

# FINANCIAL DEEPENING AND STOCK MARKET PERFORMANCE IN NIGERIA

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## ABSTRACT

*The purpose of this study was to examine the effect of financial deepening indicators on capital market performance in Nigeria. Time series data were sourced from Central Bank of Nigeria Statistical Bulletin, from 1986-2019. All share price index was used as dependent variables while percentage of narrow money supply, broad money supply, money market development, money outside the bank and private sector credit to gross domestic product was used as independent variables. Multiple regression with ordinary least square properties of cointegration, augmented Dickey Fuller unit root test, Granger causality test and vector error correction model was used to examine the relationship between the dependent and the independent variables. The study found that 47 percent variation on the performance of Nigeria capital market can be traced to variation in financial market deepening indicators. Percentage of narrow money supply, money market development, private sector credit and money outside the banks have positive and no significant effect on capital market performance while percentage of broad money supply have negative and no significant effect on capital market performance. From the findings the study concludes that financial deepening indicators have no significant effect on performance of Nigeria capital market. It recommends that the need to sustain a higher level of financial deepening in Nigeria, Policy makers and the regulatory authorities*

*should identify and monitor key business drivers such as bank credit to the real sector and the regulatory authorities such as the Securities and Exchange Commission should hedge against sudden liquidity outflows should be maintained and there should be regular review of prudential guidelines for efficiency to hedge against the negative impact of financial deepening measures on capital market performance.*

Keywords: Financial Deepening, Stock Market Performance, Market Size, Liquidity

## INTRODUCTION

Capital markets are fundamental components of well-functioning financial arrangements and important means for national growth (Osamwonyi, 2005). This is because these markets yield capital for long run projects. In fact, domestic markets enhance the execution of fiscal, monetary, and exchange rate policy (Laeven, 2014). Capital market undertakings play a key part in defining the level of economic undertakings in developing and developed economies, by providing and efficiently allocating resources for ventures, providing suitable platform to engender top business practices that end up expanding investment and developing the economy (Osamwonyi & Kasimu, 2013). The development of capital market is vital in both developed and evolving economies as overall economic performance is strongly related to state of its capital market. Indeed, solid capital market is important since proposed and observed literature has revealed a positive relationship between market development and economic growth (Beck & Levine, 2004; Chakraborty & Ray, 2006).

The depth of the financial market effects of high interest rate encourages savings and discourages investments, thus the increased liabilities of the banking system to give more resources to investments is more efficient. However, the problem with financial deepening and liquidity of the commercial banks in the underdeveloped nature of Nigeria financial market, mismatch of policies, financial dualism and influence of the international financial environment on Nigeria financial market.

The growth in the number of listed companies on the NSE has been low over years. Ngugi, Amanja and Maana, (2013) asserted that the capital market is still in its infancy stage since its inception in 1960 and the capital market has failed to pick the growth momentum with the exchange contributing less than one percent to economic growth against government expectation of ten percent.

The relationship between financial deepening variables such as percentage of narrow money supply to gross domestic products, percentage of broad money

supply to gross domestic products, percentage of private sector credit to gross domestic products, money outside the bank to broad money supply and money market development implies that changes on the variables can directly affect capital market performance as it is a transmission mechanism for monetary policy.

Furthermore, studies done focused on financial deepening and economic growth (Mwendwa et al., 2013; Aduda et al., 2012; Kemboi & Tarus, 2012). Others focused on capital market deepening and economic growth (Ngugi et al., 2013; Osamwany & Kasimu, 2013). In addition, they focused on direct impact on independent variables and did not establish the mediating effect and interaction effect. These studies also did not establish the casual link of variables. From the above, this study examined the relationship between financial deepening and performance of Nigeria capital market.

## LITERATURE REVIEW

### Financial Deepening

Financial deepening refers to enlarged delivery of financial facilities by financial institutions to all people in a society (Nnenna et al., 2012). Kromtit and Tsenkwo (2014) posit that financial deepening means expanding ventures through organized markets. It is expanding the size of financial organization, assimilating the casual market into the official economic system in order to improve effectiveness of intermediation, and efficiency of economic policy. Ndebbio (2004), asserts that it is expanding provision of financial assets hence economic growth.

The main aim of expanding the financial system is to raise domestic savings; to deepen the size of monetary system, to reinforce the procedure of gathering saving. Expanding financial ventures allows placement of saving by increasing and differentiating money and capital fairs which strive for savings streams. Investors are thus provided with a wider choice of different financial instrument (Raman & Mustafa, 2014). Financial markets are deep if they provide investors with different financial assets which differ in terms of gains, risks and maturity. It entails a range of sub-markets, undertaking various financial assets that are assimilated in the foreign market that is connected to a financial organization (Popiel, 1990).

Financial deepening implies the level of development and innovation of traditional and non-traditional financial services in a free-market economy (Valverde, et al. 2004 in Chiawa & Abur, 2013). While Nzotta and Okereke

(2009) ascertain that financial deepening is the ability of financial institutions in an economy to effectively mobilize savings for investment purposes. The financial deepening vigorously attracts.

There is a financial Sector Deepening Trust (FSD) in Nigeria which was created in 2015 as an independent trust supervised by audit firm KPMG. It uses policy guidance from a Programme Investment Committee (PIC). Current funders include the UK's Department for International Development (DFID), the Swedish International Development Agency (SIDA) and the Bill and Melinda Gates Foundation.

### Measures of Financial Deepening

Since financial development means an increase in the supply of financial assets in the economy, it is important to develop some measures of the widest range of financial assets, including money. This will involve identifying these financial assets, determining their measures and summing them up. The sum total of all the financial assets is one broad measure that represents financial deepening; the other, as indicated earlier, is the growth rate of per capita real money balances. The range of financial assets to be considered in this study includes broad money (M2), liabilities of non-bank financial assets (NB), treasury bills (TB), value of shares (VS) and money market fund (MMF).

