EFFECT OF FINANCIAL SECTOR ON ECONOMIC GROWTH: EVIDENCE FROM DEPOSIT MONEY BANKS IN NIGERIA

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Abstract

Aftermath of global financial meltdown of late 2000s, there were numerous strategies that were introduced in Nigeria to strengthen the financial sector. As a guide against the effect of similar crisis in the future, various strategies and reforms were put in place to ensure that the financial sector is well positioned and strong enough to contribute to the economic growth of Nigeria. This study therefore, investigated the effect of financial sector and economic growth in Nigeria during the period of 2004 – 2018. Specifically, it seeks to examine the effect of financial deepening measured as the ratio of profitability, investment, deposit, advances, inflation and interest rate to gross domestic product. The study adopted econometric techniques such as Augmented Dickey-Fuller (ADF) and the Phillip-Perron (PP), Unit Root Tests, regression and causality test were used to accomplish its objectives. The data were sourced from the financial statement of thirteen listed deposit money banks as at December, 2018 (2004-2018) and CBN statistical bulletin of 2018. The results revealed that financial sector has significant positive relationship on economic growth in Nigeria. Also, revealed was that there was insignificant impact of advances, inflation and interest rate on banking sector development to economic growth in Nigeria. The policy implication of these findings is that financial sector is one of the desired panaceas to achieving economic growth in Nigeria and any policy targeted on financial development is expected to positively affect the level of economic growth in Nigeria. Based on these findings, the study therefore recommends among others that government should redirect its policy on financial sector i.e. deposit money banks as well as the stock market are the most vibrant institutions in the Nigerian financial system. Thus, the government through the Central Bank should pursue favourable policies that will energies the financial sector while ensuring effective and efficient functioning of the stock exchange devoid of scams and malpractices in order to allow investors the access to long-run resources that are indispensable for the financing of medium and long-term projects.These will boost private sector development and investments which is the engine of growth and development. Finally, the Central Bank of Nigeria should constantly monitor the implementation of monetary policy mechanisms for compliance by deposit money banks among financial sector in Nigeria.

Keywords: Financial sector development, economic growth, profitability, investment, and gross domestic product.

Introduction

The banking sector all over the globe plays a very important role in the economic development and growth of a country. As an important component of the financial system, they channel scarce resources from the surplus economic units to the deficit economic units in an economy (granting credit) as such these activities form part of their basic role (Iwedi & Onuegbu, 2014). The loan resources (Bank Credits) are in the forms of short term, medium term, long term credits and contingent funds. Thus, these Bank credits to a reasonable extends, exert reasonable influence on the pattern and trend of economic growth in Nigeria through their lending and deposit mobilisation activities (Nzotta, 2005). It is an accepted fact that the level of economic growth and development determines the extent of sophistication of the banking system as well as the pattern and quantum of banking sector credit. This is primarily due to the fact that the banking sector exists to propel and service economic growth and thus all shocks in the economic growth and development process affect the banking sector positively or negatively.

The major objective of achieving high and stable economic growth has been at the front burner of successive Nigerian government. This is evident during the pre-independence era (colonial period) where the government focus was on the provision of physical infrastructure in the belief, in line with the prevailing economic ideas, that the facilities would induce the private investments that would produce the desired growth. After independence, the government became more directly involved in promoting economic growth. The thinking this time was to nurture private entrepreneurs and mobilise needed domestic resources (banking sector credit) for investment in some preferred sectors. This brought deposit money banks and their intermediation function into prominence in the economic history of Nigeria (Ekpenyong & Acha 2011). Therefore, financial systems play a vital role in economic development and, to be successful in the long run, countries must take a holistic view by identifying and improving long-term factors that are crucial to their development. Such a process would allow countries to encourage economic prosperity for all participants in the global economy. This approach is supported by empirical studies that have generally found that cross-country differences in levels of financial development explain a considerable portion of the cross-country differences in growth rates of economies (World Financial Development Report, 2013).

