Journal of Banking and Finance Research (JBFR)
2025, Vol. 1, No.1, Pp. 108 – 119

P-ISSN: 3121-8121; E-ISSN:

Effects of Nigeria Incentive-Based Risk Sharing System for Agricultural Lending on the Performance of the Agricultural Sector in Nigeria

Patricia Onyemowo Agbo (Ph.D.) [1*], Joshua Chibi Dariye (Ph.D.) [2], Maria Ayaiye Okorie[3], Taiya Haziel Mbasti (Ph.D.) [4]
[1]Department of Banking and Finance, University of Jos, Nigeria
[3]Department of Banking and Finance, University of Jos, Nigeria
[4]Department of Accounting, Adamawa State University, Mubi, Nigeria

Email:
[1]agbop@unijos.edu.ng; onyemowoa@gmail.com
[2]dariye1957@gmail.com
[4]taiya517@adsu.edu.ng

Abstract: *Nigeria's agricultural sector is central to economic development, food security, and employment generation, yet its growth has been persistently constrained by limited access to credit. To address this challenge and reduce the risks associated with agricultural lending, the Central Bank of Nigeria established the Nigeria Incentive-Based Risk Sharing System for Agricultural Lending (NIRSAL) in 2011 to stimulate increased financial support for agribusinesses. This study examined the effect of NIRSAL on the performance of the agricultural sector in Nigeria.*

The study adopted an ex-post facto research design and utilised time-series secondary data obtained from the Central Bank of Nigeria, the National Bureau of Statistics, and the Federal Ministry of Agriculture and Rural Development for the period 2013–2024. Data analysis involved the use of descriptive statistics and a range of econometric diagnostic tests, including the Augmented Dickey-Fuller unit root test, tests for multicollinearity, serial correlation, heteroskedasticity, normality, and model stability. These analyses were conducted using E-Views 10 statistical software. The Ordinary Least Squares (OLS) technique was employed to estimate the model, while multiple regression analysis was used to test the formulated hypotheses.

The results indicate that NIRSAL has a statistically significant and positive impact on agricultural productivity and financial inclusion in Nigeria. Based on these findings, the study recommends that the Federal Government, through the Ministry of Agriculture and Rural Development, should strengthen institutional, operational, and information-sharing collaboration between NIRSAL and state-level agricultural extension services. This would ensure that recipients of NIRSAL-supported loans benefit from regular capacity-building programmes, including at least quarterly training sessions, complemented by monthly or bi-monthly field supervision and ongoing technical support on modern and sustainable agricultural practices aligned with the agricultural production cycle.

Key Words: NIRSAL, Agricultural Lending, Agricultural performance

INTRODUCTION

The importance of agriculture in worldwide cannot be overemphasised as it provides employment, food security and other means of livelihood, driving economic development for nations. In Africa, agriculture contributes about 25% of the continent's GDP, employing about 60% of the labour force (FAO, 2022). Most African economies rely heavily on agricultural exports, such as cocoa, coffee, cotton and tea, playing important roles in rural development, poverty reduction, and resilience to climate change. Despite its potentials, African agriculture continues to face persistent challenges, including limited access to modern technology, inadequate infrastructure, land tenure issues and vulnerability to climate variability (AfDB, 2021). In Nigeria, agriculture accounts for over 70% of employment (Usman et al., 2024). It was the main stay of the Nigerian economy before oil discovery in Ngeria (Aloko, 2023). The agricultural sector has grown the Nigerian economy through the provision of food for the ever-increasing population, supplies of raw materials to the agro-based industry in Nigeria constituting a major source of employment, income, and foreign exchange earnings, and serving as a market for the products of the industrial sector (Osaghae, 2023; Obiukwu et al., 2024). However, the sector faces significant challenges, including inadequate financing, limited access to modern technology, and poor infrastructure. To address these problems, the Nigerian government, in collaboration with other stakeholders, established the Nigeria Incentive-Based Risk Sharing System for Agricultural Lending (NIRSAL) incorporated in 2013 by the Central Bank of Nigeria (CBN). It emerged as a dynamic public-private initiative with a substantial investment of USD 500 million with the aim to catalyse financial flow into fixed agricultural value chains (Akinwale, 2021). NIRSAL aims to bridge the financing gap in the agricultural sector by offering risk mitigation measures to encourage financial institutions to lend to farmers and agribusinesses. This study examines the effects of NIRSAL on the performance of Nigeria's agricultural sector with focus on agricultural performance.

