IMPACT OF DEPOSIT MONEY BANKS' FACILITIES ON OUTPUT OF AGRICULTURAL SECTOR IN NIGERIA

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Abstract

Agriculture is the mainstay of many economies and fundamental to the socio-economic development of a nation because it is a major element in national development. However, inadequate access to financial resources by the numerous sparsely located farmers across Nigeria continues to inhibit development of agricultural sector. As a result of these problems the study investigated the impact of deposit money banks' facilities on agricultural sector in Nigeria. Specifically, the study examined the impact of deposit money banks' loans and advances on agricultural output in Nigeria and also evaluated the effect of deposit money banks' lending rates on agricultural output in Nigeria. The study employed secondary data which was obtained from the Central Bank Statistical Bulletin 2016. First least square regression analysis was used to achieve the objectives of the study. Results of the study revealed that banks loans and advances impact significantly on the growth of agricultural sector in Nigeria with coefficient value of 0.292608 and at 5% significant level. The study concluded that banking institutions facilities have significant impact on growth of agricultural sector in Nigeria. The study therefore recommends that policy makers should put in place policy measure that will help to improve and increase the loan by the commercial banks to the agricultural sector.

Introduction

Financial sector have over the years maintained their leading role in enhancing the economic growth and development of any nation. The effectiveness of financial sector improves the thriving and economic development of a nation while the poor performance of this sector not just hampers the economic development and structure of a region yet in addition influences the economy of the entire world (Khan & Senhadji, 2011). Claessen and Feijen (2016) opined that a developed financial system empowers firms to expand production and provides households the ability to acquire fundamental assets like a house, insure against income shocks, start a company, receive cheaper remittances, and enjoy a pension when they retire. One of the most observed methods for generating employments, reducing poverty and achieving economic

growth and development is by the timely extension of credit to Agriculture sector through Deposit Money Banks (DMBs). In any case, without a developed financial sector, for instance, domestic savers and foreign investors would be reluctant to part with their cash for sound ventures, bringing about lower economic yield.

According to Udih (2014), bank credit should affect positively on the investible sectors of the economy through improved agricultural production of goods and services. Adequate financing of farming ventures won't just advance food security, but also improve the business enterprise of the young investors. Agriculture adds to the development of the economy, provides employment opportunities for the teaming population, export revenue earnings and eradicates poverty in the economy. Gourav and Suraj (2006) opined that the future growth of the developing economy, as it were, will lies on performance of agricultural sector.

Adequate provision of funds to agricultural sector improves the economic climate for development and poverty reduction in some countries; facilitate individual farmer's access to inputs and improved the technology which has enhanced productivity in the sector; reduces temporary stock on consumption by poor farmers (Ijaiya & Abdulraheem, 2000). According to Ijaiya (2003), bank credit helps in expanding, reactivating and modernizing various types of agricultural businesses, which are considered economically feasible and desirable to the achievement of stated economic goals of self-sufficiency in agricultural production. Therefore, bank credit provides incentives to adopt new technologies that would have been more slowly accepted (Eyo, 2008 and Olokyo, 2011).

Ifeoma (2017) opined that, poor access to financial resources by the various sparsely located farmers across Nigeria keeps on inhibiting improvement of agricultural sector. Regardless of the recent development in banking credits to farmers to expand productivity, their production is as yet a challenge. Statistics from Central Bank of Nigeria (CBN, 2016) has demonstrated that the Nigerian agricultural sector received increased credit from the deposit money banks up to about ₦7 million in 1970 representing 1.99 per cent of the total deposit money banks' credit in the economy. By 1990, credit to agribusiness rose to ₦4221.4 million represented 16.24 percent of the overall deposit money banks' credit in the economy and rose further to ₦25,278.7 million in

1995, which represented about 17.49 percent of the entire credit budgeted to the economy.

However, starting from 2000, the share of credit to agriculture though expanding in absolute terms, has begun to decline relatively. Total credit to agriculture was ₦41028.9 million in 2005, representing 2.46 percent of the total credit and in 2010, total deposit money banks' credit to agribusiness had risen to ₦128, 406.0 million thereby representing just 1.67 percent of the total deposit money banks' credit to the economy (CBN, 2011). By 2012, total credit to agriculture has risen to ₦316,364 million, constituting 3.9 percent of total deposit money banks' credit. Agriculture credit rose again from ₦343,696.80 million in 2013 to ₦478,911.78 million in 2014, representing 3.7 percent of total deposit banks' total credit (CBN, 2016).