Furthermore, the Nigerian financial system is not effectively providing its development roles as such and is currently not in position to fulfill its potential, as a

propeller of economic growth and development. The formal financial system is relatively shallow and provides a relatively low level of credits to the private sector. Audu, Okumoko & Tubo (2013) attributed this to the pathetic situation in the country where government deficits that have to be financed by domestic resources provide an opportunity for the banking system to push funds into a relatively safer investment outlet than lending to the private sector. According to them, this has the capacity to push up lending rates, and decrease the amount of resources channeled to private sector credits. Worst still, the banks rely on public fund to finance government borrowing; so, it is a case of lending government fund to same government to generate safe return. Also, Maduka & Onwuka (2013) argue that despite the growth of the banks and non-bank financial institutions in Nigeria, and financial liberalisation policy, the country's economic growth is sluggish as the per capita income is less than $4,000 and most of the industries are winding up giving rise to unemployment thereby putting a question mark on level of development of the financial market in Nigeria and its potency in supporting the investment needed to boost economic growth.

A parallel World Bank review of financing for Rural Micro and Small- Scale Enterprises has also revealed that the absence of efficiently operating rural financial markets in Nigeria has become a serious constraint on sustainable rural development (Ajumogobia & Okeke, 2015).

Aftermath of global financial meltdown of late 2000s, there were numerous strategies that were introduced in Nigeria to strengthen the financial sector. To guide against the effect of similar crisis in the future, strategies such as Bank recapitalisation/consolidation, public sector financial reforms (Treasury Single Account, Whistle-blowing, Integrated Payroll and Personnel information System, Government Integrated and Financial Management Information System etc) to mention a few, were put in place to ensure that the financial sector was well positioned and strong enough to contribute to the economic growth of Nigeria. In sum, both the formal and informal financial sectors in Nigeria are not currently in a position to effectively support a strong expansion of the real sector and maximise their contribution to economic growth and development. This study is devoted to investigate the financial sector and economic growth nexus in Nigeria.

The fundamental question in economic growth that has preoccupied researchers is why countries grow at different rates. The empirical growth literature has come with numerous explanations of cross-country differences in growth, including

factor accumulation, resource endowments, the degree of macroeconomic stability, educational attainment, institutional development, legal system effectiveness, international trade and ethnic and religious diversities. The list of possible factors continues to expand, apparently without limit. One critical factor that has begun to receive considerable attention more recently is the role of financial development in the growth process especially in the wake of the recent global economic and financial meltdown. The positive link between the financial depth and economic growth is in one sense fairly obvious. That is, more developed countries, without exception, have more developed financial markets. Therefore, it would seem that policies to develop the financial sector would be to raise economic growth. Indeed, the role of financial development is considered by many to be the key to economic development and growth.

Another serious problem is that the literature is less consensual on the link between financial development and economic growth. There are studies that establish little or no significantly positive relationship between financial development and economic growth. Some studies found that financial development have negative impact on economic growth especially in the long-run and that causality run from economic growth to financial development and not in reverse direction. Other studies have also found support for a positive link between financial development and economic growth. These conflicting results have been traced to methodological challenges associated with the estimation method such as single-equations (OLS); the Engle Granger two step procedures; Johansen reduced rank; and the Vector Auto Regressions (VAR) model; the use of which dominated the empirical studies in this area. However, econometric techniques have shown the strong limitations to these techniques and revealed that most economic growth and financial development data have to be subjected to more rigorous analyses involving both the short run and long run co-movement among a number of time series data to unbiased, consistent, and efficient estimates (Imoagwu, Priscilla & Ezeanyeji, 2019). The economists have generally reached a consensus on the central role of financial development in economic development theoretically; empirical works supporting this concept are conflicting. One school of thought asserts that financial development plays a limited role in accompanying the development of real activity; the second school of thought accords a crucial role to financial development in boosting the processes of growth, innovation and economic development; while for another group of scholars, the financial market promotes growth, with growth, in turn, comes market formation (Nicet-Chenaf, 2012). This study therefore, intends to bridge the existing gap in the literature by empirically investigating the nexus between the financial sector development and

economic growth in Nigeria, with special attention to Deposit Money Banks.
The broad objective of the study is to examine the effect of financial sector on economic growth in Nigeria. Specifically, it seeks to empirically investigate the significant relationship between profitability, investment, deposits, advances, inflation and interest rate to gross domestic product on economic growth in Nigeria.

Literature Review

The literature on financial development provides some theoretical explanation on the relationship between financial sector and economic growth. The general view is that financial sector development can improve long run growth. This section discusses selected theories that link financial sector development to economic growth. The theories are; supply lending theory, demand following theory, demand stage theory.