STATEMENT OF THE PROBLEM

Agriculture a fundamental pillar of Nigeria's economy, contributing significantly to GDP and employment in Nigeria (CBN, 2024). However, the agricultural sector faces persistent challenges that hinder its full potentials as low productivity remains a pressing concern due to inability of farmers to access finance as traditional financial institutions perceive agricultural lending as high-risk, limited adoption of modern farming techniques and inadequate access to timely and relevant agricultural information (Khan et al., 2024). A well-structured approach that integrates finance and research would ensure sustainable agricultural development, increase productivity, and improve the livelihoods of farmers in Jos (Adamou et al., 2021). The aim of this paper is to explore the effect of Nigeria Incentive-Based Risk Sharing System for Agricultural Lending on the performance of the agricultural sector in Nigeria covering the period 2013-2024. Based on the aim of the study, the following hypotheses are formulated:

Hypotheses

H_0: Nigeria Incentive-Based Risk Sharing System for Agricultural Lending has no significant effect on agricultural productivity in Nigeria.

H_1: Nigeria Incentive-Based Risk Sharing System has significant effect on agricultural productivity in Nigeria.

REVIEW OF RELATED LITERATURE

Conceptual Review

Nigeria Incentive-Based Risk Sharing System for Agricultural Lending (NIRSAL)

Nigeria Incentive-Based Risk Sharing System for Agricultural Lending (NIRSAL) is a Central Bank of Nigeria (CBN) programme launched in 2011 to tackle the ever-recurring problem of agricultural financing. NIRSAL was developed as a one-stop, holistic risk-sharing model to drive more lending to agriculture by lowering the financial risks that have persistently deterred banks and investors (Balana et al., 2023). By providing credit guarantees, insurance products and technical support, NIRSAL facilitates the flow of low-cost credit to farmers, agribusiness enterprises and other value chain players.

Its overall mission is to enhance agricultural productivity, attain food security and drive economic diversification through making the sector more attractive to financial institutions and private investors (Bhardwaj & Yadav, 2023). Prior to the arrival of NIRSAL, Nigeria's agricultural industry was perennially underfinanced due to lenders' perception of high risk. Commercial banks avoided lending to farmers and agribusinesses due to risks such as unpredictable weather conditions, pest infestations, post-harvest losses, and weak market linkages (Okoh & Okoh, 2021). Smallholder farmers, who form the majority of Nigeria's agriculture, also did not have collateral to secure loans, further limiting their access to finance. This funding gap stifled farm productivity, sustained rural poverty and hindered the sector's potential to contribute significantly to GDP growth. NIRSAL was conceived out of the resolution of these systemic constraints to create a safer environment for agri-lending (Kumar et al., 2021). NIRSAL operates through five strategic pillars otherwise called components of NIRSAL that seek to address different aspects of agricultural finance and value chain development. They include Risk Sharing, which provides banks with partial credit guarantees to encourage lending; Insurance, which insures farmers and lenders against climatic and production risks; Technical Assistance, which builds the capacity of farmers' and financial institutions' in best lending and agronomic techniques; Rating, which assesses the credit worthiness of agribusinesses to improve their access to finance; and Bank Incentives, which encourages financial institutions to lend more in agriculture (Mikugi & Bagudu 2020). Szebini et al. (2021) postulated that by integrating these aspects, NIRSAL encourages synergy among banks, farmers, input suppliers, processors and marketers to make the agricultural finance value chain more resilient and sustainable. Through such intervention, NIRSAL has cumulatively increased credit access to farmers, grown agribusiness investment and assisted in Nigeria's overall economic diversification targets.

