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Sectoral Credit Allocations and Deposit Money Banks in Nigeria

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Abstract

This study examines the effects of sectoral credit allocation on the performance of Deposit Money Banks (DMBs) in Nigeria for the period of 1981-2017. The objective of the study is to examine the effects of bank loans to agricultural, manufacturing, and mining and quarrying sectors on return on asset (ROA) of DMBs. Secondary data were extracted from statistical bulletin of Central Bank of Nigeria (CBN) Bulletin, 2019 and Error Corrected Model (ECM) was used as a tool for data analysis after testing for the unit root properties of the data. The study reveals that there is no significant effect of bank loans to agricultural and mining and quarrying sectors on ROA of DMBs in Nigeria. However, significant relationship between loans to manufacturing sectors and return on asset was found. Based on the findings, we recommend that in designing monetary policy guidelines, the CBN should encourage banks to increase their lending activities to these sectors such that lending will be fully guaranteed by the government to avoid the issue of bad and doubtful debt reoccurring. This policy will help to diversify the economy for greater prospects and development.

Keywords: *Deposit Money Bank, Loans, Error Correction Model, Return on Asset, Manufacturing sector.*

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Background to the Study

The financial sector plays a pivotal role in economic activities in any country. As a result, policy makers are often concerned with the health of this sector relative to other sectors because, entrepreneurs and other corporate bodies often obtain their capital in form of loans from the financial institutions to start up or boost their business activities (Imala, 2015). There are different sectors within the Nigerian economy that vie for financial assistance from deposit money banks. Prominent among these sectors are the agricultural sector, the manufacturing sector, health sector and education sector (Ebele and Iorember, 2016).

The importance of banks to national economic development is widely acknowledged in literature. Banks are, for instance, described as engine of growth and development. Ali, Jatau and Ashami (2016) assert that the economic health of a country is determined by the health of its banking system, and Imala (2015) identifies stability and enhancement of sustained economic development as basic objectives of a sound banking system. Like in many other economies of the world, financial institutions in Nigeria play vital roles in the provision of the financial support to the real sector in an economy by mobilizing resources from the surplus units and channelling same to the deficit units for productive activities within an economy (Bada, 2017).

The Deposit Money Banks (DMBs), through their credit policy act as lubricants and promote growth in different priority sectors of the economy (Okorie and Taiwo, 2015). Since the political independence of Nigeria in 1960, achieving fast and continual growth of the domestic economy have been the principal goals of successive governments in the country. Consequently, several National development plans and programmes aimed at enhancing productivity, as well as expanding the domestic economic base have been formulated by several governments. With these goals in mind, the need for intervention of DMBs in terms of credit allocation to finance various sectors in Nigeria has been emphasized.

The manufacturing sector has a significant impact on the economy of nations. For instance, they account for a substantial proportion of total economic activities in Nigeria, and the subsector is responsible for about 10% of total GDP annually and 12% of the total labour force in the formal sector of the nation (Bada, 2017). The Nigerian manufacturing sector covers a broad spectrum of activities from light agro-based industries to heavy iron and the steel companies. However, the effectiveness of manufacturing companies depends on availability of both material and financial resources to meet up with the level of productivity challenge of the sector. This challenge brings about the need of the financial sector in Nigeria to allocate substantial amounts of loans for this subsector (Bada, 2017).

The agricultural sector of Nigeria equally requires substantial credit accessibility from DMBs to be able to finance input needs of for improved productivity. Omankhanlen (2014), have argued that in the progressive and developing countries, productivity growth tends to be higher in agriculture than manufacturing, but in terms of output growth manufacturing sector perform better than agriculture. Responding to the need for sectoral growth, the federal government of Nigeria prioritized the agriculture and manufacturing sector and directed

DMBs through the Central Bank of Nigeria (CBN) to devote a certain percentage of their loanable funds to these sectors. In this regards, the CBN introduced the Agriculture Credit Support Scheme (ACSS) in 197, Agricultural Credit Guarantee Scheme (ACGS) in 1978, and Commercial Agriculture Credit Scheme (CACS) in 2009 to enhance compliance and meeting of this target by the DMBs. The mining and quarrying sector of the Nigerian economy is still at its infantry stage because mining activities contributes relatively low to aggregate growth of the economy. Credit allocation to this sector with appropriate policy directive through granting of mining licences to emerging miners in Nigeria would enhance the growth of the sector.

