenders and financial companies) in place, working together with a common purpose of promoting growth and development in an economy (Abu & Anthony, 2013).

The introduction of Structural Adjustment Programme (SAP) in Nigeria promoted by the World Bank and the International Monetary Fund has resulted in significant growth of the financial sector and the privatization exercise which exposed investors and companies to the significance of the stock market (Alile, 1996; Soyode, 1990). The banking system remains an engine of growth in Nigeria being the supplier of credit which lubricates the economy's engine of growth by intermediating between the surplus and deficit savings unit, within an economy, banks mobilize and are expected to facilitate efficient allocation of national savings thereby providing the potentials for increasing the quantum of investment and hence national output.

The present crisis of the Nigerian economy and its persistence has forcefully raised the issue of what is fundamentally wrong with it. Despite the huge amount of domestic resources, both human and material, which Nigeria is endowed with, the poverty and suffering of the overwhelming majority of the people are intensifying. Unemployment is growing higher leading to increase in poverty and hunger. One of the disastrous causes of this seems to be mismanagement, the adverse consequences which has befallen most Nigerians and future generations are likely to meet the same condition if present trends persist. Looking back into the past, it could be observed that this present situation should not be our national and inevitable fate. The people of Nigeria for centuries have been exceptionally resourceful and engaging in relentless, and fruitful efforts as hunters, herders, fishermen, artisans, merchants and others, to use the bounty nature has endowed them with to produce, sustain and develop themselves. Globally, business financing has become a major concern for both new and existing businesses especially with the tightening of both local and international financial markets, and the reluctance of investors to invest their funds in the capital markets. The Nigerian economy, which depends mainly on crude oil exports, is moving slowly as a result of downfall in the prices of crude oil in the international markets (Saee'du 2014). Does this mean that the stock exchange market has no impact to the economy of Nigeria? For this reason, researches have been undertaken to examine the impact of the capital market in financing these businesses which will lead to growth in the economy. Several studies to investigate the impact of the capital on economic growth have been undertaken, such as (Adamu & Sanni 2005, Abu 2009, Adegbaju & Henry 2008, Godwin 2012, Kolapo & Adaramola 2012, Khadijat, Fatima, Abdulrasheed & Sulu 2013, Edirin 2013, Echekoba, Gideon & chinedu 2013, Aigbovo 2014, Zainab 2015, Okoye, Nwanne & Taiwo 2016, Werema & Nikipula 2016, Hoque & Yakub 2017, Azubike 2017. But the scope of most of these literatures were before the global financial crisis, some are immediately after the global financial crisis while some are immediately before and after the Nigerian stock market crash. Stock prices on the stock market are continually changing on daily basis, for this reason time has passed and we cannot confidently rely on the results and recommendations of these past literatures because a lot of changes have taken place as a result of passage of time. As a result of passage of time, this study has also identified a gap called "time gap" to be filled by this research work.

The capital market played an important role when deposit money banks were obliged to raise a capital base of 25 billion naira; only the capital market came to their aid by raising shares for the public to take part of ownership in the banks. For this reason, the commercial banks are now part of the capital market; this paves another hole for this study to introduce another variable which literatures did not fill

Another important issue is during estimation and analysis process, considering the fact that the data for a macro study is a time series data, various studies such as Ohiomo & Godfrey (2011), Odetayo (2012), Alajekwu & Achugbu (2012), Abdul-khaliq 2013, Afolabi 2015 tend not to go for stationary test of the data employed before interpreting the ordinary least square statistics, while some of the studies such as Idolor & Erah (2011),Odetayo (2012), Osuala, Okereke & Nwansi (2013), Jafer & Inoue (2014), Aighbovo & Andrew (2015), stop only at estimating the long run and short run causality test. This is another reason for scholars like the researcher of this current work to fill this gap.

The problem to be addressed by this study firstly, is to fill the time gap that previous studies did not. Secondly, is the introduction of a new variable which previous studies did not? Lastly is to fill the methodological gap which combine the long run and short run analysis that a lot studies did not.

This study focuses on the Nigerian economy and the Nigerian stock exchange. The period of the study is 36 years (1981-2016). The dependent variable in this study is the Nigerian economy which is proxy by gross domestic product. The independent variable is the performance of Nigerian Stock exchange which is proxy by Aggregate bank lending, market capitalisation and turnover ratio. The chosen dependent variable was adopted from the study of Abdul-khaliq (2013) while the independent variables market capitalisation was adopted from the study of Kolapo & Adaramola (2012), the turnover ratio is adopted from the study of Uchenna, Nwanneka, Taiwo and Okorie (2016) whereas the Aggregate bank lending is a new variable that is introduced by this research work.

The findings of this study will be relevant to the following:
Firstly, in terms of policy and practice, the security and exchange commission and CBN will use the findings of this research work when setting policies that will favour both the Nigerian economy and also policies that will make the NSE improve its quality, reliability and goodwill which will attract foreign and local investors as well as improving the stock market performance, likewise when making decisions regarding the NSE, recommendations

fostered by this research work will assist the policy makers such as securities and exchange commission and Central Bank of Nigeria in making the right decision. This study will trace the role of the stock exchange market in the mobilizing resources and directing these resources to the productive sectors of the Nigerian economy.

