THE IMPACT OF DEPOSIT MONEY BANK LOANS ON AGRICULTURAL SECTOR PERFORMANCES IN NIGERIA
1980-2014

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ABSTRACT

The purpose of this study was to ascertain the impact of Deposit Money Bank Loans or Credits on the. Agricultural Sector Performance in Nigeria within the period of 1980 -2014, The study was a secondary data research in which we adopted multiple regression models as our tool of analysis and the OLS as the estimation technique, From the analysis, the following findings were made; the result has established a positive and significant relationship between bank loan advances and crop production; also revealed a positive and significant impact between interest rate and crop production. The implication of this result could be as a result of nature of the rate of interest charged on crop production in Nigeria. The result has established a positive and significant relationship between bank loan advances and livestock production and that there is a positive and significant impact between interest rate and livestock production. However, the result also revealed a positive and insignificant impact between interest rate and agricultural output. This suggests that the Nigerian government should strive to pursue agricultural sector policies and programmes that are vibrant and attractive for a greater impact on the economy. And that the Nigerian government should pursue stabilization policies geared towards maintaining low inflation rate to reduce the magnitude of inflation rate impact on the Nigerian economy.
Keywords: finance, bank, loan, agriculture & deposit

Introduction

Finance is the wheel on which every production activity anchors. The activities of the financial institution especially the banks, determine the economic progress and or retardation of a given nation. The banks are noted for playing the role of financial intermediation, which involves channeling firms from the surplus unit to the deficit unit of economy, thus transferring bank deposits into loans or credits.

The role of commercial bank loans in economic growth and development can be recognized in the sense that various economic units use to meet their operational needs. For example, in die agricultural sector firm's bank loans to purchase machinery and equipment

buying seeds, fertilizers, erect various kinds of farm buildings (Adeniyi, 2006).While highlighting the role of commercial bank loans, Ademu (2006) explained that credit can be used to prevent an economic activity from total collapse in the event of natural disaster, such as flood, drought, disease, or fire. The banking sector is at the centre of making these credits available by mobilizing surplus funds from savers who have no immediate need of such fund and thus channel it in form of loans to investors who have brilliant ideas on how to create additional wealth in the economy but lack the necessary capital to execute their ideas.

According to the CBN (2007), credit or loans to the core private sector by the deposit money banks grew by 98.7%. Outstanding credit to agriculture, solid minerals, export, and manufacturing in 2007 stood at 3.1%, 10.2%, 1.4% and 10.1% respectively. Credit flows to the core private sector in 2007 amounted to N2, 289.2 billion. Adekanye (1986) noted that in making credit available to the productive sectors such as agriculture, manufacturing, real estate or housing etc, banks render a great deal of service as production will be increased, capital investment expended and higher standard of living realized.

Agricultural credit access has important role it plays in the context of agricultural and rural development in Nigeria. Rahji and Adeoti (2010) noted that some 70% of the population lives in the rural areas with their main source of livelihood being agriculture. Therefore, credit constants to farm household impose high cost on the society in the areas pf rural unemployment, poverty, and distortions of production activities. Swinnen and Gow (1999) pointed out that access to agricultural credit has been severally constrained the productivity of agriculture in the developing countries. This is because of the imperfect and costly information problems encountered in the financial markets.

Tawose (2012) observed that the rapid growth of industrial production has increased the demand for bank credit on the part of industrial firms. He noted that financial institutions such as deposit money banks and merchantperceive agricultural credit as risky and seek to channel credit to less risky sectors. The bank credit constraints to farmers and national income, level of unemployment, poverty, income inequality etc.Following these eminent problems associated with poor or inadequate commercial bank loans or credit access to agricultural sector.

This study seeks to address such questions as:
- What factors are responsible for credit access to agricultural sector of the economy?
- What impact has it on the various economic problems of unemployment, poverty, low level of national income, lower output, and inequality?
- What are the responses to theseproblems in Nigeria?

Objectives of the Study
The main objective of this study is to examine the impact of Deposit Money banks loans or credits on the agricultural sector performance in Nigeria. Specifically, this study seeks to achieve the following objectives:
i.   To examine the effect of Deposit money bank loans or credits on crop Production in Nigeria;

ii. To find out the impact of commercial bank loans or credit on livestock production in Nigeria; and

iii. To ascertain the extent to which commercial bank loans or credits has affected the overall agricultural sector in Nigeria.

