IMPACT OF FINANCIAL DEEPENING INDICATION ON THE GROWTH OF NIGERIAN ECONOMY FROM 1985 TO 2020

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ABSTRACT

This paper investigated the responsiveness of economic growth to financial deepening in Nigeria from 1985 to 2020. The gross domestic product growth rate was used to represent Economic Growth while financial deepening indicators were private sector credit, deposit money bank deposits, and deposit money bank assets. Error correction model (ECM) approach was used estimate the models. The empirical results revealed that while deposit money bank deposits had positive and significant influence on economic growth, private sector credit and deposit money bank assets were negatively and significantly related to economic growth in Nigeria during the period of study. The outcomes entail that when deposit money bank deposits change by one-unit, economic growth increased by 4.92 units. On the other hand, when private sector credit and deposit money bank assets changed by one-unit, economic growth declined by 0.92 unit and 1.83 units, respectively. The result also indicates that inflation rate is negatively and significantly associated with economic growth. From the findings, it is concluded that financial deepening had significant impact on the growth of Nigerian economy.

Key Wards: Financial Deepening, Economic Growth, Private Sector Credit, Monetary Policy.

INTRODUCTION

Background of the study

A financial system consists of network of financial markets, businesses, institutions and government that participate in that system and regulate its operations (Herman and Klemm, 2019). The benefits arising from such a healthy and well developed financial system relate to savings, mobilization and efficient financial intermediation roles (Keshab, 2013; Gibson and Tsakalotos, 1994). The key essence of financial systems in the saving-investment-growth nexus serves to an extent as efficient vessel for: channeling funds from surplus to deficit units by mobilizing resources and ensuring an efficient transformation of such funds into real productive capital; creating sufficient liquidity into the economy by borrowing short-term and lending long-term; reducing information costs, providing risk management services and reducing risks from the system through diversification and techniques of risk sharing and risk poling; mobilizing savings from atomized individuals for investment, thereby solving the problem of indivisibility in financial transactions

and mobilizing savings that would be invested in the most productive ventures irrespective of the source of the savings (Bakang, 2015). This he believes can be achieved either by direct market based financing or indirect bank-based financing. Financial deepening is the effectiveness of financial institutions in mobilizing savings for investment purposes (Kpodar, Goff and Singh, 2019). This is due to the fact that growths of domestic savings are crucial for diversification of financial claims. As such, it is the increased ratio of money supply to Gross Domestic Product (Nzott, 2004). According to Shaw (1973) financial deepening involves specialization in financial functions, organized domestic financial institution and marketing the gains in relation to foreign markets. It is an increase in monetary system that will enhance profitability of other institutions as well.

Financial deepening may promote economic growth by its ability to mobilize more investments thereby lifting returns to financial resources, and hence raises productivity (Ran, Chen & Li, 2020). Financial markets are important as they play intermediation roles by channeling funds from savers to investors (Ghani, 1992). With efficiency and without repression, the outcome of financial deepening is usually a well-developed financial sector with a sustainable economic growth. However, where there is no developed financial deepening, otherwise called "financial shallowness" the growth of the economy is not guaranteed (Tigabu, 2009). From the foregoing analysis, a competitive and well-developed financial sector must be an important contributor to economic growth. Well-functioning financial institutions will lead to economic efficiency, expanded liquidity, mobilized savings, capital accumulation and the transfer of resources from non-growth sectors to the more growth-inducing sectors (Ogbodo and Ojide, 2015). Besides, financial deepening encourages a competent entrepreneurial response in these growth are induced into the economy. Financial deepening has been found to enable the financial intermediaries to effectively perform their functions into productive capital venture (Ndege, 2012).

Statement of the problem

Financial deepening plays an important role in determining the growth of an economy. It broadens its resource base, raises the capital needed to stimulate investment through savings and credit, and these boost the overall productivity. The design and implementation of effective interventions and programs in the Nigerian banking sector has led to a continued growth in financial assets. However, economic growth in Nigeria, whether as a result of financial deepening or otherwise has been fluctuating over the past decades. This is as a result of the size of the financial sector and the growing volume of intermediated finance especially through the banking system. To this end, it becomes imperative to draw the financial deepening production and economic growth discourse in the context of the banking sector deepening in Nigeria with the purpose of ascertaining how it has impacted Nigeria's economic growth.