Furthermore, this study will also serve as information to investors (existing and prospective investors) on what is happening with their investments, it will further aid investors when faced with decision problems; it will further benefit researchers (scholars) by serving as an evidence of the impact of Nigerian stock exchange on economic growth of Nigeria; It will further serve as an addition to the huge amount of literature undertaken by various scholars; It will serve as a guide to students of research when doing their research works; it will also serve as a platform for further research by scholars and academicians, this study will assist students in doing their assignments and home works; The study can also serves as a guide for future reference for both practitioners and academicians who are doing research on similar topic.

The main objective of this study is to investigate the impact of the Nigerian capital market performance on the economic growth of Nigeria. In achieving this objective, the study is divided into five parts. This is an introduction, followed by literature review as the second part. The third part is methodology and the fourth part is result and analysis, while the last part is conclusion and policy implication.

**Literature Review**
According to Al-fakhi (2006), the capital market is a network of specialised financial institutions, series of mechanisms, processes and infrastructures that in various ways facilitate the bringing together of suppliers and users of medium to long-term capital for investment in economic development project. Several attempts have been made to link the growth of capital market with the economy by previous research works. Levine (1991) has argued that the stock market development reduces both liquidity shock and productivity shock of businessmen to invest funds as well as enhancing the production capacity of the economy, thereby leading to higher economic growth. In the study of Bencivenga et al (1996), they concluded that a highly developed financial market (stock market) induces long run economic growth.

The real sector is the main driving force that moves the economy of every nation. It is the engine of economic growth and development. The real sector depends heavily on the banking sector for the provision of the required funds needed for investment purpose.

Akinbohungbe (1996) and Adebiyi (2005) have argued separately that the capital market is very vital to the growth, development and strength of any country because it supports government and corporate initiatives, finances the exploitation of new ideas and facilitates the management of financial risk. The stock market is viewed as a complex institution imbued with inherent mechanism through which long-term funds of the major sectors of the economy comprising households, firms, and government are mobilized, harnessed and made available to various sectors of the economy (Nyong,1997). The development of the capital market, and apparently the stock market, provides opportunities for greater funds mobilization, improved efficiency in resource allocation and provision of relevant information for appraisal (Inanga & Emenuga, 1997).

Gary and Andrew (2002) made an attempt to investigate on Financial Intermediation in Nigeria. In their opinion, the savings/investment process in capitalist economies is organized around financial intermediation, making them a central institution of economic growth. Financial intermediaries are firms that borrow from consumers/savers and lend to companies that need resources for investment. In contrast, in capital markets, investors' contract directly with firms, creating marketable securities. The prices of these securities are observable, while financial intermediaries are opaque. They focus on the role of bank-like intermediaries in the savings-investment process. They also investigate the literature on bank instability and the role of the government. Finally, the study concluded that the Nigerian economy is enhancing through financial intermediaries. This study is a pure explanation with no statistical inference.

Adelakun (2010) examined the relationship that exists between financial development and economic growth. The Ordinary Least Square Estimation Method (OLSEM) was set to find the relationship between financial development and economic growth in Nigeria from 1980-2008, the GDP was adopted as economic growth proxy, whereas real interest rate (R), the ratio of gross domestic savings to GDP(S), the ratio of domestic credit to GDP (P), were adopted as prime indicators of financial development. Both dependent and independent variables were subjected to statistical test for stationarity test, using the ADF test. The result of his study showed that a substantial positive effect of financial development on economic growth in Nigeria exists. The Granger causality test showed that economic growth is promoted by financial development, there is also an evidence of causality from the development of financial intermediaries to economic growth**.**

Adamopolous (2010) investigates the causal relationship between stock market development and economic growth for Germany for the period 1965-2007 using a Vector Error Correction Model (VECM). The purpose of his paper was to examine the long-run relationship between the variables (SM) is the general stock market index, GDP is the gross domestic product, BC is the bank lending expressed by bank credits to private sector. The study applied the ADF and PP test to ascertain for stationarity of the times-series data employed. Applying the Johansen co-integration analysis based on the classical unit roots tests. He then went further for the VEC which accommodate the short run dynamics. And finally 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.

Ruwaydah and Ushad (2015) Using a pooled panel data set from nine developing countries from 1980 to 2011, using the random effect model, they examined the relationship that subsist between stock market development and economic growth, and also the macroeconomic determinants of stock market development. The variables were GDP was a proxy for economic growth; the market capitalization ratio, the total value of shares traded ratio and the turnover ratio. Two indicators of banking development namely domestic credit and liquid liabilities; the inflation and gross capital formation. Data was extracted and the ordinary least square regression model was run, the Hausman specification test and the Robust Random Effects model was used. A strong link between stock market development and economic growth existed from the result of the study. A well-developed and functioning stock market will be able to boost economic growth through enhanced capital formation and a better resource allocation particularly in countries that are developed; this was an assertion which was supported by evidence in the study.

Alade (2010) investigated the impact of stock market performance on the growth of Nigerian economy. The study is an examination of the impact of the performance of Nigerian stock exchange on the economic growth of Nigeria from 1980-2010. An econometric methodology was applied as a tool of analysis. Considering the phenomenon under study, the ordinary least square was used as estimation tool because he believes it has advantages over other estimation techniques. The dependent and independent variables of the study are Gross Domestic Product, Market capitalization, Investment, Exchange rate and Interest rate. The result of the study revealed that the market capitalization is statistically significant at 95 per

cent significance level. The coefficient of multiple determinations also revealed that variation in the dependent variable is 99% caused by the explanatory variables variation. The conclusion of the study is that the market capitalization is positively contributing to the Nigerian gross domestic product.

