Agricultural Financing and Economic Growth in Nigeria

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ABSTRACT

This research investigated the impact of agricultural finance on the economic development of Nigeria between the years 1986 and 2022. The Agricultural Credit Guarantee Scheme Fund, bank loans to farmers, government spending on agriculture, and real gross domestic product were used as substitutes for agricultural funding. This analysis relies on time-series data culled from the Central Bank of Nigeria's statistics bulletin. This research utilised the following data analysis methods: the Ordinary Least Squares (OLS) regression tool, the Error Correction Model technique, the Johansen Cointegration test, and the Augmented Dickey Fuller unit root test. In congruent with the study's results, there is a substantial relationship between agricultural bank loans and Nigeria's real GDP. In addition, the Real Gross Domestic Product (GDP)—the monetary worth of all final products and services produced inside Nigeria—is highly correlated with the amount of money the government spends on agriculture. A substantial and important relationship exists between Nigeria's Real Gross Domestic Product and the Agricultural Credit Guarantee Scheme Fund. The results of the research indicate that the Agricultural Credit Guarantee Scheme Fund, government investment in agriculture, and bank loans all made substantial improvements to Nigeria's economic development. It has been suggested, among other recommendations, that increasing the volume and size of agricultural loans by reducing the interest rate will facilitate greater economic development in the nation.

Keyword: Agricultural Financing, Real Gross Domestic Product, Agricultural Credit Guarantee Scheme Fund, Bank Loans to Farmers, and Government Spending on Agriculture.

INTRODUCTION

Agriculture continues to be the primary pillar of Nigeria's economy, employing the largest portion of the workforce. Producing consumable foodstuffs, animal feed, and industrial raw materials are the three main goals of animal husbandry. Because of its potential to create jobs, reduce food insecurity, and advance agro-industrialization, the agricultural sector is expected to contribute to economic growth and development. In light of this realization, the Nigerian government initiated several agricultural development initiatives with the aim of enhancing the agricultural sector (Olukemi, 2020). Agriculture funding is a crucial tool of economic strategy for Nigeria, since it plays a significant role in stimulating growth in several sectors. Finance has the power to not only eliminate financial limitations, but also expedite the implementation of new technologies, resulting in enhanced agricultural production and therefore ensuring economic stability (Obansa and Maduekwe, 2013). Furthermore, loans are considered a crucial component among the primary elements of agricultural output. The reason for this is that the implementation of the majority of agricultural technology necessitates farmers acquiring enhanced inputs via purchase. The inadequate availability of loans or credit has consistently been a contributing factor to the low levels of domestic and international investment in the agricultural sector of the country. Economic stability is therefore negatively impacted by

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this (Central Bank of Nigeria, 2021).

Adeshina, Tomiwa, and Eniola (2020) argue that agricultural finance is often seen as the solution for enhancing agricultural output and productivity. Financing plays a crucial role in agricultural output by addressing the challenges faced by rural residents, especially the delay between planting and harvesting. Consequently, impoverished farmers are compelled to seek loans from informal channels, which are deemed exploitative due to their tendency to impose exorbitant interest rates, thereby disadvantaging the farmers (Idoko and Jatto, 2018). Achumu, Ezirim Chinedu, and Chekwa (2022) proved that a country's agricultural production is proportional to the size, scope, or amount of its financial resources devoted to farming. Increasing public investment on the agricultural sector leads to greater improvements in its performance, which in turn contributes to economic development. In their 2022 study, Mathias and Inedu found that commercial banks' lending to Nigeria's agricultural sector significantly boosted economic growth.

One significant obstacle facing the agricultural industry in Nigeria is the neglect and insufficient financing of agriculture. This has led to a decrease in agricultural production and its contribution to the GDP. The Central Bank of Nigeria has highlighted insufficient financial resources or credit facilities as the primary obstacle confronting farmers in Nigeria. In line with the identified problem, this study aimed at empirically determining the effect of agricultural financing on economic growth in Nigeria. Specifically, the researchsought to:

1. Examine the effect of bank loan to agricultural sector on Real Gross Domestic Product in Nigeria.
2. Investigate the effect of government expenditure on agricultural sector on Real Gross Domestic Product in Nigeria.
3. Determine the effect of Agricultural Credit Guarantee Scheme Fund on Real Gross Domestic Product in Nigeria.