Objective of the study

The objective of the study is to determine the responsiveness of economic growth to financial deepening indicators in Nigeria. Specifically, to determine the impact of private sector credit on economic growth, examine the impact of deposit money bank deposit on economic growth and ascertain the impact of deposit money bank assets on economic growth in Nigeria.

Statement of hypotheses

The following null hypotheses were formulated to guide the study.

H_{o1} Private Sector credit does not have significant impact on economic growth in Nigeria.

H_{o2} Deposit money bank deposits do not have significant impact on economic growth in Nigeria.

H_{o3} Deposit money bank assets does not have significant impact on economic growth in Nigeria.

REVIEW OF RELATED LITERATURE

Financial deepening

Financial deepening explains the expansion in the provision of financial services by financial intermediaries with a wider choice of services, targeted toward the development of all areas of the society (Ohwofasa and Aiyedogbon, 2013). Financial deepening aims at improving economic conditions through increased competitive efficiency within financial markets which in turn indirectly benefits the non-financial sectors of the economy (Nwnna and Chinwudu, 2016). Nzotta and Okereke (2009), asserts that financial deepening is the ability of financial institutions in an economy to effectively mobilize savings for investment purposes. Financial intermediaries are vehicles for financial deepening. Financial intermediaries mediate between the surplus economic unit (providers of financial resources) and deficit economic unit (users of financial capital) (Thakor, 2007). It mobilizes funds from households, firms or other financial intermediaries with surplus and idle financial resources, and lends it to other households; firms or other financial intermediaries with profitable investment opportunities but have inadequate funds. Financial deepening enables financial intermediaries perform their functions of mobilizing, pooling and channeling domestic savings into productive use more effectively thereby contributing to economic growth of a country. In addition to mobilizing savings and improving capital allocation, financial deepening reduces the extent and significance of information asymmetries and allows for risk transformation and monitoring. (Stiglitz and Greenwald, 2003).

Economic growth

Economic growth is the increase in the capacity of an economy to produce goods and services from a period of time. It occurs when the productive capacity of a country increases. As an aggregate measure of total economic production for a country, it represents the market value of all final goods and services including personal consumption, government purchases, private inventories, paid-in construction costs and the foreign trade balances. There are two main measures instituted and used to measure economic growth. The Gross National Product (GNP) that computes the total value of goods and services produced by all nationals within and outside the country over a given period, and the Gross Domestic Product (GDP) which is considered as the broadest indicator of economic output and growth. It is designed to measure the value/volume of production of those activities that fall within the boundary of the national accounting system. GDP measures economic growth in monetary terms and looks at no other aspects of development. It can be expressed in nominal terms which include inflation or in real terms which are adjusted for inflation. Short term GDP is the annual percentage change in real national output. While long term GDP is the increase in trend or in potential GDP. In order to compare countries of different population sizes, GDP per capita is generally used.

Private sector credit

The ratio of credit to the Private Sector (CPS) relative to nominal GDP indicates the level of financial services and is employed to measure all private resources used to finance the private sector. It is the most important measure of financial intermediary development, (Levine and Zervos (1998), Yartey, (2007) opines that it captures the channeling of funds from savers to investors in the private sector. Ang, (2007) states that it excludes credit to government, government agencies and public enterprises as well as credit issued by the Central Bank (Levine, et al 2000).

Commercial bank deposit

Commercial Bank Deposit is the ratio of commercial banks deposits to nominal GDP that shows the liquidity of the banking sector. Levine and Zervos, (1998) as quoted by Waiyaki (2013).States that Commercial bank deposits equal demand deposits plus time and saving deposits. The indicator provides an alternative measure to a broad money ratio, especially for developing countries, where a large component of the broad money stock is held outside the banking system (Kar and Pentecost, 2000)

Deposit money bank assets

Commercial Bank Assets as the ratio of GDP captures the size of the banking sector. King and Levine (1993) took account of commercial banks assets in the measurement of financial sector indicators and assessed the extent to which commercial banks channel savings into investment, monitor firms, influence corporate governance and undertake risk management, relative to the central bank (Huang, 2005). Commercial banks are expected to be more efficient and effective in allocating the savings into productive and profitable projects as compared to central banks.

