
MONETARY POLICY VARIABLES, FINANCIAL DEEPENING AND ECONOMIC GROWTH: POST STRUCTURAL ADJUSTMENT EVIDENCE FROM NIGERIA

Murray Monday Ebike and ZAAGHA, Alexander Sulaiman

Department of Banking and Finance, Rivers State University, Nigeria

ABSTRACT

This study examined the effect of monetary policy variables, financial deepening indicators and Nigeria economic growth from 1981-2018. Time series data was sourced from Central Bank of Nigeria Statistical bulletin and publications of Nigeria Bureau of Statistics. Real gross domestic products was proxy for dependent variables while the independent variables were Monetary Policy Rate, Treasury bill ratio, Treasury certificate ratio, Percentage of money supply to gross domestic product and Percentage of credit to private sector to Gross domestic products. Ordinary least square methods of cointegration, granger causality test, unit root test and Vector error correction model. The estimated regression model I shows that the effects of monetary policy variables proved 81.8 percent variations in percentage of real gross domestic products can be explained by the changes in the explanatory variables. Monetary policy rate and treasury certificate are positively related to Nigeria real gross domestic products while treasury bill rate is negatively related to the dependent variable. The estimated regression model II that 75.7 percent of variation in Nigeria real gross domestic products is explained by variations in independent variables while the remaining 24.3 percent of the variation in the model is captured by the error term, and the estimated regression line above, the results show that M2/GDP is positive while CPS/GDP have a negative impact but statistically insignificant over Nigeria real gross domestic products. From the findings, the study concludes that monetary policy variables and financial deepening indicators have significant effect on Nigeria economic growth in the post structural adjustment programme. This study recommends that the monetary policy of the Central Bank of Nigeria (CBN) should be directed to deepen the financial sector.

KEYWORDS: Monetary Policy Variables, Financial Deepening Indicator, Economic Growth, Post Structural Adjustment.

INTRODUCTION

The past decade has witnessed a renewed interest in the main factors driving economic growth in Nigeria. The Nigerian economy has undergone series of changes over time with different policy regimes. Prior to 1986, a medium-term “development plan” was adopted as a major framework for developing and restructuring the economy. The first national development plan, 1962- 1968, was developed to put the economy on a fast growth path. The plan gave adequate priority to agriculture and industrial development as well as training of high-level and intermediate manpower. However, the disruptions to economic activities during the period later paved way for broader economic policies

for reconciliation and reconstruction (Okezie & Baharuddin, 2011).

The second national development plan, 1970-1974, was launched primarily to reconstruct and rehabilitate infrastructure that had been damaged during the civil war. Thus, the government invested a lot of resources into the construction and rehabilitation of infrastructure as well as improving the incomes of the people. The Indigenization Decrees of 1972 and 1974 put the commanding heights of the Nigerian economy in the hands of Nigerians within the context of nationalism. The third national development plan, 1975-1980, was designed under a more favorable financial condition of huge oil revenues that accrued to the nation from the mid-1970s (Okezie & Baharuddin, 2011).

However, the execution/implementation of the fourth national development plan, 1981-1985, was affected by the collapse of the international oil prices. In 1982 the government introduced the Economic Stabilization Act as an immediate reaction to dwindling oil earnings and major external sector imbalances. Sanusi (2010) noted that this was aimed at reducing government expenditure and conserving foreign reserves in order to improve the country's balance sheet. It was however found that there was need for a more fundamental reform to compliment the austerity measures.

In 1986, the government accepted the IMF-sponsored Structural Adjustment Programme (SAP). The SAP aimed at removing cumbersome administrative controls and creating a more market-friendly environment underpinned by measures and incentives that would encourage private enterprise and more efficient allocation of resources. It is argued the SAP recorded some measure of success. However, some of the gains of the SAP were eroded following the increased spate of policy reversals between 1988 and 1989. Up to 1990, the economy witnessed some gains which were associated with increased deregulation and liberalization in economic management (Okezie & Baharuddin, 2011).

However, owing to policy slippages, there was a reversal of trends in major macroeconomic aggregates thereafter, resulting from policy reversals and inconsistencies. Generally, frequent policy inconsistencies and reversals that characterized the period under review created distortions in the economy and were further compounded by external shocks, including the external debt overhang. Overall, SAP failed to realize the goals of creating wealth and promoting sound economic development as most of the policies were terminated prematurely or reversed out rightly. The experimentation with deregulation and liberalization was truncated in 1994 with the advent of a military government.

Thus, the Federal Government reregulated the economy, by capping exchange and interest rates due to high nominal interest rates that reached an all-time high of 48.0% in commercial banks and 60.0% in non-bank financial institutions. These rates were in turn driven by the high rates of inflation at 48.8% in 1992 and 61.3% in 1993. As there was no clear economic strategy for the rest of the decade,

the monetary policy implementation became ineffective to check expansionary fiscal operations. In addition, weak institutions and an unfriendly legal environment reduced the benefits that would have accrued to the economy (Sanusi, 2010).

However, the scenario changed in 1999, with the return of democratic governance in the country. Democratic governments have introduced series of reforms that were aimed at redressing the distortions in the economy and to restore economic growth following the period of economic decline. In 2004 the government's economic agenda was formally launched and tagged the National Economic Empowerment and Development Strategy (Okezie & Baharuddin, 2011). While the above policies were well documented, the effect of monetary policy and other financial deepening indicators in the post Structural adjustment programmes were omitted, this study examined the effect of monetary policy variables, financial deepening indicators on Nigeria economic growth.

LITERATURE REVEIEW

Economic Growth

Economic growth refers to the increase in the amount of the goods and services produced by an economy over time. It is conventionally measured as the percent rate of increase in real gross domestic product, or real Gross Domestic Product. Growth is usually calculated in real terms, inflation adjusted terms, in order to net out the effect of inflation on the price of the goods and services produced. In economics, economic growth or economic growth theory" typically refers to growth of potential output production at full employment, which is caused by growth in aggregate demand or observed output Arthur Lewis (1963) in his concept of economic growth incorporates the human element and sees the goal of economic growth as the growth of the output per head of population. Sichel and Eckstein (1974) defined economic growth as an increase in the ability of the economy to produce commodities service.

Todaro (1977) defined economic growth as the increase overtime of an economy's capacity to produce those goods and services needed to improve the wellbeing of the citizens in increasing numbers and diversity. It is the steady process by which the productive capacity of the economy is increased overtime to bring about rising levels of national income. Baumol and Blinder (1988) sees economic growth as occurring when an economy is able to produce more goods and services for each consumer, while Roger Miller (1991) defined economic growth as the expansion of the economy to produce more goods, jobs and wealth. Henderson and Poole (1991) defined economic growth as the increase in output and other measures of material progress at a certain period. It is also said to be either growth in national output as measured by GDP or GNP (which measures economic power), or growth in the national average standard of living as measured by the GNP per capita (which measures the well-being of citizens).