Significance of the Study

Available literature revealed that the level of productivity is a direct function of capital and most of the loan to the productive sectors of the economy comes from the banks. There are insufficient studies on Deposit money bank loans on the agricultural sector of the development nations including Nigeria. The need to carry out this study becomes imperative as it bridges this apparent gap in the literature.The finding of this study is of great importance to the industrialists, farmers, government and other researchers as it will establish the relationship existing between commercial bank loans and the agricultural sector performance in the country.

Finally, the study adds and contributes to the existing body of knowledge in economic literature.

Research Hypotheses

This study is anchored onthe following hypotheses:

HO_1: There is no significant relationship between commercial bank loans and crop production in Nigeria.

HO_2: There is no significant relationship between commercial bank loans and livestock production in Nigeria.

HO_3: There is no significant relationship between commercial bank loans and overall agricultural sector production in Nigeria.

The Loanable Fund Theory

The loanable fund theory was first propounded by Wicksell and later developed and popularized by Robertson. The theory explains that the rate interest is determined by the demand and supply of loanable funds. The theory maintains that in the market, there are those who supply loanable funds and those who borrow them. The rate of interest will be such as shall wing equilibrium between the demand and supply of loanable funds.

The loanable fund theory is an improvement on the old classical theory of interest rate because the supply of loanable fund is wider in scope and includes not only saving out of current income but also bank credit. The theory posits that bank loans represent important funds, which are available on payment of interest by borrower. Also, loaned wealth can become available for purpose of investment Dis-invested wealth is another source of fund available to the borrowers.

The loanable fund theory has been accepted to have offered explanation on the determinants of interest rate, bank credit and investments as well as the real sector performance.

Financial Intermediation Theory

Bank credit is an important aspect of financial intermediation which provides funds to those economic units mat put it to most productive use. The theoretical framework that established the relationship existing between financial intermediation and the productive sector activities and economic growth can be traced from the work of Schumpeter (1934), Goldsmith (1969), McKinnon (1973) and Shaw (1973) which strongly emphasized the role of financial intermediation in economic growth. In a related study, Greenwood and Jovanovich (1990) asserted that financial development can lead to rapid growth. Bencivenga and Smith (1991) explained that development of banks and efficient financial intermediation contributes to economic growth by channeling saving to high productive activities and reduction of liquidity risks. They therefore concluded that financial intermediation leads to growth. The policy implication of this theory is that any loanable fond and bank credit that remains idle without being properlychanneled to the end users for purpose of investment will retard theproductive sector performance and growth of an economy. Hence, the theory

If) maintains that an effective and efficient financial system and financial intermediation is a necessity for the improvement of the productive sectorsof the economy and economic growth.

The New Growth Theory

The New growth Theory was developed in the 1980s by Romer (1986), Lucas (1987) and Rebelo (1991). The theory holds that policy measures can have an impact on the long run growth rate of an economy. The growth model is one in which the long run growth is determined by the variables within the model.

According to Jhingan (2005), the new growth model emphasizes that the technical progress is a result rate of investment, the size of the capital sock and of human capital. Nnanna, Eenglama and Odoko (2004) observed that financial development can affect growth through the growth of real sector performance in three ways which are: raising the efficiency of financial intermediation, increasing the social marginal productivity of capital and influencing the private savings rate.

This theoretical explanation implies that a financial institution can affect economic growth by efficiently carrying out its functions of deposit mobilization, credit provision and financial intermediation.

Trust Fund Model (TFM)

The TFM was introduced in 2001 as a strategy for reducing the exposure of banks that grant agricultural loans to small scale farmers without collateral. The process involves the intermediation by some parties willing to pledge funds in the bank as cash or treasury instruments as security for loans to target borrowers. The parties could be federal or state or local Government, religious bodies, Non-governmental organizations (NGOs), companies, especially those in the oil sector etc. for instance, the total amount placed under the scheme by the various stakeholders as end-December, 2008 stood at N4.887 billion, with the Government ministries, Department and agencies having the highest of N2.361 billion. As a scheme managed by the CBN, it shows the impact of the bank on the 7-point agenda of government in creating income and wealth for the rural poor, while at the same time contributing to the growth of die real sector and the entire economy.

