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Credit Financing and Agricultural Growth in Nigeria

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Abstract:

Agriculture is key to the industrial development of any nation this is because in addition to providing food security for the population, it also provide raw materials which industries depends upon for the production of goods and services. This study investigated the impact of credit financing on agricultural growth in Nigeria from 1989 to 2018.

This study adopted an ex-post facto research design, the data empirically analysed was a time series data sourced from CBN statistical bulletin. Agricultural gross domestic product to proxy agricultural growth, Deposit Money Banks' Credit to Agriculture, Agricultural Credit Guarantee Scheme and Government Expenditure on Agriculture to proxy credit financing. The study employed descriptive statistic, unit root test, co-integration, Bound Test and Auto

Regressive Distributed Lag Model methods of analysis as the analytical tools and inferences were made at 5 percent significant level. The study shows that deposit money banks loans to the agricultural sector ($\beta = 0.783423$,

$t=5.371$ $p= 0.0000$) impacted positively a significant effect on agricultural growth in Nigeria within the time frame. The study concluded that Deposit money banks' loans to agriculture has significantly impacted on agricultural growth in Nigeria. The study also ascertained that government expenditure on agriculture ($\beta = 0.093623$, $t= 1.132349$, $p= 0.2716$) impacted positively but insignificant on agricultural growth in Nigeria. The study concluded that

Government expenditure on agriculture has no significant impact on agricultural growth in Nigeria. The model also showed that Agricultural Credit Guarantee Scheme ($\beta = -0.11088$, $t=- 0.813$ $p= 0.426$) posits an inverse effect on Agricultural growth in Nigeria, however insignificant to determine agricultural growth in Nigeria. The study concluded that Agricultural credit guarantee scheme has no significant effect on agricultural growth in Nigeria The study concluded that the role of deposit money banks credit is more important as it is a source of providing different agricultural inputs which has strong impact on productivity. The government should provide subsidized credit to the farmers as this could positively influence more productivity in agricultural sector. To make the Agricultural credit guarantee scheme more productive special instructions and supervision should be carried out by loan issuing authorities.

Keywords: *Agricultural credit guarantee scheme, agricultural growth, credit financing, deposit money banks' credit and government expenditure*

1. Introduction

Agriculture is key to the industrial development of any nation this is because in addition to providing food security for the population, it also provides raw materials which industries depends upon for the production of goods and services.

As indicated by Ijaiya (2005) regardless of the power of the oil and gas area in Nigeria, agricultural sector despite everything stays as one of the significant bases of financial strength in the economy. From late 1950s to mid-1960s, Nigerian economy was mainly dependent on agriculture. It contributed more than 65% of the nation's Gross Domestic Product (GDP) and a significant portion of the foreign exchange earnings. This sector has most significant parts of Nigeria's economy as it holds a ton of possibilities for future monetary improvement of the country having assumed driving job in the far-off past. With the coming of oil as a significant source of government revenue and foreign exchange earner, agriculture has been overlooked which prompted the drop of the sector's commitment to the economy. Development in the agricultural sector is two to four times more effective in raising incomes among the poorest compared to other sectors and also crucial to economic growth (Okoh, Amadi, Ojiya and Ani, 2019)

Albeit Nigerian relies vigorously upon the oil business for its budgetary incomes, the nation is transcendently still an agrarian culture with around 70% of the populace taking part in agricultural creation at a subsistence level. In light of the fluctuating climatic states of places and the tremendous and rich soil, the nation produces mixtures of crops while a significant portion of the agricultural sector in Nigeria involves livestock productions, fishing, poultry and lumbering, hence agricultural products were major export product in the 1960s and mid-1970s (CBN, 2013). The agricultural dedication to the GDP in spite of proper fund provides a scope for farm capital investment (Ali, Jatau and Ekpe, 2016). This study has an objective to check the effect of credit financing and agricultural growth in the form of deposit money banks' credit in Nigeria.