LITERATURE REVIEW

Theoretical Framework

This study's theoretical underpinnings were provided by the Demand Following Model: In 1952, Robinson put forward this model. Financial theory known as the "demand following finance model" is based on the premise that supply is directly proportional to demand. To rephrase, it is a financial development model that is considered to be a passive response to economic expansion. In congruent with the demand-following finance model, which is relevant to the agricultural sector, the industry needs expand before financial institutions evolve to provide external financing to supplement internal financing, which may not be enough for expansion.

Conceptual Review

Agricultural Financing

One definition of agricultural finance is the pooling of resources from various sources to boost agricultural output and efficiency. It comprises both public and private monies, with the latter going to NGOs who aim to employ matching grants for things like economic equality, community and sector development, and local empowerment (Shreiner and Yaron, 2011).

Sources of Agriculture Financing

A primary goal of farm finance is to stimulate economic growth and development via investments in agricultural production and related activities over the long term. Public and private savings, profits from

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foreign commerce, loans and advances from domestic banks, public and private debt, and share capital are all examples of domestic capitals that are considered long-term. Agricultural banks, deposit money banks, self-financing, and government sources are the ones that provide funding for agriculture, in congruent with Amechi (2014).

Economic Growth

Economic development allows for a higher quality of living and the generation of jobs, which is why it is a key macro-economic aim (UDoffia and Godson, 2016). When a country's production capacity grows, the economy grows as a result. It represents an increase in a country's production of goods and services during a certain period of time.

Empirical Literature

Using the Bayesian VAR approach utilizing yearly data from 1981 to 2019, Achumu, *et al*, (2022) determined the effect of agricultural finance by both government and private sector banks on the GDP of Nigeria. The findings showed that the financing for the farm credit guarantee plan had a major and favorable impact on Nigeria's total national production. The direct bank loans to the agricultural sector, which are guaranteed by the non-government, have a substantial and favorable impact on Nigeria's total production.

From 1981 to 2017, Orji, *et al,* (2021) assessed how agricultural production growth and funding affected the creation of jobs in Nigeria. The ARDL Model was utilised in the study's analysis. The results demonstrated that although financing for agriculture creates jobs in the short and long terms, the lag in agricultural output growth creates jobs primarily in the short-term. Price and agricultural output also have a substantial impact on job creation, but labour force population, wages, and aggregate expenditures did not.

Ivongbe, *et al,* (2021) looked at how agricultural funding affected Nigeria's economic expansion. The Vector Correction Model (ECM), Unit Root Test, and Autoregressive Distributed Lad Model were three of the econometric approaches employed in the study's examination of many popular literatures and knowledge collection. We obtained time series data from a number of government departments and organisations. In congruent with the research, agricultural loans (AL), real gross domestic product (RGDP), and the rate of interest (INTR) had no statistically significant effects on the economic process, but agricultural output (AO) had a positive and substantial influence on RGDP.

Adeshina, *et al,* (2020) looked at the 1978–2017 sample period while analyzing the effect of agricultural funding on economic performance in Nigeria. In order to experimentally determine the coefficient of parameter estimations, the study's data were analysed utilizing the Error Correction Modelling, Bound Cointegration Test, and Unit Root Test. The research discovered that the most important agricultural financing variable that impacted economic performance over the long run was the ACGSF, which significantly boosted the growth rate of the Nigerian economy.

From 1981 to 2016, Onoh (2020) studied the correlation among agricultural financing and economic growth in Nigeria. The research demonstrated a long- and short-term association between the independent variables (agricultural production, agricultural credit guarantee scheme fund, interest rate, and commercial bank loans to agriculture) and the dependent variable (growth rate of the GDP). The coefficient of determination indicated that the independent factors had little ability to explain the dependent variable. With a probability (F-statistic) of 0.036239, the variables were found to be jointly significant. The growth rate of Nigeria's GDP and the fund of the agricultural loan guarantee plan are causally related in a unidirectional manner.

Nigerian agricultural financing and economic growth were evaluated by Angaha and Atong (2020) using a threshold autoregressive (TAR) model. Between 1990 and 2017, the sustainability of agricultural loans in

Nigeria was evaluated using the Threshold Autoregressive model (TAR). The research suggests that Nigeria's agricultural funding is not robust enough to provide additional advantages for the struggling economy, as findings indicate that the country has not reached a healthy threshold as reflected in all GDP regimes.