Interest Drawback Program (IDP)

Following the high incidence of loan default under the Agricultural Credit Guarantee Fund Scheme (ACGSF), the IDP was introduced in 2003 to reduce the effective borrowing rate under the scheme without the complication of introducing dual interest rates. The objective of the program is to encourage prompt loan repayment as well as reduce the cost of loan recovery. The IDP is funded by the Federal Government and the CBN in theratio of 60:40 with capital base of N2 billion. The operation of the program is such that fanners could borrow from die lending banks at a market-determined rates, while the program pays interest rebate of a determined percentage of 40 percent of interest repayment to fanners who were to repay their loans as at when due. As at end-December 2008, a total of 71?981 IDP claims valued at N275.2 million had been paid to the eligible fanners (CBN, 2009). To this end, this is another major contribution of the CBN in encouraging agricultural production as well as wealth creation.

The Concept of Bank Loans or Credit

Loans or credits are the extension of money from the lender to the borrower. Spencer (1977) noted that credit implies a promise by one party to pay another for money borrowed or goods and services received. Credit cannot be divorced from the banking sector as banks serve as a conduit 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 banking system in the form of loans. According to CBN (2003), amount of loans and advances given by the sector to economic agents constitute bank credit. Bank credit is often accompanied with some collateral thathelps to ensure the repayment of the loan in the event of default, Credit channels saving into productiveinvestment thereby encouraging economic growth. Thus, the availability of credit allows me 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 to the public sector.

"Credit" represents loans that have been extended to households, businesses, or the government by banks or other financial intermediaries. Credit thus represents an asset to a bank, and a liability household, business, or government receiving the loan. Consequently, for the purposes of measuring credit we can focus on the assets of financial intermediaries. In New Zealand, banks are the primary financial intermediaries, and their assets therefore constitute much of the 'credit' extended to the private sector.

A defining feature of loan (credit, that is) is an obligation to pay it off, usually on a given date, and usually (but not always) at a given rate of interest. By definition, then, share market issues are riot 'credit' because there is no explicit, legal obligation for repayment on a given date. Nonetheless, large corporations weigh the costs of funding inventories and capital improvements via issuance of shares versus borrowing. This means that ^credit* markets and share markets ate to some extent substitutes. If the costs of funding through the share market become relatively inexpensive, such as when the share market is advancing briskly, large corporations will tend to favour new share issuance as a means of obtaining capital when

interest rates relatively low, large corporations may rely more on creditmarkets, either by borrowing from their banks, or by tapping the credit markets directly by issuing dept securities. As a result, credit aggregates, measured as the assets of banks, may at times be susceptible to the same kinds of substitution effects that can plague monetary aggregates.Perhaps most important, though, credit aggregates can be greatly influenced by restructuring of the financial sector and by development of new financial instruments on notable development is 'securitization'. The upshot of all this is that there is no one best definition of money, or of credit. As a rule, central banks the world around have had to balance theory against practicalities in constructing money and credit aggregates, For the most part of banks, including the currency liabilities of the central bank, for money, and assets of banks for credit measures. Institutions outside the banking sector are generally regarded as less monetary in character, following this general approach, most central banks have constructed an array of money and credit aggregates. Financial assets (bank liabilities, that is) that are thought to be equally liquid, or highly substitutable for one asother, are pooled in common money aggregates Narrow-money aggregates typically thought of as the most liquid and therefore the most 'money-Ike' aggregates; broader-money aggregates are correspondingly less liquid and are therefore less 'money-like'. Similarly, on the credit side of the balance sheet, a distinction is generally drawn between credit extended to the private sector and credit extended to the government.

Empirical Literature

A number of empirical evidence that explained the impact of bank credit on the Nigerian economy will be considered in this sector. For example, Saunder and Schmacher (2000) show in their empirical study over the period of 1989-1995 that implicit interest rate has a significant and positive on net interest rates and current of saving accounts tended to disappear. As a consequence of deregulation, banks have increased the cost of services provision they charge to customers (Jacolin and Pagier, 1995).