Through the above analysis, it can be seen that though total credit to agribusiness has been increasing in absolute terms yet when estimated in term of percentage share in total credit to the economy, it was discovered that the credit to agriculture establishes an insignificant proportion of the total credit. Similarly, the deposit money banks finance in agricultural activities are urban based thus their impact can't be felt in the rural areas where farming really occurs.

Utomi (1997) also identified shortage of long term loans needed for adequate financing of agricultural sector. The structure of domestic money banks' credit at the end of June, 2016 showed that short-term maturities remained dominant. Outstanding loans and advances with maturity of one year and below accounted for 59.1% at the end of 2016. The medium-term (1 year and < 3 years) and long-term maturities (3 years and above) stood at 14.8% and 26.1%, at the end of 2016.

Majority of the banks still gives out agricultural loans at a foul cry prime rate of between 14percent to 26.50 (CBN, 2017). Generally, the maximum interest charges on agriculture loans in year 2017 as published by the apex bank are very high compared with the oil and gas sector or the manufacturing sector. This unpleasant scenario has remained over time mainly because many financial institutions do not believe in the potentials and viability of agricultural sector and thus considered it risky extending credit to them.

The inadequate access to economic resources by agricultural sector in Nigeria has continued to inhibit development of agricultural sector. Soludo (2006) put it that before and immediately after independence in 1960, agriculture contributed up to 64% to the total GDP, but during the 1970s, the contribution of agriculture to the GDP declined to 48%. The decline continued over years and agricultural output unfortunately dropped to 24.18% to the GDP in 2016. Farmers in Nigeria were left to live below poverty line, minimal access to credit and employment opportunities to agricultural sector, also lack of access to credit has resulted in low acreages under cultivation, poor farm maintenance practices, inadequate or no fertilizer. Nigerian agricultural sector has continuously witnessed low farm size, low output, low income and low socio-economic status. The oscillating and unstable agricultural output in Nigeria has remained the same way till date. It is due to the aforementioned problems rocking Nigerian agricultural sector that necessitated the need to examine the impact of deposit money banks' facilities on output of agricultural sector in Nigeria. The specific objectives of the study are:

i. examine the impact of deposit money banks' loans and advances on agricultural output in Nigeria; and
ii. evaluate the effect of deposit money banks' lending rates on agricultural output in Nigeria..

The following hypotheses were tested to achieve the objectives of the study and they were stated in null form:

H_{01}: Deposit money banks' loans and advances do not impact significantly on agricultural output in Nigeria.
H_{02}: There is no significant effect of deposit money banks' lending rates on agricultural output in Nigeria.

Literature Review

Conceptual Clarifications

Agriculture is the science of utilizing land to raise plant and animals. Agriculture is a major sector of any economy as well as remains the foundation of the Nigerian economy (Salami, 2006). Agriculture is the science and practice of producing crops and livestock from the natural resources. The essential point of agribusiness is to ensure the land

produce abundantly and at the same time to protect it from deterioration and abuse. Agriculture has been defined as the production of food and livestock and the purposeful tendering of plants and animals, (Ahmed, 2013). Ahmed (2013) stated further that agriculture is the mainstay of many economies and it is fundamental to the socio-economic development of a nation because it is a major element and factor in national development.

According to Okolo (2014), agricultural sector is the most important sector of the Nigeria economy which holds a lot of potentials for the future economic development of the nation as it had done in the past. Notwithstanding the enviable position of the oil sector in the Nigerian economy over the past three decades, the agricultural sector is arguably the most important sector of the economy. Agriculture's contribution to the Gross Domestic product (GDP) has remained at between 28 and 42 percent, and employs 65 per cent, of the labour force in Nigeria (Emeka, 2017). Generally, the agriculture sector contributes to the development of an economy in four major ways such as product contribution, factor contribution, market contribution and foreign exchange contribution (Abdullahi 2002; World Bank 2007).