Despite considerable efforts on the side of the government to encourage productivity in these key sectors of the economy, output levels continue to remain dismal and somewhat stagnant. This could be attributed to extreme financial distress and cases of insolvencies that incapacitate most DMBs. Consequently, all DMBs in Nigeria try to avoid loaning to these sectors due to unfriendly business climates in Nigeria and the risk of bad debt that have led to low credit allocations and high interest rate spread on loans. Increasing trends of low credit access jeopardizes the realization of high standard of living in the economy. This is because, in making credit available, DMBs are contributing to increased productivity and expanded capital investment (Olorunsola, et al., 2015). In fact, low credit access and high interest rate contribute to low level of investment in key sectors of the economy which further constrained economic performance and productivity in Nigeria (Ogar, Enya and Oka, 2015).

Despite low level credit availabilities in Nigeria, it is worth noting that DMBs are however regulated by apex bank (Central Bank of Nigeria), and it is compulsory for them to comply with rules and ensure that credits are made available to priority sectors or stand the chance of being sanctioned. Thus, this paper examines the extent to compliance with the rule (credit allocation) affects the level of productivity or financial performances of the DMBs in Nigeria.

The quick surveyed of the existing literature showed that most of the existing studies focused on the effects of credit allocation on the performances of key sectors in Nigeria. That is, the literature is skewed towards credit allocation-sectoral performance nexus (see Uzomba, et al., 2014; Chinweoke, Egwu and Nwabeke, 2015; Adeyinka, Daniel and Olukotun, 2015). However, much is unknown whether credit allocations to key sectors of the economy by DMBs affect their productivity. By this, we seek to fill the gap in knowledge by addressing the following research questions with their corresponding objectives and null hypotheses.

Research Questions

i. What is the relationship between bank credit to agricultural sector and return on asset of DMBs in Nigeria?
ii. What is the effect of bank credit to manufacturing sectors on return on asset of DMBs in Nigeria?
iii. What is the relationship between bank credit to mining and quarrying and return on asset of DMBs in Nigeria?

Objectives of the Study

i. To examine the relationship between bank credit to agricultural sector and return on asset of DMBs in Nigeria.
ii. To investigate the effect of bank credit to manufacturing sector on return on asset of DMBs in Nigeria.
iii. To evaluate the effect of bank credit to mining and quarrying on return on asset of DMBs in Nigeria.

Hypotheses of the Study

$H0_1$: There is no significant relationship between bank credit to agricultural sector and return on asset of DMBs in Nigeria.
$H0_2$: There is no significant effect of bank credit to manufacturing sectors on return on asset of DMBs in Nigeria.
$H0_3$: Bank credit to the mining and quarrying sector has no significant effect on return on asset of DMBs in Nigeria.

Following the foregoing introduction, the remainder of this paper is structured as follows: section 2 contains brief review of related theoretical and empirical studies in this area. While section three provides the methodological procedures and data issues, section four hosts the empirical results and discussion of the findings, and section five concludes the paper with relevance policy recommendations.

Literature Review

Theoretical perspective

The Loanable Funds Theory of Interest Rate explains the dynamics of bank credit and the cost of the credit vis-avis investment decisions. According to the theory, the rate of interest is the price of credit which is determined by the demand and supply of loanable funds. The demand for loanable funds primarily has three sources; government, businessmen and consumers who need them for purposes of investment and consumption (Udoka, 2013).