Ademola (2019) conducted an empirical evaluation to determine how agricultural financing affected Nigeria's economic expansion. The econometric approaches of Ordinary Least Square (OLS) of multiple regression estimations were utilised in this research along with secondary data. The model's outcome indicates that funding resources managed by commercial and specialized financial institutions will more suitably finance investment productivity. Additionally, that in order to boost the agricultural sector's productivity development, there is a genuine and urgent need to increase the credit amount available to it.

The impact of government funding on agriculture on economic development in Nigeria (1985–2015) was ascertained by Idoko and Jatta (2018). The findings of the research showed a strong and substantial correlation between government expenditure on agricultural and Nigeria's economic growth. Moreover, there is a sustained connection between the variables.

Egwu (2016) looked at how agricultural finance affected Nigeria's agricultural productivity, economic expansion, and efforts to reduce poverty. The data analysis used several techniques such as unit root, co-integration tests, and the OLS regression method to get the desired outcome. The study's findings demonstrated that the Agricultural Credit Guarantee Scheme Fund Loan to Nigeria's agricultural sector, which lowered the nation's poverty rate and boosted economic growth, and commercial bank credit to the sector had a significant impact on the sector's output as a percentage of GDP.

Olawuni (2014) conducted a study from 1985 to 2012 to examine the impact of agricultural funding on economic development in Nigeria. The ARDL model was utilised as the econometric estimation method. The data indicate that investment in agriculture in Nigeria has a significant and adverse impact on agricultural production. Agricultural land, agricultural equipment, and agricultural raw materials all have direct effects on agricultural production in Nigeria, in congruent with the results. At the 5% threshold of significance, agricultural equipment and agricultural land were determined to be significantly different.

Gap in Literature

Several empirical studies have shown a favorable correlation between agricultural funding and economic growth, while others have observed a negative correlation. None of the prior research utilised the same set of indicators for agricultural finance (some examples of this comprise agricultural credit guarantee funds, bank loans to farmers, and government expenditure on agriculture) as employed in this study. None of the research utilised time series data that comprised the year 2022. In addition, the study spanned a duration of thirty-seven years (1986 – 2022), providing more current information on recent occurrences compared to previous research conducted by other scholars.

METHODOLOGY

Research Design

This study employs the ex post facto research design. Quasi-experimental studies, including ex-post facto studies, are research designs that investigate the influence of an independent variable on a dependent variable.

Data Collection Method and Sources

The study utilised annual time data over a period of thirty-seven years (1986-2022), mostly acquired from the Central Bank of Nigeria (CBN) Statistical Bulletin.

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Model Specification

The model utilised in this research was constructed based on the framework developed by Egwu (2016), with minor adjustments. This was done in an attempt to include every research variable in the model. Expressing the modified model in its functional form, we have:

$$RGDP = f(BLAS, GEAS, ACGSF) \quad (3.1)$$

Expressing the model in its mathematical form, we have:

$$RGDP = \alpha_0 + \alpha_1 BLAS + \alpha_2 GEAS + \alpha_3 ACGSF \quad (3.2)$$

Expressing the model in its econometric form, we have:

$$RGDP = \alpha_0 + \alpha_1 BLAS + \alpha_2 GEAS + \alpha_3 ACGSF + e_t \quad (3.3)$$

Expressing the model in its log form, we have:

$$LOG(RGDP) = \alpha_0 + \alpha_1 LOG(BLAS) + \alpha_2 LOG(GEAS) + \alpha_3 LOG(ACGSF) + e_t \quad (3.4)$$

A Priori Expectation: $\alpha_1 > 0$, $\alpha_2 > 0$, $\alpha_3 > 0$.