Petros (2010) made an attempt to analyse of relationship that exists between economic growth and its determinants in Zimbabwe. Using data spanning from 1991 to 2007. The study employed FMOLS and ARDL (autoregressive distributed lag model) bounds-testing for the long run relationship and ECM for the short run dynamics of the variables. The dependent variable was proxies by Real GNP per capita while the independent variable was proxies by Market capitalization, financial development, financial instability, Inflation rate, foreign direct investment, and Literacy rate). The findings of the study revealed that a positive relationship exist between efficient stock market capitalization and economic growth both in long run and short run. Financial instability and inflation rate have negative effect, while human capital and foreign direct investment have positive effect on economic growth.

Nazir, Nawaz and Gilani (2010) attempted to examine the relationship between economic growth and stock market development in Pakistan for the period spanning 1986 to 2008. They examined the stock market development and economic growth relationship using the two major measures of stock market development, which are size and liquidity of the market. The economic growth was proxies by GDP per capita while stock market was proxies by FDI as % of GDP, Human development index of Pakistan, Market Capitalization, and Total value of traded shares. Firstly, the study interpreted the descriptive statistics and then went ahead to test for stationarity of the data employed and finally the study went ahead to interpret the OLS analysis. The result of the study revealed that economic growth can be attained by increasing the size of the stock markets of a country as well as the market capitalization in an emerging market like Pakistan.

Alghamedi (2012) examined the Impact of Stock Market Development on economic Growth in Saudi Arabia using both qualitative and quantitative method of approach. Time-series econometric analysis was utilized to measure the nexus between economic growth and stock market. After treating the data for time series features using ADF test, the OLS regression analysis showed that the market capitalization variable was statistically significant in all of the results of the study. As part of the econometric analysis, the results of the Granger causality analysis produced inconclusive results, the results of Error Correction Model or ECM with all the models for GDP showed that there is a bi-directional causality that runs from GDP to Market capitalization.

Biyan (2012) identified the role of Stock market to economic growth in Tanzania. To obtain the desired data, the study used a triangulation and descriptive research case study. The population intended used for the study was chosen from stakeholders group of DSE from four categories which are; regulatory bodies representatives, corporate organization representatives, stock brokers and analyst, shareholders and investors. The sample size was 100 stakeholders from the four categories of DSE. Data collected was analysed with the assistance of the SPSS. The findings of the study revealed that both market capitalization and value of share traded have a small contribution to economic growth of Tanzania. The findings further revealed that the challenges which cause a drawback to the growth of DSE are lack of liquidity, low market capitalization, poor macro-economic high transaction costs, lack of adequate track – openness, lack of skilfully human resources, and lack of public awareness of DSE.

Atoyebi, Ishola and Kadiri (2013) determined the impact of capital market on economic growth in Nigeria using annual data from 1981 to 2010. In their empirical analysis, they ran the ordinary least square test to verify the statistical significance of the variables used and vector auto regression technique to determine the long run relationship within the variables in their study. The empirical investigations revealed that two variables were statistically significant and these variables were market index and market capitalization. Also the coefficient value of these two variables suggests that a percentage increase in market index and market capitalization will bring about on the average percentage increase in real GDP. Findings were based on johansen co-integration test and vector auto regression, suggested three co-integrating equation while the vector auto regression suggested that a long run relationship between stock market and real GDP exist.

Usman and Alfa (2013) investigated the impact of security market on economic growth in Nigeria spanning from 1981 to 2010. The Johansen Co-integration check approach and Granger Causality check were applied by the study and the results revealed that a positive long run relationship between Market Capitalization, Value traded and growth process in Nigerian economy exist. The granger causality check indicated a one-way directional relationship between Market Capitalization and Value Traded in the security market. There was also a two-way directional relationship between market capitalization and Real

GDP with causality running from RGDP to Market Capitalization. However, in the short run value traded ratio granger causes Real GDP. Policy implication from the study suggested that the Nigerian security market remains a driver for sustainable growth and development generating more savings from private and public entities or actors for medium and long-run investment accelerating domestic investment thus, a sound institutional framework for regulatory bodies, participants in the market and improving investor confidence cannot be understated for sustainable economic growth and development in Nigeria. Capital market ought to be well instituted to soak up shocks emanating from the world markets.

A very recent study conducted by Azubike (2017) to look at the impact of the Nigerian security market on growth process in Nigeria spanning from 1981-2011. The economic growth (dependent variable) was proxies by GDP. Nigerian security Market (independent variable) was proxies by market capitalization. The study applied the ordinary least square (OLS) estimation method in order to avoid a spurious regression result, heteroscedasticity and autocorrelation covariance was also applied. The ADF unit root test was carried out to confirm for the stationarity of the time-series data. Results of the study revealed that the market capitalization, rate of interest, total number of listed securities, variety of deals and also the worth of foreign direct investment satisfy the economic apriori expectation of the study whereas the total number of issues and the value of deals was the opposite of the study apriori expectation. The stationarity checks revealed that the variables employed were all stationary at I (1) first difference. The ADF test showed a long-run relationship among the variables within the model of study. However, the time scope of the study is limited to 2011 which makes it obsolete and the analysis of the data employed by the study does not satisfy the time series data conditions as described by (Levine and Zervos 1996).