2. Literature Review

2.1. Deposit Money Banks' Credit

Credit is the extension of money from the lender to the borrower. Sunny (2013) noted that credit implies a promise by one party to pay another for money borrowed or goods and services received. Credit cannot be separated from the banking sector as banks serve as a channel for funds to be received in form of deposits from the surplus units of the economy and passed on to the deficit units who need funds for productive purposes. Banks are therefore debtors to the depositors of funds and creditors to the borrowers of funds. Bank credit is the borrowing capacity provided to an individual, government, firm or organization by the banking system in the form of loans.

According to CBN (2003), the amount of loans and advances given by the banking sector to economic agents constitute bank credit. Bank credit is often accompanied with some collateral that helps to ensure the repayment of the loan in the event of default. Credit channels savings into productive investment thereby encouraging economic growth. Thus, the availability of credit allows the role of intermediation to be carried out, which is important for the growth of the economy. The total domestic bank credit can be divided into two: credit to the private sector and credit to the public sector.

2.2. Agricultural Credit Guarantee Scheme

The Agricultural Credit Guarantee Funds Scheme (ACGFS) was being established by the Federal Military Government under the Agricultural Credit Guarantee Scheme Fund Decree 1977 (Decree No. 20) and as reviewed in 1988, with an underlying capital base of one hundred million Naira (N100, 000,000.00) conveyed between the national government (60 percent) and the Central Bank of Nigeria (40 percent). This was done to spread loans to the agricultural area. At initial stage, one hundred thousand Naira (N100,000.00) for people and one million naira for cooperatives and corporate bodies was the extreme level of credit. Such advances would require security. Security would anyway be waived for credits beneath 5000 naira (Agunwa, Inaya and Proso 2015). Most often, financial institutions require huge collateral from customers before loans are granted to them, which is detrimental to farmers' efforts that may require such loans to enhance their production. (Nwanyanwu, 2012) Hence, the ACGSF is planned for reducing this dearth by guaranteeing these farmers or other individuals involved in agricultural production when seeking for loans from the banks. Before the ACGS pays the 75% of guaranteed loans, for default the lending bank needs to drain all forms of loan recovery. This has made most financial institutions interested and secured in granting loans to agricultural ventures

2.3. Government Expenditure

Government expenditure is the costs brought about by the administration for support of the economy, and society in general, in any case, its impact on the agricultural output is flawed. Iheanacho (2016) defines government expenditure as an instrument which the government uses to influence economic performance. Public expenditure is the main instrument used by Governments especially in developing countries to promote economic growth which is an essential ingredient for sustainable development (Ewubare&Eyitope, 2015). Economic growth brings about a better standard of living of the people through provision of better infrastructure, health, housing, education services and improvement in agricultural productivity and food security (Loto, 2012). Nearly all the sectors in the national economies of developing countries demand more budgetary allocations every year. For instance, the agricultural sector under the Maputo Declaration of 2003 requires African Governments to increase expenditure on agricultural sector to at least 10 percent of the national budgetary resources (New Partnership for Africa's Development, 2011). Abula and Ben (2016) defined Public expenditure on agriculture includes spending by local/municipal, regional and national governments on agriculture from annual budgetary allocation. It is the expenditure on crop development, seed production and distribution, fertilizer procurement, agricultural mechanization, extension services, control of pests and diseases, soil conservation, irrigation, research etc.

2.4. Theoretical Review

Commercial Loan Theory of Liquidity also known as the real bills doctrine was developed by Adam Smith in 1776. This theory talks about the bank liquidity that short-term loans advanced to finance saleable goods. Goods move through different channels starting from the distributors to the retail outlet and finally consumed by the consumers. This theory also looks for the security of such short-term loans along with proper degree and proper money supply of liquidity for each bank.