Contributions of Agriculture to Economic Development in Nigeria

Notwithstanding Nigeria's rich endowment in oil and other mineral resources, the wellbeing of her economy still largely depends on agricultural sector. The Nigerian economy is essentially agriculture in terms of national output and employment generation. Agriculture is the largest contributor to Gross Domestic Production (GDP) (average 38% in the last 8 years) with forestry accounting for 3%, crops 80% and fishery 4%. It provides employment for about 65% of the labor force and the food and fiber needs of a large and increasing population (Oji-Okoro, 2011). The agro-industrial sectors depend on agricultural sector for raw materials while 88% of the non-oil exports earning come from the sector. The sector contributes a great deal to the development of Nigerian economy in various ways:

Agriculture contributes tremendously to national food self–sufficiency by accounting for over 90% of total food consumption requirements; agriculture also helps to maintain a healthy and peaceful population and also a source of food and nutrition for households. Furthermore the ultimate objective of interest of economists in productivity should be to

find ways of increasing output per unit of input and attaining desirable inter-firm, intra-firm and inter sector transfers of population resources thereby providing the means of raising the standard of living.

In Nigeria, agriculture export has continuously played an essential role in economic development by providing the needed foreign exchange earnings for other capital development project. According to Ekpo and Egwaikhide (1994), Nigeria agricultural export has improved to include cocoa beans and palm kernel. Statistics indicate that in 1960 agricultural export commodities contributed well over 75% of total annual merchandise exports. In 1940's and 50's Nigeria was ranked highly in the production and exportation of major crops in the world. For instance, Nigeria was the largest exporter of palm oil and palm kernel, second to Ghana in cocoa and third position in the exportation of groundnut. Nigeria export earnings from major agricultural crops contributed significantly to the Gross Domestic Product (GDP).

In terms of employment, the sector is still leading in economic activities, while accounting for one-third of the Gross Domestic Product (GDP). Farming in Nigeria today still remains the sources of employment of majority of the adult population, its productivity is the most important single factor influencing the standard of living of both the rural and urban centers. Agriculture has remained the major source of revenue to Nigerian economy. About 90% of the rural population is involved in activities related to the crop sub-sector which provides the bulk of agricultural income.

Deposit Money Banks' Facilities

The deposit money banks serve as the king pin of the financial system of the country. They render many valuable services such as accepting deposits, giving loans, overdraft, discounting of bills of exchange, investment of funds, agency functions and miscellaneous functions. Nnanna (2001) put forward that, fixed and low income earners, traders and businessmen deposit their savings in the banks for the convenience of payment, security, income and saving promotion. Chand (undated) asserted that, there are three (3) types of deposits, namely; savings, current and fixed deposits. Small savings in the form of deposits are made into this savings account and can be withdrawn anytime in a week. They are usually maintained by salary earners and people who have fixed

and less income. However, this deposit attracts a very less rate of interest.

The holders of current account can withdraw and deposit money whenever they wish. They carry either no interest or very low rate of interest and are usually maintained by traders and big business firms. Fixed deposits is a long term deposit as it is normally not less than one year and it cannot be withdrawn before the stipulated time. It attracts a higher rate of interest because banks can use these deposits for a definite time without having the fear of being withdrawn (Agwu & Emeti, 2014).

Commercial bank has the function of advancing loans to its customers with a certain interest charge which is an income to them. Most loans given for productive purposes are secured with tangible collateral security so that banks will have something to fall upon in case the borrower defaults. According to Longenecker, Moore, Petty and Palich (2008), loans can be divided into three; Lines of credit, Term loans and Mortgages. Line of credit is an informal agreement/understanding between the borrower and the bank as to the maximum amount of credit to the bank will provide the borrower at any one time. The entrepreneur is expected to arrange for a line of credit in advance of an actual need because banks extend credit only in situation about which they are well informed. Attempts to obtain a loan on a spur-of-the-moment basis are generally ineffective (Agwu & Emeti, 2014).

Term loans are usually used to finance equipment with a useful life corresponding to the loan's term. Entrepreneur are expected to match short term loan with short term project and long term loan for long term project and not otherwise. Failure to match the loan's payment terms with the expected cash inflows from the investment will cause a frequent financial problem for the small firms. It is the money loaned for a 5-10years term, corresponding to the length of time the investment will bring in profits.

Nwoye (2011) postulates that Interest rates are not favourable to investors in that; the cost of funds could undermine profits and causes down turn of the investment. Interest rates in Nigeria officially are high and this has a negative impact on the ability of agricultural sector to obtain credit from banks. Chand (2016) put forward that, banks carry out some specific functions on behalf of their customers. Such specific

function is referred to as agency function and this include; collection of cheques, drafts, bill of exchange and dividends of the shares, purchases and sales of securities, shares and debentures, payment of Insurance premium, dealing in foreign exchange, act as correspondent, trustee, executors of will, attorney (receive payments and sign transfer deeds of properties on behalf of their customers), and such other related services.