Thullah (2014) examined National Stock Exchanges (NSE) and National Economic Development in war-affected and disaster-stricken economies in the Sub-Saharan Africa. A panel data for thirty (30) SSA economies (1981-2012), comprising of selected macroeconomic variables viz: "Gross Domestic Product, Economy-wide Stock Capitalization and Economy-Wide Stock Monetization" was used to resolve the question "Does a formidable NSE enhance national economic development? Whilst the VAR was used to demonstrated co-movement within the short and long-run dependence, the PLSR technique evaluated structural dynamics amongst the variables. Both the VAR and PLSR affirmed a positive relationship between economic growth (GDP) and the variables Nation-wide Market Capitalization and Economy-Wide Stock Monetization. This result implies that, Nation-Wide Market Capitalization and Economy-Wide Monetization contributes to national economic development.

Afolabi (2015) empirically examined the impact of stock market on the economic growth of Nigeria spanning a period from 1992 to 2011. The stock market (independent variable) was proxies by Market Capitalization against some of the economy variables such as GDP, FDI, and Rate of inflation, Total New Issues, Value of Transaction and Total Listed equities. Multiple regression analysis was adopted; the study found out that Capital market has an insignificant impact on the economic growth of Nigeria within the period of the study under review. The study failed to go for stationary test for the data employed, it also failed to take into cognizance market liquidity variable as part of the independent variables of the study, the turnover ratio or stock market traded ratio was supposed to be picked.

Nageri and Nageri (2015) studied the joint impact of capital market and corruption on Economic growth and development in Nigeria, using the Co-integration and VECM Analysis. GDP is the variable for the Nigerian economy, while market Capitalization of the Nigerian Stock Exchange and Corruption Perception Index on Nigeria are the independent variables of the study. The data covered a period of 16years (1996-2012). Results showed that market capitalization, corruption perception index and gross domestic products in Nigeria have long run relationship but has no short run relationship.

Osama (2015) examined the causal relationship that exists between capital market development and economic growth in Egypt. Unit root test was applied for the time series data that was extracted from secondary source for the period spanning from 2002-2013. Johansen co-integration test was employed to assess whether or not the variables of the study were co-integrated. Vector auto-regression estimates (VAR) was adopted to test for the long-run relationship between the capital market development and economic growth. To determine the direction of causality between the examined variables, granger causality check was employed. Variance Decomposition and Impulse response function (IRF) were also used in forecasting the future relationship between the variables of the study (Real GDP, FDI and market capitalization). The results of the study did not specifically indicate the causal relationship between security market development and economic growth. The study results indicated a linkage between security market development, FDI and economic growth.

Zainab (2015) examined the impact of Nigerian Capital Market capitalization on the Growth of the Nigerian Economy utilizing time series data from 2001-2012. Regression analysis was applied in computing the interaction between the market capitalization of the capital market and economic growth in Nigeria. GDP (dependent variable) was proxy for economic growth whereas market capitalization, Total new issues, Total value of transactions, and Total bank assets were proxy for stock market (independent variable), ADF test was applied for stationarity test. The results of the study showed that most of the variables in the study (market capitalization, Total new issues, Value of transactions, listed equities and government stock) were stationary at levels I(0), except for Total bank assets and gross domestic product that became stationary at first difference I(1). The causality test revealed that market capitalization and total new issues have a single directional causal relationship with Gross domestic product. The result from granger causality test showed that there was a bidirectional causal relationship between GDP and total bank assets and a single directional relationship between GDP and market capitalization. Except for total listed equities and government stock that had an opposite relationship, all other variables in the study had no significant causal relationship with GDP. The empirical findings of the study finally showed that stock market has a positive impact on growth process in Nigeria.

Werema and Nikupala (2016) investigated the impact of capital market on the economic growth of Tanzania over a period of 1998 - 1992. A simple regression model using the 1998 to 2012 annual data sets was employed. The variable of the study GDP was adopted as proxy for economic growth while stock exchange market was proxies by market capitalization and volume of shares traded. The empirical findings of the study showed that the market size (market capitalization) has a negative impact on economic growth, which suggests that the stock market in Tanzania is still infant and thus does not have a significant impact on economic growth. The findings also showed that the market liquidity (value traded ratio) has a positive impact on the economic growth, which suggests that that despite the size of the stock market, the market is very active.

GDP= $\beta_{ot} + \beta_1 ABL_t + \beta_2 MC_t + \beta_3 TR_t + \beta_4 INF_t + U$ ……………………………………………..……… **(1)**

Where:
GDP= Gross Domestic Product
ABL = Aggregate Bank Lending
MC = Market Capitalization

This model is adopted from various literatures such as otuke (2006), asiegbu (2012), edirin (2013),

## Theoretical Framework
Efficient Market Hypothesis which was developed by Fama in 1965 and used by Ewah, Sang and Bassey (2009) states that financial markets are efficient or that the prices on traded assets have already reflected all known information about the market, and therefore it is unbiased because they represent the collective beliefs of all investors about future prospects of the capital market. The theory points out that information about stock prices on the market floor is a very important factor that motivates investors because without information investors will not be able to monitor the developments in the stock market i.e investors (both existing and prospective) rely heavily on information that is provided about the stock market. The perception of investors, regulators, government and other interested parties is influenced by the available information they receive. This theory sets to explain the importance of information and that information should always be disclosed, information should be made available, information should be real and genuine, information provided should reflect the true nature of the market and there should be convenience and ease of acquiring the information in the stock market.