2.5. Empirical Review

A significant association found between commercial banks' credit and agricultural productivity in Nigeria by Agunuwaet *al.* (2015) with the application of Auto Regressive Distributed Lag (ARDL). How growth has been seen in case export sector created by money bank credit within a timeframe of 1986 to 2016 by Okosodo and Imoughele (2019). The impact of bank credit on Nigerian agricultural output had been reviewed by Nnamocha and Eke (2015). The effect of deposit money banks financing on real sector output had been studied by Arikpo and Adebisi (2017). This showed that there is no long run effect on the agricultural sector. Deposit money banks had been found significant source for growth in agriculture in Nigeria by Ali, Jatau and Ekpe (2016). Time series data had been studied for the period of 1970-2008 by Ernest (2010) to check the performance of the agricultural sector for commercial banks' lending. Obilor (2013) also evaluated same thing for a time period of 1983-2007. His findings show that prices of agricultural produce and commercial banks to the agricultural sector were not significant while agricultural credit guarantee scheme fund and government fund

allocation to agriculture produced a significant positive effect on agricultural productivity. Mgbanya *et al* (2018) evaluated the impact of the national recurrent expenditure on Nigeria's agricultural growth from 1990 to 2017. Nigerian agricultural output change caused by agricultural expenditure of government and other determinants had been researched by Iganiga and Unemhilin (2011). Association between private investments and agricultural sector performance had been highlighted by Francis and Baribe (2018). Impact of the government budgetary provision on the agricultural sector had been documented by Adofu, Abula and Agama (2012). Agricultural credit Guarantee scheme fund (ACGSF) and its contributions had been found in the work of Akaninyene and Sunday (2017). Ihegboro (2014) investigated the impact of Agricultural Credit Guarantee Scheme Fund total fund granted on Agricultural output and productivity in Nigeria. The ex-post facto research design was adopted to enable the researcher make use of secondary data and determine cause-effect relationship during the period, 1978-2008. Findings found that the total agricultural credit guarantee scheme fund had significant positive impact on agricultural output in Nigeria. Bassey, Ibok, and Amba (2014) result revealed presence of co-integration and shows that past value of gross domestic product exerted significant positive impact on agricultural output.

No strong association had been found between deposit money banks' credit and the performance of agricultural sector in Nigeria in the study of Ekine and Onukwuru (2018). No asymmetry in the impact of credit to output growth has been found by Olorunsola, Olowofeso, Adeboye, Adejo, Bassey and Ochoche (2017) for the short-run not for long run.

The dynamic adjustments show that the cumulative agricultural output growth is mostly attracted by the impact of the positive changes in credit to agriculture with a lag of four quarters of the prediction horizon

Ishmael, Farouk and Idisi (2018) showed that government expenditure on agriculture and how it affects unemployment reduction in Nigeria from 1999 - 2015. It was found that government expenditure and unemployment did not have a significant effect, on Nigerian economy from 1960 to 2012. Furthermore, Okezie, Nwosu and Njoku (2013) studied An assessment of Nigeria expenditure on the agricultural sector using time series data from 1980 to 2011, their findings indicated that agricultural contribution to GDP (Gross domestic product) and total government expenditure on agriculture are cointegrated in the study. However, Kareem, Bakare, Ademoyewa, Ogunla and Arije (2015) concluded that federal government spending on agricultural sector has significant impact on economic growth as well as agricultural output response in Nigeria.

3. Methodology

3.1. Model Specification

The model is specified as:

$$Y = f(X)$$

Y = Agricultural growth (AG)

X = Credit financing (CF)

x_1 = Deposit money banks' loans (DMBL)

x_2 = Government expenditure on agriculture (GEA)

x_3 = Agricultural credit guarantee scheme (ACGS)

$$AG = f(\text{DMBL}) \text{----- (1)}$$

$$AG = f(\text{GEA}) \text{----- (2)}$$

$$AG = f(\text{ACGS}) \text{----- (3)}$$

$$AG = f(\text{DMBL, GEA, ACGS}) \text{----- (4)}$$

Where;

AG - Agricultural Growth

DMBL - Deposit Money Banks' Loans to Agricultural Sector

GEA - Government Expenditure on Agricultural Sector

ACGS - Agricultural Credit Guarantee Scheme

Accordingly, the econometric form, the models are:

$$AG = \beta_0 + \beta_1 \text{DMBL}_t + e_t \text{----- model (1)}$$

$$AG = \beta_0 + \beta_2 \text{GEA}_t + e_t \text{----- model (2)}$$

$$AG = \beta_0 + \beta_3 \text{ACGS}_t + e_t \text{----- model (3)}$$

$$AG = \beta_0 + \beta_1 \text{DMBL}_t + \beta_2 \text{GEA}_t + \beta_3 \text{ACGS}_t + e_t \text{----- Equation (1)}$$

We also tried the log-linear specification on the relationship in equations (1), the log-linear specification was adopted to place all the variables in the models on the same scale or level and to minimize the problem of multicollinearity.

