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Long-Run and Short-Run Relationship Between Cocoa Exports and Economic Growth in Nigeria

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Abstract:

This study examined the long-run and short-run relationships between cocoa exports and economic growth in Nigeria from 1970 to 2023. The study employed the Autoregressive Distributed Lag (ARDL) model to assess both short-run and long-run dynamics, with secondary data obtained from sources such as the World Bank and the International Cocoa Organization. The findings revealed that cocoa exports significantly impacted economic growth in both short and long terms. In the short run, cocoa exports had a marginally significant positive effect on GDP growth, while in the long run, cocoa export earnings showed a significant positive relationship with Nigeria's GDP, with a 1% increase in cocoa export earnings leading to a 0.294% increase in GDP. The study highlights the need for policies that stabilise exchange rates and enhance cocoa production to realise the full potential of the cocoa sector. A key recommendation is for policymakers to prioritise the stabilization of cocoa prices and encourage sustainable farming practices.

Keywords: Cocoa exports, Economic growth, Autoregressive Distributed Lag, Nigeria, short-run relationship, long-run relationship, exchange rate, global cocoa prices

1. Introduction

The relationship between agricultural exports and economic growth is a crucial subject for developing economies like Nigeria, where agricultural exports, including cocoa, play a significant role in the national economy (Oginni et al., 2024). Cocoa, as one of Nigeria's primary agricultural exports, holds substantial promise for driving economic growth due to its position as a major foreign exchange earner for the country. Studies have shown that cocoa exports contribute significantly to both agricultural growth and overall economic development by stimulating trade and increasing foreign exchange earnings, with impacts on various economic sectors (Ukpe & Onuigbo, 2024). In Nigeria, where cocoa is a key cash crop, its export potential is integral to rural livelihoods and the agricultural sector's broader economic contribution (Adewumi et al., 2024). However, the precise nature of the relationship between cocoa exports and economic growth in Nigeria, especially when considering short-run and long-run dynamics, remains underexplored in the current literature. Research has indicated that cocoa exports have contributed positively to Nigeria's economy, but the strength of this relationship fluctuates depending on factors such as government policy, exchange rate stability, and global market conditions (Abdul-Karim & Damba, 2024; Oginni et al., 2024).

In the short run, empirical evidence indicates that cocoa exports have a significant impact on agricultural growth, with factors like exchange rate policies and government agricultural spending playing complementary roles in promoting sectoral growth (Ukpe & Onuigbo, 2024). This suggests that short-run effects could be crucial in understanding the immediate impact of cocoa exports on economic variables such as employment, output, and revenue generation. Several studies highlight that, in the short term, a surge in cocoa exports can result in increased employment in the agricultural sector and boost the revenue of farmers (Kayode & Oladimeji, 2024). The effects of such short-run dynamics are often exacerbated by external shocks such as exchange rate fluctuations and global price shifts, both of which can influence export performance and growth outcomes in the agricultural sector (Lintang & Kurniawan, 2023; Oginni et al., 2024). However, long-run relationships are more complex, often demonstrating a weaker connection

between exports and growth due to structural challenges in the sector, such as fluctuating commodity prices and inconsistent government policies (Adegunsoye et al., 2024; Nnoli et al., 2023).

The long-run effects of cocoa exports on Nigeria's economic growth remain contentious, as structural factors such as price volatility, weak agricultural infrastructure, and unpredictable policies have hindered the sustainable growth of the sector. Studies like those by Abdul-Karim and Damba (2024) and Oginni et al. (2024) argue that while cocoa exports have a positive long-term impact on economic growth, their contribution is diminished by macroeconomic challenges, including inflation and inconsistent government interventions. The economic instability in Nigeria, coupled with weak policy implementation, has resulted in a long-term decline in cocoa production capacity and a failure to realise the full potential of cocoa exports as a tool for sustained economic growth (Adewumi et al., 2024). This structural imbalance poses a significant challenge for policymakers aiming to leverage cocoa exports for broad-based economic development, as short-term gains are not consistently reflected in long-term economic performance.

The problem that this study aims to address is the lack of clear understanding regarding the long-run and short-run dynamics between cocoa exports and Nigeria's overall economic growth. Although cocoa export has been linked to agricultural development and job creation, the precise nature and strength of these relationships require further investigation to inform policy decisions and enhance the sector's contribution to Nigeria's economic transformation. Additionally, the study will explore the impact of macroeconomic factors such as exchange rates, government policies, and global cocoa price volatility on this relationship. It is essential for policymakers to understand both the short-term and long-term effects of cocoa exports in order to develop targeted strategies that can maximise their potential to drive sustainable economic growth.