## Methodology
In an attempt to investigate the impact of the NSE on the growth of Nigerian economy, correlation and ex-post facto research designs have been adopted for the purpose of this study. The correlation research design is adopted because it makes it possible for the exploration of the relationships that exist between two or more variables.

This study used secondary data collected over a period of 36 years from 1981- 2016. All the data were sourced from the Central Bank of Nigeria (CBN) statistical bulletin and National Bureau of Statistics. The multiple regression technique is applied in order to determine whether the capital market performance indicators (aggregate bank lending, market capitalization and turnover ratio) have impacted significantly on the growth of Nigerian economy which is proxy by Gross Domestic Product within the study period.

## Model Specification
The model is specified as follows:

TR = Turnover Ratio
INF = Inflation rate (control variable)
B= Constant
t = Time Series Data
u = Term Error

zainab (2015) and saee'du (2016). However, to standardise the model so as to suit the analysis of

this study, the Aggregate bank lending (independent variable) was introduced into the model as a new variable and also, the Inflation rate was also introduced to serve as a control variable because of fluctuations that normally occur in the time series data, as these modifications were not found in previous studies.

**Data Presentation and Analysis**
This section presents the analysed data, interprets the results and discusses the findings. Order of presentation of results is as follows:

i)   Table 1 presents unit root test to establish if the data is stationary or otherwise.
ii)  Table 2 presents co-integration test to know the long run relationship between the variables and to know the number of variables to be used in running the VEC model for the relationship between the dependent and independent variables.

**Table 1: Unit Root Test**

|  | D(**LNGDP**) | D(**LNABL**) | D(**LNMC**) | D(**LNTR**) |
|---|---|---|---|---|
| ADF values | -3.086830 | -6.735269 | -7.234059 | -4.794926 |
| Level | -3.639407 | -3.646342 | -3.646342 | -3.646342 |
| 1st difference | -2.951125 | -2.954021 | -2.954021 | -2.954021 |
| 2nd difference | -2.614300 | -2.615817 | -2.615817 | -2.615817 |
| stationary | Stationary | Stationary | Stationary | Stationary |
| Order of integration | I(1) | I(0) | I(0) | I(0) |

**Source**: E-views 9.0 Regression Output

From Table 1, the result revealed that the variable GDP is stationary at 1st difference I (1), while, ABL, MC, and TR are stationary at levels. In other words, GDP, ABL, MC, and TR are integrated at levels I(0) and first order I(1) at 1%, 5% and 10% critical levels. It is clear from the result that the null hypothesis which says the series is not stationary are rejected at their first differences since the ADF tests statistics values are greater than the critical values at 5% significance levels. Thus, these variables (GDP, ABL, MC, and TR) are stationary and integrated of same order, that is, 1(1). It is therefore mean that all the variables have unit root at level but stationary at first difference. This indicates a relationship exists between the variables and they are integrated at lags length.

Since the data employed is a time series data, the co-integration test is conducted in order to ascertain the long-run relationship that exists between the variables of the study under review.

**Table 2: Co-integration Test**
Unrestricted Cointegration Rank Test (Trace)

| Hypothesized No. of CE(s) | Eigenvalue | Trace Statistic | 0.05 Critical Value | Prob.** |
|---|---|---|---|---|
| None * | 0.597820 | 103.6248 | 95.75366 | 0.0129 |
| At most 1 * | 0.534664 | 72.65576 | 69.81889 | 0.0292 |
| At most 2 | 0.432813 | 46.64593 | 47.85613 | 0.0647 |
| At most 3 | 0.343633 | 27.36569 | 29.79707 | 0.0930 |
| At most 4 | 0.206341 | 13.05052 | 15.49471 | 0.1130 |
| At most 5 * | 0.141645 | 5.193085 | 3.841466 | 0.0227 |

**Source**: E-views 9.0 Regression Output

Trace test indicates 2 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

The result of the Johansen co-integration results depicted in the table 1 contains the result for both trace and Maximum Eigen value. Both the trace statistic and the Maximum Eigen value shows two co-integrating equations, hence the included variables are co-integrated and have a long run meaningful relationship existing among them.