Supply -Leading Hypothesis: -The supply-leading hypothesis suggests that financial deepening spurs growth. The existence and development of the financial markets brings about a higher level of saving and investment and enhance the efficiency of capital accumulation. This hypothesis contends that well-functioning financial institutions can promote overall economic efficiency, create and expand liquidity, mobilise savings, enhance capital accumulation, transfer resources from traditional (non-growth) sectors to the more modem growth inducing sectors, and also promote a competent entrepreneur response in these modern sectors of the economy. The recent work of Dernirguc-Kunt and Levine (1996) in a theoretical review of the various analytical methods used in finance literature, found strong evidence that financial development is important for growth. To them, it is crucial to motivate policymakers to prioritize financial sector policies and devote attention to policy determinants of financial development as a mechanism for promoting growth.

Demand-Following Hypothesis: -The demand-following view of the development of the financial markets is merely a lagged response to economic growth (growth generates demand for financial products). This implies that any early efforts to develop financial markets might lead to a waste of resources which could be allocated to more useful purposes in the early stages of growth. As the economy advances, this triggers an increased demand for more financial services and thus leads to greater financial development. Some research works postulate that economic growth is a causal factor for financial development. According to them, as the real sector grows, the increasing demand for financial services stimulates the

financial sector. It is argued that financial deepening is merely a by-product or an outcome of growth in the real side of the economy, a contention revived by Ireland (1994) and Demetriades and Hussein (1996). According to this alternative view, any evolution in financial markets is simply a passive response to a growing economy.

Stage of Development Theory: - The theoretical basis of this study is anchored on stage of development hypothesis of financial development by Hugh & Patrick (1966) which states that the direction of causality between financial development and economic growth changes over the course of development. That is, at the early stage of development, the supply- leading impetus is evident but as real growth occurs in the economy, it will spark demand for financial services. This theory suggests a demand – following relationship between financial and economic developments. High economic growth creates the demand for modern financial institutions; their services, their assets and liabilities and arrangements, by investors and savers in the real economy. The financial market in turn responds to such demands. In this case, the evolutionary development of the financial system is a continuing consequence of the pervasive, sweeping process of economic development, the level of demand for financial services.

Empirically, the concept of economic growth has not been quite easy to grasp and measure in real terms. This is so because often in the literature of economics, some authors have variously differentiated economic growth from the term “economic development”. For such authors like Lewis (1978), the mere increase in the aggregate level of production of goods and services in an economy tells us nothing about the “quality of life” of a citizenry, given the threats of global pollution, abysmal lop-sided distribution of aggregate output and income, environmental degradation, prevalence of chronic and deadly disease, abject poverty and the absence of freedom and justice. For such authors, attention should be focused not merely on the increase in aggregate output and income but also on the total quality of standard of living and that there is yet no satisfactory measure of “quality of life” that can be applied to quantitative measure of aggregate output and income which would be acceptable to all and sundry that will stand the test of the time.

For instance, Osuji and Chigbu (2012) investigated the impact of financial development variables on economic growth in Nigeria, using time series data for the period 1960-2008. The research utilised co-integration analysis, causality test and error correction mechanism for analysis of the data; using variables such as money supply and credits to private sector and GDP. The results showed that money

supply and credits to private sector positively impacted on economic growth in Nigeria and were as well co-integrated with GDP for the study period. The Granger test shows a bi-directional causality existing between GDP and all repressors.

Meanwhile, Kuipou, Nembot and Tafah (2012) examined the relationship that exists between financial development and the growth rate per capita real GDP in OECD countries using panel data estimation techniques for the period 1980 - 2006. The variables used are the liquidity rate and the growth rate of per capita real GDP and the static panel model using OLS technique of analysis. The results showed that financial development negatively impacted on growth, while the Granger tests showed that there existed unidirectional causality running from economic growth to financial development in the OECD economies. Using the Johansen & Juselius (1990) approach to co integration and Vector Error Correction Modeling (VECM).

Similarly, Abdulsalam and Ibrahim (2013) examined the long run relationship between financial development indicators and economic growth in Nigeria over the period 1970- 2010. The findings of the study revealed that in the long-run, liquid liabilities of commercial banks and trade openness exert significant positive influence on economic growth. Conversely, credits to the private sector, interest rate spread and government expenditure exert significant negative influence. The findings implied that credits to the private sector were marred by the identified problems and government borrowing and high interest rate are crowding out investment and growth. In the same vein, Adekunle, Salami and Adedipe (2013) determined the impact of financial sector development and economic growth in Nigeria. They contended that an efficient financial system is essential for building a sustained economic growth and an open vibrant economic system. According to the study, countries with well-developed financial institutions tend to grow faster; especially the size of the banking system and the liquidity of the stock markets tend to have strong positive impact on economic growth. They employed the OLS method of the regression analysis; the financial development was represented by ratio of liquidity liabilities to GDP (M2GDP), real interest rate (INTR), ratio of credit to private sector to GDP (CPGDP) while the economic growth was measured by the real GDP (RGDP). The study founds that only the real interest rate was negatively related. All the explanatory variables were statistically insignificant.