Empirical review

Maxwell and Oluwatosin (2012) examined the influence of financial deepening on manufacturing output in Nigeria from 1970 to 2010. The study made use of vector auto regression technique to analyze banking annual data obtained from Central Bank of Nigeria (CBN) statistical bulletin and annual reports. The results revealed that the coefficients of financial deepening indicators included in the study do not exert significant effects on manufacturing output in Nigeria.

Elijah and Uchechi (2012) adopted Auto Regression Distributive Lag (ARDL) co-integration method to analyze the link between financial development and industrial production growth in Nigeria from 1970 to 2009 using time series secondary data obtained mainly from CBN statistical bulletin. The study found a co-integrating relationship between financial sector development and industrial production. Based on the outcomes, the study noted that one of the policy implications is that the most important task for Nigerian government is to ensure that further healthy financial sector reforms should be to improve the efficiency of the domestic financial sector.

Aiyetan and Aremo (2015) studied the effect of financial sector reform development on manufacturing output growth in Nigeria within the periods of 1986 to 2012. The study focused on the effects of financial sector development on disaggregated manufacturing output growth in Nigeria. Employing Vector Auto Regression (VAR) approach, the study examined whether or not

financial sector variables stimulate growth of output in the manufacturing sector of Nigerian economy with reference to some key macroeconomic variables. The findings indicated that liberal financial system and a deepened financial sector would enhance output growth of manufacturing sector in Nigeria.

Alrabadi and Kharabsheh (2016) investigated the dynamic relationship between financial deepening and economic growth in Jordan over the period (1992-2014). Vector auto regressive regressions, Granger causality and Johansen-Juselius co-integration tests are employed to achieve the objectives of the study. Using quarterly data, the results indicated no statistically significant effect of financial deepening on economic growth on the short run. However, the co-integration tests showed a statistically significant long run equilibrium relationship between the two variables regardless of the proxy used for financial deepening. Moreover, the Granger causality test showed a bi-directional causality between economic growth and financial deepening when the latter is measured by the amount of credit granted to private sector. However, a one way causal relationship from the economic growth to financial deepening was found when the amount of deposits and money supply (M2) were used as proxies of financial deepening.

Okoye, Nwakoby and Okorie (2016) examined the effect of economic liberalization policy on the performance of industrial sector in Nigeria. The study focused on how dynamism in some key macroeconomic variables, such as exchange rate, financial deepening, trade openness and lending rate, affected trend in output performance of Nigeria's industrial sector in the post reform era. Using data spanning from 1986 to 2014, the study employed vector error correction mechanism. Results of the study revealed that financial deepening exert a significant positive impact on industrial output while the Granger Causality test showed that there is a weak causal relationship between financial deepening and industrial output with trade openness and industrial output exhibiting a bi-directional causation.

Mounde (2017) examined the causal relationship between foreign direct investment and manufacturing output in Nigeria using industry production for the determinant of manufacturing output from 1981 to 2016. The study adopted *ex-post facto* research design with 176 listed manufacturing companies' being the sample size. Using Johansen co-integration test, the study found a long run relationship between foreign direct investment and output of manufacturing sector in terms of industry production. The study further revealed that there is a unidirectional causality between foreign direct investment and industry production in Nigeria. The causality runs from foreign direct investment to industry production both in the long run and short run.

Gezer (2018) examined the causal relationship between financial deepening and economic growth for fourteen upper middle income countries for the period during 1987 to 2015. Broad money supply, private credits, financial system deposit liabilities and deposit money banks' assets were used as proxies of financial deepening. The Bootstrap Panel Granger Causality approach was used for this relationship based on Seemingly Unrelated Regression (SUR) model. Empirical findings indicated that countries can be clustered according to supply-leading and demand following

approach. Besides, there exists evidence for bi-directional causality for some countries. This findings support the outcome in Igwebuike, Udeh and Okonkwo (2019) in the Nigerian context.