Equation (1) was transformed into log to enable the model amenable to as follows:

$$\text{LOG}(AG_t) = \text{LOG}(\beta_0) + \beta_1 \text{LOG}(\text{DMBL}_t) + \beta_2 \text{LOG}(\text{GEA}_t) + \beta_3 \text{LOG}(\text{ACGS}_t) + e_t$$

Where:

AG = Agricultural growth

DMBL = Deposit Money Banks' Loans to Agricultural Sector

ACGS = Agricultural Credit Guarantee Scheme Credit to agricultural sector

GEA = Government Expenditure on Agricultural Sector

β = Parameter estimates

e = Error term.

3.2. Data Analysis and Interpretations

	LAO	LDMBL	LGEA	LACGS
Observations	30	30	30	30
Mean	8.001577	6.996113	2.065486	14.01491
Median	8.467454	7.212185	2.606857	14.25292
Maximum	10.21725	9.687642	4.180507	16.33773
Minimum	4.480334	3.091406	-1.885191	11.27856
Std. Dev.	1.785486	2.202370	1.849254	1.889825
Skewness	-0.589715	-0.350561	-0.739295	-0.189166
Kurtosis	2.121114	1.769895	2.330919	1.363705
Jarque-Bera	2.704373	2.505913	3.292373	3.525745
Probability	0.258674	0.285659	0.192784	0.171551

Table 1: Descriptive Statistics

The table 1 presents the descriptive statistics of the data on the impact of credit financing on Agricultural growth in Nigeria. These data were Log of Agriculture Output (LAO), Log of Deposit Money Bank Loan (LDMBL) Log of Government Expenditure on Agriculture (LGEA) and Log of Agriculture credit guarantee scheme (LACGS) from 1989 to 2018. The table include the number of observations, mean, median, maximum, minimum, standard deviation, skewedness, kurtosis and normality test of each of the dependent and independent variables.

The log of Agriculture Output posits a mean value of 8.001577 with a standard deviation of 1.785486. The value of the standard deviation depicted that there exists high variation around the data sets of Log of Agriculture output giving it value lying above 1. The value of the skewness and kurtosis show value of -0.589715 and 2.121114 respectively. The results indicate that LAO is negatively skewed and leptokurtic in nature since its value lies below 3. The Jarque-bera statistics of 2.704373 depicted that LAO is normally distributed giving the Probability value of LAO as 0.258674.

The Log of Deposit Money Bank Loan mean value of 6.996113 and standard deviation of 2.202370 showed a high variation around the data set giving it value above 1. The value of the skewness and kurtosis showed a value of -0.350561 and 1.769895 respectively. The results indicate that LDMBL is negatively skewed and leptokurtic in nature. The Jarque-bera statistics of 2.505913 shows that LDMBL is normally distributed giving the Probability value of LDMBL as 0.285659.

The Log of Government Expenditure on Agriculture mean value of 2.065486 and standard deviation of 1.849254 showed a high variation around the data set giving it value above 1. The value of the skewness and kurtosis showed the value of -0.739295 and 2.330919 respectively. The results indicate that LGEA is negatively skewed and leptokurtic in nature. The Jarque-bera statistics depicted that LGEA is normally distributed giving the Probability value of LGEA as 0.192784

The Log of Agriculture credit guarantee scheme mean value of 14.01491 and standard deviation of 1.889825 showed a high variation around the data set giving it value above 1. The value of the skewness and kurtosis showed a value of -0.189166 and 1.363705 respectively. The results indicate that LACGS is negatively skewed and leptokurtic in nature. The Jarque-bera statistics depicts that LACGS is normally distributed giving the Probability value of LACGS as 0.171551