Audu, Okumoko and Tubo (2013) suggested that the theoretical modelling requirements for all the variables used in the regression satisfy the statistical requirements which determine the choice of our model. The result of the co-

integration estimates in the study revealed that the selected independent variable used in this study explained the long-run relationship between financial development and economic growth within the periods under consideration. The result from the estimated long– run Parsimonious Error Correction Model (ECM) showed that all the variables used in the study were statistically significant. The study also revealed that lending rate did not conform to our theoretical expectation but impacted significantly on gross domestic product. Commercial banks credits to private sector had the expected a priori expectation sign and also positively affected financial development and economic growth in our study. Contrary to our expectation, MGDP negatively influenced financial development and economic growth in Nigeria. The study also indicated that commercial banks credits to non-financial private firms did not conforms to a priori expectation but significantly influenced or stimulated financial development and economic growth in the Nigerian economy. The ratio of commercial banks' deposits to gross domestic product (RDEP) appeared with the right sign and also impacted significantly on financial development and economic growth in Nigeria. The evidence from the study showed that the entire model is stable within the period of study.

Meanwhile, Oriavwote and Eshenake (2014) assessed the implications of financial development on economic growth in Nigeria, using time series data for the period of 1990-2011. The study applied the co-integration analysis with its error correction mechanism; the variables included Real Gross Domestic Product, Financial deepening (ratio of money supply to GDP, liquidity ratio, interest rate and the credits to private sector). These findings showed that financial sector development has not significantly improved private sector development, while the capital base and liquidity ratio have improved the level of economic growth in Nigeria. Also, Madichie, Maduka, Oguanobi & Ekesiobi (2014) applied OLS, ADF and PP unit root tests, Johansen and Juselius (1990) cointegration, error correction model, and the Granger causality procedures to examine the relationship between financial development and economic growth in Nigeria using data from 1986 – 2012. The results revealed that financial development affected economic growth negatively in the long run whereas its impact on economic growth was positive in the short run. The results also revealed that long run relationship existed between financial development and economic growth while causality run from economic growth to financial development in Nigeria.

Furthermore, Chude and Chude (2016) examined the impact of financial development on economic growth in Nigeria from 1980-2013. Vector error correction model was employed. They obtained the following results, (i) the trace

statistics of the Johansen co integrating equation showed that there existed a long run equilibrium relationship between financial development and economic growth in Nigeria, (ii) ratio of broad money supply to GDP have no significant impact on economic growth in Nigeria, (iii) ratio of domestic credit to private sector to GDP have no significant impact on economic growth in Nigeria, (iv) the causal relationship between financial development and economic growth indicated that ratio of Domestic Credit to the Private sector granger cause the economy. Conversely, Olanrewaju, Aremo and Aiyegbusi (2015) studied the causal linkages between banking sector reforms and output growth of manufacturing sector as well as the direction of such causality. A selected sample of financial development and manufacturing output of Nigeria with annual data between 1970 and 2008 were used and co integration and Granger-causality techniques were applied to ascertain evidence regarding this important issue. The result of Granger causality analysis according to the study showed that the MGDP and banking sector reforms indicators (BF) moved differently with one not predicting the other within the study period. Moreover, the empirical results showed that banks' assets, lending interest rate with co-efficient, exchange rate and real rate of interest positively and significantly affected the manufacturing sector's output growth in Nigeria. On the other hand, the financial deepening indicator (M2/GDP) and Interest rate spread negatively and significantly impacted on the MGDP in Nigeria, showing that the effects of banking sector reform indicators could vary widely in an economy. The study concluded that with proper banking policy formulations and guidance in the financial sector, the manufacturing output growth would be positively affected.