Ajayi (2007) empirically tests the impact of bank credit on industrial performance in Nigeria between 1975 and 2003. He confirmed that bank credit and inflation have positive and negative effects respectively on the performance of the industrial sector. That is, increase in bank credit to the industrial sector improved its performance in the period under review, while tot of inflation retarded the growth of the industrial sector. Rama (1996) investigated the theoretical and empirical determinants of private investment in developing countries and identified macroeconomic and institutional factors such as financial repression, foreign exchange shortage, and lack of infrastructure, economic and political instability as important variables that explained private investment.Gregorio and Guidotti (1992) proved that in the sample of Latin American countries, there is a robust and significant negative correlation between financial intermediation and economic growth. The explained thisrelationship with the facts that in the absence of proper regulation, more financial development may be associated with lower efficiency of investment. They concluded that the positive relationship between financial intermediation and economic growth may be reversed in the presence of unregulated financial liberalization and expectations of government bailouts. Their empirical results are consistent with the empirical evidence by Bayomi (1993) and Liu Woo (1994) that financial growth hurt growth.

Andrus (2001) confirms statistically significant positive relationship between industrial production index loans to the private sector. Vuyyuri (2005) investigated the cointegrating relationship and the causality between the financial and real sectors of the Indian economy using monthly observation from 1992 through December 2002. The financial variables used were interest rates, inflation rates, exchange rate, stock return and real sector proxied by industrial productivity. The Johansen (1988) multivariate co-integration test supported the long run equilibrium relationship between the financial sector and the sector, and the Granger test showed unidirectional Granger causality between the financial sector and the real sector of the economy, Ggunleye (2007) stated that along trade cycle, *the* rise and fall in interest rate during boom and slump respectively does not determineinvestment but expectation. He stated further that funds for investment may be allocated by rationing and this is evident in Nigerian banking industry where Central Bank of Nigeria (CBN) would give directive on sector of economy to which much of commercial banks loans and advances must go.

According to Nzotta (2002) the factors that determine a tending in Nigeria include contact position of the bank, risk and profitability of various types of bank credit, sterility of deposit, economic condition, monetary policy, ability and exposure of bank personnel credit need of the source of bank. Nzotta said bank credit is said to mean the act of bank giving out advances to a debtor after considering the risk and profitability that must be followed in such tending decision.Rahji and Adeoti (2010) adopting binary and logit models to test agricultural credit rationing by banks to fanners in south western Nigeria fond that farm size, previous years household income, household net-worth and the level of agricultural commercialization are significant at 11%.

Nwanyanwu (2008) carried out a study on the impact of bank credit on the Nigerian economy, using a simple regression model of OLS. He found that bank credit has not impacted significantly on the growth of the Nigerian economy. He noted that banks exhibit apathy in lending to the private sector for productive purpose especially the agricultural sector, as they prefer to tend to the short-term and of the market which attract quick and high rate of turnover. He noted that the volume of loan given to the private investors is insignificant.

Methodology

Research design according to Amadi (2002) is scheme or a blueprint for collecting data prior to the study. It is usually formulated by the researcher to find answers to research questions and to achieve the objectives of the study (Felix and Anaele, 2006). In view of this, we adopted econometric design in conducting this research.

Method of Data Collection

The study obtained data from secondary sources mainly the Central Bank of Nigeria (CBN) Statistical Bulletin, National Bureau of Statistics (NBS), the CBN's Annual reports and financial statement.

Technique of Data Analysis

The study adopted the econometric method of ordinary least square (OLS) of simple regression as the main analytic tool. The method is employed because its estimates possess the

properties of best, linear, unbiased and efficient estimator (BLUE). The following tests of significance were conducted:

i.   The R2-test was used to establishe the goodness of fit of the model.
ii.   The T-test was used to test for the significance of the parameter estimate,
iii.   The F-test was used to test for the significance of the overall model.
iv.   The DW-test was used to test for the presence of auto correlation,

However, an econometric software package called E-views was used to facilitate the estimation processes.