Agricultural Sector Performance

Agriculture is the most fundamental and oldest human activity with nature, comprising the systematic cultivation of land for food crops and animal production, as well as the renewable harvesting of forest products and aquatic life through fisheries. This complex sector involves a multifaceted chain of interdependent activities from soil preparation, planting and crop maintenance to animal breeding, disease control, irrigation systems, harvesting techniques, post-harvest handling, storage and delivery systems (Karaca & Ince, 2023). As the cornerstone of civilisation since the Neolithic Revolution some 12,000 years ago, agriculture continues to be the mainstay of human sustenance, economic growth and societal organisation in modern societies. In addition to its central role in global food security, agriculture also supplies essential raw materials for a range of manufacturing industries like

textiles, pharmaceuticals, construction, and biofuels (Kurowska et al., 2020). It remains the single largest source of employment in the world, particularly in developing nations where it generates income for an estimated 60% of the workforce, having particular significance in rural areas where economic alternatives are more limited. Besides, agriculture is an important foreign trade sector, generating valuable foreign exchange revenues from exports of crops like coffee, tea and spices, and also supporting allied industries such as transport, food processing and production of agricultural machinery through backward and forward economic linkages (Siwar et al., 2022). The Nigerian agricultural sector consists of four primary sub-sectors: crop production, livestock, forestry, and fisheries. It remains one of the most significant pillars of the country's economy, a key source of livelihood for a large number of people, particularly those in rural areas.

Empirical review such as Deboe (2020) stated that Agricultural Production and Productivity as an agricultural performance indicator thus encompasses measurement of fishery output, animal production and crop yield. These indicators measure the efficiency, growth and sustainability of agriculture and play a critical role in measuring the impact of interventions by NIRSAL.

By increasing access to funding, enhancing technical capabilities and risk management in agriculture, NIRSAL helps increase agricultural output, reduce dependence on food imports, and promote long-term development of the agricultural industry, ultimately resulting in national economic growth and food security.

THEORETICAL REVIEW

Agricultural Finance Theory

The Agricultural Finance Theory, which originated among economists such as John Mellor and Bruce Johnston during the 1960s, points out the necessity of financial inputs in driving agricultural development and growth. The theory holds that the availability of finance is a key factor in enabling farmers to invest in improved agriculture, thereby increasing productivity, enabling technological advancement, and ultimately leading to overall economic development of the agricultural sector. In the case of NIRSAL (Nigeria Incentive-Based Risk Sharing System for Agricultural Lending), Agricultural Finance Theory is particularly relevant. NIRSAL was established to reverse the challenges Nigerian farmers face in accessing loans and credits from financial institutions, which have the tendency of categorising the agricultural sector as high-risk due to factors like weather uncertainty, low repayment rates, and volatile farm incomes.

Financial Intermediation Theory

Financial Intermediation Theory was developed through the work of economists such as Gurley and Shaw in the 1960s. It focused on the role played by financial intermediaries such as banks and other financial institutions to facilitate the flow of funds between savers and borrowers. The theory asserts that intermediaries reduce transaction costs, remove information asymmetry, and allocate capital more efficiently, thereby stimulating economic growth. In farming, especially in developing economies like Nigeria, financial intermediation is usually hindered by the risky nature of farming, lack of collateral, and seasonal nature of agricultural income. It is in this context that NIRSAL (Nigeria Incentive-Based Risk Sharing System for Agricultural Lending) becomes highly relevant.

NIRSAL acts as an intermediary facilitator as it de-risks agricultural lending and encourages financial institutions to lend to the agricultural sector. Through its risk-sharing facilities, it makes agricultural finance more accessible, particularly to smallholder farmers and agribusinesses, thus facilitating the flow of funds into agriculture (Gbadebo, 2024).

EMPIRICAL REVIEW

Ebukiba et al., (2025) assessed the impact of NIRSAL on smallholder rice farmers' performance in North Central Nigeria productivity. The result revealed that NIRSAL had an impact on the productivity of rice farmers, with an 18% change in total factor productivity between NIRSAL beneficiaries and non-beneficiaries. Christopher et al. (2024) examined how agricultural productivity affects economic growth in Nigeria, focusing on the relationship between key agricultural sub-sectors and real gross domestic product (RGDP) production to GDP (FSGDP). The results indicate a high positive relationship between both CGDP and FSGDP with RGDP, which suggests that agricultural productivity growth contributes significantly to economic growth. Bai et al., (2022) investigated the effects of the Nigeria Incentive-Based Risk Sharing System for Agricultural Lending (NIRSAL) on livestock production in Yenagoa Local Government Area of Bayelsa State, Nigeria. Results indicate that NIRSAL effectively shares lending risks when beneficiaries obtain loans from financial institutions and provides insurance coverage to support livestock production among its participants.