Conversely, Chude and Chude (2016) investigated the impact of development of banking sector on economic growth in MENA countries. They found that negative impact of financial development on economic growth of MENA countries during short and long-run. Sikdar, Wadud & Hassan (2015) investigate the presence of long-run relationship between financial development and economic growth in Bangladesh and India. They are found the evidence of bidirectional causal relationship between financial development and economic growth in both countries.

On the contrary, Prochniak and Wasiak (2017) examined the impact of financial system on economic growth for 28 EU and 34 OCED countries. Their empirical result showed a positive significant relationship between banking system and economic growth. However, some banking variables have negative effect on economic growth. Furthermore, Bongini, Drozdowska, Smaga and Witkowski (2017)

determined the role of financial development in economic growth of Central, Eastern and South Eastern European Countries (CESEE) between1995- 2014. They found CESEE economy benefits from the presence of foreign owned banks and those banks fostered economic growth. Also, Cashina, Mohaddesb & Raissi (2017) estimated the macroeconomic impact of El-Nino in 21 economies including Europe as a region for the period 1979-2013. Using global vector auto regression, their results exhibited significantly different impacts of El-Nino across 21 economies. Economies, such as Australia, India, Chile, Japan, New Zealand and South Africa experienced shorter fall in economic activity from the emergence of El-Nino compared to economies, such as Europe and the USA. They further showed that India's GDP growth fell by 0.16 per cent after the first quarter due to El Niño driven weather shocks.

Similarly, Imoagwu, Priscilla and Ezeanyeji (2019) investigated the relationship between financial development and economic growth in Nigeria during the period of 1986 – 2017. Specifically, it sought to examine the effect of financial deepening measured as the ratio of broad money supply to GDP, interest rate, stock market recapitalisation and credit to private sector to GDP on economic growth in Nigeria. The study adopted recent econometric techniques such as Augmented Dickey-Fuller (ADF) and the Phillip-Perron (PP), Unit Root Tests, co-integration test as well as the Toda-Yamamoto causality test were used to accomplish its objectives. The results revealed that financial development had significant positive relationship on economic growth in Nigeria only in the short-run while negative impact in the long-run and that causality run from financial development to economic growth. Furthermore, the study revealed that the stock market capitalisation had significant positive impact on economic growth in Nigeria in the short run while negative significant in long run. The interest rate had positive insignificant effect on economic growth in Nigeria only in the short run while negative significant effect in the long run. The ratio of domestic credits to private sector to GDP had positive significant impact on economic growth in Nigeria only in the long run while positive insignificant in the short run. Causality also run from stock market development, interest rate, banking sector development and recapitalisation to financial development in Nigeria. The policy implication of these findings was that financial development was one of the desired panaceas to achieving both long-run and short-run sustainable economic growth in Nigeria and any policy targeted on financial development is expected to positively affect the level of economic growth in Nigeria. Based on these findings, the study therefore recommended among other things that the government should redirect its policy efforts towards the promotion

of an efficient financial system while discouraging the elements of bureaucratic bottlenecks in the system as this would help accelerate the pace of growth of the economy.

As have been seen from the literature that a large body of work has investigated the relationship between financial sector development and economic growth of different economies and Nigeria as well, but the results of these studies remained less consensual, thereby making the topic a great research burden. These conflicting results have been traced to methodological challenges associated with the estimation method such as single equations (OLS); the Engle-Granger two step procedures; Johansen reduced rank; and the Vector Autoregressions (VAR) model; the use of which dominated the empirical studies in this area. However, recent econometric techniques have shown strong limitations of these techniques and revealed that most economic growth and financial development data have to be subjected to more rigorous analyses involving both the short run and long run co-movement among a number of time series data to unbiased, consistent, and efficient estimates (Enders, 1995). Another limitation of the previous studies was that they did not capture the effects of recapitalisation reform in the financial sector through the use of dummy variable thereby rendering the empirical results unreliable. The current study employed the sophisticated but simple recent techniques of econometrics in studying the link between financial development and economic growth in Nigeria. This study also captures the effects of recapitalisation reform through the use of dummy variable.The choice of this period is also necessitated by the availability of data, which is a major challenge to economic studies in Nigeria. The data were sourced from the Central Bank of Nigeria (CBN) Statistical Bulletin and Annual Reports of various issues.