Theoretical Review

The Financial Intermediation Theory of Banking

Financial intermediation is defined as the process of mobilization financial resources through financial institutions/ intermediaries which comprise of the surplus saving units of an economy for lending or allocation to the effectual deficit spending units. Financial intermediation theory was first formalized in the works of Goldsmith (1969) Mckinnon (1973) and Shaw (1973) who see financial markets as playing a pivotal role in economic development attributing the differences in economic growth across countries to the quantity and quality of services provided by financial institutions. This contrast with Robinson (1952) who argued that financial market are essentially handmaidens to domestic industry and respond passively to other factor that produce cross- country differences in growth.

There is general tendency for the supply of finance to move with the demand for it. It seems to be the case that where enterprise leads, finance allows. The same impulses within an economy, which set enterprises on foot, make owners of wealth venturesome, and when a strong impulse to invest is fettered by lack of finance, devices are invented to release it and habits and institutions are developed.

The Robinson school of thought therefore believes that economic growth will lead to the expansion of the financial sector. Goldsmith (1969) attributed the positive correlation between financial development and the level of per-capita GNP to the positive effect that financial development has in encouraging more efficient use of the capital stock. In addition, the process of growth has feedback effects on financial markets by creating incentives for further financial development.

McKinnon's thesis is based on the complementarity hypothesis, which in contrast to the neo-classical monetary growth theory, argued that there is a complementarity between money and physical capital, which is reflected in money demand. According to McKinnon, complementarity links the demand for money directly and positively with the process of physical capital accumulation because the conditions of money supply have a first order impact on decisions to save and invest. In addition, positive and high interest rates are necessary to encourage agents to accumulate money balance, and complementarity with capital accumulation will exist as long as real interest rate does not exceed real rate of return on investment.

Furthermore, the lumpiness of investment expenditure implies that aggregate demand for money will be greater, the larger the proportion of investment in total expenditures. Shaw (1973) proposed a debt intermediation hypothesis, whereby expanded financial intermediation between savers and investors resulting from financial liberalization (high real interest rates) and development increase the incentive to save and invest, stimulates investments due to an increased supply of credit and raises the average efficiency of investment. This view stresses the importance of free entry into and competition within the financial markets as prerequisites for successful financial intermediation. McKinnon (1973) and

Shaw (1973) argue that policies leading to the repression of the financial markets reduce the incentives to save. They described the key element of financial repression as:

1. High Reserve Requirements on Deposits.
2. Legal Ceilings on Bank Lending and Deposit Rates.
3. Directed Credit.
4. Restriction on Foreign Currency Capital Transactions.
5. Restriction on Entry into banking activities.

Financial Repression Theory

Financial repression refers to the notion that a set of government regulations, laws, and other non-market restrictions prevent the financial intermediaries of an economy from functioning at their full capacity. Financial repression represents economic conditions in which the government's regulatory and discretionary policies distort financial prices or interest rates, discourage saving, reduce investment, and misallocate financial resources. The policies that cause financial repression include interest rate ceilings, liquidity ratio requirements, high bank reserve requirements, capital controls, and restrictions on market entry into the financial sector, credit ceilings or restrictions on directions of credit allocation, and government ownership or domination of banks. Economists have commonly argued that financial repression prevents the efficient allocation.

McKinnon (1973) and Shaw (1973) were the first to explicate the notion of financial repression. While theoretically an economy with an efficient financial system can achieve growth and development through efficient capital allocation, McKinnon and Shaw argue that historically, many countries, including developed ones but especially developing ones, have restricted competition in the financial sector with government interventions and regulations. According to their argument, a repressed financial sector discourages both saving and investment because the rates of return are lower than what could be obtained in a competitive market. In such a system, financial intermediaries do not function at their full capacity and fail to channel saving into investment efficiently, thereby impeding the development of the overall economic system.

Credit Rationing Theory

Access to credit is explained by credit rationing theory (Stiglitz and Weiss, 1981; Bester, 1985; Cressy, 1996; Baltensperger and Devinney, 1985). According to Stiglitz and Weiss (1981) credit rationing is said to occur when some borrowers receive a loan, while others do not. Credit rationing takes place at either financier level due to loan markets imperfection and information asymmetry or voluntarily by the borrowers (voluntary exclusion). At financier level, credit rationing occurs in a situation where demand for credit exceeds supply at the prevailing interest rate (Stiglitz and Weiss, 1981). There is

scant literature on self-rationing, however, in situations where credit rationing is voluntary, Arora (2014) describes such borrowers as non-credit seekers due to personal, culture or social reasons or could be in the bracket of discouraged borrowers. Bester (1985) suggested that financiers may choose to reject some borrowers because of negative enticement effects. For example, for given collateral, an increase in the rate of interest causes adverse selection, since only borrowers with riskier investments will apply for a loan at a higher interest rate. Similarly, higher interest payments create an incentive for investors to choose projects with a higher probability of bankruptcy (Afonso and Aubyn, 1997, 1998; Matthews and Thompson, 2014). On the other hand, for a fixed rate of interest, an increase in collateral requirements may also result in a decline in the lender's profits (Cressy, 1996). Stiglitz and Weiss (1981) showed that this happens if the more risk-averse borrowers, those that choose relatively safe investment projects, drop out of the market. According to Bester (1985) Andretti (1983), if financiers set collateral requirements and the rate of interest to screen investors' riskiness, then no credit rationing will occur at equilibrium. This is because increasing collateral requirements tends to result in adverse selection, even with risk-neutral investors (Bester, 1984a, 1985).

Harrod – Domar Growth Model

Harrod-Domar opined that economic growth is achieved when more investment leads to more growth. Their theory is based on linear production function with output given by capital stock (K) times a constant. Investment according to the theory generates income and also augments the productive capacity of the economy by increasing the capital stock. In as much as there is net investment, real income and output continue to expand. And, for full employment equilibrium level of income and output to be maintained, both real income and output should expand at the same rate with the productive capacity of the capital stock.

The theory maintained that for the economy to maintain a full employment, in the long run, net investment must increase continuously as well as growth in the real income at a rate sufficient enough to maintain full capacity use of a growing stock of capital. This implies that a net addition to the capital stock in the form of new investment will go a long way to increase the flow of national income. From the theory, the national savings ratio is assumed to be a fixed proportion of national output and that total investment is determined by the level of total savings i.e $S = SY$ which must be equal to net investment I . The net investment which is $I = \Delta K = K\Delta Y$ because K has a direct relationship to total national income. And, therefore $SY = K\Delta Y$ which simply means $\Delta Y/Y$ is growth rate of GDP that is determined by the net national savings ratio, s and the national capital output, K in the absence of government, the growth rate of national income will be positively related to the saving ratio i.e the more an economy is able to save and invest out of a given GDP, the greater the growth of GDP and which will be inversely related to capital output ratio.