The government borrows money for constructing public works or for war preparations. The businessmen borrow for the purchase of capital goods and households borrows to smooth consumptions and for the purchase of durable consumer goods. Such borrowings are interest elastic and depend mostly on the expected rate for profit as compared with the rate of interest. The tendency to borrow is more at a lower rate of interest than at a higher rate (Adebiyi 2011). Therefore, the demand curve for investment funds according to this theory slopes downward showing that less funds are borrowed at a higher rate and more at a lower rate of interest. The theory of loanable funds provides a link between deposit money bank credits and manufacturing sector output in that, it buttresses the fact that borrowing for investment in the manufacturing sector is interest rate elastic since it is determined by the existing rate of interest (Ehikioya and Mohammed, 2013).

Empirical Review

There are empirical studies that explored that nexus between bank credits and sectoral performances in Nigeria. For instance, Uzomba et al., (2014) investigated the impact and the

determinants of Deposit Money Banks' loans and advances granted to the agricultural sector in Nigeria from 1980 to 2011 using multiple regression, Stationary Test, Co-integration test, Parsimonious Error Correction Mechanism and Granger Causality Test. The study concludes that there is a positive impact of deposit money banks' loans and advances on the agricultural sector in Nigeria.

Toby and Peterside (2014), analyzed the role of banks in financing the agriculture and manufacturing sectors in Nigeria from 1981-2010 using agricultural contribution to GDP, manufacturing contribution to GDP, deposit money banks' lending to agriculture, merchant banks' lending to agriculture, deposit money banks' lending to manufacturing and merchant banks' lending to manufacturing as variables of the study with panel data analysis and found that that role of banks in facilitating the contribution of the agriculture and manufacturing sectors to economic growth is still limited. Ogar, Nkamene and Effiong (2014) investigated the impact of deposit money banks' loans, on manufacturing sectors. Using variables like manufacturing output, deposit money banks' loans, and DMBs' interest rate with OLS in a multiple regression framework found that deposit money banks' credits had a significant relationship with the manufacturing sectors.

Chinweoke, Egwu and Nwabeke (2015) evaluated the impact of deposit money banks loans and advances to the agricultural and manufacturing sectors on economic growth in Nigeria for 1994-2013 using an ordinary least square technique. The study found that banks' loans and advances to agricultural and manufacturing sectors have a statistically significant impact on economic growth. In the same vein, Adeyinka, Daniel and Olukotun (2015), examined the contributions of DMBs' credits in financing agricultural sector in Nigeria. using multiple regression analysis, they found that cash reserves ratio and rediscount rate is not statistically significant; and liquidity ratio are statistically insignificant in agricultural development.

Sogules and Nkoro (2016), examined the impact of bank credits to agricultural and manufacturing sectors on economic growth. They used the Annual time series data from 1970-2013. Employing Co-integration and Error Correction Mechanism (ERM) for the analysis, the study revealed that banks' credits to agricultural sector exhibited an insignificant negative impact on economic growth while banks' credits to manufacturing sector exhibited a negative significant impact on economic growth in Nigeria.

Other studies take the strand of sectoral bank allocation effects on economic growth in Nigeria. Fapetu and Obalade (2015), examines the impact of sectoral allocation of Deposit Money Banks' loans and advances on economic growth in Nigeria during intensive regulation, deregulation and guided deregulation regimes and found that only the credit allocated to government, personal and professional have significant positive contributions on economic growth during the intensive regulation, and bank credits generally do not contribute significantly to economic growth during deregulation.

Sectoral allocation of credit as a vital role of the banking sector and its effects on economic growth in Nigeria was further examined by Alaba John and Lawal (2019). Using annual time

series data obtained from the Central bank of Nigeria (CBN) statistical bulletins and National Bureau of Statistics (NBS) annual reports for the period of 1986-2015 through Augmented Dickey Fuller (ADF) unit root test, Johansen co-integration test, vector error correction model (VECM) and fully modified Ordinary Least Square (FMOLS) regression, they found that credit allocated to productive sector and broad money supply have significant positive influence on economic growth in Nigeria.

In terms of the effects of sectoral credit allocation on the performance of deposit money banks, Maxwell and Ogbeonu (2016), empirically examined sectoral loans demand and performances of deposit money banks in Nigeria. By employing unit root for stationary test and Johannsen co-integration test, as well as granger causality test, the result revealed that loans and advances to agriculture, mining and quarrying sectors have negatively impacted the performances of DMBs but credit to the manufacturing and real estate construction sectors contributed positively to the performances of deposit money banks.