Theoretical Review

This study is hinged on theory of active lending which was propounded by Erickson and Pakes (1995) which states that a firm explores its economic environment actively and invests to enhance its growth under competitive pressure from both within and outside the firm. The potential and actual growth changes over time in response to the outcomes of the firm's own investment and those of other actors in the same market. According to this theory of active lending, owners or managers of firms could raise their efficiency through formal lending from financial institutions while government may support their activities through the creation of the enabling environment (Agwu & Emeti, 2014). Entrepreneurs with high lending from formal financial institutions or government assistance would therefore be expected to grow faster than those without these qualities. This implies that firms in Nigeria have prospects of experiencing growth and contributing meaningfully to employment generation only when appropriate investments are made into them by all the stakeholders. This could best be achieved by government intervention through the provision of financial assistance, social infrastructures, capacity building for business operators and favourable taxation policies.

Empirical Framework

Sekyi (2013) investigated impact of micro credit on rural farming activities: the case of farming communities within Sunyani area. A total of 103 farmers were randomly selected from farmer clients of a rural bank to respond to close-ended questions. Paired samples t-test was run to determine the differences and impact of the credit intervention on the dependent variables. A modified Eta squared formula and paired samples correlation was used to determine the impact of the independent on the dependent variables. The result found significantly large effect of the microcredit intervention on the labour employed, working capital, output and income of farmers.

Gowhar, Ashaq and MohdUmmer (2013) in a study on institutional credit to agriculture sector in India. Secondary data and compound growth rate were used for the analysis of data. The study reveals that the highest increase in loans issued was in the case of scheduled commercial banks while the lowest was in the case of co-operatives on the other hand the total number of account holders in scheduled commercial banks has increased and also the total direct and indirect advances to agriculture outstanding by scheduled commercial banks shown gradual increase.

Ijaya and Abdulraheem (2000) studied commercial banks credit to the agricultural sector and poverty reduction in Nigeria: A calibration analysis. Times series data for the period of 1980 to 1996 on the number of people that are not poor, the credit facilities made available by all the commercial banks to agricultural sector in Nigeria were analyzed using a linear regression analysis. The study revealed that commercial banks credits to the agricultural sector will lead to a reduction in the number of people that are poor. The study recommended that policy makers should put in place appropriate policy measure that will help to improve the existing methods of credits disbursement by the commercial banks to the agricultural sector.

Izuchukwu (2011) studied the analysis of the contribution of agricultural sector on the Nigerian economic development. The panel data used for the study was sourced from the statistical bulletin of the Central Bank of Nigeria and World Bank's development indicators, multiple regression was used to analyze the data, the result indicated a positive relationship between Gross Domestic Product (GDP) vis-a-vis domestic saving, government expenditure on agriculture and foreign direct investment between the period of 1986-2007. It was also revealed in the study that 81% of the variation in GDP could be explained by domestic savings, government expenditure and foreign direct investment. In order to improve the agricultural sector it is recommended that government provides more funding for agricultural universities in Nigeria to carry out researches on all areas of agricultural production this will lead to more exports and improvement in the competitiveness of Nigeria agriculture production in international markets. The Central Bank of Nigeria should also come up with a stable policy for loan disbursement to farmers at a reasonable interest payback.

Onamah (2013) examined the role of microfinance bank credit on agricultural development in Nigeria. Using ordinary least square method,

data collected were secondary data and chi square was used in the regression analysis. The study shows that microfinance bank loans have a positive impact on agricultural development in Nigeria. Based on these findings some recommendations were made, interest rate should be reduce to encourage farmers in borrowing and The federal government should give a directive through microfinance bank that will encourage the farmers by giving them incentives.

Adolphus and Peterside (2014) studied the role of banks in financing the agriculture and manufacturing in Nigeria. Two multiple regression models were estimated using the software package for social sciences (SPSS). Times series data were generated from the central bank of Nigeria statistical bulletin for the period of 1981-2010. The results of the findings revealed that the role of banks in facilitating the contribution of the agriculture and manufacturing sector to economic growth is significantly limited and therefore recommended that a mandatory sectoral allocation of credit with appropriate incentives to boost the flow of bank credit to these sectors.