The model that captures the main objective of this study is Harrod–Domar model. Harrod–Domar model described the economic mechanism by which more investment leads to more growth. For a country to develop and grow, it must divert part of its resources from current consumption (or save) and invest them in capital formation. Diversion of resources from current consumption is called saving. While saving is not the only determinants of growth, the HarrodDomar model suggests that it is an important ingredient for growth. Its argument is that every economy must save a certain proportion of its national income if only to replace worn-out of capital goods. The model shows mathematically that growth is directly related to saving and indirectly related capital output ratio. Suppose we define national income as Y, growth as G, capital output ratio as K, saving as S, and investment as I, and average saving ratio as s and incremental capital output ratio as k, then we can construct the following simple model of economic growth.

$$S = sY \tag{1}$$

i.e. saving (S) is some proportion of (s) of national income (Y)

$$I = \Delta k \tag{2}$$

i.e. net investment (I) is defined as the change in capital stock K

$$G = \frac{\Delta Y}{Y} \tag{3}$$

ΔY i.e. growth is defined as change in National income ΔY divided by the value of the National income.

But since the total stock, K, bears a direct relationship to total national income, or output Y, as expressed by the capital/output ratio k, then it follows that since total national saving, S, must equal total investment, I, we can write this equality as

$$S = I \tag{4}$$

But from Equation (1) above we know that $S = sY$ and from Equations (2) and (3) we know that:

$$I = \Delta K = k\Delta Y \tag{5}$$

It therefore follows that we can write the identity of saving equalling Investment shown by Equation (6) as

$$S = sY = k\Delta Y = \Delta k = I \tag{6}$$

or simply as

$$sY = k\Delta Y \tag{7}$$

$$\Delta Y = G = sYK \tag{8}$$

Now by dividing both sides of Equation (2.10) by Y and later by K, we derive the growth Model $\Delta Y/Y$ which represents the rate of change of national income or rate of GDP (It is the percentage change in GDP).

Empirical Review

Akani and Uzah (2018) examined micro financing and macroeconomic stability in Nigeria from 1992-2015. The objective was to investigate the relationship between micro finance lending operation and Nigerian macroeconomic stability. The required data were sourced from Central Bank of Nigeria (CBN) Statistical Bulletin and Stock Exchange Annual Report. The study modeled Nigeria real gross domestic product as a function of micro finance lending to agricultural sector, mining and quarrying, manufacturing sector, transport and communication, real estate and micro finance other lending. The Ordinary Least Square multiple regressions with econometric view were used as data analysis techniques. Cointegration test, Granger Causality Test, Augmented Dickey Fuller Test and Error Correction Model were used to examine the variables and its relationship to the dependent variables. The study found that microfinance lending to the various sectors of the economy have positive but insignificant effect on Nigerian macroeconomic stability except lending to agricultural sector and mining and quarrying. The stationarity test proved presence of stationarity at first difference, the cointegration test indicates the presence of long run relationship and the granger causality test prove no causal relationship among the variables. The study concludes that microfinance operation does not significantly affect Nigerian macroeconomic stability.

Akani, Lucky and Anyamoabi (2016) examined the effect of banking sector development on Nigerian capital formation. The objective is to investigate the extent to which various banking sector reforms affect Nigerian capital formation. Time series data was collected from the publications of Central Bank of Nigeria statistical bulletin from 1980-2014. The study has Nigerian Capital Formation (CF) as the function of Percentage of Bank credit to Gross Domestic Product (BC_GDP), Percentage of Bank investment to Gross Domestic Product (BI_GDP), Percentage of Bank deposit to Gross Domestic Product (BD_GDP), Percentage of Bank Total Assets to Gross Domestic Product (BTA_GDP) and Prime Lending Rate (PLR). The study used the Ordinary Least Square (OLS) Method of cointegration test, Augmented Dickey Fuller Unit Root Test, Granger causality test in a Vector Error Correction Model setting to examine the relationship between the dependant and the independent variables. The study revealed that in the static regression result that all the independent variables have positive relationship with the dependent variable except prime lending rate. The Unit Root Test shows that the variables are non-stationary at level but stationary at difference. The cointegration result indicates long run relationship between the dependent and the independent variables. The granger causality test shows multivariate relationship running from the independent variables to the dependent variable and from the dependent variable to the independent variables while the vector error correction result shows adequate speed of adjustment to equilibrium. The study conclude that banking sector development have significant effect on Nigerian capital formation.

Akani, Lucky and Kingsley (2016) examined the relationship between Nigeria financial sector development and macroeconomic stability from 1980 – 2014. The objective is to investigate the extent and the direction of relationship between various components of financial sector development and macroeconomic stability in Nigeria. Time series data were sourced from Central Bank of Nigeria (CBN) statistical bulletin. The study modeled percentage of Nigerian Gross Domestic Product to Balance of Payment (GDP/EXT) as our dependent variable total commercial banks credit to Gross Domestic Product (TCBC/GDP), Broad Money Supply to Gross Domestic Product (M2/GDP), Credit to Core Private Sector to Gross Domestic Product (CPS/GDP), Stock Market Capitalization to Gross Domestic Product (MKT/GDP) and Total savings to Gross Domestic Product (TS/GDP) as our independent variables. The study employed Cointegration Test, Augmented Dickey Fuller Unit Root Test, Granger Causality Test and Vector Error Correction Model were used to examine the extent to which the independent variables affect dependent variable. The static regression result shows that all the independent variables have positive effect on the dependent variables. The Augmented Dickey Fuller result shows non stationarity at level and stationarity at first difference. The cointegration result shows long run relationship, the Granger Causality Test shows multivariate relationship running through the independent to the dependent variable and the dependent to the independent variables. The vector error correction result shows adequate speed of adjustment to equilibrium. The study conclude that Nigerian financial sector development have significant relationship with macroeconomic stability.

Akani and Momodu (2016) examined whether there is a dynamic long run relationship between financial sector development and Nigeria National Savings in addition to determining the direction of causality among the variables. Time series data were sourced from Central Bank of Nigeria (CBN) Statically Bulletin from 1980 – 2014. The study modeled Gross National Savings as the percentage of Gross Domestic Product (GDP) as our dependent variable while our independent variables were Commercial Banks Credit as percentage of GDP (CBC/GDP), All Share Price Index as the percentage of GDP (ASPI/GDP), Broad money supply as a percentage of GDP (M2/GDP) to captured the level of financial deepening, Interest Rate (INTR), Exchange Rate (EXR) and Inflation Rate (INFR) were used. The study employed the Johansen. Cointegration Test, Augmented Dickey Fuller Unit Root Test, Granger Causality Test and Vector Error Correction Model were used to examine the relationship between the dependent and the independent variables. The empirical results demonstrate vividly that there is a long run dynamic and significant relationship between financial sector development proxy by national savings and a negative long run relationship between national savings and inflation rate in Nigeria. The static regression result indicates that all the independent variables except inflation rate have positive effect on National Savings. The Unit Root Test indicates non-stationarity at level. The study concludes that financial sector impact significantly to Nigerian total saving. It therefore recommends for financial sector deepening and well management Strategies to enhance National Savings in Nigeria.