**Table 3: Vector Error Correction (VEC) Model (GDP is the dependent variable)**

| Error Correction: | D(LNGDP) | D(LNABL) | D(LNMC) | D(LNTR) |
|---|---|---|---|---|
| ECT | -0.12126 | 0.508458 | 0.084612 | -0.087975 |
| | (0.3431 | (0.33847) | (0.24484) | (0.06280) |
| | [-3.5343] | [ 1.50223] | [ 0.34558] | [-1.40082] |
| D(LNGDP(-1)) | 0.393189 | 3.797534 | -2.539260 | 0.317962 |
| | (0.23422) | (5.53046) | (4.00066) | (1.02617) |
| | [ 1.67871] | [ 0.68666] | [-0.63471] | [ 0.30985] |
| D(LNGDP(-2)) | -0.060915 | 4.979344 | 7.109857 | -0.506434 |
| | (0.24846) | (5.86679) | (4.24395) | (1.08857) |
| | [-0.24516] | [ 0.84873] | [ 1.67529] | [-0.46523] |
| D(LNABL(-1)) | 0.006292 | 0.103242 | 0.083389 | -0.062307 |
| | (0.01342) | (0.31696) | (0.22928) | (0.05881) |
| | [ 0.46876] | [ 0.32573] | [ 0.36369] | [-1.05944] |
| D(LNABL(-2)) | -0.031149 | -0.551206 | 0.083668 | -0.056948 |
| | (0.01267) | (0.29906) | (0.21633) | (0.05549) |
| | [-2.45850] | [-1.84315] | [ 0.38675] | [-1.02628] |
| D(LNMC(-1)) | 0.043373 | 0.121713 | -0.621175 | -0.055212 |
| | (0.01225) | (0.28918) | (0.20919) | (0.05366) |
| | [ 2.02539] | [ 0.42089] | [-2.96945] | [-1.02899] |
| D(LNMC(-2)) | 0.008377 | 0.020848 | -0.396870 | -0.062315 |
| | (0.01167) | (0.27560) | (0.19937) | (0.05114) |
| | [ 0.71768] | [ 0.07564] | [-1.99065] | [-1.21856] |
| D(LNTR(-1)) | -0.005148 | -1.186316 | -0.507376 | 0.134776 |
| | (0.05155) | (1.21730) | (0.88058) | (0.22587) |
| | [-1.89986] | [-0.97454] | [-0.57618] | [ 0.59670] |
| D(LNTR(-2)) | -0.030922 | 0.487841 | -0.211944 | -0.011240 |
| | (0.04693) | (1.10811) | (0.80159) | (0.20561) |
| | [-2.65890] | [ 0.44024] | [-0.26440] | [-0.05467] |
| C | 0.128242 | -1.446258 | -0.364729 | 0.051792 |
| | (0.06044) | (1.42722) | (1.03243) | (0.26482) |
| | [ 2.12166] | [-1.01334] | [-0.35327] | [ 0.19558] |

**Source**: E-views 9.0 Regression Output

The short-run relationship between GDP and the explanatory variable is estimated using the error correction model. The error correction coefficient (-0.12) not only has the expected sign but also statistically significant at 5% level. This indicates a relatively low speed to equilibrium after a shock. Specifically, 12% of the disequilibrium which occurred in the previous period are corrected in the current period. For the respective explanatory variables, as in the case of the long-run estimation, the short-run results only show existence of significant negative relationship between GDP and ABL at lag two. This implies that aggregate bank lending has significant impact on gross domestic product in the second period. MC and TR in the first period have significant positive and negative relationship with GDP respectively in the current period. But MC is also positively significant in the second period. TR in the second period has a significant positive impact on GDP. It thus implies that ABL, MC, and TR are the short-run adjustment mechanisms as well as the major pivots that capture short run response of the authority in order to boost GDP

**Conclusion and Recommendations**

The study seeks to investigate the impact of the Nigerian Stock Exchange on the real sector by setting out a target objective which will assist in testing the stated hypotheses formulated. It focuses on Nigerian stock exchange and the Nigerian economy from 1981-2016. The study proxy the dependent and independent variables with Gross domestic product, Aggregate bank lending, Market capitalisation and Turnover ratio. This study is primarily significant to economic planners and investors. This study has been systematically designed into five sections for a comprehensive understanding. Correlational and ex-post facto research design is adopted. The data for this study is extracted from secondary sources via CBN annual reports for various years, CBN statistical bulletin, and relevant literatures. Augmented dickey-fuller test was employed for the extracted data to ascertain stationary of data and the results shows that all the data were stationary at levels. The findings of this study revealed that there is a long-run relationship between the dependent variable; Economic growth (Gross domestic product) and the independent variable; Nigerian stock exchange (Aggregate bank

lending, Market capitalisation and Turnover ratio). The results of this study also showed that some of the variables adopted by this study are integrated of order, I (0) at 5 percent level of significance and some are integrated of order I (I). Therefore, the results concluded that all the variables are co-integrated. The result of this study showed that Aggregate bank lending is positively and significantly influencing Gross domestic product, Market capitalisation also has a positive influence, turnover ratio also has a positive and significant relationship with the Nigerian gross domestic product, the relationship is statistically significant at 5% and 10% respectively. The result confirms that there is positive relationship between the Nigerian capital market and economic growth.

In view of the foregoing, the following recommendations have been proffered:

1.  The Central bank of Nigeria should encourage deposit money banks to improve in their financial intermediation role in the real sector by setting affordable interest rates on loans taken by investors

who do not have access to finance their businesses for both new businesses and existing entrepreneurs for expansion and modernisation. This will help to increase the quantum of production output in the country.

2.  iii.    The Nigerian stock exchange should find a way to liaise with insurance companies and ensure that every registered security in the floor of the stock exchange is insured for the security of shareholder's funds. This will give an investor guaranty that his funds are highly secured

3.  The stock exchange market should create an avenue through any of the trending media where people will be enlightened on the activities of the market. Most of local investors do not invest in the capital market because they may be ignorant on what the market constitutes and what it's meant for.

## References

Abdul Hakeem, Sa'eedu (2016). Impact of Capital Market Performance on Economic Growth in Nigeria. *A Thesis Submitted to the School of Postgraduate Studies, Ahmadu Bello University, Zaria, In Partial Fulfillment of the Requirements for The Award of a Master of Science Degree in Business Administration.*

Abuh A. and Anthony, A. Onuh (2013). Financial intermediation and the real sector of Nigerian economy. *KASU Journal of Accounting Research and Practice,* 2 (1), 61-70.

Adamu, J. A. and Sanni, I. (2005). Stock market development and Nigerian economic growth. *Journal of Economic and Allied Fields,* 2(2), 15-26.