However, respondents expressed mixed feelings on provision of funds to banks by NIRSAL to enhance lending capacity to livestock farmers, with 31% of the farmers in agreement and 34% expressing disagreement. Mbelu and Ifionu (2022) assessed how agricultural financing affects Nigeria's economic growth from 1981 and 2019. Unit root (stationarity) tests, co-integration analysis, the error correction model, and the Granger causality test were employed. The results revealed that all variables became stationary after first differencing.

While the co-integration test confirmed the existence of a long-run relationship among the variables. In the long run, the findings show that the Agricultural Credit Guarantee Scheme Fund has a positive and statistically significant effect on Nigeria's gross domestic product.

Mikugi and Bagudu (2020) in their study assessed the level of funding, extent of improvement in the activities of agricultural and Small and Medium Enterprises (SMEs), as well as examined the contribution of NIRSAL Microfinance Bank to job creation and employment generation through business start-ups and expansion in Bida Metropolis. Findings from the study revealed that economic activities and the funding levels of SMEs have increased significantly as a result of the NIRSAL Microfinance Bank loan scheme. However, the results also show that most of the respondents were dissatisfied with the loan application and approval process, noting that it is not sufficiently fast to meet their expectations.

METHODOLOGY

Ex-post facto research design was used in this study with data from secondary sources retrieved from Central Bank of Nigeria (CBN) report, National Bureau of Statistics (NBS) and Federal Ministry of Agriculture and Rural Development (FMARD) Reports. The Multiple Regression analysis was used to test the hypotheses stated in this study. The Ordinary Least Square (OLS) procedure of analysis is used to estimate the model with the aid of computer statistical application E-view.

Model Specification

The mathematical form of the OLS model is specified in a functional relationship as follows;

$AP = \beta 0 + \beta 1 NIRSAL + + \mu$.....(1)

Where;

AP	=	Agricultural Productivity
NIRSAL	=	Nigeria Incentive-Based Risk Sharing System for Agricultural Lending
β_0	=	autonomous intercept
U_t	=	Disturbance term

The model is expressed in natural log to make it easier to be estimated using the ordinary least square method which assumes a linear relationship between variables.

RESULTS AND ANALYSIS

Pre-Estimation Test Results

Descriptive Statistics

Table 1: Descriptive Statistics

Sample: 2013 -2024

	AP	NIRSAL
Mean	3.675000	32.26667
Median	3.600000	32.05000
Maximum	5.000000	45.00000
Minimum	2.500000	20.50000
Std. Dev.	0.814778	8.117695
Skewness	0.154631	0.073528
Kurtosis	1.808556	1.768062
Jarque-Bera	0.757591	0.769648
Probability	0.684686	0.680570
Sum	44.10000	387.2000
Sum Sq. Dev.	7.302500	724.8667
Observations	12	12

***Source**: Researcher's computation with the aid of E-View 10*

From the table above, the descriptive statistic result indicates a total of 12 observations. The table showed the mean, standard deviation, minimum, maximum, Skewness and Kurtosis values of the dependent and independent variables. The result revealed that the mean value of Agricultural Productivity (AP) is 3.68% with standard deviation of 0.81%. while NIRSAL Risk Management Product Rate has a mean of 32.27% and a standard deviation of 8.12%.In addition, the data set may be classified normally distributed since the table above indicates that none of the skewness value fall outside the -2 to 2 range. Similarly, the Kurtosis value suggest that the data set is relatively peaked than normal as the majority of the variables differed from zero.

Unit Root Test

Table 2: Unit Root Test Results

Variable	ADF Statistics	Critical value @5%	Level of Stationarity
LogNIRSAL	-5.738790	-3.175352	I(0)
LogAP	-4.145993	-3.212696	I(0)

***Source**: Researcher's computation with the aid of E-View 10*

A unit root test was conducted using the Augmented Dickey-Fuller (ADF) approach to examine the stationarity properties of the time series variables used in estimating the model. As presented in Table 2 above, the results revealed that NIRSAL Risk Management Product Rate, Agricultural Productivity has ADF test statistics more negative than the 5% critical values. This implies rejection of the null hypothesis of a unit root at the 5% significance level for all variables. Consequently, each variable is stationary at level, indicating they are integrated of order zero, I(0). This implies that the variables are suitable for regression analysis in levels without differencing. Therefore, methods such as Ordinary Least Square (OLS) can be employed.