Udoka, Mbat, Stephen and Duke (2016) examined the effect of commercial banks' credit on agricultural output in Nigeria. Four research hypotheses were formulated to guide and direct the study. The ex-post facto research design was adopted for the study. Data for the study were collected from published articles and the Central Bank of Nigeria Statistical bulletin. To estimate the specified equation, the ordinary least squares regression technique was employed. Based on the results obtained, the following result arose; the estimated results showed that there was a positive and significant relationship between agricultural credit guarantee scheme fund and agricultural production in Nigeria. This means that an increase in agricultural credit guarantee scheme fund could lead to an increase in agricultural production in Nigeria; there was a positive and significant relationship between commercial banks credit to the agricultural sector and agricultural production in Nigeria. This result signified that an increase in commercial banks credit to agricultural sector led to an increase in agricultural production in Nigeria. Again, there was a positive and significant relationship between government expenditure on agriculture and agricultural production in Nigeria and a negative relationship between interest rate and agricultural output also confirmed theoretical postulations.

Anifowose & Ladanu (2016) reviewed the role of commercial banks in agricultural growth in the period 2010 – 2014. The study reviewed the work and view of eminent scholars. Their views were diverse, some share some views and some disagreed. Some scholar realized the role of the agricultural sector in economic development but was short sighted toward the fact that there was a great importance, about developing this sector scholars bear in mind the role, problems and importance of the sector and found it necessary to develop the agricultural sector, if it is to play its role in economic development. These scholars went further to detect important variable or catalysts or prerequisite for the development of the sector which allows for other factors like technology and research. The study also had an overview of the impact of commercial banks as safe keepers and channeling of funds to needy sector like agricultural sector. In conclusion, it was discovered that the Deposit money banks have actively been playing quite a large role under the policies of the apex regulatory body, the central banks in financing agriculture. So as to justify the hypothesis of the study that if one of the major factors that aid the agricultural sector which finance, in form of credit service from the Deposit money banks, is channelled into this promising sector that the sector will develop and also increase its output and play its role effectively in economic development.

Shuaib, Ahmed & Kadiri(2015) examined the impact of innovation for 21st century educational sector in Nigerian economic growth. The paper employed the characteristics of each time series by testing their stationarity using Augmented Dickey Fuller (ADF) tests, including co-integration tests and Error Correction model through over parameterization and parsimonious of the variable to enable the researcher to ascertain both short run and long run equilibria.

Adeyinka, Daniel and Olukotun (2015) examined the contributions of commercial banks in agricultural financing in Nigeria. It pointed out the roles of bank credit in agricultural development. The study discussed a number of challenges that affected the agricultural financing in Nigeria. This is with a view to shedding light on the relationship between banks and agricultural sector and to evaluate the extent of banks involvement in agricultural financing. Secondary data (2002 -2014) on sectorial distribution of commercial banks' loans and advances to agricultural sector, liquidity ratio of commercial banks, cash reserve ratios of commercial banks and money market minimum rediscount rates, etc. were sourced from various statistical publications of the central bank of Nigeria (CBN). Data collected were analyzed using multiple regression of ordinary least square to achieve its objectives. It was revealed that the parameter of cash reserve and discount rate is not statistically significant and the parameter of liquidity ratio is not statistically significant. It was also discovered that agriculture credit was found as a decreasing function of discount rate, liquidity ratio and cash reserve, this lower the volume of agricultural credit.

Shuaib, et.al, (2015) examined the impact of innovations and transformations in teaching and learning on educational systems in Nigerian economic growth, The paper employed the characteristics of each time series by testing their stationarity using Augmented Dickey Fuller (ADF) tests, including co-integration tests and Error Correction model through over-parameterization and parsimonious of the variable to enable the researcher to ascertain both short run and long run equilibria. The results of the findings revealed that total government expenditure on education proxied for teaching and learning has direct relationship with economic growth.

Toby and Peterside (2014) analyzed the role of banks in financing the agriculture and manufacturing sectors in Nigeria from 1981 – 2010. Data were generated from the Central Bank of Nigeria Statistical Bulletin (2010) and analyzed using both descriptive and inferential techniques. Two multiple regression models were estimated using the Software Package for social Sciences (SPSS). The tolerance values are greater than zero in the estimated models. The absence of multicollinearity among the independent variables (IVs) is further supported by an engenal that is less than 0.5. The descriptive results show that Nigeria's commercial and merchant banks lagged behind in financing agriculture when compared to manufacturing. Average bank credit to agriculture, within the period, ranged between 9.0% and 10.1%. Average bank credit to the manufacturing sector ranged between 32.0% and 36.8%. Within the period, average contribution of agriculture to GDP was 33.5% while contribution of the manufacturing sector to GDP averaged 5.4%. The inferential results show a significantly weak correlation between commercial bank lending and the contribution of agriculture to GDP. However, there is a significantly positive correlation between merchant bank lending and agricultural contribution to GDP. The beta coefficient shows that agricultural contribution to GDP increased significantly by 48.22% with a 100% increase in merchant bank lending to agriculture. With a 100% increase in commercial bank lending, the contribution of manufacturing to GDP declined by

27.32%. However, the contribution of the manufacturing sector to GDP increased by 40.08% as merchant bank lending to manufacturing increased by 100%. There is also a significantly inverse correlation between commercial bank lending and manufacturing contribution to GDP. The model R² shows that 23.04% of the variation in agricultural contribution to GDP is explained by an increase in bank lending to the sector. It also shows that 18.75% of the variation in manufacturing contribution to GDP is explained by a change in aggregate lending. The results, however, indicate that the role of banks in facilitating the contribution of the agriculture and manufacturing sectors to economic growth is still significantly limited.

Torbira and Ogbulu (2014) empirical investigation into the relationship between fund mobilization by insurance companies and gross fixed capital formation (GFCF) in Nigeria and specifically how the latter responds to stimuli emanating from the insurance companies. A five variable-predictor multivariate regression model was estimated and analyzed. The short run results reveal those four explanatory variables namely: premium from fire, accidents, motor vehicles and employee liabilities insurance policies positively and insignificantly correlate with Gross Fixed Capital Formation while the relationship between premium from marine insurance policies and GFCF is both negative and insignificant. In the long run, the fund mobilization variables by insurance companies positively and significantly impact on the growth of gross fixed capital formation. In addition, the Granger causality test provides no evidence of causality among the variable.