Objectives of the Study

This study aims to investigate the relationship between cocoa exports and economic growth in Nigeria, focusing on both dynamics. Specifically, the objectives are to:

i. examine the short-run impact of cocoa exports on Nigeria's economic growth; and
ii. assess the long-run influence of cocoa exports on economic growth in Nigeria.

2. Materials and Methods

Study Area

The study covered Nigeria and Ghana. Nigeria is located in West Africa and lies between latitudes 4°N and 14°N and longitudes 3°E and 15°E. It is the most populous country in Africa, with an estimated population of over 220 million people as of 2023. Nigeria covers a land area of approximately 923,768 square kilometers, making it one of the largest countries in Africa. The country experiences a tropical climate, characterized by distinct wet and dry seasons. The southern region receives annual rainfall ranging from 1,500mm to 4,000mm, while the northern region receives between 500mm and 1,500mm. Temperatures range from 25°C to 35°C, with the coastal areas experiencing higher humidity levels. Nigeria has diverse vegetation zones, including mangrove forests and rainforests in the south, guinea savannah in the central region, and Sudan and Sahel savannahs in the north. The country's farming activities are extensive, covering crops such as cassava, maize, yam, rice, and cocoa, as well as livestock rearing. Cocoa production is concentrated in the southwestern states, including Ondo, Osun, Oyo, Ogun, Ekiti, Edo, Cross River, and Kwara. These states have favorable climatic and soil conditions that support cocoa cultivation, making Nigeria one of the leading cocoa producers in Africa.

Population of The Study

The population of the study comprised all the quarterly time series data on cocoa production, cocoa exports, economic growth indicators (specifically GDP), exchange rates, and global cocoa prices for Nigeria and Ghana from 1970 to 2023. The study focused on these two West African countries due to their historical significance and contributions to global cocoa output and export revenues.

Data Sources and Collection

This study employed secondary time series data covering the period from 1970 to 2023, which were sourced from reputable national and international institutions. The data were obtained from the World Bank Development Indicators (WDI), International Cocoa Organization (ICCO), Central Bank of Nigeria (CBN) Statistical Bulletin, Bank of Ghana Annual Reports, Ghana Statistical Service (GSS), FAOSTAT (Food and Agriculture Organization Statistics), and the International Monetary Fund's International Financial Statistics (IFS). Key variables to be collected included cocoa production measured in metric tons, cocoa export values in U.S. dollars (USD), gross domestic product (GDP) at constant 2010 USD, exchange rate expressed as local currency per USD, and international cocoa prices in USD per metric ton.

Measurement of Variables

Table 1: Measurement of Variables

Variable Symbol	Variable Description	Type	Measurement	A Priori Expectation
GDP	Gross Domestic Product	Dependent	Annual GDP at constant 2010 USD	-
COCOA_EXP	Cocoa Export Earnings	Independent	Value of cocoa exports in USD	Positive (+)
COCOA_PROD	Cocoa Production	Independent	Metric tons of cocoa produced annually	Positive (+)
EXCHR	Exchange Rate	Independent	Local currency per USD	Ambiguous (+/–)
COCOA_PRICE	Global Cocoa Price	Independent	USD per metric ton	Positive (+)

Method of Data Analysis

The Autoregressive Distributed Lag (ARDL) Bounds Testing approach was used to examine both short-run and long-run relationships between cocoa exports and economic growth. The ARDL model is preferred because it was suitable for variables integrated at different orders (I(0) and I(1)) and allows for the estimation of both short-run and long-run relationships. Analyses were carried out using econometric software such as EViews version 13.

Model Specification and Formular

Unit Root Tests

To test for stationarity, the Augmented Dickey-Fuller (ADF) model was used. The general form of the ADF test is specified as:

$$\Delta Y_t = \alpha_0 + \beta_t + \gamma Y_{t-1} + \sum_{i=1}^{p} \delta_i \, \Delta Y_{t-1} + e_{it} \ldots\ldots\ldots\ldots (1)$$

Where:

ΔY_t= first difference of the variable being tested

α = Intercept

β = Time trend coefficient

γ = Unit root coefficient

p = Optimal lag length

δ_i = Coefficients of lagged differences

e_t = Error term

The null hypothesis ($H_0 : \gamma = 0$) implies a unit root (non-stationarity), while the alternative hypothesis ($H1 : \gamma<0$) implies stationarity.