The sum of these financial assets can thus approximate one of the widest measures of financial deepening. The summing up of these financial assets to represent a broad measure of financial deepening is not a problem, but the availability of data for some of them is. Because of narrow and undeveloped capital markets in many Sub Saharan African countries, data on value of shares (VS) and money market funds (MMF) in particular are not available. It is equally difficult to get consistent annual data on all financial assets except broad money (M2). If data had been available on these financial assets, the degree of financial intermediation, which is an important part of financial deepening (FDY), would be the sum of the measures of these financial assets, thus:

$$FDY = (M2 + TB + NB + VS + MMF)/Y \quad (1)$$

The financial deepening based on such an identity is unlikely to capture a good number of Sub Sahara African countries because these countries have narrow and shallow capital markets. Thus, the market capitalization as a percentage of GDP in these countries has been seen to be quite low compared with much higher percentages in advanced economies (Nyong, 1996). This may be because

many companies in SSA are not quoted on the stock exchange. One example is Nigeria, where funds from the capital market in the 1970s formed a negligible 5% of total capital investment (Alili, 1984). In view of the lack of information, our study uses broad money (M2) as a proxy for the measure of financial deepening. Given the empirical/scientific work of Jao (1976), Fry (1978) and Ogun (1986), however, financial deepening is represented by two variables: the degree of financial intermediation measured, in our case  $M2/Y$ , and the growth rate of per capita real money balances (GPRMB). Financial development and long-run endogenous growth variables

#### Market Size

With 269 securities listed and a market capitalization of approximately N300 billion or US\$3,000 million, relatively to international standards, the Nigerian Stock Exchange can still be regarded as small. In Africa, Nigeria ranked 4th after South Africa, Egypt and Morocco in term of market size (Standard and Poor's Emerging Stock Markets Fact book, 2015). Among the emerging markets, Nigeria's share of emerging market capitalization out of 54 markets covered by Standard and Poor's was just 0.1% as at the end of 1999 (Standard and Poor's Emerging Stock Markets Factbook, 2000).

Alile and Anao, (1986) adduced possible reasons for the small size. One of the reasons is that indigenous entrepreneurs were not too keen in to going public due to fear of losing control. However, an innovative move by the stock market through the creation of second-tier securities market (SSM) tried to find solution to the problem. Measures taken by the governments and the exchange itself are expected to boost the resource base of the stock market in Nigeria. These measures are: Privatization of Public Enterprises, linking up of the exchange with Reuters Electronic Contributors System for on line global dissemination of stock information, launching of the exchange's Intranets System (CAPNET) and the transition of the exchange from manual call-over Trading System to Automated System (ATS) in April 1999. It is also expected that the present democratic dispensation will impact positively on the turnover of the exchange.

#### Liquidity

Basically, liquidity refers to the ease with which an asset (in these case securities) can be turned into cash through an efficient market. That is, the ability to easily buy and sell securities. Demirgüç-Kunt and Levine (1996) identified two main reasons why liquidity is important in the characterization of stock market. The first is that liquidity relates to the riskiness of the investment. An investment is

deemed to be less risky where investors are able to alter their portfolios quickly and cheaply. While the second, theoretically, allocation of capital is more efficient and as such liquid market enhances long-term economic growth. Added to the points above (Osinubi 1998) pointed out that liquidity of the stock market facilitates profitable interaction between the stock market and the money market in that shares become easily acceptable as collateral for bank lending thereby boosting credit and investment. There are two main measures of liquidity; total value traded ratio and turnover ratio.

- a) Total value traded ratio is the total value of shares traded on the Stock market exchange divided by GDP. It measures trading of equities as a share of national output. Normally, it should positively reflect liquidity on an economy wide basis. The market has an average of 0.25 per annum for the study period.
- b) Turnover ratio is the value of total shares divided by capitalization. High turnover reflects low transaction costs. The Nigerian stock market turnover ratio for the period under study has an average of 0.04.

## Institutional Characteristics

### Regulatory Institutions

Regulation is seen as a way of buoying investor's confidence in brokers and other capital intermediaries and stakeholders. It ensures fair play and transparency in the market operations. This in turn encourages investment and trading in the stock market. Nigerian capital market had from the onset ensured that a strong institutional framework was in place through the establishment of Capital Issue Commission (though with no legal status), which later metamorphosed, to Nigeria Securities and Exchange Commission in 1979 and serves as the apex regulatory body of Nigerian capital market. Of added importance is that the Nigerian Stock Exchange itself is a self-regulatory institution (Akamiokhor, 1984; Inanga and Emenuga, 1997).

### Transaction Costs

One of the relative measures of the efficiency of a stock market is the level of transaction cost. The higher the transaction cost the highly inefficient the market is perceived to be. Transaction cost can either be viewed from the perspective of an investor or that of the companies. From a company's point of view, it includes all expenses incurred in the bid to make public offer of equity or loan stock. For an investor on the hand, transaction cost comprises all expenses incurred in the



purchase of shares or loan stock. Identifiable transaction cost in Nigerian capital market includes: application fee (0.5%), valuation fee (0.75%), brokerage fee (1%) and vending fee (1%). Other cost item includes payment to auditors, solicitors, advertising and administrative expenses (Inanga and Emenuga, 1997).

### Openness and Market Barriers

Until 1972 when the Indigenization Decree was promulgated, there was no restriction to foreign investors in the Nigerian capital market. The Decree also known as Nigerian Investment Promotion Decree was amended in 1977 and it effectively restrict capital inflows to a maximum of 40% equity holding in listed security among other stringent measures. The Decree was again amended in 1989 during the privatization era. This time it was aimed at encouraging domestic investment by foreigners. However, total deregulation of the capital market was helped by the Nigerian Investment Promotion Commission Act of 1995, Foreign Exchange (Miscellaneous Provisions) Act of 1995 and recently, the Investment and Securities Act of 1999. Foreigners now participate in the Nigerian capital market both as operators and investors. There is no limit any more to the percentage of foreign holding in any company registered in Nigeria. As at 2000, foreign holdings on the Nigeria stock exchange is 3.96 on the average (BGL Financial Monitor, 2001).

### Asset Pricing Characteristics

This deals with the efficiency of the asset pricing process in the securities market. The major yardstick for measuring efficiency in terms of market prices is the informational content inherent in such prices. A market price is touted as reflecting a strongly efficient market if it adequately and correctly reflects all available information (past, present and future) and are at the disposal of all market participants simultaneously and instantaneously. It is regarded as semi-strong where current stock prices reflect both the information contained in the historical prices and all publicly available information. Where the current prices reflect only the historical information with little predictive value, the market is regarded as weak (Inanga and Emenuga, 1997).