Kanu, Ozurumba and Anyanwu (2014) examined capital expenditures and capital formation in Nigeria posits that Capital Expenditures (CAPEX) had a negative significant relationship with Gross Fixed Capital Formation (GFCF) in Nigeria at both 1% and 5% Alpha levels, while other macro-economic variables such as Imports, National Savings and Gross Domestic Product maintained a positive significant relationship with GFCF in the short run. In the long run, CAPEX still maintained a significant negative relationship with Gross Fixed Capital Formation; while Imports and National Savings equally had a positive significant relationship with GFCF. It was also observed that the lagged value of GFCF had no significant impact on GFCF in the preceding year; however this degenerated into a significant negative relationship in the second year. Outcome of that study did not come by chance, as a functional classification of the nation's expenditure profile for the period under review reveals that; outlays on capital expenditure accounted for only about 32% of total expenditures, while the remaining balance of 68 % went to recurrent expenditures

METHODOLOGY

The study adopted the quasi-experimental research design to examine the relationship between monetary policy variables, financial deepening and Nigeria economic growth. This study utilized secondary data collected from the Central Bank of Nigeria.

Model Specification

Following the previous works of Akani and Uzah (2018) we model the relationship between financial intermediation and economic development in Nigeria as follows

$$RGDP = \alpha + \beta_1 TBR + \beta_2 TCR + \beta_3 MPR + e_i \tag{9}$$

$$RGDP = \alpha + \beta_1 M2 / GDP + \beta_2 CPS / GDP + e_i \tag{10}$$

Where;

RGDP = Real gross Domestic Product

MPR = Monetary Policy Rate

TBR = Treasury bill ratio

TCR = Treasury certificate ratio

M2/GDP = Percentage of money supply to gross domestic product

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

$\phi_0 \alpha_0 =$ Constant

$\beta_1 - \beta_5 =$ Coefficients of independent variables

$\mu_i =$ Error Term

Data Analysis Techniques

Econometric Analysis

Ordinary least squares (OLS) are a method for estimating the unknown parameters in a linear regression model. Hutcheson (2011) defined ordinary least square (OLS) regression as a generalized linear modeling technique that may be used to model a single response variable which has been recorded on at least an interval scale.

Unit Root Test

A unit root test is a statistical test for the proposition that in a autoregressive statistical model of a time series, the autoregressive parameter is one. The Augmented Dickey Fuller (ADF) unit root test is used to test the stationarity property of a time series data in order to avoid the spurious regression problem. The ADF unit root test is specified as

$$\Delta Y_t = \alpha + \beta_1 Y_{t-1} + \sum_{j=1}^n \beta_{j+1} \Delta Y_{t-j} + \varepsilon_t \tag{11}$$

$$\Delta Y_t = \alpha + \beta_1 Y_{t-1} + \sum_{j=1}^n \beta_{j+1} \Delta Y_{t-j} + \varepsilon_t \tag{12}$$

$$\Delta Y_t = \alpha + \beta_1 Y_{t-1} + \sum_{j=1}^n \beta_{j+1} \Delta Y_{t-j} + \varepsilon_t \tag{13}$$

Note: The null hypothesis is rejected on the ground that the absolute value of the calculated ADF test statistic is larger than the absolute value of the Mackinnon critical value.

Cointegration Test

Cointegration is a statistical property of time series variables. There are two common methods for testing cointegration and estimating the relationship among cointegrated variables namely the Engle-Granger (1987) Two Step Procedure and Johansen’s (1988) maximum likelihood method. In the Engle-Granger two-step procedure, variables entering the cointegrating vector are tested for integration of the order, I (1). The cointegration test is based on the following equation.

$$\Delta Y_t = \alpha + \beta Y_{t-1} + \gamma Y_{t-2} + \dots + \delta Y_{t-k} + \epsilon_t \tag{14}$$

Where α and β are 4×4 matrices and k is the lag length. The tests used here involved cointegration with linear deterministic trend in the vector auto regression (VAR).

Granger Causality Test

The main objective of this study is to investigate the causality between the independent and the dependent variables. Granger (1996) proposed the concept of causality and exogeneity: a variable Y_t is said to cause X_t , if the predicted value of X_t is ameliorated when information related to Y_t is incorporated in the analysis. The test is based on the following equation below

$$Y_t = \alpha_0 + \alpha_1 Y_{t-1} + \alpha_2 Y_{t-2} + \dots + \alpha_n Y_{t-n} + \beta_1 X_{t-1} + \beta_2 X_{t-2} + \dots + \beta_k X_{t-k} + \mu_{1t} \tag{15}$$

and

$$X_t = \alpha_0 + \alpha_1 X_{t-1} + \alpha_2 X_{t-2} + \dots + \alpha_n X_{t-n} + \beta_1 Y_{t-1} + \beta_2 Y_{t-2} + \dots + \beta_k Y_{t-k} + \mu_{2t} \tag{16}$$

Where X_t and Y_t are the variables to be tested while μ_{1t} and μ_{2t} are white noise disturbance terms and n is maximum number of lags. The null hypothesis $\alpha_1 = \beta_1 = 0$ for all 1’s is tested against the alternative hypothesis $\alpha_1 \neq 0$ and $\beta_1 \neq 0$, if the coefficient of α_1 are statistically significant, that of β_1 are not, then X causes Y , If the reversal is true than Y causes X . However, where both coefficient of α_1 and β_1 are significant then causality is bi-directional.

ANALYSIS AND DISCUSSION OF FINDINGS
Monetary Policy Variables and Nigeria Economic Growth

Table 1: Multiple Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
TBR	-0.163449	0.377311	-3.433195	0.0276
TCR	0.152590	0.192641	2.792092	0.0038
MPR	0.043248	0.396863	3.108974	0.0039
C	4.218844	2.274155	1.855126	0.0723
R ²	0.818639			
Adj R ²	0.607951			
F-Stat	5.215256			
F-prob	0.000031			
DW	0.983457			

Source: Extracts from E-view 9.0

The coefficient of determination (R²) is 0.818639. This shows that 81.8 percent of variation in Nigeria real gross domestic products is explained by variations in the monetary policy variables while the remaining 18.2 percent of the variation in the model is captured by the error term. And this shows that the line of best fit is highly fitted. The Durbin-Watson statistic is 0.983457 which shows that there is autocorrelation in the model. The value of F-statistics is 5.215256 and the value of the probability of Fstat is 0.000031. This result implies that the overall regression is statistically significant at 5% level of significant given that probability of F-stat is 0.000031 is less than 0.05.

In the estimated regression line above, the results show that treasury bill rate and significant while treasury certificate ratio and monetary policy rate have a positive statistically significant over Nigeria real gross domestic products. The constant term is 4.218844 meaning that holding the value of other variables in the model constant, the value of real gross domestic products will be about 4.2 units.