Adegbaju, A. and Henry O. (2008). The role of the Nigerian stock market in achieving vision 2020. *Lagos Journal of Banking, Finance and Economic Issues,* 2 (1) 194-206.

Adeoye, A. Afolabi (2015). Impact of the Nigerian Capital Market on the Economy. *European Journal of Accounting Auditing and Finance Research, 3 (2), 88-96.*

Adamopoulos Antonios (2010). Stock Market and Economic Growth: An Empirical Analysis for Germany. *Business and Economics Journal. 1, (1) 1-12.*

Adebiyi, M.A. and Akinbohungbe, S.S. (2005), ''Capital Market Performance and the Nigerian Economic Growth'', In: Oluwatayo, A. O. (Eds.): *Issues in Money, Finance and Economic Management, Lagos: University of Lagos.*

Adelakun, O. J. (2010). Financial sector development and economic Growth in Nigeria. *International Journal of Economic Development Research and Investment. 1, (1). 25-41.*

Alade, f. j. (2010). The impact of stock market performance on the Growth of Nigerian Economy. *Department of Economics faculty of Social and Management Sciences Caritas University, Amorji-nike, Enugu State.*

Alajekwu, U. B. and Achugbu, A. A. (2012). *African Research Review. International Multidisciplinary Journal, Ethiopia,* 6 (1) 51-70.

A. E. Osuala, J. E. Okereke and G. U. Nwansi (2013). Does stock market development promote economic growth in emerging markets? A causality evidence from Nigeria. *World review of business research. 3, (4). 1–13.*

Aigbovo, Omoruyi and Izekor, Andrew Osaretin (2015). Stock Market Development and Economic Growth in Nigeria: An Empirical Assessment. *International Journal of Business and Social Science. 6, 9(1). 27-36.*

Athambawa Jahfer and Tohru Inoue (2014). Financial Development and Economic Growth: The Role of Stock Market in Japan. *International Review of Business Research Papers. 10 (2). 46 – 61.*

Akingbohungbe, S. S. (1996): The Role of the Financial System in the Development of the Nigerian Economy. *Paper Presented at a Workshop Organized by Centre for Africa Law and Development Studies.*

Aigbovo, O. and Uwubamwen A. E. (2014). Financial System Development and Economic Growth the Nigerian Stock Market and Bank Perspective. *Asian Journal of Business Management 6(4), 155-172.*

Aigbovo, Omoruyi and Izekor, Andrew Osaretin (2015). Stock Market Development and Economic Growth in Nigeria: An Empirical Assessment. *International Journal of Business and Social Science. 6, 9(1). 27-36.*

Al-faki, M. (2006). The Nigerian capital market and socioeconomic development. *A paper presented at the 4th distinguished Faculty of Social Science, Public Lectures, University of Benin,* 9-16.

Alghamedi, Ahmed, Misfer, A. (2012) Assessing the Impact of Stock Market Development on economic Growth in Saudi Arabia: An Empirical Analysis. *Durham theses, Durham University. Available at Durham E-Theses Online: http://etheses.dur.ac.uk/6367/*

Auckbarally Ruwaydah and Subadar Agathee Ushad (2015). Effects of Stock Market Development on Economic Growth: The Case of SADC Countries. *Proceedings of the Third Middle East Conference on Global Business, Economics, Finance and Banking (ME15Dubai October Conference) 16-18 October. 1-20.*

Alade, f. j. (2010). The impact of stock market performance on the Growth of Nigerian Economy. *Department of Economics faculty of Social and Management Sciences Caritas University, Amorji-nike, Enugu State.*

Alile, H. I., (1996). The Nigerian Stock Exchange. Historical perspectives, operations and contributions to economic development, *Central Bank of Nigeria Bullion II,* 65-69.

Abu N. (2009) does stock market development raise economic growth? Evidence from Nigeria. *Journal of Banking and Finance*, 1(1)15-26

Anulika Azubike (2017). Impact of the Nigerian stock exchange on economic growth. *Munich Personal RePEc Archive. 75984.*

Atoyebi Kehinde O., Ishola Saheed Ademola, and Kadiri Kayode I. (2013). Capital Market and Economic Growth in Nigeria an empirical analysis. *IOSR Journal of Humanities and Social Science (IOSR-JHSS). 6, (6). 60-68.*

Bencivenga V. R., Bruce D. S, and Ross M. S. (1996). Equity markets, Transaction Costs, and Capital Accumulations. *The World Bank Review,* 10(2), 241-265.

Bencivenga V. R., Bruce D. S, and Ross M. S. (1996). Equity markets, Transaction Costs, and Capital Accumulations. *The World Bank Review,* 10(2), 241-265.

Echekoba F. N., Ezu G. K. and Egbunike, C. F. (2013). The impact of capital market on the growth of the Nigerian economy under democratic rule. *Arabian Journal of Business and Management Review,* 3 (2), 53-62.

Edirin, J. (2013). The Global Financial Crisis and the Performance of Capital Markets of Developing Economies. *ACTA UNIVERSITATIS DANUBIUS,* 9(3) 70-83.

E. G. Otuke. (2013). Basics and computation of rebased gross domestic product, Nigeria's experience. *Bullion (publication of the Central Bank of Nigeria). 38(2), 47-53.*

Ewah, S. O. Sang, A.E., and Bassey, J.U. (2009). Appraisal of Stock Market. *International Journal of Business and Management* 4(12) 219-225.

Fama, E. F. (1965): The Behaviour of Stock Market Prices. *Journal of Business. 38(1) 34-65.* Gabriel (2002): In Nyong, M.O (2003), Predictability and volatility of Stock International.