	LACGS	LAO	LGEA	LDMBL
LACGS	1			
LAO	0.788614	1		
LGEA	0.650547	0.766448	1	
LDMBL	0.783838	0.979121	0.758532	1

Table 2: Correlation Matrix

Table 2 presents the correlation matrix for the data sets. These data were Log of Agriculture Output (LAO), Log of Deposit Money Bank Loan (LDMBL) Log of Government Expenditure on Agriculture (LGEA) and Log of Agriculture credit guarantee scheme (LACGS) from 1989 to 2018. The essence of the correlation matrix is to show the possibility of the existence of multicollinearity in the model. The results showed the coefficient of 0.651 among LACGS and LGEA while the correlation coefficient between LACGS and LDMBL showed a value of 0.784. Also, the coefficient between LGEA and DMBL showed a value of 0.759. Since the correlation coefficients between the LGEA, LDMBL and LACGS are less than 1.0 (Perfect Correlation), this study concluded that the existence of multicollinearity issue in the model is minimal.

Variable	Level	First Difference	Critical Value	Lag	Order of Integration
LAO	-3.049361**	-3.271120	-2.967767	2	I (0)
LDMBL	-1.943939	-4.774404**	-2.967767	2	I (1)
LACGS	-0.997909	-4.745637**	-2.971853	2	I (1)
LGEA	-2.566375	-7.720664**	-2.976263	2	I (1)

Table 3: Augmented Dickey-Fuller (Adf) Unit Root

The results indicated that the time series of LAO is stationary at level giving the t-statistics of -3.049 and the critical value of -2.968 at 5% inferences. This indicates that LAO does not have unit root problem at level, hence the data

set was stationary at level. The time series of LDMBL, LACGS and LGEA have unit root problem at level giving their T-statistics at level with -1.944, -0.998 and -2.566 respectively and the critical value of -2.97. The result indicated that the null hypothesis of existence of unit root cannot be rejected.

At the first difference the t-statistics of LDMBL, LACGS and LGEA shows -4.774, -4.746 and -7.721 respectively with the critical value of -2.976. The result indicates that LDMBL, LACGS and LGEA were integrated of order one respectively. That is the series were not stationary at their level but stationary after their first difference. The conditions for testing for co-integration have been met. Hence, the application of Autoregressive Distributed Lag Modelling is sufficient, this called for Bound Co-Integration Test.

F-statistic	K		Lower Bound	Upper bound
4.707402**	3	10%	2.72	3.77
		5%	3.23	4.35
		2.5%	3.69	4.89
		1%	4.29	5.61

Table 4: Bound Test for Co-integration Test

The bound testing for co-integration was presented in the table 4. The bound test compares the F-value of a model at 5% level with the lower bound test and upper bound test. The model F-statistics value of 4.707402 showed that the value is greater than both the lower and upper bound value of 3.23 and 4.35 respectively at 5% significant level. The result shows that there exists a long run relation between credit financing and agricultural growth in Nigeria from 1989 to 2018.

Variables	Coefficient	Stand. Error	T-Statistics	P-Value
Method: Autoregressive Distributed Lag Model (ARDL)				
D(LAO(-1))	0.390523	0.180662	2.161619**	0.0436
D(LACGS)	0.050173	0.068534	0.732088	0.4730
D(LACGS(-1))	0.154884	0.066940	2.313777**	0.0320
D(LDMBL)	0.186518	0.132456	1.408147	0.1752
D(LGEA)	0.043512	0.041378	1.051573	0.3062
ECT(-1)	-0.464755	0.129458	-3.590012***	0.0020
R-Squared	0.626810			
Adjusted R-Squared	0.469678			
F-Statistics	3.989057***(0.006315)			
Durbin Watson	2.146084			

Table 5: Estimated Coefficients of the Dynamic Effect

The results of the short run impacts of credit financing on agriculture growth reveals that LACGS, LDMBL and LGEA have positive impact of 0.050, 0.187 and 0.044 on LAO. However, none of the variables is significant to explain the LAO at 5 percent inferences.