Models Specification

(i)   Variables of the model. (a) Dependent variables

Crop Production: This is defined as the contribution of crop to the gross domestic product of Nigeria.

Livestock Production: This is defined as the contribution of the livestock to the gross domestic product of Nigeria.

Agricultural Sector Performance: This is defined as the overall contribution of the agricultural sector to the gross domestic product of Nigeria.

Independent Variable:

Bank credit allocation to agriculture: This is defined as the bank credit allocation to the agricultural sector for the purpose of improving the performance of the sector and encouraging growth and development of theeconomy. It is expected to show a positive relationship with agricultural sector performance.

ii. The Model

Thus, from the explanations above, the model were specified as follows:

Model I: Crop Production Model

CRP = F(BCA)..(i)

The mathematical form of the model can be expressed into the OLS from as follows:

$CRP - a_0 + a_1 BCA + U$

$A_1 > 0$

Where:

CRP   = Crop production
BCA   = Bank Credit Allocation to agriculture
O_0 = Intercept or constant term
a_1 = Co-efficient of the explanatory variable
U   = Error term

Model II: Livestock Production Model

LSP - f(BCA)...(ii)

The mathematical form of the model can be expressed in the PLS form as follows:

$$LSP = b_0 + b_1 BCA + U$$
$$B_1 > 0$$

Where: LSP
Livestock Production
All variables and parameters are as previously interpreted

Model III: Agricultural Sector Performance Model

$$ASP = f(BCA) .... (iii)$$

The mathematical form of the model can be expressed in the OLS form as follows:

$$ASP = C_0 + C_1 BCA + U$$
$$C_1 > 0$$

DATA PRESENTATION AND ANALYSIS

Three OLS models were estimated: model 1 was estimated to examine the effect of commercial bank loans or credits on crop production; model 2 was estimated to find out the impact of commercial bank loans or credit on livestock production while Model 3 was estimated to ascertain the extent to which commercial bank loans or credits have affected the overall agricultural sector in Nigeria.

Table 1　Crop Production, Bank Allocation and Interest Rate

YEARS	CRP	BLA	INT
1980	70245.5	6,349.1	6
1981	71224.9	8,582.9	6
1982	72849.8	10,275.3	8
1983	70761.8	11,093.9	8
1984	67551.8	11,503.6	10
1985	83749.1	12,170.2	10
1986	93203.2	15,701.6	10
1987	89474.3	17,531.9	12.75
1988	99135.9	19,561.2	12.75
1989	104092.7	22,008.0	18.5
1990	108647.3	26,000.1	18.5
1991	113508,7	31,306.2	14.5
1992	116914.1	42,736.8	17.5
1993	120304.5	65,665.3	26
1994	123913.6	94,183.9	13.5
1995	128126.7	144,569.6	13.5
1996	132982.6	169,437.1	13.5
1997	138700.9	385,550.5	13.5

1998	144110.3	272,895.5	14.31
1999	151661.6	322,764.9	18
2000	156211.5	508,302.2	13.5
2001	158453.7	796,164.8	14.31
2002	159954.2	954,628.8	19
2003	161347.7	1,210,033.1	15.75
2004	165278.8	1,519,242.7	15
2005	169578.9	1,976,711.2	13
2006	170765.6	2,524,297.9	12.25
2007	172453.8	4,813,488.8	8.75
2008	189679.7	7,799,400.1	9.81
2009	192479.6	9,667,876.70	7.44
2010	198421.7	6,754,657.80	8.8
2011	212589.7	8,456,567.34	8
2012	213534.8	9,235,578.59	7.9
2013	214582.8	7,489,872.45	9
2014	215676.6	8,273,876.87	11.2

Source: CBN Statistical Bulletin

Table 2   Analysis of Unit Root and Co-Integration Results of Model I
We employ Augmented Dickey-Fuller (ADF) test. The results are shown in the table below.