Sunday (2014) studied the impact of banks' and public sector's financing activities on agricultural output in Nigeria, the studied employed secondary data from central bank of Nigeria (CBN) annual and quarterly reports, the CBN statistical bulletin on the aggregate amount of the commercial banks' credit to agricultural sector within the time frame of 1990-2007 using analysis of variance to test the significance of the relationship. The study found out that commercial banks' credit to agricultural sector for the period of 1990 to 2007 has a significant positive impact on agricultural productivity in Nigeria and recommended that banks should be assist institutions that are engaged in agricultural financing.

Research Gap and Contribution to the Body of Knowledge

Several studies have been carried out to investigate the impact of banking credit on development of agricultural sector in Nigeria (Adolphus & Peterside, 2014). However, many of such studies (such as Sekyi (2013) employed primary data, which at best captures the view of respondents but with a lot of inconsistencies in estimation procedure without establishing the effect of macroeconomic policies on the growth of agricultural sector in Nigeria. Also, different econometric models have been used. Few of the studies in Nigeria have taken the stationarity or

otherwise of the variables into account. Previous studies have also not considered contribution of agricultural sector to gross domestic product in Nigeria; and this aspect is duly considered in this current study. Therefore, this study filled the gap identified in the study by incorporating the issues raised in the study.

Methodology

This study examined the impact of deposit money banks' facilities on agricultural sector in Nigeria. This study adopted an Expost-Facto method of research design and this is because investigation started after the fact has occurred without interference from the researcher and also for the fact that data needed for the study already exists. Secondary data were employed. The secondary data used in this study were sourced from the Central Bank of Nigeria (CBN) Statistical Bulletin within the time frame of 1987-2016 and the time series data were subjected to First Least Squares (FLS) statistical technique. The model adopted for this study is re-modified and stated as:

CAGDP= *f* (DBLA, INTR, EXR, INF)……..(iv)
$CAGDP= \beta_0 + B_1DBLA_{t1} + \beta_2INTt_2 + \beta_3EXRt_3$……(v)
Econometrically, it can be written thus:
$CAGDP= \beta_0 + B_1DBLA_{t1} + \beta_2INTt_2 + \beta_3EXRt_3 + \beta_4INFt_4 + \mu_t$……(vi)
Where:
CAGDP= Contribution of Agricultural Sector to Gross Domestic Product
DBLA= Deposit Money Banks Loan and Advances to Agricultural Sector
EXR = Exchange Rate
INT = Interest Rate
INF= Inflation
μ= Error term
β0= Constant
β_1, β_2 , β_3 and β_4= Slope coefficient

Apriori Expectations

(i). It is expected that there will be a positive relationship between deposit money banks' loans and advances and agricultural sector in Nigeria.
(i). It is expected that there will be a negative relationship between macroeconomic determinants and growth of agricultural sector.

Mathematically, this can be written as: $\beta_1 < 0$ and $\beta_2 > 0$

Data Presentation, Analysis and Interpretation

Table 4.1: Descriptive Statistics for Agricultural Sector

Statistics	**CAGDP**	**DBLA**	**EXRS**	**INF**	**INT**
Mean	1322.0	319210.5	68.8	21.2	13.7
Median	620.2	110456.2	22.1	12.0	13.5
Maximum	7233.3	1278765	355	76.8	26.0
Minimum	27.1	721.8	0.8	0.2	6.0
Std. Dev.	1746.3	433180.2	61.2	20.0	4.2
Skewness	1.9	1.2	0.2	1.5	0.7
Kurtosis	6.5	3.9	1.2	3.9	4.0
Jarque-Bera	32.6	7.4	3.9	11.8	3.3
Probability	0.0	0.0	0.1	0.0	0.2
Observations	30	30	30	30	30

Source: Authors computation (2017)

The descriptive statistics of the variables of this study is presented in table 4.1. It shows that the average CAGDP, DBLA, EXR, INF and INT over the period of 30 years are about 1322.0, 319210.5, 68.8, 21.2 and 13.7 in their respective units. It also shows that all the variables significantly varied over the period as indicated by the large margins between the Minimum and maximum values of all the variables and the large Standard deviations. So, the study of their movements over the period becomes important. The Skewness shows that all variables are positively skewed. Regarding the kurtosis, distribution of a series is leptokurtic when the kurtosis is greater than three and it is platykurtic when the kurtosis is less than three. So, the series of CAGDP, DBLA, INF and INTR are leptokurtic (i.e. evidence of thinner tail than the normal distribution) while EXR is platykurtic (i.e. evidence of fatter tail than the normal distribution). The Jaque-Bera statistics is significant when the probability value of the statistics is less than 5% (CAGDP, DBLA, INT, EXR and INF) while it is insignificant when the probability value of the statistics is greater than 5%. Since, the dependent variables are normally distributed as shown by the appropriate statistics, the use of Ordinary Least Square estimator is appropriate.