Nwakobi, Oleka and Ananwude (2019) evaluated the effect of financial deepening on economic growth in Nigeria over a period of thirty three years: 1986 to 2018. Data were collected from statistical bulletins of the Central Bank of Nigeria (CBN) and fact books of the Nigerian Stock Exchange (NSE). The model estimation followed the Auto-regressive Distributive Lag (ADLR) approach with the effect, estimated in line with the Granger Causality Analysis. They found that economic growth in Nigeria was not affected by financial deepening. The study also stated that the level of growth in the economy is what influences the level of development in the banking sector. The implication is that the Central Bank of Nigeria and the Security and Exchange Commission (SEC) should formulate and implement policies geared towards the deepening of the banking sector.

Amaefule (2019) examined whether financial deepening enhances economic growth. The data sets were on Gross Domestic Product (GDP), Money Supply (MS) and Credit to Private Sector (CPS) were used, covered the period of 1981 to 2016. The ARDL result showed no evidence of short-run relationship between financial deepening and economic growth but the long-run equilibrium relationship was only significant at 10% level. The result also showed that the system was getting adjusted towards long-run equilibrium at the speed of approximately 50%.

Theoretical framework

Financial intermediation theory

Traditional theory of intermediation was propounded by Allen and Santomero (1996). The theory is based on transaction costs and asymmetric information, and is designed to account for institution which takes deposits and channel the funds to firms as a means of stimulating economic activities in an economy. Efficient financial deepening promotes financial intermediation which is seen as the extent to which financial institutions bring deficit spending units and surplus spending units together (Ndebbio, 2014). An important question this theory tries to answer is why do investors first lend to banks who then lend to borrowers, instead of lending directly? This theory is relevant to this study given that intermediated finance has been acknowledged to be pivotal in driving growth. Arguments point out to the fact that banks are able to effectively monitor borrowers and thus play the role of delegated monitoring. Literature has shown that reduced monitoring costs are a source of this comparative advantage. This study is anchored on theory, for it states that the selected arms of financial sector have a significant role in the channeling of fund from economic agents having surplus to economic agents having deficits. All the two sectors generate large pool of funds, and provide mechanisms that allow such fund to be assessed by other economic units in the economy. It is through the later (providing mechanisms that allow funds to be assessed) that the respective sectors foster financial deepening in the economy.

METHODOLOGY

Research design

The study adopted the *ex-post facto* design. Being that the events had already taken place and is being examined.

Sources of data

The data for this study was completely a secondary data. These are data that have been collected, processed and published. It was obtained from Central Bank Statistical Bulletin for the period from 1985 to 2020.

Description and justification of research variables

The study employed annual data on selected variables from 1985 to 2020. The study adopted Gross Domestic Product (GDP) rate as proxy for economic growth, which is our dependent variable. The selected independent variables include private sector credit, deposit money bank deposits and deposit money bank assets as well as bilateral debt services, whereas inflation rate is our control variable.

Model specification

Our model is patterned after Bakang (2019) which sought to investigate the effects of financial deepening on economic growth in Kenya. The model proposed in the paper is represented thus:

$$\Delta(GDP)_t = \beta_0 + \sum_{i=4}^{p} \beta_1 \Delta (GDP)_{t-i} + \sum_{i=4}^{p} \beta_2 \Delta (FD)_{t-i} + \beta_3 ECT_{t-i} + \varepsilon_t \qquad (1)$$

The ECM enables us to distinguish between the short-run and the long-run and its results indicate the speed of adjustment back to long run equilibrium after a short run shock. The estimated equation is used to obtain the ECT (ECT_{t-i}) which is later used in the ECM.