Data and Methodology

The study examined the relationship between financial sector development and economic growth, the data used for the study is basically secondary in nature. The period of the study is fifteen (15) years from 2004 to 2018. The choice of this period is also necessitated by the availability of data, which is a major challenge to economic studies in Nigeria. The researchers resolved to use the period because it is believed that the 15-year is well enough to reveal the causality between the variables and is well above the usual 5 to 10 years that are used in similar studies. The data were sourced from the Central Bank of Nigeria (CBN) Statistical Bulletin of 2018 and annual reports of listed deposit money banks in Nigeria as at 2018. The variables under study are gross domestic product (GDP), profitability of the sector

(PROF), investment of the sector (INV), deposit for the year (DEP), advances to customers (ADV), inflation (INF) and interest rate (INTR). The study adopted though with modification, the model version of Oriavwote & Eshenake (2014). The model is stated as follows:

RGDP = f(PRF, INV, DEP, ADV, INF, INR, DUMMY) ..... (1)
Econometrically, the above equation 1, becomes;
$RGDPt = \beta0 + \beta1PRFt + \beta2INVt + \beta3DEPt + \beta4ADVt + \beta5INFt + \beta6INRt + \mu$ ..... (2)

Where:

GDP = Gross Domestic Product,; PRF = Profitability; INV = Investment; DEP = Deposit; ADV = Advances; INF = Inflation; INR = Interest Rate; Adopting a semi-log specification, logging (RGDP) the left side of the equation, and specifying in a full econometric form, we have:
$LNGDPt = \beta0 + \beta1LPRFt + \beta2LINVt + \beta3LDEPt + \beta4INFt + \beta5LINRt + \mu$ ..... (3)
Where;
LNRGDP = Log of real gross domestic product;
PRF = Profitability measured as gross profit to sale revenue.
INV = Investment is measured by dividing the difference by the initial cost of investment.
DEP = Deposit is measured by dividing bank's total amount of loans by the total amount of deposit;
INF = Inflation is the Consumer Price Index (CPI), which measures the percentage change in the price of a basket of goods and services consumed by households (as provided by CBN)
INR = Interest rate is the measure of the percentage change in the economic value of a position given a small deviation in the level of interest rates
LN = Natural Logarithm;
t= a certain time period,
0 = intercept;
$\beta1 - \beta6$= parameters to be estimated;
μ= error term.

Presentation and Analysis of Results

This study, tests began with unit root testing in order to determine whether the underlying time series are stationary or non- stationary. The stationarity tests follow the Augmented Dickey- Fuller (ADF) and Philip Peron (PP) unit root test approaches.

Table 1: *Augmented Dickey- Fuller and Unit Root Test Results*

Variables	t-statistics	Probability	Order of Integration
GDP	-3.392300	0.0254	I (1)
PRO	-6.498793	0.0001	I (1)
INV	-6.141236	0.0001	I (1)
DEP	-6.199328	0.0001	I (1)
ADV	-5.030274	0.0011	I (1)
INF	-5.802905	0.0002	I (1)
INT	-5.983441	0.0002	I (1)

Source: Author's Computation from Eviews Output (2019).

The results derived from these augmented dickey- fuller and unit root test results in table 1 shows the following two approaches, all the chosen variables were non-stationary at their level states and were all stationary at their first difference states. In other words, all the variables chosen for this study are integrated of order one, I (1). The tests for unit root is not just an approach for determining whether a time series is stationary or not but also it serves as a diagnostic test for determining whether a group of time series with similar time trend have long-run relationship. That is, it is known that when a group of time series show similar time trend (being integrated of the same order), co-integration may exist among them. In this study, all the chosen variables are order one, I (1) variables. The result is in consistent with Imoagwu, Priscilla and Ezeanyeji (2019); Prochniak and Wasiak (2017).The regression and causal relationship of the results are reported in table 2 is presented below:

Table 2: Regression Results for GDP, PRO, INV, DEP, ADV, INF and INT.

Dependent Variable: GDP
Method: Least Squares
Date: 12/20/19 Time: 02:51
Sample (adjusted): 2 20
Included observations: 130 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	401.9425	23705.98	0.016955	0.4218
PRF	792.5937	3360.582	0.235850	0.0179
INV	80.53954	1726.190	0.046657	0.0036
DEP	-758.8473	2570.150	-0.295254	0.0123
ADV	25.39880	307.5026	0.082597	0.9357
INF	30267.80	59236.94	0.510962	0.6195
INT	-259.1110	920.4231	-0.281513	0.2835
	1.090142	0.077830	14.00672	0.0000

R-squared	0.962544	Mean dependent var	32163.06
Adjusted R-squared	0.938709	S.D. dependent var	31860.06
S.E. of regression	7887.619	Akaike info criterion	21.07954
Sum squared resid	6.84E+08	Schwarz criterion	21.47720
Log likelihood	-192.2556	Hannan-Quinn criter.	21.14684
F-statistic	40.38281	Durbin-Watson stat	2.021103
Prob(F-statistic)	0.000001		

Source: Author's Computation from Eviews output (2019).