Table 2.1: Augmented Dickey-Fuller (ADF) test

Variable	Variable at level form			Variable at difference form			Order of Integration
Variable	ADF Stat	Lag	5%	ADF Stat.	Lag	5%	
In(CRP)	-1.258542	1	-2.9527	5.694723	1	-2.9558	1(1)
In(BLA)	-0359075	1	-2.9527	3.532197	1	-2.9558	1(1)
INT	-2.288227	1	-2.9527	6.081919	1	-2.9558	1(1)
RESIDUAL	-3.008556	1	-1.9514	NA	NA	NA	1(0)

The results show that all the variables are integrated of order one 1(1) (differenced once to attain stationarity).In other words, all the variables have unit roots, but stationary after being differenced. This is because the ADF statistics for each of the variables are less than the critical levels at 5%. In other words, the null hypothesis for unit root is accepted for all the variables at the level form. On the other hand, the ADF statistics for each of the variables when differenced are higher than their critical values at 5% which implies that the null hypothesis of unit root is rejected.

However, though the variables are not stationary, there is tendency of long-run relationship between the dependent variable and the independent variables. Thus, we

proceeded to examine their long-run equilibrium relationship using co-integration ADF (CADF) test after which we examined the adjustment to short-run discrepancies when co-integration was established. As already shown in table 1 above, the error term (residual) is stationary at its level form. This implies that there exists a long-run relationship between dependent and independent variables.

Table 2.2: Examination of the effect of Deposit money bank loans or credits on crop production.

Variable	Coefficient	Std. Error	t-stat
Constant	9.836260	0.073783	133.3141
In(BLA)	0.140494	0.004817	29.16572
INT	0.015735	0.002812	5,595466

R^2 - 0.963965   F-stat. = 428.0165   d-w -1.149207

Evaluation Based On Economic Criteria

The OLS regression applied the Log-Linear Model in order to determine the relative change in the dependent variable from a relative change in each of the explanatory variables.

The result has established a positive and significant relationship between bank loan advances and crop production. This has been found to beconsistent with the theory.

The result also revealed a positive and significant impact between interest rate and crop production. This has been found to be inconsistent with the theory which could be as a result of nature of the rate of interest charged on crop production in Nigeria.

Table 3   Summary of the Signs

Variable	Expected Sign	Realized Sign	Remark
In (BLA)	Positive	Positive	Conforms
INT	Negative	Positive	Does not conform

4   Evaluation Based On Statistical Criteria Coefficient of Determination (R^2)

This measures the goodness of fit of the regression model. It shows how the variation in the dependent is explained by explanatory variables, from the table, R^2 = 0.963965. This implies that about 96% variation in crop production is explained by the explanatory variables,

Student t-Test

This tests the explanatory power of the Independent variables; the result shows that the variable bank loan advances has a significant impact on crop production. This is because its absolute t-statistic of 29.16572 is greater than the critical t-statistics of 2.042 at 5% level of

significance. Thecoefficient of BLA which is 0,140494 shows that as log of bank loan advances increases by one percent, crop production rises by 0.140494 percent. Again, the variable interest rate has a significant impact on crop production. This is because its absolute t-statistic of 5.595466 is greater than the critical t-statistics of 2.042 at 5% level of significance. The coefficient of INT which is 0.015735 shows that as income increases by one unit, crop production rises by 0.015735percent.

F-Statistic

The F-statistic is used to determine the overall significance of the entire variable in the model. The calculated f-statistic is 428.0165 and is greater than the critical f-value of 8.62. This implies that the entire variables joined together are significantly different from zero.

Evaluation Based On Econometric Criteria

The econometric criteria are applied to check the reliability of the parameter estimates. To do that, we apply the following test: autocorrelation, normality, heteroscedasticity co-integration test, stationarity test and multicollinearity.

Autocorrelation Test

This test whether the error are correlated with one another. To do that, we apply the Durbin Watson'd' test with the hypothesis as below.

From the Durbin Watson table, the estimated d* is 1.149 while the dl is 1.153 at 0.01 level of significance (0<d <dl => 0 < 1.149 < 1.153) which falls under the rejection region. However, Heteroscedasticity and autocorrelation consistent H AC standard errors would be used to correct this for the existence of autocorrelation.

Heteroscedasticity Test

This test is conducted to check if errors have constant variance or not. The null hypothesis is that the errors are homoscedastic (no heteroscedasticiry). Note this test follows chi-square distribution. We compare the estimated chi-square statistics with the critical chi-squarestatistic. From the result obtained x Gal = 2,7559 is les than x critical of 20.95 which is statistically insignificant and therefore do not reject the null hypothesis of hemoscedasticity.