Multicollinearity Test

Table 3: Variance Inflation Factors

Variable	Coefficient Variance	Uncentered VIF	Centred VIF
LogAP	0.092159	16,717.05	461.98
Constant (C)	0.076438	8,246.937	NA

***Source**: Researcher's computation with the aid of E-View 10*

The Variance Inflation Factor (VIF) results above in Table 3 revealed that LogAP have extremely high centred VIF values of 461.98, which are well above the conventional threshold of 10. This indicates the presence of severe multicollinearity between the explanatory variables in the model. High multicollinearity can inflate standard errors, compromise the precision of coefficient estimates, and undermine the reliability of statistical inferences.

Estimation Technique

The Ordinary Least Square (OLS) result of the study variables generated from E-views 10 computer software are presented in tables 4 and 5 below;

Model 1

$AP = \beta 0 + \beta 1NIRSAL + + \mu$.....(1)

Table 4: Ordinary Least Square Result for Model 1

Dependent Variable: LAP
Method: Least Squares
Sample: 2013-2024
Included observations: 12

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.701398	0.048859	-34.82284	0.0000
LNIRSAL	0.865319	0.014151	61.15101	0.0000
R-squared	0.997333	Mean dependent var		1.278594
Adjusted R-squared	0.997066	S.D. dependent var		0.225136
S.E. of regression	0.012194	Akaike info criterion		-5.824679
Sum squared resid	0.001487	Schwarz criterion		-5.743861
Log likelihood	36.94807	Hannan-Quinn criter.		-5.854600
F-statistic	3739.446	Durbin-Watson stat		0.867132
Prob(F-statistic)	0.000000			

Source: *Researcher's Computation with the aid of E-views 10*

Table 4 contained the multiple linear regression estimation result. The result revealed a positive relationship between NIRSAL Risk Management Product Rate and Agricultural Performance with coefficient value of 0.865319 and probability value of 0.0000. Thus, from the OLS result, the regression equation becomes; AP = (-1.701398) + 0.865319LNIRSAL

Table 4 further revealed that the coefficient of determination, R^2 stood at 0.997333. The implication of the above result is that, about 99.7% of the proportion of the total variation observed in the dependent variable was explained by the explanatory variable (NIRSAL) in the model. The remaining 0.3% represents unexplained variation due to other factors not captured in the model. Furthermore, the adjusted R^2 value of 0.997066 indicated that the model maintains a strong explanatory power even after adjusting for the number of predictors (it still had a good fit). The F-statistic which measured the joint statistical influence of the explanatory variables in explaining the dependent variable stood at 3739.446 with a P-value of 0.0000.

This affirmed the effect of the explanatory variables to be statistically significant at 10%, 5% and 1% level of significance. The Durbin-Watson (DW) test statistic yielded a value of 0.867132, which is significantly below the benchmark value of 2.

This suggests the presence of positive serial correlation in the regression residuals. Positive serial correlation violates the classical OLS assumption of independent errors and may lead to inefficient parameter estimates and biased standard errors. Therefore, the presence of serial correlation suggests the need for further diagnostic checks or model adjustment to improve the reliability of the regression results.

Post Estimation Technique

1. Serial Correlation Test

Table 6: Breusch-Godfrey LM Test for Model 1

Statistic	Value	Prob.	
F-statistic	1.734056	Prob. F(2,8)	0.2368
Obs*R-squared	3.628962	Prob. Chi-Square(2)	0.1629
Durbin-Watson stat	1.766187		

Source: *Researcher's Computation with the aid of E-views 10*

Table 6 above revealed the Breusch-Godfrey Serial Correlation LM Test for Model 1. The test was conducted to assess the presence of higher-order autocorrelation in the regression residuals. The test yielded an F-statistic of 1.734056 with a probability value of 0.2368, and an Obs*R-squared statistic of 3.628962 with a p-value of 0.1629. Both p-values exceed the 5% significance threshold, indicating that the null hypothesis of no serial correlation cannot be rejected. This suggests that there is no statistically significant evidence of serial correlation up to the second lag. Furthermore, the Durbin-Watson statistic of 1.766187, also supports this conclusion by indicating only minimal positive autocorrelation. This result confirms that the regression residuals are not serially correlated, and thus the model satisfies the OLS assumption of independent errors. This enhances the reliability of the coefficient estimates and inference drawn from the model.