### Central Securities and Clearing System (CSCS) a Subsidiary of NSE

Central Securities Clearing System (CSCS) was established on 14th April 1997. It services as a central depository for all shares certificates of quoted securities including new issues. Since its introduction in 1997, it has reduced instances of fraud perpetuated by capital market operators' especially stock brokers. It also

provides clearing settlement and custodian services for local and foreign investments. Central Securities Clearing System brought the Nigerian Stock Market at par with what is obtainable from other developed countries. The Central Securities Clearing System has now enhanced the operation of stock transactions through the Automated Trading System (ATS) which replaced the manual Call over System of Trading in 1999. The major strength of Central Securities Clearing System lies in its ability to centralize operations which were been done at different location.

## Theoretical Review

### Financial Liberalization

Theory According to this theory by Shaw (1973) financial liberalization means removal of government controls from the financial markets, thus in a full liberalized regime there are no credit restriction, capital outflows move freely, receipts can be made in foreign currencies and foreign shareholders are can hold local equity. Claesens et al., (2001) and Stulz (1999) affirms that the liberalization improves effectiveness of financial institutions through removing inefficient firms.

Moreover, the key arguments for proponents of the financial liberalization is that process would lead to more efficient allocation of financial resources on commercial basis to most productive enterprises, thus increasing productivity as well as growth rate in an economy (Galindo et al., 2007). In view of this therefore, financial liberalization is an important determinant of financial development (Demetriades & Luintel, 2001; Yartey & Adjasi, 2007; Seetanah et al., 2009). According to, Williamson and Mahar (1998) financial depth increases after the liberalization process, financial liberalization may result to adverse effects on market development in short term and positively in the long run (Ben-Naceau, Ghazouani & Omran, 2008).

Levine and Zervos (1998), suggests that lowering barriers to international investors would boost equity market development. In fact, liberalization in form of foreign capital enhances assets differentiation (Mun et al., 2008). In addition, Ito, (2005) asserts that elimination of capital restrictions enables shareholders to engage in portfolio diversification, thus decreasing the cost of capital. In regards to savings Aduda et al., (2013) asserts that liberalization and reorganization increases savings if enterprise in the private sector increase credit. The outcome is an expansion in securities market as investors buy securities using their savings from the bank. In addition, Sulaiman et al., (2012) propose that, a long run link between financial liberalization and economic growth exist since liberalization



enables financial system to function efficiently, increase savings.

### Financial Repression

Theory According to this theory by MacKinnon and Shaw (1973), repressing the financial system means that a state controls the price and credit. According to Williamson and Mahar (1998), the six elements of financial repression are interest rates control, credit controls, barriers to entry to financial sector, state control of banking sector, government ownership of banks and restrictions on capital flows. Detrimades (1996) and Luintel (1997) argued that these financial repressive policies have negative effect on financial deepening, investment and financial development.

Consequently, Khalaf and Sanhita (2009) noted that different policies are implemented to achieve greater development of financial systems; however, some developing countries have adopted restrictive policies that have seen dampening of financial development by lowering the savings and investment levels. In absence of repression and inefficiencies joining together financial consumers would lead to more deep systems. (Goldsmith, 1969; Ghani, 1992; Greenwood & Jovanovic, 1990). GDP grows as a result of a more grown financial sector however, the opposite case shallowness in the financial sector which is a phenomena facing economic growth in emerging economies. According to Victor and Omidio (2007) interest rates ceilings and controls of credit in economies that are repressed poses as hindrances on growth in developing states.

### Supply Led Growth Theory

This theory was put forward by Schumpeter (1911). The theory suggests that capital market development spurs economic growth as the presence of developed capital markets results to greater levels of investment and savings which in turn enhance effectiveness of resources gathering. A financial institution that is well structured enhances the entire efficiency in the economic, increases liquidity, gathers savings, improves resources mobilization, remove capital from primitive sectors to modern set ups hence promoting growth of economy (ohwofasa & aiyedogbon, 2011). Dernirguc-Kunt and Levine (2008) posits that for an economy to grow, the development of its capital market is critical. The argument is finance that is supply-leading poses several benefits resources through enhancing the composition of existing funds and places new ventures by providing rewards for greater investments and saving.

### The McKinnon and Shaw Theory

Mckinnon and Shaw (1973) analyzed the benefits of financial repression, at least reducing its impact on the domestic financial system in the developing countries.

Their analyses which are referred to as the complementarity hypothesis, concluded that mitigating financial restrictions in such developing countries, mainly by allowing market forces to determine real interest rates, can exert a positive effect on growth rates as interest rates rise toward their competitive market equilibrium.

According to this theory, ceilings on interest rates reduce savings, capital accumulation and discourage the efficient allocation of resources. In addition, McKinnon pointed out that financial repression may lead to dualism in which firms that have access to subsidized funding, tend to go for more capital-intensive technologies; whereas those not favoured by policy, only be able to engage high-yield projects with short maturity.

Another effect of financial repression pointed out by Mckinnon, R. and Shaw, E. (1973) was on credit rationing effect which results from excessive government intervention in money and credit markets in developing countries. Therefore, financial repression means that the quantity of savings and investments are low or irregular and also the level of activity which occurs is of poor quality. If the real interest rate is not allowed to clear the money and credit markets, savings and investment are repressed both in the overall level as well as their quality. According to Gemechand Struthers (2011), the hypotheses of McKinnon and Shaw made the assumption that financial liberalization is associated with higher real interest rates (as controls on these are lifted) hence stimulating savings.

### Empirical Review

Ngugi, Amanja and Maana (2013) conducted a study on financial deepening, capital market and growth of the economy in Kenya. The study used multiple regression and correlation method to establish the relationship between variables. The study findings were a correlation that was positive existed among capital market, access of financial besides depth factors. However, development of the market had a high relationship with financial sector depth than financial access. The method of analysis that was used in their study was Ordinary Least Square method however the current study used ARDL-ECM approach for analysis.

Osomwanyi and Kasimu (2013) examined the causal relationship and the causality link among development of stock market and growth of economy in Ghana, Kenya and Nigeria. Employing Granger test procedure, the study examined the causal relationship and the direction of causality between

variables. Their study regressed five stock market indicators namely capitalization of stock market (MC), turnover ratio of stocks (STO), stock traded value (TVL), number of listed securities (LS), and stock market index (MI) against the real GDP representing growth of the economy. Empirical findings showed no link among development of stock market and Ghana economic growth. In Nigeria the findings were a bidirectional link between stock market development and Kenya economic growth. The variables used were economic growth and stock market development; the current study used capital market development and financial deepening.