The Model result showed that about 46.5 % represents the speed at which the independent variables adjust annually as warranted by the Autoregressive Distributed Lag Model (ARDL) value of -0.464755. The co-efficient of the ARDL conforms to theoretical exposition of the Error correction modelling with the negative value and corresponding probability value of 0.002 which shows that it is significant at 5% inference.

The value of the adjusted R-squared of 0.4696 is an indication that about 47.0 % variation in Log of agricultural output are explained by LACGS, LDMBL and LGEA while the remaining 53% are explained by other external factors. The F-Test which is the test of overall significance of the model indicates that by its value of 3.990 (P-value=0.0063), it is statistically significant at 5% level. Therefore, the result of the individual independent variables regressed against the dependent variables as shown above is reliable and is a true representation of the data used in the analysis.

Dependent Variable: LAO				
Long Run Coefficients				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LACGS	-0.110888	0.136437	-0.812738	0.4264
LDMBL	0.783423	0.145872	5.370630***	0.0000
LGEA	0.093623	0.082680	1.132349	0.2716
C	3.978577	1.130561	3.519117***	0.0023

Table 6: Long Run Effect of Credit Financing on Agricultural Growth in Nigeria

The result of the analysis on table 6 reveals the effect of credit financing on agriculture growth in Nigeria. While the agricultural growth was proxy with Log of Agriculture Output (LAO), credit financing was proxy with Log of Deposit Money Bank Loan (LDMBL) Log of Government Expenditure on Agriculture (LGEA) and Log of Agriculture credit guarantee scheme (LACGS).

The parameter of the Constant (C) depicted that holding all explanatory variables constant, the LAO assumed a value of 3.978577. In broad, the LAO determinant depicted a value of 3.978577, given that LACGS, LDMBL and LGEA are

held constant. The t-statistics of the parameter gives a value of 3.519117 and the probability value of 0.0023. This showed that the parameter of the constant is statistically significant to explain the LAO at 5 percent inferences.

4. Discussion of Findings

The outcome of the study was in tandem with the work of Agunuwa et al. (2015), Ogbanje et al. (2012), Ammaini (2012), Basse, Ibok, and Amba (2014) among others. Agunuwa et al. (2015) shows positive relationship between commercial banks' credit and agricultural productivity in Nigeria. The work by Ogbanje et al. (2012) buttress the findings of the results, the study shows that commercial banks' loan on agricultural posits positive and significant effect on agricultural GDP over the period 1981-2007. Ali, Jatau and Ekpe (2016) on deposit money banks' credit and agricultural output in Nigeria from 1981 to 2014 also found that deposit money banks' credit significantly and positively affected agricultural output. Whereas, a weak relationship had been noticed between the government expenditure variables had been found by Francis (2013) on Federal Government's expenditure. Ishmael, Farouk and Idisi (2018) also on government expenditure on agriculture and its impact on unemployment reduction in Nigeria revealed that the relationship between government expenditure and unemployment did not have a significant effect, that is, has no reducing effect on unemployment in Nigeria.

However, the study of Ernest (2010) on commercial banks' lending and the performance of the agricultural sector in Nigeria for the period 1970-2008 does not augur well with the findings of the study. Ernest (2010) findings shows that an insignificant inverse relationship between agricultural output and deposit money bank's lending agriculture output and agricultural output. More so, the work of Obilor (2013) measured up with the work of Ernest (2010). His findings show that prices of agricultural produce and commercial banks to the agricultural sector were not significant while agricultural credit guarantee scheme fund and government fund allocation to agriculture produced a significant positive effect on agricultural productivity.

Ekine and Onukwuru (2018) on the long run indication revealed no co-integrating relationship between deposit money banks' credit to agricultural sector and the performance of agricultural sector in Nigeria during the period of study; the study emphasized that deposit money banks' credit to agricultural sector had a positive and a significant impact on Agricultural Sector performance.