2. Heteroskedasticity Test

Table 8: Breusch-Pagan-Godfrey Result for Model 1

Statistic	**Value**	**P-value**	
F-statistic	0.148721	Prob. F(1,10)	0.7078
Obs*R-squared	0.175850	Prob. Chi-Square(1)	0.6750
Scaled explained SS	0.073819	Prob. Chi-Square(1)	0.7859
Durbin-Watson stat	2.084620		

Source: Researcher's Computation with the aid of E-views 10

The Breusch-Pagan-Godfrey Heteroskedasticity Test was conducted to determine whether the variance of the regression residuals is constant (homoskedasticity). The result in Table 8 revealed an F-statistic of 0.148721 (p = 0.7078), an Obs*R-squared statistic of 0.175850 (p = 0.6750), and a Scaled Explained Sum of Squares statistic of 0.073819 (p = 0.7859). All p-values are well above the 5% significance threshold, indicating that the null hypothesis of homoskedasticity cannot be rejected. This implies that there is no evidence of heteroskedasticity in the model residuals. Also, the assumption of constant variance is satisfied, reinforcing the reliability of the OLS estimates in terms of efficiency and validity of statistical inference. The Durbin-Watson statistic of 2.084620 also indicates no significant autocorrelation, further supporting the model estimation.

3. Normality Test

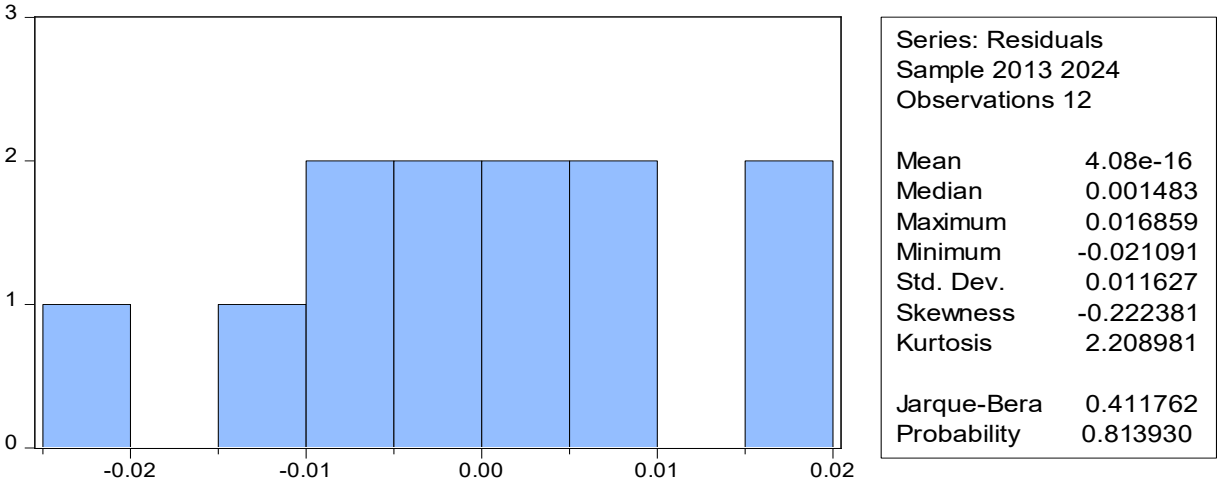

Figure 1*: Jarque-Bera for Model 1*
Source: *Researcher's Computation with the aid of E-views 10.*

The Jarque-Bera normality test conducted on the model residuals yields a statistic of 0.4118 with a p-value of 0.8139, indicating that the residuals are normally distributed. This result is supported by a near-zero mean (4.08), slight skewness (-0.2224), and a kurtosis value of 2.2089, which are within acceptable bounds for normality. The histogram also reflects a roughly symmetric, bell-shaped distribution. This confirms that the normality assumption of the classical linear regression model is not violated, thus validating the reliability of inferential statistics (t and F tests) and affirming the appropriateness of using the OLS estimator in the study.