Where: RGDP = Real Gross Domestic Product, BLAS= Bank loan to agricultural sector, GEAS = Government expenditure on agricultural sector, ACGSF = Agricultural Credit Guarantee Scheme Fund, $_0$ =

Constant variable, α = Coefficients of independent variables, e_t = error term

Data Analysis Techniques

Analysis of data in this research began with the use of descriptive statistics and trend analysis for all the research variables. The research furthered this by performing preliminary tests to verify that the estimated model is not false. Since the starting difference is the same for all the variables, the Error Correction Model (ECM) approach wasutilisedto determine the short-term dynamics. The ECM model is presented as:

$$\Delta \ln(RGDP_t) = \beta_0 + \sum_{t=1}^{p} \alpha_{1i} \Delta 1n(RGDP_{t-1}) + \sum_{t=1}^{q} \alpha_{2i} \Delta 1n(BLAS_{t-1}) + \sum_{t=1}^{q} \alpha_{3i} \Delta 1n(GEAS_{t-1}) + \sum_{t=1}^{q} \alpha_{4i} \Delta 1n ACGSF_{t-1}) + \delta ECMT_{t-1} + \varepsilon_{1i} \quad (3.5)$$

RESULTS AND DISCUSSION OF FINDINGS

Descriptive Analysis

Table 1: Descriptive Statistics

	RGDP	BLAS	GEAS	ACGSF
Mean	40463.72	258.6189	24.93973	3.635135
Median	35020.55	59.85000	16.30000	3.060000
Maximum	74639.47	1676.400	81.87000	13.00000
Minimum	15237.99	1.830000	0.020000	0.070000
Std. Dev.	21453.12	404.7214	25.78285	3.878865
Skewness	0.335743	2.137451	0.704846	0.785967
Kurtosis	1.470308	7.090144	2.178710	2.441437

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Jarque-Bera	4.302561	53.96458	4.103528	4.290412
Probability	0.116335	0.000000	0.128508	0.117044
Sum	1497158.	9568.900	922.7700	134.5000
Sum Sq. Dev.	1.66E+10	5896778.	23931.18	541.6413
Observations	37	37	37	37

Source: *Author's Computation (2023), E-views 12.0*

The study variables' descriptive statistics are shown in Table 1 above. As shown in the table, Real Gross Domestic Product (RGDP) recorded over the period a mean value of N40463.72billion with a maximum of N74639.47billion and minimum of N15237.99billionper annum with its standard deviation of N21453.12billion indicating high dispersion from the mean. In addition, bank loan to agricultural sector (BLAS) recorded over the period a mean value of N258.62 billion with a maximum of N1676.4billion and minimum of N1.83billion per annum with its standard deviation of N404.7billion indicating low deviation from the mean. In furtherance, government expenditure on agricultural sector (GEAS) recorded over the period a mean value of N24.94 billion with a maximum of N81.87billion and minimum of N0.billion per annum with its standard deviation of N25.78billion indicating low deviation or dispersion from the mean. Finally, the Agricultural Credit Guarantee Scheme Fund (ACGSF) had a mean value of N 3.64 billion, a range of N 0.07 billion to N 13.0 billion per year, and a standard deviation of N3.88 billion, suggesting a moderate level of dispersion.