The gap found in the literature is that the work of Maxwell and Ogbeonu (2016), appears to be the available studies that examined sectoral credit allocation effects on the performance of deposit money banks in Nigeria. This current study therefore filled this observed empirical gap by examining the nexus between sectoral credits allocations and the performance of DMBs in Nigeria using return on assets

Research Methodology

Model Specification

Following the work of Maxwell and Ogbeonu (2016), the model employed for this study is functionally or structurally stated as:

$$ROA = F(AGR, MAN, MNQ) \quad \ldots\ldots(1)$$

$$ROA = \beta_0 + \beta_1 AGR + \beta_2 MAN + \beta_3 MNQ + \mu \quad \ldots\ldots(2)$$

Where:

ROA	=	Return on asset
AGR	=	Loans and advances to agricultural sector
MAN	=	Loans and advances to manufacturing sector.
MNQ	=	Loans and advances to mining and quarrying
μ	=	error term
β_0	=	intercept

In terms of a' priori expectations, we expect that when loans and advances granted are paid back promptly with interest, the level of ROA of the banks will increase positively. In this case, we expect the β_1 to β_3 to sign positively ($\beta_1 \rightarrow \beta_3 > 0$). However, if the loans are not paid and they result to bad debts, the expectation is the ROA of DMBs will be low, hence, the coefficients will sign negatively ($\beta_1 \rightarrow \beta_3 < 0$). The variables of the model are analyzed using descriptive and inferential statistical measures. Regarding the scope of the study, the data on these variables

are secondarily sourced from the Central Bank of Nigeria (CBN) and National Bureau of Statistics (NBS) spanning 1981-2017.

Result Presentation, Analysis and Interpretation

This section is based on the presentation, analysis and interpretation of regression results. The empirical results obtained from the data analyses. The section begins with the descriptive statistic, correlation matrix, and unit root test with co-integration analyses among others.

Result Presentation

Table 1: Descriptive Analysis

	ROA	AGR	MAN	MNQ
Mean	2.261081	108.3000	460.3919	268.3676
Median	2.420000	33.30000	115.8000	20.60000
Maximum	3.420000	528.2000	2215.700	2155.900
Minimum	0.220000	0.600000	2.700000	0.000000
Std. Dev.	0.724936	160.8296	643.3471	545.0967
Skewness	-0.630736	1.646625	1.454547	2.173341
Kurtosis	3.316978	4.319177	4.022203	6.644706
Jarque-Bera	2.608171	19.40298	14.65775	49.60702
Probability	0.271421	0.000061	0.000656	0.000000
Sum	83.66000	4007.100	17034.50	9929.600
Sum Sq. Dev.	18.91916	931182.3	14900239	10696693
Observations	37	37	37	37

Source: Author's computation (2020)

Table 1 reveals that the average return on assets within the period under study was 2.26 percent with the maximum ROA of 3.42 percent which was observed in 1994 while the minimum ROA of 0.22 percent was observed in 2011. The average Agriculture value was #108.3 billion with a maximum Agriculture value of # 528.20 billion in 2017 and a minimum Agriculture value of #0.60 billion at the end of 1981.

Similarly, the average manufacturing value during the period was #460.3919 billion with a maximum manufacturing value of # 2215.700 billion was observed in 2016 and a minimum manufacturing value of #2.70 was reported in 1981. Similarly, the average mining and quarrying value was #268.3676 billion, with a maximum mining and quarrying value of #2155.900 reported in 2013 while the minimum mining and quarrying value of #0.00 was reported in 1994. In the same vein, the Jarque-Bera statistics shows that only ROA variable is normally distributed.

Correlation Matrix

Correlation analysis was applied to estimate the amount of relationship between the different variables under discussion.