Werigbelegha and Igbodika (2013) investigated relationship between deepening financial sector and economic performance of Nigeria. Their study utilized secondary data retrieved from statistical bulletins of Nigeria central bank and statistics from national bureau. Broad money supply and private sector credit were used to represent financial sector deepening. Gross domestic product was used to represent the performance of Nigerian. The findings indicated that financial deepening and Nigerian economy have a long run equilibrium relationship in Nigerai. The study used economic growth as the dependent variable while the current study used capital market development.

Naceur et al., (2007) studied the factors of stock market development in MENA. Using savings rate, credit to private sector, money supply liquidity and rate of inflation rate as factors of stock market development and Ordinary Least Square method, the study found out savings rate, credit to private sector, money supply, liquidity of the market and rate of inflation were factors affecting development of the stock market in MENA. The study used OLS method and established the direct relationship among the variables. The current study used ARDL approach and further established if gross domestic savings mediates the link between deepening the financial sector and development of capital market in Kenya.

Aduda et al., (2012) sought to find out determinants of development of Nairobi securities exchange. Using existing data from 2005-2009 and Ordinary Least Square method for analysis, the study found that liquidity of stock market, income per capita, domestic savings and money supply are critical determinants of stock market development in Kenya. However, relationship among development of stock market, rate of inflation and private capital flows was statistically insignificant. Aduda et al., (2012) and established the interaction effects of financial deepening variables on capital market development in Kenya.

Li (2015) examined the relationship between money supply and stock market in Europe. Empirical analysis was done using the Vector Error Correction Model and Granger Causality test to determine the direction of the link. The result

revealed that money supply had a significant positive impact on stock market capitalization both in the long run and short run; however, money supply does not granger cause stock market capitalization. The study was done in Europe which has different economic conditions and therefore it was necessary to test these conclusions in context of Kenya which is a developing country.

Sirucek (2012) conducted a study on the impact of money supply and capital market in United States of America. Stock market index, Dow Jones Industrial Average was used to represent the capital market. Using Ordinary Least Squares Method, the study found a positive significant relationship between money supply and stock market index. The present study employed ARDL-ECM approach and used market capitalization as the dependent variable. This study was also done on capital market in Kenya which is an emerging market.

Kemboi and Tarus (2012) examined the macro-economic factors affecting stock market development of stock market in Kenya in 2000 to 2009. An error correction model was used in estimating the relationship between macroeconomic variables and stock market development. Using VECM the results revealed that money supply positive and statistically significant on development of Nairobi Securities Exchange. The study examined the effect of macroeconomic variables on stock market development in Kenya and used money supply as a measure of bank development however the current study examined the effect of financial deepening on capital market development and used money supply M2 as a measure of financial depth.

Aleghona et.al (2014) conducted a study on financial deepening and performance of capital market in Nigeria. Using the VECM approach the study found that narrow money supply has a positive significant impact on performance of capital market in Nigeria. The study used VECM approach while the current study used ARDL approach.

Al-Zararee and Ananzeh (2014) conducted a study on the relationship between macroeconomic factors on Amman Stock Market Exchange (ASE) Returns, by employing quarterly data between 1993 and 2013. They study used real money supply as a measure of macroeconomic factor and ARCH /GARCH models were utilized. The result revealed that real money supply had a negative significant impact. The study explored macroeconomic variables effect on stock market returns in Jordan and utilized ARCH /GARCH models. The current study investigated the effect of money supply on capital market development in Kenya and utilized the ARDL approach to establish both the short run and long run relationship. JavedIqbal (2012) in a study on capital market in Pakistan used the ratio of M2 to GDP as an indicator of financial depth of the economy. In

support of other studies Nacuer et al., (2007) and Yartey (2008) found a positive relationship between money supply and stock market development.

Brahmasrene (2015) examined the association between market index and macroeconomic variables in Thailand. The study carried out Granger causality tests. The results showed that money supply has a positive impact on the stock market index. This study established the direct relationship between the variables while the current demonstrated that besides the direct their also exist an indirect and interaction relationship between the variables.

A study by Yilgor and Karahan (2013) on financial development and growth of economy indicated a bidirectional relationship between broad money supply and economic growth in Turkish economy. Onuwumere et al., (2012) conducted a study on the financial deepening and economic growth in Nigeria for the period 1992- 2008. The study used time series data and employed multiple regression models. However, they found out that M2/GDP had a positive non-significant impact on gross domestic product growth rates in Nigeria. These studies used economic growth as the dependent variable while the present study used capital market development.

Nnenna (2012) studied financial deepening and stock market in Nigeria. Using value of stocks traded as ratio of GDP to represent financial deepening as the independent variable and stock market as the dependent variable. Using GARCH (1, 1) model the study found that the ratio of value of traded stocks to GDP had no effect on stock market. The study used GARCH (1, 1) model while the current study used ARDL model.

Rahman and Mustafa (2014) surveyed effect deepening finance and stock market return in selected 19 developed and 21 developing countries from 1988-2013. The study used stock market turnover and liquidity as measures of financial deepening. Using the VECM, the study found out that stock market turnover contributes more to stock market returns than stock market liquidity in both selected developed and developing economies. The study used VECM and established a direct relationship among the variables however the present study used ARDL-VECM and established the mediating effect of gross domestic savings on the relationship between the variables.

Aduda et al., (2012) found that in Kenya the liquidity of market li has exhibited a decline since 2006, but even out in 2008 and 2009. Aduda et al., (2012), researched on elements of expansion in the Nairobi Securities Exchange. Using VAR for analysis the outcome was that bank credit to private sector was statistically significant and therefore promotes stock market development. While the study used VAR model the current study used ARDL model with

ECM.

Ngugi et al., (2013) carried out a study on capital market, financial deepening and economic growth in Kenya. The study found out that there exists a positive correlation between capital market, and financial access. The study used economic growth as the dependent variable however the current study used capital market development. In addition, this study used ARDL model with an ECM term and further established the direction of the causal link by carrying out the Granger causality test.

Abdullah (2016) studied the simultaneous openness hypothesis on stock market development. The study found out capital account openness affects market development negatively while trade openness is insignificant determinant of stock market development. Kim et al., (2011) investigated trade openness effect on financial development. Panel data was used for the period 1960-2005 for 88 countries the study found out trade openness has adverse effects on financial development in short run but in the long run.

Shahbaz et al., (2015) investigated the Macroeconomic factors affecting market capitalization in Pakistan. The ADRL bounds test for co integration. The findings showed that the effect of trade openness on stock market development is negative and significant both in the short run and long run. Chinn and Ito (2006) examined the impact of financial openness on financial development. The study used a sample of 108 countries and their results revealed that capital account openness has a significant effect on financial markets development.