Table 2: Testing for Unit Root (Stationarity Test)

Variable	ADF	1%	5%	10%	Prob.	Order of integration	Decision	Remark
RGDP	-7.810789	-3.626784	-2.945842	-2.611531	0.0000	1(I)	Sig	Reject H0
TBR	-7.955640	-3.639407	-2.951125	-2.614300	0.0000	1(I)	Sig	Reject H0
TCR	-6.657659	-3.646342	-2.954021	-2.615817	0.0000	1(I)	Sig	Reject H0
MPR	-5.183798	-3.653730	-2.948404	-2.957110	0.0002	1(I)	Sig	Reject H0

Source: Computed from E-View 9.0

The results performed using E-view version 9.0, as shown above. The first Unit root test conducted was Augmented Dickey-Fuller Test at Level for each variable. And the results as shown in the table above indicate that the variables are stationary, because all the absolute values of the Test statistics, regardless of their signs were above than the values of the 5% critical value. Therefore, the variables are stationary at first difference. We reject the null hypothesis of non stationarity and conclude that

there is stationarity at first difference.

Table 3: Johansen Co-Integration Test Results: Maximum Eigen

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.538841	50.95122	47.85613	0.0249
At most 1	0.274502	23.08677	29.79707	0.2418
At most 2	0.213517	11.53449	15.49471	0.1807
At most 3	0.077085	2.887860	3.841466	0.0892

Source: Computed from E-View 9.0

The guideline is that when the Trace statistics is more than 5 % percent Critical value, we reject the null hypothesis. However, the estimated co integration equation found there is no co integrating equation among the two hypothesis, we accept the null hypothesis.

Table 4: Parsimonious Error Correction Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.042097	0.658535	0.063926	0.9497
D(RGDP(-1))	-0.022791	0.262419	-0.086849	0.9317
D(RGDP(-2))	-0.028188	0.249922	-0.112788	0.9113
D(RGDP(-3))	-0.166080	0.228590	-0.726540	0.4759
D(TBR(-1))	-0.272984	0.363204	-0.751600	0.4610
D(TBR(-2))	-0.034890	0.373836	-0.093328	0.9266
D(TBR(-3))	0.094272	0.379528	0.248392	0.8064
D(TCR(-1))	0.267728	0.254068	1.053763	0.3046
D(TCR(-2))	-0.150564	0.269380	-0.558927	0.5824
D(TCR(-3))	-0.070113	0.267580	-0.262028	0.7960
D(MPR(-1))	0.200182	0.424040	0.472083	0.6420
D(MPR(-2))	-0.095871	0.460888	-0.208013	0.8373
D(MPR(-3))	0.194612	0.403213	0.482653	0.6346
ECM(-1)	-0.360561	0.269920	-1.335804	0.1966
C	0.042097	0.658535	0.063926	0.9497
R ²	0.433817			
ADJR ²	0.065799			
F-Stat	1.178791			
F-prob	0.359761			
DW	1.926368			

Source: Computed from E-View 9.0

From the table, in the two hypotheses the Error correction term is positive which is contrary to

expectation, that is to say it has a positive sign, implying that the error obtain has high possibilities of moving much further away from the equilibrium path as time goes on and on. Also the ECM (-1) coefficient shows that 36 percent and 36 percent of the error produced in the previous period are corrected in the current period. The error term however is not statistically significant ECM (-1) is speed of adjustment towards equilibrium or error correction term.

Table 5: Granger Causality Test

Null Hypothesis:	Obs	F-Statistic	Prob.
TBR does not Granger Cause RGDP	36	0.24762	0.7822
RGDP does not Granger Cause TBR		0.63161	0.5384
TCR does not Granger Cause RGDP	36	0.62063	0.5442
RGDP does not Granger Cause TCR		0.39194	0.6790
MPR does not Granger Cause RGDP	36	0.47073	0.6289
RGDP does not Granger Cause MPR		0.95583	0.3955

Source: Computed from E-View 9.0

The cointegration results alone are not adequate enough to explain the relationship between bank intermediation and Nigeria economic growth. We need to establish the direction of this relationship, hence the causality test. Given that a relationship exists between monetary policy variables and Nigeria economic growth as shown from the Johansen cointegration test from the trace statistics, we ought to examine the causation of this relationship. If monetary policy variables can predict Nigeria economic growth more than monetary policy variables can predict itself, the variables are said to granger-cause Nigeria economic growth the reverse is true. The economic growth variable is said to granger cause. However, from the tables above, the study conclude that there is no causal relationship among the variables.

Financial Deepening Indicators and Nigeria Economic Growth

Table 6: Multiple Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
M2_GDP	0.778876	0.531202	1.466252	0.0015
CPS_GDP	-0.538148	0.388369	-1.385662	0.1746
C	-0.477820	3.720840	-0.128417	0.8986
R ²	0.757936			
Adj R ²	0.504104			
F-Stat	5.076232			
F-prob	0.000890			
DW	1.258620			

Source: Computed from E-View 9.0

The coefficient of determination (R²) is 0.757936. This shows that 75.7 percent of variation in Nigeria real gross domestic products is explained by variations in independent variables while the remaining 24.3 percent of the variation in the model is captured by the error term. And this shows that the line of best fit is highly fitted. The Durbin-Watson statistic is 1.258620 which shows that there is autocorrelation in the model. The value of F-statistics is 5.076232 and the value of the probability of F-stat 0.000890. This result implies that the overall regression is statistically significant at 5% level of significant given that probability of F-stat is 0.000890 is greater than 0.05.

In the estimated regression line above, the results show that M2/GDP is positive while CPS/GDP have a negative impact but statistically insignificant over Nigeria real gross domestic products. The constant term is -0.477820 meaning that holding the value of other variables in the model constant, the value of real gross domestic products will be about reduce by 0.47 units.

Table 7: Testing for Unit Root (Stationarity Test)

Variable	ADF	1%	5%	10%	Prob.	Order of integration	Decision	Remark
RGDP	-7.810789	-3.626784	-2.945842	-2.611531	0.0000	1(I)	Sig	Reject H0
M2_GDP	-5.637824	-3.626784	-2.945842	-2.611531	0.0000	1(I)	Sig	Reject H0
CPS_GDP	-6.525290	-3.646342	-2.954021	-2.615817	0.0000	1(I)	Sig	Reject H0

Source: Computed from E-View 9.0

Stationarity test or unit root test is one of the conditions to be satisfied in time series data analysis to ensure accuracy and to avoid spurious regression. A time series is said to be stationary when it's mean and variance do not vary systematically over time (Gujarati 2004). A Unit root test was carried out to check for stationarity. In order to avoid problems of autocorrelation as may arise from using Dickey-Fuller test, the researcher used Augmented Dickey- Fuller Unit root test. From the table above, we conclude that the variables are stationary at first difference.