Table 2: Correlation Coefficients Matrix

	ROA	AGR	MAN	MNQ
ROA	1			
AGR	-0.226	1		
MAN	-0.219	0.968	1	
MNQ	-0.042	0.355	0.399	1

Source: Author's computation (2020)

From the correlation matrix presented in Table 2 shows that all the specified variables as negative relationship with the return on asset. While Agriculture and manufacturing have -0.22 and -0.21 respectively. Mining and quarrying have -0.04 accordingly. The implication of this result is that there is no form of Multicollinearity problem suspected among the variables.

Unit Root Test

A test of stationary or non-stationarity in time series data that has become widely popular over the past several years is the unit root test. This is to find out if the relationship between economic variables is spurious. This study used the Augmented Dickey-Fuller (ADF) Techniques to test and verify the unit root property of the series and stationarity of the model, seeing that it is very crucial to have a stationary time series.

Table 3: Result of Stationarity (Unit Root) Test

Variables	**Adf-statistics**	**Critical values**	**Order of integration**
ROA	-7.719135 (0.0000)	1%=-3.699871 5%=-2.976263 10%=-2.627420	First difference
AGR	-5.349843 (0.0000)	1%=-3.69987 5%=-2.976263 10%=-2.627420	First difference
MAN	-4.75819 (0.0007)	1%=-3.689194 5%=-2.971853 10%=-2.6255121	First difference
MNG	-5.086221 (0.0003)	1%= -3.689194 5%= -2.971853 10%=-2.625121	First difference

Source: E-view 9.0 output file

In order to investigate the order of integration among the variables (ROA, AGR, MAN, MNG), the study used the Augmented Dickey Fuller (ADF). As stated in the methodology, the tools of unit root tests (ADF) are tested for all the variables by taking null hypothesis as presence of unit root (i.e. presence of non-stationarity) against the alternative hypothesis _series is stationary '. If the absolute computed value exceeds the absolute critical value, then we reject the null hypothesis and conclude that series is stationary and vice-versa. It is clear from the Table 3 above that the null hypothesis of no unit roots for all the time series are

rejected at their first differences since the ADF test statistic values is less than the critical values at one percent levels of significances. Thus, these variables are stationary and integrated of same order, i.e., I (1). Thus, it is clear that all the variables have unit root in their level form but at first difference the variables became stationary. Thus, the model follows integrating process.

Johansen Co-Integration Test

Having ascertain the unit roots properties of the series and given that the variables were stationary at first and second difference, it is therefore appropriate to use co-integration analysis to estimate the relationship between the variables, provided that the variables.

Table 4: Unrestricted Co-Integration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.775686	109.0453	81.34653	0.0017
At most 1 *	0.645465	72.45465	58.67686	0.0122
At most 2 *	0.532540	50.66204	47.85613	0.0266
At most 3 *	0.467198	31.65101	29.79707	0.0302
Trace test indicates 4 cointegrating eqn (s) at the 0.05 level denotes rejection of the hypothesis at the 0.05 level MacKinnon-Haug-Michelis (1999) p-values				
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.775686	42.22236	40.07757	0.0282
At most 1	0.645465	25.15527	33.87687	0.3746
At most 2	0.532540	19.01103	27.58434	0.4137
At most 3	0.467198	15.74012	21.13162	0.2404
Max-eigenvalue test indicates 1 cointegrating eqn (s) at the 0.05 level denotes rejection of the hypothesis at the 0.05 level MacKinnon-Haug-Michelis (1999) p-values				

Table 4 shows the results from the trace test and it rejects the null hypothesis if the trace statistics exceeds the critical value generated by the statistical packages. The table shows that the trace statistics value of 109.04 exceeds the critical value of 81.34 at 95 percent confidence level. This implies that the null hypothesis of no co-integrating relationships is rejected. Instead, there are four possible integrating equations among the variables at 5% level of significance.

The results from this test as the Eigen Value test statistics value of 42.22 exceed the critical value 40.07 at 95 percent coincidence level. This suggests that the null hypothesis be rejected. Instead, there are only one possible cointegration equations among the variables as indicated by the Max-Eigen value. The results of trace confirmed the presence of a long-run relationship between and explanatory variables. Based on the Unit root test and cointegration

test results, the study proceeds to the adoption of the Error Correction as specified for the study and the result is presented in table 5.