Table 4.2: Result of Unit Root (Stationarity)Test for Agricultural Sector

Variables	Augmented dickey-fuller (ADF)	5% Critical level	Philip-Perron (PP)	5% critical level	Order of integration	
					ADF	PP
CAGDP	-4.056293	-3.557759	-3.799008	-3.552973	I(1)	I(1)
DBLA	-4.222376	-3.548490	-3.745510	-3.548490	I(0)	I(0)
EXR	-5.268181	-3.552973	-5.268197	-3.552973	I(1)	I(1)
INF	-3.874811	-3.622033	-4.080318	-3.557759	I(0)	I(0)
INT	-7.956984	-3.552973	-3.055098	-2.951125	I(1)	I(0)

Source: Authors computation (2017)

Non-stationarity is a common feature of time series data. The problem with non-stationary or trended data is that the standard Ordinary Least Square estimator produces bias and incorrect regression estimates which mislead the researcher to incorrect conclusions. In other words, the application of OLS on non-stationary series leads to spurious regression results. It is vital therefore, to perform unit root test to examine the order of integration of the series and avoid spurious regression. Regression becomes spurious when both the dependent and independent variable (s) are not stationary at level. A spurious regression usually has a very high R^2, t statistics that appear to provide significant estimates, but the results may be intuitively meaningless . This is because the OLS estimates may not be consistent, and therefore the tests of statistical inference are not valid. To avoid the aforementioned problems, Augmented Dickey Fuller (ADF) and Philips-Perron unit root tests was conducted in this study and the result is presented in Table 4.2. The result for Augmented Dickey Fuller test reveals that DBLA and INF are stationary at levels. That is integrated of order zero [I(0)] while

CAGDP, EXR and INT are stationary at first difference which mean that they are integrated of order one, that is I(1). However, the Philips-Perron test shows that the DBLA, INF and INT variables are integrated at I(0) while CAGDP and EXR are integrated of order one, that is I(1). In this case, Philips-Perron test supersedes because it takes care of possible heteroscedasticity. This means DBLA, INF and INT are stationary at levels while CAGDP and EXR are stationary at first difference. To estimate these series with combination of I(0) and I(1), the ARDL Bound Test of cointegration is conducted and the result is presented below.

Table 4.3: Cointegration Test (Bound Testing Approach)

Model	Test F-Statistic	5% Critical Value Bounds	
		Lower Bound (I_0)	Upper Bound (I_1)
CAGDP Model	1.3617	2.43	3.56

Source: Authors computation (2017)

The result of the unit root tests show that some variables are integrated of order one I(1) while others are stationary at level I(0). So, the most appropriate test of cointegration is the Autoregressive Distributive Lag (ARDL) Bound test. This is employed for the model estimated in this study. The result is contained in Table 4.3. The null hypothesis of the test is that, there is no long-run relationship (no cointegration). The decision rule is to reject the null hypothesis when F-statistics of the test is greater than the Critical Value of upper bound at a chosen level of significance (5% in this study). On the other hand, the null hypothesis is not rejected when the F-statistics is less than that of the Critical Value of the lower bound. When the F-statistics falls between the upper and the lower bound, the test is inconclusive. The result of the test indicates that the F-statistics of CAGDP model is1.3617 with Critical Values of lower boundof2.43. This shows that the F-statistics are less than the Critical Value of the lower Bounds in the model. It implies the non-rejection of the null hypothesis.

Hence, the test shows that there is no cointegration in the model. In short, the ARDL bound test of cointegration shows that there is no long-run relationship between the variables in the models. Meaning, the impact of the independent variables on the dependent variable of the model can be examined for the short run.