The variant of our models follows the modification of Equ (1) and is expressed as follows:

$$GDPGR_t = \beta_0 + \sum_{i=4}^{p} \beta_1 PSC_t + \sum_{i=4}^{p} \beta_2 DMBD_t + \sum_{i=4}^{p} \beta_3 DMBA_t + \sum_{i=4}^{p} \beta_4 INF_t + \beta_5 ECT_{t-1} + \varepsilon_t \qquad (2)$$

Where *t*denotes time,

GDPGR = Gross Domestic Product Growth Rate

PSC = Private Sector Credit (% of GDP)

DMBD = Deposit Money Bank Deposits (% of GDP)

DMBA = Deposit Money Bank Assets (% of GDP)

INF = Inflation Rate

ECT = Error Correction Term

β_o = Intercept

$\beta_1 - \beta_4$ = Coefficient

ε = Error Term

Method of data analysis

We tested our variables for stationarity using the Augmented Dickey-Fuller (ADF) unit root test. Based on the outcome, we employed the Error Correction Model (ECM) estimation technique in analyzing our model. We also subjected our data set to descriptive statistics and analysis.

RESULTS

Table 1. Descriptive Statistics results

Statistics	GDPGR	DMBD	DMBA	PSC	INF
Mean	22.15468	4.813902	23.69442	11.55074	19.69049
Median	18.67685	4.342827	22.74509	8.255015	12.16854
Maximum	64.23759	9.322883	40.65480	20.77330	76.75887
Minimum	5.285688	2.430364	12.13976	6.217349	0.223606
Std. Dev.	13.17187	1.713585	7.408225	5.392513	18.63550
Skewness	1.271856	0.696621	0.447598	0.724697	1.700137
Kurtosis	4.621457	2.719755	2.358566	1.742232	4.819276
Jarque-Bera	13.27024	2.945337	1.768687	5.370638	21.68779
Probability	0.001313	0.229313	0.412985	0.068199	0.000020
Sum	775.4138	168.4866	829.3047	404.2760	689.1672
Sum Sq. Dev.	5898.938	99.83674	1865.981	988.6926	11807.58
Observation	35	35	35	35	35

Source: Researcher's computation, 2020

Table 1 explains the statistical descriptions of the variables in our model. The results revealed that Gross Domestic Product Growth (GDPG) averaged 22.15% while the deposit money bank deposit relative to GDP (DMBD) averaged 4.81%. The mean of deposit money bank asset relative to GDP (DMBA) was 23.69%. Moreover, private sector credit as a share of GDP (PSC) and inflation rate (INF) averages 11.55 and 19.69, respectively. The Maximum DMBD was 9.32% in 2008 but lowest at 2.43% in 1989. GDPGR peaked at 64.24% while the maximum trajectory for DMBA

and PSC was 40.65% and 20.77% respectively. The INF ranged between 0.22% and 18.64% over the period of 1985 – 2019. The results also showed that DMBA, DMBD and PSC are normally distributed which is indicated by the p-value of the Jarque-Bera (J-B) statistics all of which are less than 5%. However, GDPGR and INF did not provide evidence of normal distribution, with the p-value of J-B statistics being less than 5%.

Stationarity test

Table 2. Unit root test results

Variable	ADF- Stat.	5% Critical Value	P-value	Order of Integration	Inference
GDPGR	-7.825565	-2.954021	0.0000	I(1)	Stationary
DMBD	-4.668489	-2.954021	0.0007	I(1)	Stationary
DMBA	-3.511926	-2.954021	0.0139	I(1)	Stationary
PSC	-3.591183	-2.954021	0.0115	I(1)	Stationary
INF	-5.262106	-2.954021	0.0002	I(1)	Stationary

Source: Researcher's computation, 2020

Results of stationarity test in Table 2 show that our variables are all stationary at the same order of integration. This entails that GDPGR, DMBD, DMBA, PSC and INFINT do not have unit root and are stationary at first difference, I(1). Given this outcome, it becomes appropriate we employ the Error Correction Model (ECM) technique in estimating our model.