Table 5: Error Correction Model (ECM)
Co-integration is a prerequisite for the error correction mechanism. Since co-integration has been established, it is pertinent to proceed to the error correction model.

Dependent Variable: ROA

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-36.14424	16.77721	-2.154366	0.0415
AGR	-0.228185	0.297134	0.767953	0.4492
MAN	0.439236	0.091472	-4.801865	0.0001
MNQ	-0.167533	0.270624	0.619064	0.5411
ECM(-1)	-0.358918	0.223326	-6.084906	0.0078

R-squared	0.744514	Mean dependent var	1.390113
Adjusted R-squared	0.708600	S.D. dependent var	3.156228
S.E. of regression	2.300801	Akaike info criterion	4.659977
Sum squared resid	127.0484	Schwarz criterion	4.895718
Log likelihood	-62.56967	Hannan-Quinn criter.	4.733808
F-statistic	21.17756	Durbin-Watson stat	1.979429
Prob(F-statistic)	0.000601		

Source: Author's Computation from E- view

The results of the error correction model presented in Table 5 show that the error correction term i.e. ECM (-1) is negative and significant. Its coefficient implies that the speed of adjustment is high and it will approximately take a speed of 36% for the short run disequilibrium to converge to the long run equilibrium in the system. The adjusted coefficient of the determination of the model (Adjusted R^2) signifies that all the explanatory variables in the model accounts for about 70.9% of total variation in ROA while the remaining 29.1% is attributed to the white noise (error term) after accounting for possible lot in the degree of freedom.

The regression co-efficient of bank credit to the agricultural sector (AGR) shows a negative and insignificant relationship with Return on Assets. Agricultural sector (AGR) is found to be insignificant in determining increase in ROA. This relationship implies that there is possibility of a unit increase in agricultural sector causing insignificant decrease in Return on Assets by 0.228 units. This potential negative effects of bank credit to agricultural sector on ROA of the banks could be due to the fact that agricultural sector is vulnerable to shocks and climate risks that may not yield enough expected returns to the farmers or borrowers, hence, they could be high level of loan default or bad debts. The finding of Ebele and Iorember (2016) is similar to this current finding where bank credit to this sector exhibited insignificant effects.

The coefficient for the Manufacturing sector (MAN) shows positive and significant relationship between bank credits to manufacturing sector and the level of ROA of the DMBs

in Nigeria. Here, the coefficient is found to be significant at 0.0001 statistical levels, which is less than 0.05. This relationship is such that for a unit increase in bank's credit to the manufacturing sector (MAN) will correspondingly increase ROA by 0.4 units. There is seeming increase in demand for manufacturing products since most of the fast moving consumable goods (FMCGs) are produced and well patronized, the level of return to investors in this sector would guarantee fast returns to assets of the lenders (DMBs).

The regression co-efficient of mining and quarrying sector showed a negative coefficient of 0.16. and is found to have insignificant effects on Return on Assets of DMBs in Nigeria. This relationship is such that for a unit increase in bank credit to mining and quarrying sector, there will be a decrease in Return on Assets by 0.16 units. This could be due to the fact that this sector is still under developed in Nigeria. The finding is in line with Adeyinka, Daniel and Olukotun (2015). The value of F-Statistic (21.178) with a probability of 0.000, shows that the specified model is significant. The Durbin-Watson statistic of 1.97 could be approximated to 2 which indicate the absence of auto-correlation. This implies that the problem of serial autocorrelation does not constitute a problem in the research analysis.

Test of Hypotheses

Hypothesis One

$H0_1$: There is no significant relationship between loans to agricultural sector and return on asset.

The study shows that there is no significant relationship between loans to agricultural sector and return on asset. Hence the null hypothesis is accepted as the study revealed that there is no significant relationship between loans to agricultural sector and return on asset.

Hypotheses Two

$H0_2$: There is no significant effect of bank loans to manufacturing sectors on return on asset of DMBs in Nigeria.

The regression results presented above shows that there is a significant effect of bank credit to the manufacturing sectors on return on asset. Thus, the alternative hypothesis is accepted as there is a significant relationship between loans to manufacturing sectors and return on asset.