Trend Analysis

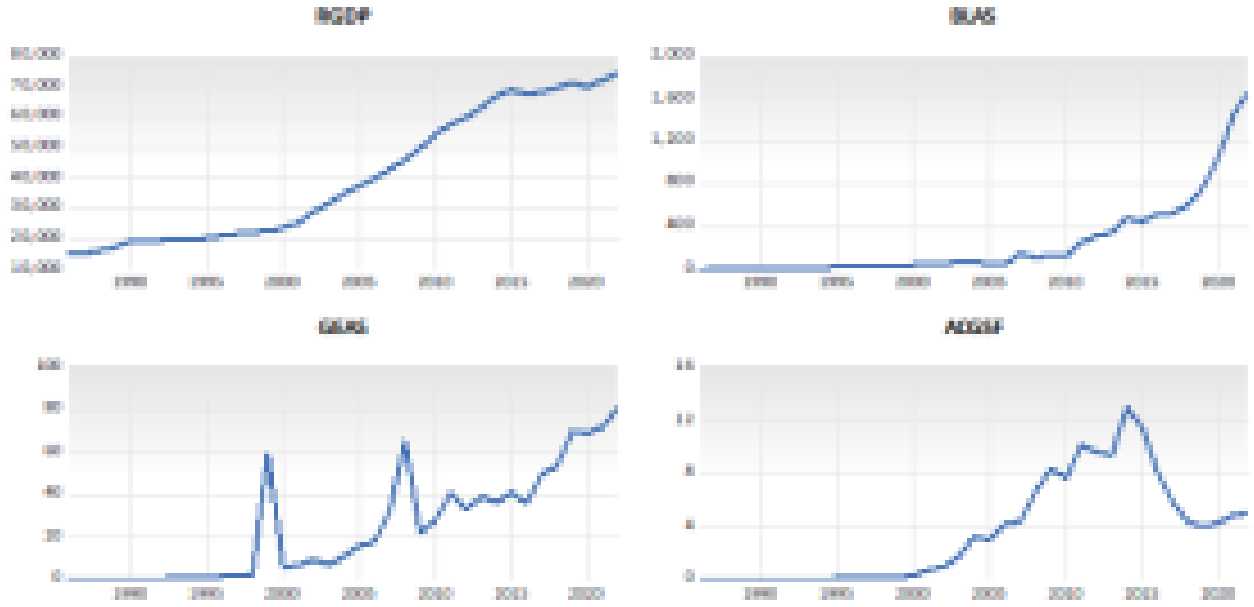

Figure 1: Trends in Real Gross Domestic Product (RGDP), Bank Loan to Agricultural Sector (BLAS), Government Expenditure on Agricultural Sector (GEAS) and Agricultural Credit Guarantee Scheme Fund (ACGSF)

Figure 1 represents a graphical illustration of the dataset under analysis. In particular, the figure demonstrates that government statistics showed a great deal of inconsistency in their upward and downward movements throughout the research period, in contrast to RGDP and BLAS, which were more stable and mostly maintained consistent upward movements.

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Unit Root Tests

Table 2: Results from Augmented Dickey-Fuller Test

	@Levels			@ 1st Differences	
Variables	**ADF**	**Mackinnon Critical Value @ 5%**	**ADF**	**Mackinnon Critical Value @ 5%**	**Order of Integration**
LOG(RGDP)	-1.045985	-2.948404	-3.292290	-2.948404	I(1)
LOG(BLAS)	-0.830123	-2.945842	-6.851830	-2.948404	I(1)
LOG(GEAS)	-2.543725	-2.948404	-8.409581	-2.948404	I(1)
LOG(ACGSF)	-1.067317	-2.948404	-3.687930	-2.948404	I(1)

Source: *Author's Computation (2023), E-views 12.0*

The analysis in Table 2 indicates that all the variables (RGDP, GEAS, BLAS, and ACGSF) exhibited stationarity after being differenced once, and they were integrated at order one, denoted as I(1) series. The research examined the variables' unit root properties before determining if the variables in the equation had a long-term cointegrating connection by utilizing Johansen's cointegration test.

Cointegration Test Result

Table 3: JohansenCointegration Test Results

		Trace		
Hypothesized No. of CE(s)	**Eigen Value**	**Statistic**	**0.5 Critical Value**	**Prob.****
None *	0.568764	61.67731	47.85613	0.0015
At most 1 *	0.413649	32.23883	29.79707	0.0257
At most 2	0.188754	13.55457	15.49471	0.0960
At most 3 *	0.163132	6.233131	3.841465	0.0125
Max-Eigen Statistic				
Hypothesized No. of CE(s)	**Eigen Value**	**Statistic**	**0.5 Critical Value**	**Prob.****
None *	0.568764	29.43848	27.58434	0.0286
At most 1	0.413649	18.68426	21.13162	0.1064
At most 2	0.188754	7.321434	14.26460	0.4518
At most 3 *	0.163132	6.233131	3.841465	0.0125

Source: *Author's Computation (2023), E-views 12.0*

Note: Trace test specifies 2 cointegrating equations at the 0.05 level

Max-eigen test specifies 2 cointegrating equations at the 0.05 level.

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*signifies rejection of the null hypothesis at the 0.05 level.

**Mackinnon-Haug-Michelis (1999) P-values

The Johansen cointegration test findings in Table 3 show that both the trace statistic and the Max-Eigen statistic suggest the presence of two cointegrating equations. The upshot of this outcome is that there is a long-term (equilibrium) connection between RGDP, BLAS, GEAS, and the ACGSF. Therefore, we proceeded to calculate the Error Correction Model (ECM) in order to reconcile the short-term dynamics with the long-term imbalance of the variables.