Error correction model (ECM) regression result

Table 3. ECM results

Dependent Variable: D (GDPGR)
Method: Least Squares
Date: 05/10/20
Time: 15:25
Sample (adjusted): 1989 to 2020
Included observations: 34 after adjustments

Variable	Coefficient	Std. Error	t-Statistics	Probability
D(DMBD)	4.916704	2.492643	1.972486	0.0085
D(DMBA)	-1.833661	0.698715	-2.624333	0.0139

D(PSC)	-0.922618	0.781512	-1.180555	0.0077
D(INF)	-0.190953	0.078593	-2.429663	0.0218
ECT(-1)	-0.818673	0.154139	-7.906314	0.0000
C	0.511975	1.271854	0.402542	0.6903
R-Squared	0.748662	Mean dependent var		0.273634
Adjusted R-squared	0.703780	S.D dependent var		13.58620
S.E of regression	7.394435	Akaike info criterion		6.998118
Sum squared resid	1530.975	Schwarz criterion		7.267475
Log likelihood	-112.9680	Hannan-Quinn criterion		7.089976
F-statistic	16.68076	Durbin-Watson stat.		1.678030

Source: Researcher's computation, 2020

Regression estimates in Table 3 reveals that DMBD has positive and significant influence on economic growth (GDPGR). Moreover, the results show that both DMBA and PSC have negative and significant impact on economic growth. Similarly, we also observe that INF is negatively and significantly related to the dependent variable. These outcomes entail that when DMBD changed by one-unit, GDPGR increased by 4.92 units. On the other hand, when DMBA changed by one-unit, GDPGR declined by 1.83 unit. The result also indicates that one-unit change in PSC and INF lead to about 0.92 units and 0.19 unit decrease in economic growth. The result also indicated that the speed of adjustment or the error correction term (ECT) has the right sign and is significant. The coefficient of the ECT which is -0.82 implies that deviations from long-run equilibrium relationship are corrected at the speed of 82% annually. The coefficient of determination shows that the regressors account for about 75% of the variations in economic growth while the remaining 25% could be attributes to other variables not included in the model. The results further indicated that the regressors jointly have significant effect on public investment as shown by the p-value of the F-statistic (0.00000<0.05). The Durbin-Watson statistic is also approximately 2.0, thereby indicating that our model do not have autocorrelation problems.

Test of hypotheses

Acceptance or rejection of the hypotheses was based on the t-value and p-value. The decision rule was to accept alternate hypotheses if the t-value $\geq$ 2.000 and p-value $\leq$ 0.05. Reject alternate hypotheses if t-value < 2.000 and p-value is > 0.05. Accept hypotheses if the t-value < 2.000 and p-value > 0.05. Reject null hypotheses if the t-value $\geq$ 2.000 and p-value $\leq$ 0.05.

The results from the ECM model estimation were used in testing hypotheses formulated, where the decision rule as explained in this sub-section were applied in rejecting or accepting the null hypotheses.

Test of hypotheses one

H_{01}**:** Private sector credit does not have significant impact on economic growth in Nigeria.

H_1: Private sector credit has significant impact on economic growth in Nigeria.

Decision: The hypothesis was tested using the error correction model estimation result in table 3 above. The result showed that private sector credit is negatively and significantly associated with economic growth in Nigeria. The results reported a t-statistics of -2.18 and p-value of 0.0077 < 0.05. Therefore, the study rejects the null hypothesis and accepts the alternate hypothesis which states that private sector credit has significant impact on economic growth in Nigeria.

Test of hypotheses two

H_{02}**:** Deposit money bank deposits do not have significant impact on economic growth in Nigeria.

H_2**:** Deposit money bank deposits have significant impact on economic growth in Nigeria.

Decision: The Hypothesis was tested using the ECM estimation result in table 3. The result revealed that deposit money bank deposits have positive and significant impact on economic growth in Nigeria. We observed that the t-statistics of the beta coefficient is 2.07 and the p-value is 0.0085 < 0.05. Therefore, the study rejects the null hypothesis and accepts the alternate hypothesis that deposit money bank deposits have significant impact on economic growth in Nigeria.

Test of hypotheses three

H_{03}**:** Deposit money bank assets do not have significant impact on economic growth in Nigeria.

H_{03}**:** Deposit money bank assets have significant impact on economic growth in Nigeria.

Decision: The hypothesis was tested using the ECM estimation result in table 3. The result revealed that deposit money bank assets have negative and significant impact on economic growth in Nigeria. We observed that the t-statistics of the beta coefficient is -2.62 and the p-value is 0.0139 < 0.05. Therefore, the study rejects the null hypothesis and accepts the alternate hypothesis that deposit money bank assets have significant impact on economic growth in Nigeria.