Kalim and Shabaz (2013) studied the effect of FDI on development stock market in Pakistan. An ARDL bound testing approach was used to test long run association and ECM established the short run relationship. Empirical findings revealed a positive significant relationship between FDI and stock market development in Pakistan. This study was done in Pakistan and therefore the findings could not be generalized in Kenya which has different economic and political condition.

Raza et al., (2012) analyzed the impact of FDI on stock market in Pakistan. The study employed Ordinary Least Square method and used annual time series data for the period 1988-2009. The findings revealed a positive impact of foreign direct investment on stock market development in Pakistan.

Aduda et al., (2012) on determinants of development in Nairobi Securities Exchange revealed that gross domestic savings has a positive significant relationship with the stock market development in Kenya. Further, the study found that growth in the economy compels people to investment invest their previous savings. Similarly, another study by Yartey (2008) found that gross



domestic savings is a positive and significant determinants of capital market development.

Nnenna (2012) examines the relationship between financial deepening and stock market returns in Nigeria employing value of traded stocks as ratio of GDP and market capitalization as ratio of GDP. Empirical results show that the ratio of value of traded stocks to GDP has no effect on stock market while the ratio of market capitalization to GDP exerts positive influence on stock market. Alenoghena et al. (2014) study the impact of financial deepening on the performance of the Nigerian capital market and find that the impact is positive on the stock market of Nigeria using data from 1981 through 2012.

Onwumere, et al (2012) examined the impact of financial deepening on economic growth in Nigeria for the period 1992 to 2003. The study adopted supply Leading hypothesis thereby using variables such as broad money velocity, money stock diversification, economic volatility, market capitalization and market liquidity as proxies for financial deepening and gross domestic product growth rates for economic growth. The paper discovered that broad money velocity and market liquidity promote economic growth in Nigeria while money stock diversification, economic volatility and market capitalization do not.

Akinlo and Egbetunde (2010) examined the long-run and causal relationship between financial development and economic growth for ten countries in sub-Saharan Africa using the vector error correction model (VECM). The study revealed that financial development is co-integrated with economic growth in the selected ten countries in sub-Saharan African countries. it went in Central African Republic, Congo Republic, Gabon, and Nigerian while economic growth Granger causes financial development in Zambia and a bidirectional relationship between financial development and economic growth was found in Kenya, Chad, South Africa, Sierra Leone and Swaziland.

Okpara (2010) assessed the relative potency of financial repression and liberalization in Nigeria. The study selected periods that would reflect important policy periods in Nigeria. The study multiple regression analysis to estimate the model constructed for the research. The results of the study reveal that financial development during the period of financial liberalization significantly impact more on the growth variable (GDP). Most studies reviewed the link between finance and economic growth.

Égerta and Koèenda (2011) examined the time-varying synchronization of European Stock Markets for three developed (France, Germany, and the United Kingdom) and three emerging (the Czech Republic, Hungary and Poland) European stock markets. Using dynamic conditional correlation GARCH

model for five-minute tick intraday stock price data from 2003 to 2006 and monitoring stock co-movements, they concluded that a deeper and higher quality banking system is associated with a lower volatility of stock returns and greater synchronization in the movements of domestic and world returns.

## METHODOLOGY

This study adopted ex-facto research design to examine the effect of financial deepening on the performance of Nigeria capital market. The time series data used in this study were sourced from the publications of Central Bank of Nigeria statistical Bulletin.

### Model Specification

Econometric models used in this research work include the Regression Analysis and the Vector Auto-regression (VAR) Model. The choice of multiple regression models is based on the use of more than single independent variables in a regression model. The study adopts modified model of Owuor (2013) on the relationship between real interest rate and financial deepening in Kenya.

### Linear Regression Models

Components of financial deepening have implication on commercial bank liquidity management. In this study, increase in liquidity management is conceptualized as the function of variation in financial deepening. We have therefore, chosen a combination of deductive and inductive analytical framework to achieve the objective of the study.

$$ASPI = f(FD) \quad (2)$$

### Testing of Research Hypothesis

The focus of this study is to evaluate the effect of financial deepening on liquidity management of commercial banks. In other words, changes in capital market performance depend on changes in components of financial deepening.

$$U(VAR) = (ASPI) \quad (4)$$

Where:

$$ASPI = FD \quad (5)$$

We assumed that the economy is described by a system of equations where:

$$ASPI = (M1/GDP, M2/GDP, PSC/GDP, MOB/M2, MMD/M2) \quad (6)$$

$$ASPI = \beta_0 + \beta_1 M1/GDP + \beta_2 M2/GDP + \beta_3 PSC/GDP + \beta_4 MOB/GDP + \beta_5 MMD/GDP + \mu \quad (7)$$

Where:

ASPI = Growth of All share price index proxy for capital market performance

M1/GDP = Percentage of Narrow money supply to Gross domestic products

M2/GDP = Percentage of broad money supply to Gross domestic products

M2/GDP = Percentage of private sector credit to Gross domestic products

MOB/GDP = Percentage of money outside the bank to Gross domestic products

MMD/GDP = Percentage of money market instrument to Gross domestic products

$b_0$  = Regression Intercept

$b_1 - b_6$  = Coefficient of the independent variables to the Dependent variable

$\mu$  = Error term

### Techniques of Data Analysis

The main tool of analysis is the Ordinary Least Squares (OLS) using the multiple regression method for a period of 34 years, annual data covering 1986–2019. Statistical evaluation of the global utility of the analytical model, so as to determine the reliability of the results obtained were carried out using the coefficient of correlation ( $r$ ) of the regression, the coefficient of determination ( $r^2$ ), the student T-test and F-test.

- (i) Coefficient of Determination ( $r^2$ ) Test: This measure the explanatory power of the independent variables on the dependent variables.  $R^2$  gives the proportion or percentage of the total variation in the dependent variable Y that is accounted for by the single explanatory variable X. The higher the  $R^2$  value the better. For example, to determine the proportion of financial deepening and capital market performance in our model, we used the coefficient of determination. The coefficient of determination varies between 0.0 and 1.0. A coefficient of determination says 0.20 means that 20% of changes in the dependent variable are explained by the independent variable(s). Therefore, we shall use the  $R^2$  to determine the extent to which variation in financial deepening variables

are explained by variations in capital market performance variable over the periods covered in this study.