Lag Selection Criteria

Table 4: Lag Selection Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-119.9304	NA	0.017225	7.290024	7.469595	7.351263
1	58.17356	303.8244*	1.25e-06*	-2.245503*	-1.347644*	-1.939308*
2	73.87154	23.08526	1.33e-06	-2.227738	-0.611591	-1.676585
3	87.23629	16.50939	1.74e-06	-2.072723	0.261711	-1.276614

Source: *Author's Computation (2023), E-views 12.0*

Table 4 displays the results of the lag selection criteria, which indicate that all of the criteria have chosen a lag duration of one as the ideal choice. Therefore, all future analysis will be conducted with the most effective lag duration of one.

Ordinary Least Square (OLS) Regression Analysis

The research utilised the Ordinary Least Square (OLS) regression technique to ascertain the enduring link between agricultural financing and economic growth in Nigeria. The obtained results are presented as follows:

Table 5: Ordinary Least Square Regression Results

Explained Variable: LOG(RGDP)				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	0.166850	0.122426	1.362858	0.1874
LOG(BLAS)	0.099667	0.028912	3.447312	0.0024
LOG(GEAS)	0.000738	0.000243	3.038155	0.0063
LOG(ACGSF)	0.011000	0.002965	3.710363	0.0013
R^2 = 0.826006; Adj R^2 = 0.721609; Prob. (F-statistic) = 0.000032; Durbin-Watson stat = 1.508284				

Source: *Author's Computation (2023), E-views 12.0*

Table 5 displays the OLS model's long-run estimations. The findings showed a strong and positive correlation between the between RGDP, BLAS, GEAS, and the ACGSF. This suggests that a unit increase in BLAS, GEAS, and the ACGSF would, over time, result in long-term increases in the RGDP of 0.099667, 0.000738, and 0.011000, respectively. The short-run estimates of the ECM model in Table 5 indicate that BLAS, GEAS, and the ACGSF together account for about 72% of the variance in RGDP. The remaining

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28% may be attributed to additional variables or factors not comprised in the model. Nigeria's RGDP was statistically significantly impacted by BLAS, GEAS, and the ACGSF combined, in congruent with the Prob. (F-statistic) of 0.000032, which is below 0.05.

Error Correction Model (ECM) Analysis

There is evidence of a short-term economic link between the variables due to the cointegration among them, as shown in Table 6. This recommends that the ECM is the ideal choice for more investigation, and the following is a presentation of its findings:

Table 6: Error Correction Model (ECM) Results

Explained Variable: LOG(RGDP)				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	0.024175	0.010832	2.231839	0.0345
DLOG(RGDP(-1))	0.321649	0.147282	2.183903	0.0382
DLOG(BLAS)	0.145804	0.036390	4.006694	0.0004
DLOG(BLAS(-1))	-0.010000	0.019566	-0.511086	0.6136
DLOG(GEAS)	0.039303	0.006757	5.816896	0.0000
DLOG(GEAS(-1))	0.002276	0.007003	0.324927	0.7478
DLOG(ACGSF)	0.145804	0.011200	13.01788	0.0000
DLOG(ACGSF(-1))	0.047918	0.032083	1.493529	0.1473
ECM(-1)	-0.269561	0.049568	-5.438174	0.0000
R^2 = 0.648030; Adj R^2 = 0.508962; Prob. (F-statistic) = 0.003624; Durbin-Watson stat = 2.125807				

Source: *Author's Computation (2023), E-views 12.0*

Table 6 displays the ECM model's short-run estimates. The findings found that BLAS, GEAS, and the ACGSF all had a strong and positive association with Nigeria's real GDP. This means that increasing BLAS, GEAS, and the ACGSF by a unit would result in a 0.145804, 0.039303, and 0.145804 rise in RGDP in the near term, respectively. The ECM model's short-run estimations in table 6 show that BLAS, GEAS, and the ACGSF account for about 51% of the variance in RGDP, in congruent with the 0.508962 Adjusted R-squared value. The remaining 49% of the variation is attributed to other variables or factors not comprised in the model. Ultimately, the Prob. (F-statistic) of 0.003624, which is below 0.05, signifies that BLAS, GEAS, and the ACGSF all had a statistically significant impact on Nigeria's RGDP. Lastly Table 6 demonstrates that the predicted negative sign of ECM(-1) is extremely significant after error correction. This demonstrates the long-run link between the variables with their different major delays. The ECM(-1) coefficient of -0.269561 implies that Nigeria's departure from RGDP is corrected by 27% the next year.