5. Conclusion

The role of deposit money banks credit is more important as it is a source of providing different agricultural growth which has strong impact on productivity. While credit plays important role in providing farmers agricultural tools like tractors. The study also shows that long run coefficient of deposit money banks credit is highly significant due to the volume of loans and monitoring of such credit utilization by farmers. This shows that the intensity ratio of capital availability increases the growth of this sector. However, the role of government expenditure on agriculture and Agricultural Credit Guarantee Scheme are questionable as their volume to agricultural sector has not been significant overtime. These results are consistent with most of other previous studies. This study concludes that a proper mix of Agricultural credit guarantee scheme, Government expenditure, money bank credit for agriculture can able to create significant impact.

5.1. Recommendations

Based on the conclusion of the study, the following recommendations were made:

- It is suggested that the deposit money banks should increase its volume to enable the farmer in corporate more supply on farms equipment like land, water, labour, machinery
- To make the Agricultural credit guarantee scheme more productive special instructions and supervisions should be carried out by loan issuing authorities.
- Government should set up panel investigating committee that will ensure that the funds necessary for agricultural sector are well utilized for its purpose without any possible diversion;
- The government should increase its allocations to Agricultural sector to have large revenue base aside the oil sector.

6. References

- i. Abula, M. & Ben, D. M. (2016). The Impact of public agricultural expenditure on agricultural output in Nigeria (1981-2014). *Asian Journal of Agricultural Extension, Economics & Sociology*, 11(2), 1-10.
- ii. Adofu, I., Abula, M. & Agama, J.E. (2012). The effects of government budgetary allocation to agricultural output in Nigeria. *Sky Journal of Agricultural Research*, 1(1), 1-5.
- iii. Agunuwa, E. V, Inaya, L. & Proso T. (2015). Impact of commercial bank' credit on agricultural productivity in Nigeria (Time Series Analysis 1980-2013). *International journal of Academic Research in Business and Social Science*, 5(11), 337-350.
- iv. Akaninyene, B. O. & Sunday, A. A. (2017). The Impact of agricultural credit guarantee scheme fund on agricultural sector development in Nigeria. September. *International Review of Management and Business Research*, 6(3), 1105-1116.
- v. Ali, J. I., Jatau, S. & Ekpe, M. J. (2016). Financial intermediation and agricultural output in Nigeria: An impact analysis of deposit money banks' credit. *International Journal of Agricultural Economics*, 1(1), 16-25.
- vi. Ammani, A. A. (2012), An investigation into the relationship between Agricultural Production and Formal Credit Supply in Nigeria, *International Journal of Agriculture and forestry* 2 (1) 46-52.