- (ii) **Correlation Co-Efficient (R):** This measures the degree of the relationship between two variables  $x$  and  $y$  in a regression equation. That is, it tries to establish the nature and magnitude of the relationship when two variables are been analyzed. Thus correlation co-efficient show whether two variables are positively or negatively correlated. That is, it takes the value ranging from  $-1$ , to  $+1$ .
- (iii) **F-Test:** This measures the overall significance. The extent to which the statistic of the coefficient of determination is statistically significant is measured by the F-test. The F-test can be done using the F-statistic or by the probability estimate. We use the F-statistic estimate for this analysis.
- (iv) **Student T-test:** measures the individual statistical significance of the estimated independent variables. This is a test of significance used to test the significance of regression coefficients (Gujurati, 2003). Generally speaking, the test of significance approach is one of the methods used to test statistical hypothesis. A test of significance is a procedure by sample results are used to verify the truth or falsity of a null hypothesis ( $H_0$ ) at 5% level of significance.
- (v) **Durbin Watson Statistics:** This measures the collinearity and autocorrelation between the variables in the time series. It is expected that a ratio of close to 2.00 is not auto correlated while ratio above 2.00 assumed the presence of autocorrelation.
- (vi) **Regression coefficient:** This measures the extent in which the independent variables affect the dependent variables in the study.
- (vii) **Probability ratio:** It measures also the extent in which the independent variables can explain change to the dependent variables given a percentage level of significant.

#### Stationarity (Unit Root) Tests

Stationary test therefore checks for the stationarity of the variables used in the models. If stationary at level, then it is integrated of order zero,  $I(0)$ . Thus, test for stationarity is also called test for integration. It is also called unit root test.

Stationarity denotes the non-existence of unit root. We shall therefore subject all the variables to unit root test using the augmented Dickey Fuller (ADF) test specified in Gujarati (2004) as follows.

$$Dy_t = b_1 + b_2 + dy_{t-1} + \sum_{i=1}^m \alpha_i Dy_{t-i} + \epsilon_t \tag{7}$$

Where:

- $Dy_t$  = change time t
- $Dy_{t-1}$  = the lagged value of the dependent variables
- $S_t$  = White noise error term

If in the above  $d=0$ , then we conclude that there is a unit root. Otherwise there is no unit root, meaning that it is stationary. The choice of lag will be determined by Akaike information criteria.

**Co-integration Test (The Johansen Test)**

It has already been warned that the regression of a non-stationary time series on another non stationary time series may lead to a spurious regression. If the residual is found to be stationary at level, we conclude that the variables are co-integrated and as such has long-run relationship exists among them.

$$ASPI_t = w_0 + \sum_{i=1}^j \alpha_i M1/GDP_{t-i} + \sum_{i=1}^j \beta_i M2/GDP_{t-i} + \sum_{i=1}^j \gamma_i PSC/GDP_{t-i} + \sum_{i=1}^j \delta_i MOB/M2_{t-i} + \sum_{i=1}^j \epsilon_i MMD/M2_{t-i} + m_t \tag{8}$$

**Granger Causality Test**

Causality means the impact of one variable on another, in other-words; causality is when an independent variable causes changes in a dependent variable. The pair-wise granger causality test is mathematically expressed as:

$$Y_t = \rho_0 + \sum_{i=1}^n \alpha_i x_{t-i} + \sum_{i=1}^n \beta_i y_{t-i} + u_t \tag{9}$$

and

$$x_t = \rho_0 + \sum_{i=1}^n \alpha_i x_{t-i} + \sum_{i=1}^n \beta_i y_{t-i} + v_t \tag{10}$$

Where  $x_t$  and  $y_t$  are the variables to be tested white  $u_t$  and  $v_t$  are the white noise disturbance terms. The null hypothesis  $\rho_1^y = \rho_1^x = 0$  for all  $i$ 's is tested against the

alternative hypothesis  $\rho_1^x \neq 0$  and  $d\rho_1^y \neq 0$ . if the co-efficient of  $\rho_1^x$  are statistically significant but that of  $d\rho_1^y$  are not, then x causes y. If the reverse is true then y causes x. however, where both co-efficient of  $\rho_1^x$  and  $d\rho_1^y$  are significant then causality is bi – directional.

**Vector Error Correction (VEC) Technique**

The presence of co-integrating relationship forms the basis of the use of Vector Error Correction Model. E-views econometric software used for data analysis, implement vector Auto-regression (VAR)- based co-integration tests using the methodology developed by Johansen (1991,1995). The non-standard critical values are taken from (Osterward, 1992).

**ANALYSIS AND DISCUSSION OF FINDINGS**

Table 1: Presentation of Unit Root Test

Variable	ADF statistic	MacKinnon	MacKinnon	MacKinnon	Prob.	Decision	Summary
Unit Root At Level							
ASPI	-1.326375	-3.646342	-2.954021	-2.615817	0.6055	1(0)	Not stationary
M1_GDP	-2.265962	-3.646342	-2.954021	-2.615817	0.1884	1(0)	Not stationary
M2_GDP	-2.054575	-3.646342	-2.954021	-2.615817	0.2634	1(0)	Not stationary
MMD_M2	-1.516008	-3.646342	-2.954021	-2.615817	0.5132	1(0)	Not stationary
MOB_M2	-1.855849	-3.646342	-2.954021	-2.615817	0.3481	1(0)	Not stationary
PSC_GDP	-1.920270	-3.646342	-2.954021	-2.615817	0.3193	1(0)	Not stationary
Variable	ADF statistic	MacKinnon	MacKinnon	MacKinnon	Prob.	Decision	Summary
ASPI	-5.237446	-3.661661	-2.960411	-2.619160	0.0002	1(I)	Stationary
M1_GDP	-6.761552	-3.670170	-2.963972	-2.621007	0.0000	1(I)	Stationary
M2_GDP	-5.184050	-3.689194	-2.971853	-2.625121	0.0002	1(I)	Stationary
MMD_M2	-8.523950	-3.661661	-2.960411	-2.619160	0.0000	1(I)	Stationary
MOB_M2	-6.827535	-3.670170	-2.963972	-2.621007	0.0000	1(I)	Stationary
PSC_GDP	-7.030684	-3.670170	-2.963972	-2.621007	0.0000	1(I)	Stationary

Source: E-view 9.0

The analysis from table 1 shows the stationarity test of the variables. From the tables, the ADF statistics of the variables are all greater than the MacKinnon critical value at 5%. This means that the variables are stationary and the null hypotheses of non stationarity are rejected. Therefore, the study concludes that the variables integrated in the order of 1(1).