Multicollinearity Test

This test was carried out through the use of correlation matrix. It suggests that if the pair wise correlation coefficient between two regressors is high, say in excess of 0.8, then multicollinearity is a serious problem (Gujarati, 2009). The correlation matrix as shown in the appendice; from the result, the existence of collinearity cannot be found among the explanatory variable. Thus, we can conclude that multicollinearity is not a serious problem in the model since the highest value is 0.76.

Analysis of Unit Root and Co-Integration Result Model H

From the table, at level form, the variables are not stationary but at a difference form the variables are stationary at their appropriate order of integration to indicate that the mean, variable and auto covariance are constant over time.

Table 5: Stationary Test for Model II

Variable	Variable at level form			Variable at difference form			Order of integration
Variable	ADF Stat.	Lag	5%	ADF Stat.	Lag	5%	
In (LSP)	-2.124892	1	-2.9499	-7.981055	1	-2.9527	1(1)
In (BL A)	-0.359075	1	-2.9527	-3.532197	1	-2.9558	1(1)
INT	-2.288227	1	-2.9527	-6.081919	1	-2.9558	1(1)
(RESIDUAL)	-3.588171	1	-1.9514	NA	NA	NA	1(0)

The result shows that all the variable are integrated of order one 1(1) (differenced once to attain starionarity) meaning that they all have unit roots in their level form but stationary after being differenced this is because the variable. Thus, we can conclude that multicollinearity is not a serious problem in the model since the highest value is 0.72.

Summary

In this study, we set out to empirically examine the Impact of Commercial Bank Loans or Credits on the Agricultural Sector Performance in Nigeria between 1980 and 2014. The study was conducted to determine the extent to which commercial bank credit or loan contributes to crop production, livestock production and agricultural sector as a whole.

Secondary data were used; the source of data included CBN Statistical Bulletin (2014), National Bureau of Statistics (NBS). In order to achieve the objectives of the study, three econometric models were formulated using the Ordinary Least Square (OLS). In the first model, crop production was regressed on, bank loan advances and interest rate, in second model, livestock production was regressed on, bank loan advances and interest rate while in the third model, agricultural output was regressed on, bank loan advances and interest rate. The major findings of the study are summarized below:

- The result has established a positive and significant relationship between bank loan advances and crop production.
- The result also revealed a positive and significant impact between interest rate and crop production. The implication of this result could be as a result of nature of the rate of interest charged on cropproduction in Nigeria,
- The result has established a positive and significant relationshipbetween bank loan advances and livestock production.
- The result also revealed a positive and significant impact between interest rate and livestock production.
- The result has established a positive and significant relationship between bank loan advances and agricultural output.
- The result also revealed a positive and insignificant impact between interest rate and agricultural output.

Conclusions

In this study, we empirically examine the Impact of Commercial Bank Loans or Credits on the Agricultural Sector Performance from 1980 - 2014. From our findings, the result revealed a positive and insignificant impact between interest rate and agricultural output.

Also, the result also established a positive and significant relationship between bank loan advances and livestock production. The result has established a positive and significant relationship between bank loan advances and crop production. The general conclusion is that of Commercial Bank Loans or Credits is paramount in promoting agricultural sector.

Recommendations

Based on the following findings of this study, the following policy recommendations are suggested:

1. The empirical results of the study have revealed a positive and significant impact between interest rate and crop production. We therefore, advocate for a moderate interest rate so to improve crop production in Nigeria.
2. The government at all level should also be more committed to the enhancement of food production in Nigeria by increasing the budgetary allocation to the agricultural sector, This is urgent, given the economic situation in Nigeria.
3. The government should at all level maintain a good monetary policy that would enable the commercial bank issue loan for agricultural purposes.
4. The government should adequately fund agricultural sector, this can be done by increasing the grants to local governments and setup a framework to ensure that the funds are judiciously used for the specified purpose.
5. The government should checkmate this corrupt practice by ensuring the independent and empowerment of the anti-graft bodies and strictly adhering to the stipulations of the Fiscal Responsibility Act (FRA).

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