Hypotheses Three

$H0_3$: Bank credit to the mining and quarrying has no significant effect on return on asset of DMBs in Nigeria.

The regression result shows that there is no significant effect of bank credit to mining and quarrying on return on asset of DMBs in Nigeria. Hence, the null hypothesis is accepted as the study revealed that there is no significant sign of effect of loans to this sector on ROA of DMBs in Nigeria.

Summary, Conclusion and Recommendations

Summary of Findings

The purpose of this study was to determine the effect of sectoral bank credit allocations on the performances of deposit money banks (DMBs) in Nigeria during the period 1981-2017. After establishing the unit root status of the variables and found that the variables were non-stationary, cointegration test and error correction model was utilized. The findings showed that bank credits to agricultural and mining and quarrying sector had no significant effect on return on assets of DMBs, however, bank credit to the manufacturing sector showed significant positive effect on ROA of DMBs in Nigeria.

Conclusions

Sectoral bank credit and deposit money bank's performances are key factors that stimulate the growth of every viable economy. In recent times, in one of her monetary policy guidelines, the CBN has instructed banks to channel their loans and advances to the less preferred sectors (agriculture, mining and quarrying sectors) for effective re-distribution of income and growth of the sectors. The test result revealed that banks attitude towards giving out loans and advances to less preferred sectors is becoming worrisome; owing to such, the performances in such sectors

Recommendations

Based on the findings from our study, the following recommendations were made and they include:

i) The monetary policy design, the CBN should encourage banks to increase their lending activities to the less preferred sectors such that such lending will be fully guarantee by the government to avoid the issue of bad and doubtful debt reoccurring. This policy will help diversify the economy for greater prospects and development.

ii) The CBN should pursue policies that lower interest rate (cost of capital) and reduce inflation on one hand and increase money supply as well as loans and advances to the investors in order to increase the output of the manufacturing sector which is capable of stimulating economic growth.

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APPENDIX
Data presentation

YEAR	Agriculture	Manufacturing	Miningand Quarying	ROA (%)
1981	0.6	2.7	0.1	3.36
1982	0.8	3.0	0.1	2.81
1983	0.9	3.1	0.1	2.45
1984	1.1	3.1	0.2	3.18
1985	1.3	3.2	0.2	2.48
1986	1.8	4.5	0.2	1.56
1987	2.4	5.0	0.2	2.68
1988	3.1	6.1	0.2	2.43
1989	3.5	6.7	0.3	1.89
1990	4.2	7.9	0.4	3.24
1991	5.0	10.9	0.5	2.13
1992	7.0	15.4	0.8	2.14
1993	10.8	23.1	1.4	2.42
1994	17.8	34.8	0.0	3.42
1995	25.3	58.1	12.1	2.14
1996	33.3	72.2	15.0	1.24
1997	27.9	82.8	20.6	0.96
1998	27.2	96.7	22.8	2.69
1999	31.0	115.8	24.7	0.95
2000	41.0	141.3	32.3	2.56
2001	55.8	206.9	70.5	3.26
2002	59.8	233.5	70.2	2.44
2003	62.1	294.3	96.0	1.84
2004	67.7	332.1	131.1	2.02
2005	48.6	352.0	172.5	2.09
2006	49.4	445.8	251.5	1.75
2007	149.6	487.6	490.7	2.96
2008	106.4	932.8	846.9	2.58
2009	135.7	993.5	1,190.7	2.32
2010	128.4	987.6	1,178.1	2.92
2011	255.2	1,053.2	1,295.3	0.22
2012	316.4	1,068.3	1,771.5	2.99
2013	343.7	1,179.7	2,155.9	2.04
2014	478.9	1,647.5	18.2	2.08
2015	449.3	1,736.2	11.7	1.47
2016	525.9	2,215.7	21.3	1.53
2017	528.2	2,171.4	25.3	2.42

Source: CBN statistical Bulletin 2019, World Bank 2019, Global Financial Centre Index, Financial Sector Development Indicator.