Table 4.4:Regression Result of Agricultural Contribution to GDP Model

Dependent variable : **Agricultural Contribution to GDP**				
Method: **Least Square**				
Independent Variables	Coefficient	Standard Error	t-Statistic	P-Value.
Constant	-185.8325	174.8558	-1.062776	0.3019
DBLA	0.292608	0.098947	1.986582	0.0174
INT	-46.01018	12.88918	-3.569674	0.0022
INF	-5.491083	1.759056	-3.121608	0.0059
D(EXR)	-20.81392	8.236473	-2.527043	0.0211
R-squared	0.794381	F-statistic		318.5548
Adjusted R-squared	0.791260	Prob(F-statistic)		0.000000

Source: Authors computation (2017)

Table 4.4 presents the regression estimates for the investigation on theimpact of deposit money banks' facilities on agricultural sector in Nigeriawhile contribution of agricultural sector to Gross Domestic Product (CAGDP) is used here as the dependent variable. The independent variables are DBLA, INT, INF and EXR. The first difference of EXR is taken to control for the inference of I(1) in their series. The result indicates that INT, INF and EXR are inverse related to CAGDP while DBLA is positively related to CAGDP. Furthermore, the result reveals that all the variables are statistically significant. This is indicated by the standard errors of the coefficients of all the variables which are less than half of their respective coefficients. Further, P-values of the coefficients are less than 5% level of significance. Therefore, both the standard error and P-values reveal that the coefficients of all the variables are statistically significant. By implication, all the variables are significant determinants of Agricultural sector contribution to Gross Domestic Product (CAGDP) in Nigeria.

The magnitude of the impact of the independent variables on the dependent variable is shown by the values of their respective coefficients. The coefficient of DBLA is 0.292608. It means 1 per cent increase in DBLA will induce 0.292608units increase in CAGDP. On the other hand, 1 percent rise in INT, INF and EXR will result to 46.01018,5.491083 and 20.81392 units decrease in the CAGDP respectively. This represents a great impact of the independent variables on the dependent variable.

Summarily, the level of Agricultural Sector to Gross Domestic Product (MGDP) in Nigeria is greatly determined by the level of DBLA, INTR, INF and EXR in the country. The result has been validated by the F-statistics (318.5548) with P-value 0.0000 and R-squared 0.794381 which indicate that the model is a good fit and has over all significance.

Table 4.5: Result of Diagnostic Test for the Model

Models	Breusch-Pagan-Godfrey Heteroscedasticity Test:		Durbin Watson Serial Correlation Test
	F-statistic	Probability value	Durbin-Watson Statistic
ACGDP model	2.511090	0.1428	2.397209

Source: Author's computation, (2017)

Breusch-Pagan-Godfrey test of Heteroscedasticity and Durbin Watson Test of Serial Correlation were conducted for the model in this study and the result is presented in Table 4.5. Heteroscedasticity test is usually conducted to test the presence or otherwise of heteroscedasticity (variability of variance of the series) in the model. The null hypothesis of the test is that the series are homoscedastic (there is no heteroscedasticity). The null hypothesis is rejected when the probability value of the F-statistics of the test is less than a chosen level of significance (usually 5%). In this case, the result of the Breusch-Pagan-Godfrey test of heteroscedasticity presented in table 4.5 shows that the F-statistics of test is 2.511090 with p-value 0.1428 for the model. Since, the P-valueis greater than 5%, the null hypothesis is not rejected. So, the test shows that there is no heteroscedasticity in all the models.

Another test conducted is the Durbin Watson Serial Correlation Test. Its null hypothesis is that there is no serial correlation. That is, the error terms of different periods are not correlated. In other words, current value of the error in the Durbin-Watson statistic is greater or less than 2. If the statistic is approximately 2, the null hypothesis is accepted. In this study, the Durbin-Watson statistics of CAGDP model is 2.397209. Since, the statistics is approximately 2, the null hypothesis is accepted and we conclude that there is no serial correlation in the model. Therefore, the results of the model are free from the problem of heteroscedasticity and Serial Correlation (Autocorrelation).

Conclusion and Recommendation

The study concluded that lending rates have significant impact on the growth of agricultural sector in Nigeria. The study further concluded that banking institutions loans and advances have significant impact with growth of agricultural sector in Nigeria. Finally, the study concluded that deposit money banks' facilities influence the growth of agricultural sector in Nigeria. Therefore, the study recommends that interest rate factor are known to affect the growth of agricultural sector therefore the interest rate should be managed in a way that it will be favorable to the growth of agricultural sector in Nigeria. Central bank of Nigeria should put in place policy measure that will help to improve and increase the loan by the deposit money banks to the agricultural sector.

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