4. Stability Test

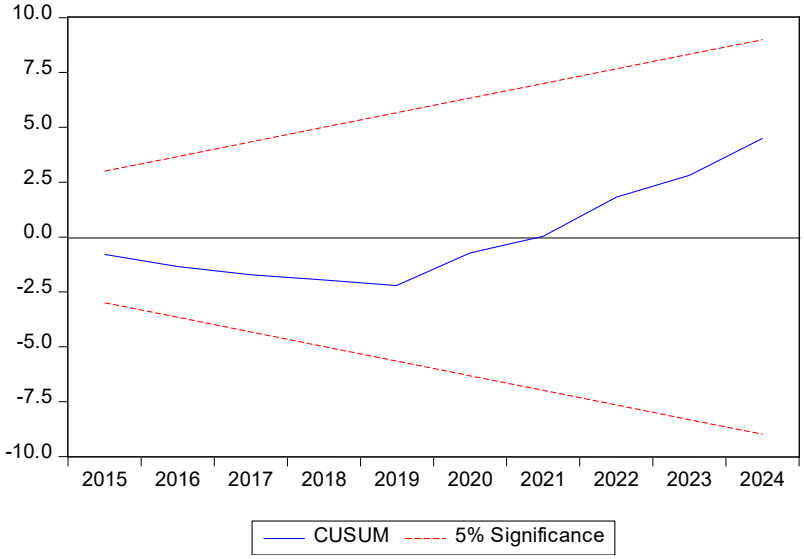

***Figure 3**: CUSUM Test for Model 1*
***Source:** Researcher's Computation with the aid of E-views 10.*

From Figure 3 above, the CUSUM line (blue) remains within the 5% significance bounds (red dashed lines) throughout the period 2015 to 2024. This implies that the estimated model parameters are structurally stable over time. Since the CUSUM line does not cross the critical bounds, the researcher fails to reject the null hypothesis of parameter stability. Thus, there is no evidence of structural breaks or parameter instability in the model during the sample period.

TEST OF HYPOTHESES

The hypotheses formulated were tested with the decision rule that if the p-value is less than the level of significance of 0.05, the null hypothesis rejected while the alternate hypothesis is accepted. But if the p-value is greater than the level of 0.05, accept the null hypothesis and reject the alternate: Reject HO_1-$H1_1$ if p value < 0.05, otherwise Accept HO_1-$H1_1$

Hypothesis One

H_0: Nigeria Incentive-Based Risk Sharing System for Agricultural Lending has no significant effect on agricultural productivity.

Variable	Coefficient	t-Statistic	P-value
AP	0.865319	61.15101	0.0000

***Source:** OLS Result Extract.*

The result of regression test presented in Table 4 revealed that the P-value of AP is 0.0000 which is below 0.05 level of significance. Hence, the null hypothesis is rejected while alternate hypothesis is accepted. Therefore, it was concluded that Nigeria Incentive-Based Risk Sharing System for Agricultural Lending has a significant effect on agricultural productivity.

DISCUSSION OF FINDINGS

The study examineed the effect of Nigeria Incentive-Based Risk Sharing System for Agricultural Lending on the performance of the agricultural sector in Nigeria. Findings revealed that Nigeria Incentive-Based Risk Sharing System for Agricultural Lending has a significant effect on agricultural productivity given p-value = 0.0000. This finding is in line with Ogbe and Igwemadu (2021) who observed that NIRSAL's de-risking of the agricultural value chain enhances farmers' access to credit, enabling the acquisition of better inputs, mechanisation, and improved farming practices, all of which led to increased yields and productivity. The credit guarantee provided by NIRSAL reduces financial institutions perceived risk, thereby encouraging higher volumes of lending to agriculture (CBN, 2021). Furthermore, Ebukiba et al., (2025) who reported that NIRSAL's role in reducing loan default risks and training farmers in agribusiness management has directly translated to improved productivity in both crop and livestock farming. The implementation of NIRSAL's Technical Assistance Facility (TAF) also builds the capacity of agricultural value chain actors, making their businesses more viable and efficient (IFPRI, 2020).

CONCLUSION AND RECOMMENDATIONS

The study assessed the effect of Nigeria Incentive-Based Risk Sharing System for Agricultural Lending on the performance of the agricultural sector in Nigeria with the conclusion that NIRSAL has positive significant impact on agricultural productivity. Therefore it recommended that:

- Federal government through the Ministry of Agriculture and Rural Development, should strengthen collaboration between NIRSAL and state-level agricultural extension services to ensure farmers who receive NIRSAL-backed loans are also provided with regular training, field supervision, and technical support on modern and sustainable agricultural practices. Doing so would ensure that credit is not only available but also effectively utilised to maximise yields and ensure long-term productivity improvements.

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