Post Estimation Tests

The post-estimation test results are shown and discussed below:

Table 7: Post-Estimation Test Results

Test	**Null Hypothesis**	**Test Type**	**F-stat.**	**Prob.**
Autocorrelation	Serial Correlation does not exist	Breusch-Godfrey LM Test	0.602887	0.5553
Normality	Normally Distributed	Jarque-Bera Test	0.720350	0.6976

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Heteroscedasticity	Homoscedasticity exists	Breusch-Pagan-Godfrey Test	0.806069	0.6032
Model Specification	Model is Correctly Specified	Ramsey RESET Test	0.500202	0.4860

Source: *Author's Computation (2023), E-views 12.0*

Serial correlation diagnostic test results Given that the probability value of the Breusch-Godfrey LM test exceeded 0.05, the test indicated the absence of serial correlation (autocorrelation). Moreover, the result of the normality test demonstrated that the error term conforms to a normal distribution. Furthermore, the heteroscedasticity test result showed that the model does not comprise heteroscedasticity, confirming the presence of homoscedasticity. In the end, the Ramsey RESET test result verified that the model was appropriately defined and had no missing variables.

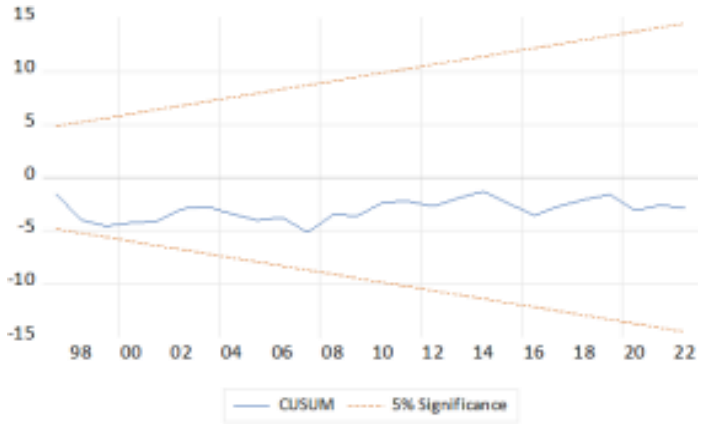

Figure 2: Stability Cusum Test

The CUSUM approach was utilised to evaluate the stability of the long-run coefficients in respect to the short-run dynamics. The stability test results, as shown in Figure 2, demonstrate that the CUSUM line remained within the 5% critical limit, and there were no instances when the CUSUM plot crossed the 5% critical lines. This infers that the long-run coefficients of the regressors that impact economic development in Nigeria remain stable.

DISCUSSION OF FINDINGS

This research examined the impact of agricultural funding on Nigeria's economic development from 1986 to 2022. The study found a strong relationship between bank loans to Nigeria's agricultural industry and the country's RGDP. This result is in line with research by Egwu (2016), which demonstrated that the amount of credit that commercial banks extended to the agricultural sector had a notable and positive impact on the portion of the sector's output that was comprised in the gross domestic product. The study's findings demonstrate a substantial correlation between Nigeria's actual gross domestic product and governmental expenditure on the agriculture sector. This discovery corroborates the research conducted by Udoka, Mbat, and Duke (2016), which demonstrated a robust and favorable correlation between governmental assistance for agriculture and the productivity of the agricultural sector. The study's findings demonstrate a substantial correlation between Nigeria's RGDP and ACGSF. This discovery is consistent with the research conducted by Egwu (2016), which revealed a positive correlation between the ACGSF and Nigeria's Gross Domestic Product and.

CONCLUSION

A vital component of agricultural operations, agricultural financing guarantees farmers have access to enough capital to carry out all farm operations, which boosts output. Based on the underlying theory, this

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study looked at how agricultural financing affected Nigeria's economic growth. The study's findings, which comprised empirical evidence, led researchers to the conclusion that agricultural financing significantly and favorably influences Nigeria's economic growth.