CONCLUSION

The results revealed that while deposit money bank deposits had significant influence on economic growth, private sector credit and deposit money bank asset were negatively and significantly related to economic growth in Nigeria during the coverage period. The result also indicates that inflation rate is negatively and significantly associated with economic growth. This paper analyzed the responsiveness of economic growth to financial deepening in Nigeria from 1985 to 2020. The specific objectives of the study are to determine the impact of private sector credit, deposit money bank deposits, and deposit money bank assets on economic growth in Nigeria. The empirical results revealed that while deposit money bank deposits had positive and significant influence on economic growth, private sector credit and deposit money bank assets were negatively and significantly related to economic growth in Nigeria during the coverage period, the result also showed that inflation rate is negatively and significantly associated with economic growth. It was

observed that deviations from long-run equilibrium relationship during the period were connected at the speed of 81.87% annually. From the findings, we conclude that financial deepening had significant impact on the growth of Nigerian economy.

RECOMMENDATIONS

1. The monetary authorities should adhere strictly to the appropriate use of monetary policy to stimulate the economy with further implications for effective credit creation and lending to the priority sector of the Nigerian economy.
2. The monetary authority and the banking sector should take actions that will encourage savings as well as investment.

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APPENDIXES

Dataset for the Study

Year	DMBD	DMBA	PSC	GDPGR	INF
1985	3.66468	16.64189	6.797795	12.85114	1.030928
1986	3.284886	19.60064	7.531977	5.285688	13.67347
1987	3.206394	19.97618	8.452161	23.2186	9.694794
1988	3.3303	18.1149	8.530747	28.41955	61.21113
1989	2.430364	15.4758	7.252738	30.86451	44.67005

1990	3.119776	16.60229	6.713879	19.19875	3.614035
1991	3.699219	19.71528	6.937812	19.28603	22.9597
1992	3.65612	17.49728	6.388518	52.64012	48.80198
1993	3.965116	17.96268	10.09616	38.3893	61.26226
1994	3.70707	16.7365	8.1361	40.00907	76.75887
1995	2.744866	13.30276	6.217349	64.23759	51.59132
1996	2.537725	12.13976	6.313526	30.53092	14.31428
1997	3.117099	14.2127	7.690533	8.798514	10.21333
1998	3.099857	15.13656	7.669579	11.6097	11.91292
1999	3.8089	20.16105	8.123968	15.65424	0.223606
2000	5.001845	22.74509	7.678375	29.96067	14.52697
2001	5.507912	27.62479	9.40433	17.92914	16.49485
2002	4.446339	24.41598	8.211023	39.31713	12.16854
2003	4.342827	22.91353	8.243662	17.37789	23.81136
2004	4.206106	21.66857	8.207608	30.22004	10.00848
2005	4.250743	20.27446	8.255015	28.56993	11.56515
2006	5.226011	25.02552	7.991697	28.70452	8.548721
2007	6.884664	33.28251	11.1187	15.11704	6.563952
2008	9.322883	40.6548	17.67332	18.67685	15.05556
2009	7.647022	39.56788	20.55309	13.09488	13.92956
2010	7.013593	31.73565	18.59843	23.31844	11.8
2011	7.813305	30.76789	16.92602	15.32281	10.28303
2012	7.069745	29.68481	20.42738	13.86707	11.98108
2013	6.443603	30.34141	19.66704	11.6834	7.956881
2014	5.894723	30.91341	19.23939	11.17588	7.978297
2015	6.238734	29.92541	19.83693	5.729041	9.55
2016	6.089341	31.21784	20.7733	7.801301	18.55

2017	5.618292	30.42247	19.42813	12.04277	15.37161
2018	5.172605	29.12198	17.62796	12.35662	11.4
2019	4.813902	23.69442	11.55074	9.15468	19.69049
2020	5.124613	22.74612	13.61063	11.23416	16.54268

Source: Central Bank of Nigeria Statistical Bulletin (various years)