F. T. Kolapo and A. O. Adaramola, (2012). The Impact of the Nigerian Capital Market on Economic Growth. International Journal of Developing Societies, 1(1), 11–19.

Godwin C. O. (2010). Analysis of Capital Market Performance and the Growth of the Nigerian Economy. *Global Journal of Human Social Science,* 10(4), 9-15.

Ibraheem Kamaldeen Nageria, Ibraheem Sherifdeen Nageri (2015). The Joint Impact of Stock Market and Corruption on Economic Growth and Development in Nigeria: Evidence from Cointegration and VECM Analysis. *Serbian Journal of Management 10 (2).189 – 200.*

Inanga, I. L. and Chidozie, E. (1997). Institutional, Traditional, and Asset Pricing Characteristics of the Nigerian stock exchange. *African Economic Research Consortium Research paper 60.*

Jecheche Petros (2010). The effect of the stock exchange on economic growth: a case of the Zimbabwe stock exchange. *Research in Business and Economics Journal*.

Joseph Alimamy Thullah (2014). National Stock Exchanges (NSE) and National Economic Development: A Vector Autoregressive Modelling Approach with Data from Thirty (30) Sub-Saharan Countries (2000-2013). *Journal of World Economic Research. 3, (6). 109-118.*

Katuma Biyan (2012). The Role of Stock Exchange Market to The Economic Growth in Tanzania: A Case of Dar Es Salaam Stock Exchange Market. *A Dissertation Submitted in Partial Fulfilment of Requirements for The Award of the Degree of Master of Business Administration of the open University of Tanzania.*

Khadijat, A. Y., Oyebola F. E.-M., Abdulrasheed A. and Sulu B. I. (2013). Stock Market Development and Economic Growth in

Nigeria. *Babcock Journal of Management and Social Sciences,* 11(1) 3-25.

Levine, R. and Zervos, S. J. (1996). Stock Market Development and Long-Run Growth. *The World Bank Economic Review*, 10 (2), 323 – 3399.

Levine, R. (1991). Finance and growth: Theory and evidence. *In Agbion, P. and Durlaufi, S. N. (Eds) hand book of economic growth in North Holland.*

Mian Sajid Nazir, Muhammad Musarat Nawaz and Usman Javed Gilani (2010). Relationship between economic growth and stock market development. *African Journal of Business Management. 4(16), 3473-3479.*

Mohammad Enamul Hoque and Noor Azuddin Yakob (2017). Revisiting stock market development and economic growth nexus: The moderating role of foreign capital inflows and exchange rates. *Cogent Economics & Finance. 1-17.*

Nwankwo G.O. (1991):" Money and capital market in Nigeria today". *University of Lagos press.*

Nyong, M. O. (1997). Capital market development and long-run Economic Growth. Theory, Evidence and Analysis. *First Bank Review,* 13-38.

Odetayo T. A. and Sajuyigbe A. S. (2012). Impact of Nigerian capital market on economic growth and Development. *International Journal of Arts and Commerce. 1(5). 1-8.*

Ohiomu, S. and Godfrey O. E. (2011). The effect of stock market on economic growth in Nigeria. *Jorind* (9)1 June, 2011. *www.transcampus.org/journals. www.ajol.info/journals/jorind*

Odetayo T. A. and Sajuyigbe A. S. (2012). Impact of Nigerian capital market on economic growth and Development. *International Journal of Arts and Commerce. 1(5). 1-8.*

Okoye Lawrence Uchenna, Modebe Nwanneka J., Taiwo, J.N., and Okorie, Uchechukwu Emena (2016). Impact of Capital Market Development on the Growth of the Nigerian Economy. *Research Journal of Financial Sustainability Reporting. 1, (1). 24-32.*

Osama M. Badr (2015). Stock Market Development and Economic Growth: Evidences from Egypt. *International Journal of Trade, Economics and Finance. 6, (2). 96-101.*

Osaze, B. E and Anao A. R. (1999) Managerial Finance. Benin City: *UniBen Press.*

Salmanulfarisi, A. (2013). An evaluation of the performances of Nigeria capital market before and after banking sector consolidation exercise. *Kuwait Chapter of Arabian Journal of Business and Management Review,* 2 (6).

Samwel Werema and Lwaga Nikupala (2016). Impact of Stock Exchange Market to the economic Growth in Tanzania. *International journal of scientific and technical research in engineering (IJSTRE). 1, (8). 42-48.*

Samwel Werema and Lwaga Nikupala (2016). Impact of Stock Exchange Market to the economic Growth in Tanzania. *International journal of scientific and technical research in engineering (IJSTRE). 1, (8). 42-48.*

Shatha Abdul-Khaliq (2013). The Impact of Stock Market Liquidity on Economic Growth in Jordan. *European Journal of Business and Management. 5, (30). 154-159.*

Shatha Abdul-Khaliq (2013). The Impact of Stock Market Liquidity on Economic Growth in Jordan. *European Journal of Business and Management. 5, (30). 154-159.*

Soyode, A. (1990). The role of capital market in economic development. *Security Market Journal in Nigeria,* 6.

Zainab Dabo (2015). Impact of Nigerian Capital Market Capitalisation on the growth of the Nigerian Economy. *Journal of Emerging Issues in Economics, Finance and Banking (JEIEFB). An Online International Research Journal. 4, (2).*