RECOMMENDATIONS

The study's findings and conclusions form the basis of the following recommendations:

1. To encourage stronger economic development in Nigeria, it is imperative to increase the quantity and magnitude of agricultural loans by reducing interest rates, because bank loans to the agriculture sector are strongly correlated with economic development.
2. The government should raise its outlay on the agricultural sector in order to develop the sector and its production, since it has a favorable and considerable impact on the Real Gross Domestic Product.
3. The government should maintain the Agricultural Loans Guarantee Scheme and make sure that a larger share of allocations are given to the agricultural sector so as to support the economy's continued growth, as the scheme has a positive and substantial impact on the Real Gross Domestic Product.

REFERENCES

1. Achumu, J., Ezirim, U., & Chekwa, C. (2022). Agricultural financing and economic growth: A Bayesian VAR examination of the Nigerian evidence. *Journal of Applied Business and Economics,24* (1), 133-142.
2. Ademola, E. A. (2019). Impact of agricultural financing on Nigeria economy. *Asian Journal of Agricultural Extension, Economics & Sociology, 31*(2), 1-13.
3. Adeshina, K. F., Tomiwa, O. Y., & Eniola, O. O. (2020). Agricultural financing and economic performance in Nigeria. *Asian Journal of Agricultural Extension, Economics & Sociology, 38*(7), 61-74.
4. Amechi, A. R. (2014). Accelerated growth in agricultural production and intersectional transfer of resources, *Economic Development and Cultural Change*, *22*(3), 1-16.
5. Angaha, J. S. & Atong, T. A. (2020). Agricultural financing and economic growth in Nigeria: A threshold autoregressive (TAR) Analyses. *SOCIALSCI Journal, 7*(2),36- 44.
6. Central Bank of Nigeria (2021). *The changing structure of the Nigerian economy and the implications for development in Nigeria*. CBN Abuja: pp. 31 – 60.
7. Egwu, P. N. (2016). Impact of agricultural financing on agricultural output, economic growth and poverty alleviation in Nigeria. *Journal of Biology, Agriculture and Healthcare*, *6*(2), 36-42.
8. Idoko, C. U., &Jatto, S. M. (2018). Government expenditure on agriculture and economic growth in Nigeria (1985-2015). *International Journal of Academic Research and Reflection, 6*(4), 24-39.
9. Ivongbe, M. I., Oyatayo, T. T., & Atu, O. O. (2021). Agriculture financing and the Nigerian economy. *African Journal of Business and Economic Development, 1*(6), 1-26.
10. Mathias, H.,&Inedu, L. (2022). The effect of commercial banks' sectoral credit allocation allocated to manufacturing sector and agricultural sector on non-performing loans of banks in Nigeria from 2014q1 to 2020q4. *International Journal of Economics and Financial Issues, 8*(2), 287-297.
11. Obansa S. A. J.,&Maduekwe, I. M. (2013).Agriculture financing and economic growth in Nigeria. *European Scientific Journal*, 9(1), 168-204.
12. Olawuni, B. E. O. (2010). Agricultural financing and agricultural performance in Nigeria. *International Journal of Agricultural Development*, *2*(1), 10-19.
13. Olukemi, D. O. (2020). An evaluation of the agricultural credit guarantee schemes in Osun State, Nigeria. *Journal of Agricultural Development,4*(2), 24-33.
14. Onoh, C. F. (2020). Nexus between agriculture financing and economic growth in Nigeria 1981-2016. *Journal of Banking and Finance Management, 3*(2), 25-33.

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15. Orji, O., Ogbuabor, U., Alisigwe, M., & Anthony-Orji, C. (2021). The impact of agricultural financing and agricultural output growth on employment generation in Nigeria from 1981 to 2017. *International Journal of Applied Econometrics and Quantitative Studies,5*(6), 75 – 84.
16. Schreiner, M.,& Yaron, J. (2011). *Development finance institutions: Measuring their subsidy.* Washington, D.C.: World Bank.
17. Udoffia, D. T.,& Godson J. R. (2016). The impact of federal government expenditure on economic growth in Nigeria. *Greener Journal of Social Sciences, 6*(4), 92-105.
18. Udoka, C. O., Mbat, D. O.,& Duke, S. B. (2016). The effect of commercial banks' credit on agricultural production in Nigeria. *Journal of Finance and Accounting,*4(1), 1-10.