Table 8: Johansen Co-Integration Test Results: Maximum Eigen

Hypothesized	0.05 Critical			
No. of CE(s)	Eigenvalue	Trace Statistic	Value	Prob.**
None	0.337440	14.81919	21.13162	0.3018
At most 1	0.242477	9.997243	14.26460	0.2121
At most 2	0.043391	1.596989	3.841466	0.2063

Source: Computed from E-View 9.0

From the lag selection criteria, the most appropriate lag was lag 2 due to inadequate number of observations. Two equations were used, but with similar model. This was so to avoid the problem of

multicollinearity of variables. The two dimensions were put in a separate equation. In all the two hypotheses, the Trace statistics indicate that the variables are cointegrated. The Maximum Eigen value shows cointegration. Null Hypothesis: There is no cointegration among variables (Hypothesis zero) Alternative hypothesis.

Table 9: Parsimonious Error Correction Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.083151	0.650500	-0.127827	0.8994
D(RGDP(-1))	0.104817	0.287513	0.364566	0.7188
D(RGDP(-2))	0.152612	0.246656	0.618725	0.5422
D(RGDP(-3))	-0.144697	0.228503	-0.633241	0.5328
D(M2_GDP(-1))	0.191464	0.633931	0.302026	0.7653
D(M2_GDP(-2))	0.202910	0.692273	0.293106	0.7721
D(M2_GDP(-3))	-0.607782	0.615993	-0.986670	0.3341
D(CPS_GDP(-1))	0.223635	0.587930	0.380378	0.7072
D(CPS_GDP(-2))	0.152545	0.504116	0.302598	0.7649
D(CPS_GDP(-3))	0.410119	0.542667	0.755747	0.4575
ECM(-1)	-0.624316	0.299803	-2.082417	0.0486
R ²	0.422951			
ADJR ²	0.172059			
F-Stat	1.685794			
F-prob	0.144840			
DW	1.817534			

Source: Computed from E-View 9.0

From the table, in the two hypotheses the Error correction term is positive which is contrary to expectation, that is to say it has a positive sign, implying that the error obtain has high possibilities of moving much further away from the equilibrium path as time goes on and on. Also, the ECM (-1) coefficient shows that 35.4 and 62.4 percent of the error produced in the previous period are corrected in the current period. The error term however is not statistically significant ECM (-1) is speed of adjustment towards equilibrium or error correction term.

Table 10: Granger Causality Test

Null Hypothesis:	Obs	F-Statistic	Prob.
M2_GDP does not Granger Cause RGDP	36	1.65131	0.2082
RGDP does not Granger Cause M2_GDP		1.46968	0.2456
CPS_GDP does not Granger Cause RGDP	36	0.64388	0.5321
RGDP does not Granger Cause CPS_GDP		0.46943	0.6297

Source: Computed from E-View 9.0

The researcher's interest here is to establish the direction of causality between the dependent variables

the percentage of long term investment and the independent variables. The cointegration results alone are not adequate enough to explain the relationship between financial deepening indicators and Nigeria economic growth. We need to establish the direction of this relationship, hence the causality test. Given that a relationship exists between financial deepening indicators and Nigeria economic growth as shown from the Johansen cointegration test from the trace statistics, we ought to examine the causation of this relationship.

Discussion of Findings

Monetary policy rate and treasury certificate are positively related to Nigeria real gross domestic products while treasury bill rate is negatively related to the dependent variable. The positive findings of this study is supported by the findings of Afangideh (2006) that emphasis on investment in the agricultural sector should top the agenda of financial sector development as a primary focus on economic diversification by Nigerian governments but confirm to the findings of Udah and Obafemi (2011) results findings revealed that currency outside banks had a negative impact on actual output of agriculture and manufacturing sectors in the short run. Contrary to the findings of Ruget (2016) that gross domestic savings impacted negatively on capacity utilization and a positive influence on manufacturing and agricultural outputs.

The estimated regression line above, the results show that M2/GDP is positive while CPS/GDP have a negative impact but statistically insignificant over Nigeria real gross domestic products, The constant term is -0.477820 meaning that holding the value of other variables in the model constant, the value of real gross domestic products will be about reduce by 0.477820. the above positive findings confirm the findings of Ahiawodzi and Adade (2012) both survey and econometric results show that access to credit exerts a significant positive effect on growth of SMEs in the Ho-Municipality of Ghana and the findings Yusuf and Dansu (2013) that standard risk management strategy by SMEs would result to their sustainability.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The estimated regression model I shows that the effects of monetary policy variables proved 81.8 percent variations in percentage of real gross domestic products can be explained by the changes in the explanatory variables. Monetary policy rate and treasury certificate are positively related to Nigeria real gross domestic products while treasury bill rate is negatively related to the dependent variable. Furthermore, the overall fit of the model is good given an F-statistic of 5.215256 (P-value = 0.000031).

The estimated regression model II that 75.7 percent of variation in Nigeria real gross domestic products is explained by variations in independent variables while the remaining 24.3 percent of the

variation in the model is captured by the error term, and the estimated regression line above, the results show that M2/GDP is positive while CPS/GDP have a negative impact but statistically insignificant over Nigeria real gross domestic products.

Recommendations

1. This study recommends that the monetary policy of the Central Bank of Nigeria (CBN) should further direct deposit money banks and other financial institutions to lend to various sector for better performance and there has been various government policies aimed to revamp the industrial sector through deposit money banks financing, therefore there is need for better implementation of these credit policies to attract investment in the sector.
2. Monetary policy rate should decrease increase rate to encourage investment borrowings. The volume of money in circulation (money supply) should be closely checked and increased to avoid inflation and to encourage the growth of the economy. The Central Bank of Nigeria should continue to rigorously pursue the use of growth of money supply to grow the economy. This is so arising from the salutary effect of expansionary monetary policy in growing the economy.
3. The Central Bank of Nigeria policies should directed toward effective financial intermediation. Policies such as increase deposit rates should be enforced in the commercial banks, public sensitization on the relevant of deposits should be carried out and there is need to increase banking habit of Nigerian. This can enhance deposit mobilization of the commercial banks in Nigeria.

REFERENCES

- Adelegan, J.O. (2010). Foreign direct investment and economic growth in Nigeria: a seemingly unrelated model. African review of money, financial and banking, supplementary issue of Savings and Development. *Journal of Economics and Sustainable Development*,8(20),202-215.
- Adenyinka, A.J., Daniel, A.A., & Olukotun, G.A., (2016). An assessment of the contribution of the contributions of commercial banks to agricultural financing in the Nigerian economy. *International Journal Advanced Academic Research* 1(2), 1-15.
- Akani, H. W & Uzah, C. K. (2018). Microfinance and macroeconomic instability in Nigeria. *Banking and finance journal*, 1(1), 186-208.
- Akani, H. W & Uzah, C. K. (2018). Microfinance and macroeconomic instability in Nigeria. *Banking and finance journal*, 1(1), 186-208.