Table 2: Presentation of Level Series Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
M1_GDP	0.510179	10.52269	0.048484	0.9617
M2_GDP	-6.543961	7.723794	-0.847247	0.4040
MMD_M2	1.550344	1.320450	1.174102	0.2502
MOB_M2	19.25748	11.32988	1.699708	0.1003
PSC_GDP	1.396397	3.847637	0.362923	0.7194
C	93.66104	33.36668	2.807023	0.0090
R-squared	0.550898	Mean dependent var		93.21176
Adjusted R-squared	0.470701	S.D. dependent var		48.93756
S.E. of regression	35.60351	Akaike info criterion		10.14155
Sum squared resid	35493.07	Schwarz criterion		10.41091
Log likelihood	-166.4064	Hannan-Quinn criter.		10.23341
F-statistic	6.869327	Durbin-Watson stat		0.883130
Prob(F-statistic)	0.000269			

Source: E-view 9.0

From table 2, the regression equation was revealed that holding the independent variables constant and performance of the capital market to a constant zero, Nigeria financial market deepening indicators would be at 93.66104. The adjusted R-square shows that 47 percent variation on performance of Nigeria capital market can be explained by variation on the independent variables. The f-statistic and probability indicates that the model is significant while the Durbin Watson statistics proved that there is presence of serial autocorrelation. The beta coefficient of the variables found all the independent variables have positive effect on the performance of the Nigeria capital market except percentage of broad money supply.

Table 3: Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.704079	96.06918	95.75366	0.0475
At most 1 *	0.511563	87.10395	69.81889	0.0009
At most 2*	0.473078	54.17452	47.85613	0.0023
At most 3*	0.227056	33.67203	29.79707	0.0485
At most 4	0.156055	5.430478	15.49471	0.7615

At most 5	3.47E-05	0.001111	3.841466	0.9730	
Normalized cointegrating coefficients (standard error in parentheses)					
ASPI	M1_GDP	M2_GDP	MMD_M2	MOB_M2	PSC_GDP
1.000000	23.31474	-6.973209	1.501435	-54.22231	-2.065793
	(15.5337)	(9.59096)	(1.09757)	(14.2397)	(3.91427)

Source: E-view 9.0

Table 3 shows the co-integration results of the variables. It shows at least four cointegrating equations. This indicates the presence of long run relationship between the variables in the time series. The null hypotheses of no cointegration are rejected and the alternate accepted. Results from the normalized cointegration test found that in the long run percentage of narrow money supply, money market development have positive long run effect while percentage of broad money supply, money out the banks and private sector credit have negative long run effect on capital market performance.

Table 4: Presentation Error Correction Estimates

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.300685	6.056235	0.049649	0.9610
D(ASPI(-1))	0.165915	0.261793	0.633762	0.5347
D(M1_GDP(-1))	3.490555	9.892495	0.352849	0.7285
D(M2_GDP(-1))	1.436790	7.655427	0.187683	0.8533
D(MMD_M2(-1))	-1.972812	2.965456	-0.665265	0.5148
D(MOB_M2(-1))	-4.816882	14.87233	-0.323882	0.7500
D(PSC_GDP(-1))	-3.806776	3.925555	-0.969742	0.3458
D(ASPI(-2))	0.066557	0.318406	0.209032	0.8369
D(M1_GDP(-2))	18.68418	13.08747	1.427638	0.1715
D(M2_GDP(-2))	-5.418902	8.376881	-0.646888	0.5263
D(MMD_M2(-2))	-1.670149	2.680745	-0.623017	0.5415
D(MOB_M2(-2))	-18.74444	16.31560	-1.148866	0.2665
D(PSC_GDP(-2))	-1.969348	4.647350	-0.423757	0.6771
ECM(-1)	-0.500229	0.309721	-1.615098	0.1247
R-squared	0.763022	Mean dependent var		-1.752258
Adjusted R-squared	0.624079	S.D. dependent var		29.25777
S.E. of regression	31.01985	Akaike info criterion		10.00958
Sum squared resid	16357.93	Schwarz criterion		10.65719
Log likelihood	-141.1485	Hannan-Quinn criter.		10.22069
F-statistic	6.745270	Durbin-Watson stat		1.948316
Prob(F-statistic)	0.000900			

Source: E-View 9.0

The estimated error correction model proved that the independent variables can explain 76 percent variation on the dependent variable. The model is well specified based on the outcome of the f-statistics and probability. The error correction model ECM (-1) proves that the variable can adjust at the speed of 50 percent annually, however the beta coefficient of variables at the various lag proved that the relationship between the dependent and the independent variables.

<b>Null Hypothesis:</b>	<b>Obs</b>	<b>F-Statistic</b>	<b>Prob.</b>
M1_GDP does not Granger Cause ASPI	32	2.04008	0.1496
ASPI does not Granger Cause M1_GDP		0.64538	0.5324
M2_GDP does not Granger Cause ASPI	32	2.41351	0.1086
ASPI does not Granger Cause M2_GDP		2.01411	0.1530
MMD_M2 does not Granger Cause ASPI	32	0.53536	0.5915
ASPI does not Granger Cause MMD_M2		1.02383	0.3727
MOB_M2 does not Granger Cause ASPI	32	0.04334	0.9577
ASPI does not Granger Cause MOB_M2		4.20118	0.0258
PSC_GDP does not Granger Cause ASPI	32	2.00453	0.1543
ASPI does not Granger Cause PSC_GDP		3.46834	0.0456

Source: E-View 9.0

From table 5, it is evident that the result found causality between all share price index and money out the banks and all share price index and private sector credit. The presence of causality confirms our a-priori expectation while the nonexistence of causality is contrary to our expectation and could be blamed on the volatility on the monetary policy compared to Nigeria macroeconomic performance.