The Table 2 which is the regression result reveals the adjusted R-square, which represents the correlation between the observed values and predicted values of the dependent variable. R-Square is called the coefficient of determination and it gives adequacy of the model. Here the value of R-Square is 0.963 that means the independent variable in the model can predict 96% of the variance in dependent variable. The p-value is given by 0.000 which is less than 0.05, which shows the significance of our model. The values of Durbin-Watson statistics for dependent variables in our case is very slightly above 2.00, this indicates that there is no autocorrelation exists in our study and the regression models assume that the error deviations are uncorrelated.

Durbin-Watson test is used to test autocorrelation among the data (error term). In Durbin-Watson test, null hypothesis indicates that autocorrelation does not exists

in error term and alternative hypothesis depicts that autocorrelation exist in error term. Since regression model has assumption of uncorrelated error term therefore it must be fulfilled to run regression analysis. In Table 2 indicate value of Durbin-Watson (DW) as 2.021 which shows that autocorrelation does not exist in error term. Regression model overall significance is identified by F- value. It is actually the explained variance divided by unexplained variance (mean error). In Table 2 F-stat shows the value (40.38281) and it's Probability (0.000). The result is in consistent with Chude and Chude (2016) and Imoagwu, Priscilla and Ezeanyeji (2019).

H1: Financial sector has a significant impact on economic growth in Nigeria.

Table 3: Test of Hypotheses

Variable	Co-efficient	Probability
PRF	792.5937	0.0179
INV	80.53954	0.0036
DEP	-758.8473	0.0123
ADV	25.39880	0.9357
INF	30267.80	0.6195
INT	-259.1110	0.2835

Source: Author's Computation from Eviews output (2019).

The result above in Table 3 (test of hypothesis) showed that the p-value is 0.0179 (PRF), 0.0036 (INV), 0.0123 (DEP), and it is significant at 0.05 level of significance. The null is therefore rejected. While the result of ADV, INF and INT with the p-value of 0.9357, 0.6195 and 0.2835 are not statistically significant at 0.05 level of significance, therefore the null hypothesis is accepted.

5.0 Conclusion and Recommendations

This study investigated the effect of financial sector on economic growth with a special reference to deposit money banks in Nigeria. From the result, the following conclusions are made, that;

The unit root tests carried out showed that all the chosen variables are non-stationary at their level state and were all stationary after first differencing. In other words, they are all integrated of order one. Also the co-integration analysis showed that the variables have long run relationship which implies that any deviation from equilibrium among them was temporary as equilibrium held in the long-run for them.

The results showed that financial development has significant positive impact on economic growth in Nigeria in the long-run. Also, the results revealed that profitability, investment and deposit have significant positive impact on economic growth in Nigeria.

Also, the study revealed an insignificant impact of advances, inflation and interest rate on banking sector development to economic growth in Nigeria. This as a result of unstable monetary policy of the Central Bank of Nigeria which proved unidirectional causality relationship between financial sector (Deposit Money Bank) and economic growth in Nigeria.

Based on the findings of this study, the following recommendations are put forward that;

The government should redirect its policy efforts towards the promotion of an efficient financial system while discouraging the elements of bureaucratic bottlenecks in the system. This will help to energise the financial system and launch a big push on the level of economic growth.

Banking sector as well as the stock market are some of the most vibrant institutions in the Nigerian financial system. Thus, the government through the Central Bank should pursue favourable policies that will energise the banking sector while ensuring effective and efficient functioning of the stock exchange devoid of scams and malpractices in order to allow investors the access to long-run resources that are indispensable for the financing of medium and long-term projects.

As the advances to private sector to GDP has no significant impact on economic growth in Nigeria within the period under study, the development of the finance sector is also very necessary so as to make credit accessible to micro entrepreneurs who are often left out in the formal credit markets. These will boost private sector development and investments which is the engine of growth and development. Finally, the Central Bank of Nigeria should constantly monitor the implementation of monetary policy mechanisms and compliance with by deposit money banks in Nigeria.

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