- Akani, H. W., & Momodu, A. A.,(2016). Empirical analysis of financial sector development and national savings: Evidence from Nigeria economy. *International Journal of Financial Economics*, 5(1), 46-60.
- Akani, H. W., & Momodu, A. A.,(2016). Empirical analysis of financial sector development and national savings: Evidence from Nigeria economy. *International Journal of Financial Economics*, 5(1), 46-60.
- Akani, H. W., Lucky, A. L., & Anyamaobi, C., (2016). Banking Sector Development and Capital Formation in Nigeria: A Multivariate Analysis. *Everant Account and Financial Management Journal* 1 (3), 141 – 161.
- Akani, H. W., Lucky, A. L., & Uzah, C. K., (2016). Financial sector development and macroeconomic stability in Nigeria: A long –run analysis. *International Journal of Empirical Finance*, 5 (2), 112 – 128.
- Akani, H. W.,& Onyema, J.I., (2017). Determinants of credit growth in Nigeria: A multidimensional analysis. *Journal of Economics and Sustainable Development*,8(20)202- 215.
- Akani, H. W.,& Onyema, J.I., (2017). Determinants of credit growth in Nigeria: A multidimensional analysis. *Journal of Economics and Sustainable Development*,8(20)202- 215.
- Anifowese, O.L., & LAdanu, W.K., (2016). The Role of commercial banks in agricultural growth in Nigeria. *International Journal of Entrepreneurial Development, Education and Science Research* 3(2), 1-22.
- BOFIA (1991). Banks and Other Financial Institutions Act. Decree No.25 of 1991, Laws of the Federal of Nigeria.
- Engle, R.F., & Granger, C.W.J., (1987). Co-integration and error correction representation estimations and testing. *Econometrica*, 35: 251-276.
- Ezirim, B. C. (2005). Finance Dynamics: Principles, Applications and Techniques. Markowitz Centre for Research and Development. Port Harcourt
- Ezirim, B. C., & Muoghalu, M. I. (2001). Stages of development of insured and insuring financing institutions and their impact on the financial inter-relations index. *Academy of Economics and Finance Papers and Proceedings*, 25, 119-127.
- Ezirim, B. C., (2003). Modeling the intermediation functions of the financial superstructure in Nigeria: A synoptic treatment. *Journal of Industrial Business and Economic Research*; 7(2), 69 – 95.
- Ezirim, B. C., Muoghalu, M. I., & Emenyonu, E. N., (2012). Environmental correlates of the intermediation function of the Nigerian financial superstructure: *A Preliminary Investigation. FBN Quarterly Review*, .2, (4), 403-421.

- Gerschenkron, A. (1962). *Economic backwardness in historical perspective*. Cambridge, MA: Belknap Press of Harvard University Press.
- Goldsmith, R. (1969). *Financial structure and development*. New Haven, CT, Yale University Press.
- Granger, C. W. J. (1969). Investigating causal relations by econometric models: Cross spectral methods. *Econometrica*, 37: 424-438.
- Gujarati, D. (2004). *Basic Econometrics*. New Delhi: McGraw-Hill Companies Inc.
- Hao, C., (2006). Development of financial intermediation and economic growth: *The Chinese Experience*, *China Economic Review*, 17 (4), 347-362.
- Johansen, S. (1988). Statistical analysis of cointegration vectors. *J. Econ. Dyn. Control*, 12: 231-254.
- Kanu, S. I., Ozurumba B.A & Ihemeje, J.C., (2014). Examining the relationship between Federal Government of Nigeria's Revenue and Expenditure profiles. *Journal of Economics and Sustainable development, the International Institute for Science, Technology and Education (IISTE)*.
- Keynes, J. M. (1936). *A treatise on money in two volumes. 1.: The pure theory of money. 2.: The applied theory of money*. London: Macmillan & Co.
- King, R. G., & Levine, R. (1993). Finance and growth: Schumpeter might be right. *The Quarterly Journal of Economics*, 108(3), 717-737.
- Levine, R. (2000). More on finance and growth: more finance, more growth. *Reserve Bank of St. Louis Review*, 85: 31-46.
- MacKinnon, J.G., (1996). Numerical Distribution Functions for Unit Root and Cointegration Tests. *Journal of Applied Econometrics*, 11(4), 601-618
- Mckinnon (1973). *Money and Capital in Economic Development*. Washington, D.C.: Brookings Institution.
- Mohan S. (2012). Perspectives of deposits mobilization, online publication
- Nwaeze, C (2014). *Public financial management: Theory and practice*, Aba: Reconciliation Publishers Limited.
- Obamuyi, T. M., (2012). Incessant bank distress and the policies of Central Bank of Nigeria. *International Journal of Finance and Accounting*, 1(1), 121 – 13.
- Obilor, S.I. (2013). The impact of commercial banks' credit to agriculture on agricultural development in Nigeria: An econometric analysis. *International Journal of Business Humanities and Technology*, 3(1), 85 – 95.
- Okezie, C. A.& Baharuddin, A.H. (2011). Economic crossroads: The experiences of Nigeria and lessons from Malaysia. *Journal of Development and Agricultural Economics*, 3(8), 368-378.

- Robinson, J. (1952). *The generalization of the General Theory, In the Rate of Interest and Other Essays*, London Oxford University Press.
- Sanusi LS (2010). *Growth prospects of the Nigerian economy*. Eighth Convocation lecture of the Igdinedion University, Okada, Edo State, Nigeria
- Schumpeter, J.A. (1934). *The Theory of Economic Development*, Cambridge, Mass, Harvard University Press
- Schumpeter, J.A., (1911). *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*. Oxford: Oxford University Press.
- Shaw, E. (1973): *Financial Deepening in Economic Development*. Oxford University Press, London.
- Shuaib, I.M., Igbinosun, F.E., & Ahmed, A. E., (2015). Impact of Government Agricultural Expenditure on the Growth of the Nigerian Economy, *Asian Journal of Agriculture Extension, Economic & Sociology*, unpublished.
- Sylvester, O. (2010). Mobilizing deposits; the role of commercial banks, Ghana
- Tadaro, M. P., (1999). *Definition of foreign direct investment, economic development*, 7th edition. Addison Webley Longman incorporated, Reading Massachusetts.
- Toby, A. J., & Peterside, D. B. (2014). Analysis of the role of banks in financing the agriculture and manufacturing sectors in Nigeria. *International Journal of Research in Business Management (IMPACT: IJRBM)* 2(2), 9-22
- Torbira, L.L., & Ogbulu, O.M., (2014). Fund Mobilization by Insurance Companies and Fixed Capital Formation: Evidence from the Nigerian Economy. *International Journal of Financial Research*, 5(2), 69-81.
- Udoka, C.O., Mbat, D.O., & Stephen, B. D., (2016). The Effect of Commercial Banks' Credit on Agricultural Production in Nigeria. *Journal of Finance and Accounting*, 4(1), 1-10.
- Zakaria, M. (2008). Openness and inflation: Evidence from time series data. *Doğuş Üniversitesi Dergisi* 11,2, 313–322.