#### DISCUSSION OF FINDINGS

The regression model formulated in this study proved that 47 (adjusted  $R^2$ ) percent variation on performance of Nigeria capital market can be traced to financial deepening indicators formulated in the regression model. This implies that more than 53 percent was explained by factors not captured in the regression

model. The study found that narrow money supply has positive but no significant effect on the performance of Nigeria capital market. The coefficient justifies that a 1 percent increase on narrow money supply positive affect all share price index by 0.5 percent. The positive effect of the variable confirms the a-priori expectation of the study and reforms in the financial market such as the banking sector consolidation and recapitalization, increase capital base of the insurance firms and internationalization of the capital market. Empirically, the findings confirm the findings of Ngugi, Amanja and Maana (2013) a correlation that was positive existed among capital market, access of financial besides depth factors, the findings of Werigbelegha and Igbodika (2013) that financial deepening and Nigerian economy have a long run equilibrium relationship in Nigeria, the findings of Naceur et al., (2007) deepening the financial sector and development of capital market in Kenya but contrary to the findings of Osomwanyi and Kasimu (2013) whose findings show no link among development of stock market and Ghana economic growth. In Nigeria the findings were a bidirectional link between stock market development and Kenya economic growth. The variables used were economic growth and stock market development; the current study used capital market development and financial deepening.

The study found that broad money supply has negative but no significant effect on the performance of Nigeria capital market. The coefficient justifies that a 1 percent increase on broad money supply negatively affect all share price index by 6.5 percent. The negative effect of the variable contradicts the a-priori expectation of the study and reforms in the financial market such as the banking sector consolidation and recapitalization, increase capital base of the insurance firms and internationalization of the capital market. Empirically, the findings contradict the findings of Ngugi, Amanja and Maana (2013) a correlation that was positive existed among capital market, access of financial besides depth factors, the findings of Werigbelegha and Igbodika (2013) that financial deepening and Nigerian economy have a long run equilibrium relationship in Nigeria, the findings of Naceur et al., (2007) deepening the financial sector and development of capital market in Kenya but confirm the findings of Osomwanyi and Kasimu (2013) whose findings show no link among development of stock market and Ghana economic growth. In Nigeria the findings were a bidirectional link between stock market development and Kenya economic growth. The variables used were economic growth and stock market development; the current study used capital market development and financial

deepening.

The study found that money market development has positive but no significant effect on the performance of Nigeria capital market. The coefficient justifies that a 1 percent increase on money market development positive affect all share price index by 1.6 percent. The positive effect of the variable confirms the a-priori expectation of the study and reforms in the financial market such as the banking sector consolidation and recapitalization, increase capital base of the insurance firms and internationalization of the capital market. Empirically, the findings confirm the findings of Ngugi, Amanja and Maana (2013) a correlation that was positive existed among capital market, access of financial besides depth factors, the findings of Werigbelegha and Igbodika (2013) that financial deepening and Nigerian economy have a long run equilibrium relationship in Nigeria, the findings of Naceur et al., (2007) deepening the financial sector and development of capital market in Kenya but contrary to the findings of Osomwanyi and Kasimu (2013) whose findings show no link among development of stock market and Ghana economic growth. In Nigeria the findings were a bidirectional link between stock market development and Kenya economic growth. The variables used were economic growth and stock market development; the current study used capital market development and financial deepening.

The study found that private sector credit has positive but no significant effect on the performance of Nigeria capital market. The coefficient justifies that a 1 percent increase on private sector credit positive affect all share price index by 1.4 percent. The positive effect of the variable confirms the a-priori expectation of the study and reforms in the financial market such as the banking sector consolidation and recapitalization, increase capital base of the insurance firms and internationalization of the capital market. Empirically, the findings confirm the findings of Ngugi, Amanja and Maana (2013) a correlation that was positive existed among capital market, access of financial besides depth factors, the findings of Werigbelegha and Igbodika (2013) that financial deepening and Nigerian economy have a long run equilibrium relationship in Nigeria, the findings of Naceur et al., (2007) deepening the financial sector and development of capital market in Kenya but contrary to the findings of Osomwanyi and Kasimu (2013) whose findings show no link among development of stock market and Ghana economic growth. In Nigeria the findings were a bidirectional link between stock market development and Kenya economic

growth. The variables used were economic growth and stock market development; the current study used capital market development and financial deepening.

The study found that money outside the bank has positive but no significant effect on the performance of Nigeria capital market. The coefficient justifies that a 1 percent increase on money outside the bank positive affect all share price index by 1.4 percent. The positive effect of the variable confirms the a-priori expectation of the study and reforms in the financial market such as the banking sector consolidation and recapitalization, increase capital base of the insurance firms and internationalization of the capital market. Empirically, the findings confirm the findings of Ngugi, Amanja and Maana (2013) a correlation that was positive existed among capital market, access of financial besides depth factors, the findings of Werigbelegha and Igbodika (2013) that financial deepening and Nigerian economy have a long run equilibrium relationship in Nigeria, the findings of Naceur et al., (2007) deepening the financial sector and development of capital market in Kenya but contrary to the findings of Osomwanyi and Kasimu (2013) whose findings show no link among development of stock market and Ghana economic growth. In Nigeria the findings were a bidirectional link between stock market development and Kenya economic growth. The variables used were economic growth and stock market development; the current study used capital market development and financial deepening.

#### CONCLUSION AND RECOMMENDTIONS

The study examined the effect of financial deepening indicators and performance of the Nigeria capital market. From the findings on the Adjusted R squared, the study found that there was variation of 47 percent on capital market performance proxy by all share price index can be traced to variation in financial deepening indicators.

From the findings the study concluded that there is no significant relationship between percentage of narrow money supply to gross domestic products and the performance of Nigeria capital market, that there is no significant relationship between percentage of broad money supply to gross domestic products and the performance of Nigeria capital market, that there is no significant relationship between percentage of private sector credit to gross domestic products and the performance of Nigeria capital market, that there is no significant relationship



between money market development and the performance of Nigeria capital market and that there is no significant relationship between money outside the bank and the performance of Nigeria capital market. Thus the following recommendations are made:

1. From the findings of the study, there is need to sustain a higher level of financial deepening in Nigeria. Incidences of financial sector instability be minimized and private sector credits channeled to the private sector of the economy should be enhanced through monetary and macroeconomic policies.
2. Policy makers and the regulatory authorities should identify and monitor key business drivers such as loan and deposit margins as these are the outcome of financial sector development to enhance effective performance of the capital market.
3. the regulatory authorities such as the Securities and Exchange Commission should hedge against sudden liquidity outflows should be maintained and there should be regular review of prudential guidelines for efficiency to hedge against the negative impact of financial deepening measures on capital market performance.
4. The positive impact of money outside the bank is contrary to the expectation of the study, therefore there is need for the monetary authorities and the financial market regulators to formulate policies that will deepen the operational efficiency of the Nigeria financial market for effective performance of the capital market.
5. Policy oriented measures such as policy to reduce capital flight should take into consideration the positive causality between money outside the banks and capital market performance.

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