- vii. Arikpo, O. F and Adebisi, A. W. (2017). Deposit money banking financing and its effect on real sector output in Nigeria: evidence from trade and agricultural sectors. *Advances in Social Sciences Research Journal*, 4(14) 22-37.
- viii. Bassey, N. E., Ibok, O. W. & Amba, E. A. (2014). The Effect of Selected Financial Indicators on Formal Agricultural Credit Supply in Nigeria. *International Journal of Management Sciences and Business Research*, 3(9), 1-8.
- ix. Central Bank of Nigeria (2013). Annual reports and statement of accounts. Abuja: CBN
- x. Central Bank of Nigeria (2003). Annual reports and statement of accounts. Abuja: CBN
- xi. Francis, O. & Baribe, G. T. (2018). Public and private investments and agricultural sector performance in Nigeria, 1981-2016. *International Journal of Agricultural Policy and Research*, 6(11), 201-206.
- xii. Iganiga, B. O, & Unemhilin D. O. (2011). The impact of federal government agricultural expenditure on agricultural output in Nigeria. *Journal of Economics*, 2(2), 78-88.
- xiii. Ijaiya, G. T. & Abdurraheem, A. (2005). Commercial Banks Credits to the Agricultural Sector and Poverty Reduction in Nigeria: A Calibration. Analysis. *Nigerian Journal of Agricbiz and Rural Development, University of Uyo, Uyo*, 6(12), 9-15.
- xiv. Ishmael, O., Farouk A. A. & Idisi, O. P. (2018). Government Expenditure on Agriculture and Its Impact on Unemployment Reduction in Nigeria: 1999 - 2015. *International Journal of Economics, Commerce and Management*, 6(3), 1-25.
- xv. Ekine, D. I. & Onukwuru, F. M. (2018) Deposit Money Banks' Credit and Agricultural Sector Performance in Nigeria. *Greener Journal of Agricultural Sciences*, 8(3), 065-073.
- xvi. Ernest, T. (2010). The Impact of Commercial Banks' Lending on the Performance of the Agricultural Sector in Nigeria, 1970-2008: Choba Port Harcourt.
- xvii. Ewubare, D. B. & Eyiotope, J. A. (2015). The Effects of Public Expenditure on Agricultural Production Output in Nigeria. *Journal of Research in Humanities and Social Science*, 3(11), 07-23.
- xviii. Kareem, R. O., Bakare, H. A., Raheem, K. A., Olagumela, S. E., Alawode, O. O. & Ademoyewa, G. R. (2013). Analysis of factors influencing agricultural output in Nigeria: Macro-economic perspectives. *American Journal of Business, Economics and Management*, 1(1), 9-15.
- xix. Loto, M.A. (2011). 'Impact of Government Sectoral Expenditure on Economic Growth'. *Journal of Economics and International Finance*, 3(11), 646-652.
- xx. Mgbanya, J. C., Eze, A.V. & Obiora, C.C. (2018). Assessment of produce standardization adopted by the rice farmers in the marketing of their rice produce in Ebonyi state, Nigeria. *Asian Journal of Agriculture and Rural Development*, 8(2), 146-152.
- xxi. NEPAD (New Partnership for Africa's Development): CAADP (Comprehensive Africa Agriculture Development Programme). 2011. [online] Available: <<http://nepad-caadp.net>> (5 November, 2011).
- xxii. Nnamocha, P. N., & Eke, C. N. (2015) Bank credit and agricultural output in Nigeria (1970 - 2013): An error correction model (ECM) approach. *British Journal of Economics, Management & Trade*, 10(2), 1-12.
- xxiii. Nwanyanwu A. (2012). Agriculture Resource and Economic Growth in Nigeria. *European Scientific Journal October edition*, 8(22), 103-115.
- xxiv. Obilor, S.I. (2013). The impact of commercial banks' credit to agriculture on agricultural development in Nigeria: An econometric analysis. *International Journal of Business Humanities and Technology*, 3(1), 85 - 95.
- xxv. Ogbanje, E. C., Yahaya, M. A. & Kolawole, F. (2012). Effect of commercial banks' loan on agricultural gross domestic product (GDP) in Nigeria from 1981 - to 2007. (Online) Available: <http://www.patnsukjournal.net/currentissue> (March 1, 2019).
- xxvi. Okezie, A. I., Nwosu, C. & Njoku, A.C. (2013). An assessment of Nigeria expenditure on the agricultural sector: Its relationship with agricultural output (1980 - 2011). *Journal of Economics and International Finance* 5(5), 177-186.
- xxvii. Okoh, S. A., Amadi, U., Ojiya, E. A. & Ani, E.C. (2019). Impact of Fiscal Policy on Agricultural Productivity in Nigeria: An Empirical Analysis. *Journal of Business School*, 2(3), 7-27.
- xxviii. Okosodo, L. A. & Imoughel, L. E. (2019). Deposit money bank credits and export performance in Nigeria: an empirical analysis. *International Journal of Economics, Commerce and Management*, 7(1), 112-135.
- xxix. Olorunsola, E. O., Adeyemi, A. A., Valli, T. A., Kufre, J. B. & Ochoche, A. (2017). Agricultural Sector Credit and Output Relationship in Nigeria: Evidence from Nonlinear ARDL. *CBN Journal of Applied Statistics*, 8(1), 102-122.
- xxx. Shuaib, I. M., Igbinosun, F. E. & Ahmed, A. E. (2015). Impact of Government Agricultural Expenditure on the Growth of the Nigerian Economy. *Asian Journal of Agricultural Extension, Economics & Sociology*, 6(1), 23-33.
- xxxi. Sunny, I. O. (2013). The impact of commercial banks credit to agriculture on agricultural development in Nigeria: An econometric analysis. *International Journal of Business, Humanities and Technology*, 3(1), 85-94.