Lag Length Selection Criteria

Selecting an appropriate lag length is essential for model estimation, especially in autoregressive (AR), vector autoregression (VAR), and cointegration models. The optimal lag length was determined using the following selection criteria:

i. Akaike Information Criterion (AIC)

$$AIC = -2lnL + 2k \dots\dots\dots (2)$$

where:

L = Log-likelihood function

k = Number of parameters

A lower AIC value indicates a better model fit.

ii. Schwarz Bayesian Criterion (SBC or BIC)

$$BIC = -2lnL + klnT \dots\dots\dots (3)$$

where:

T = Sample size

BIC penalizes additional parameters more than AIC, making it more conservative in selecting the optimal lag length.

iii. Hannan-Quinn Criterion (HQC)

$$HQC = -2lnL + kln(lnT) \dots\dots\dots (4)$$

HQC provides a balance between AIC and BIC.

The optimal lag length was selected based on the criterion that yielded the lowest value.

Short-run and Long-run Relationship

The ARDL model was specified as:

$$\Delta GDP_t = \alpha_0 + \Sigma\alpha_1\Delta GDP_{t-i} + \Sigma\alpha_2\Delta COCOA\_EXP_{t-i} + \lambda_1 GDP_{t-i} + \lambda_1 COCAO\_EXP_{t-i} + e_t \dots\dots\dots (5)$$

Where:

Δ denotes first difference

λ_1 and λ_2 represent long-run relationships

α's are short-run coefficients

e_t = white noise error term

3. Results and Discussions

Descriptive Statistics of Variables in Nigeria

The descriptive statistics for Nigeria from 1970 to 2023, as shown in Table 2, reveal significant variability in key economic indicators. The mean GDP was 135.42 billion USD, with a maximum of 410.22 billion USD, highlighting moderate growth tempered by extreme fluctuations. Cocoa exports averaged 4.52 billion USD, with a peak of 12.64 billion USD, suggesting modest export earnings compared to GDP, while cocoa production fluctuated, averaging 675.33 thousand tonnes. The exchange rate exhibited substantial volatility, averaging ₦115.22 per USD, with a wide

range from ₦0.75 to ₦950, indicating severe depreciation of the Nigerian naira. Similarly, cocoa prices and cocoa values showed notable volatility, with cocoa prices averaging 1,187.12 USD per tonne and a maximum of 1,848 USD. Skewness and kurtosis statistics further illustrated the non-normal distribution of these variables, particularly cocoa value and exchange rates, which were highly skewed and leptokurtic. The Jarque-Bera test confirmed that while GDP and cocoa prices exhibited moderate deviations from normality, exchange rates and cocoa values were significantly non-normal. These findings underscore the instability in Nigeria's economic indicators, particularly in exchange rates and cocoa export values, which may have profound implications for the country's macroeconomic stability and the sustainability of its cocoa sector.

Table 2: Descriptive Statistics of Variables in Nigeria (1970–2023)

Statistic	GDP	CocoaExp	CocoaProd	EXR	CocoaPrice	CocoaValue
Mean	135.420	4.520	675.330	115.220	1187.120	377,470,500
Median	128.770	3.950	652.800	72.500	1115.000	337,279,519
Maximum	410.220	12.640	1200.550	950.000	1848.000	1,238,160,000
Minimum	45.360	0.920	300.110	0.750	769.000	158,096,081
Std. Dev.	72.150	2.650	184.920	202.140	284.349	178,550,900
Skewness	1.080	0.870	0.420	2.450	0.365	1.895
Kurtosis	3.540	2.980	2.340	7.850	1.869	8.507
Jarque-Bera	8.710	4.190	1.650	45.660	8.155	201.093
Prob.	0.013	0.121	0.438	0.000	0.017	0.000
Obs.	54	54	54	54	54	54

Correlation Matrix of Variables in Nigeria

The correlation matrix in Table 3 for Nigeria (1970–2023) demonstrates strong positive relationships between GDP, cocoa exports, and cocoa value, with values of 0.842 and 0.873, respectively, indicating that cocoa exports significantly contributed to economic growth. Cocoa production also had a positive, though weaker, correlation with GDP (0.678), suggesting that output levels supported growth, albeit less directly than exports. Furthermore, cocoa exports and cocoa value exhibited a strong correlation (0.910), reflecting the close link between export volumes and their monetary returns. Cocoa prices were positively correlated with GDP (0.605), cocoa exports (0.562), and cocoa value (0.640), highlighting the role of global price movements in shaping the cocoa sector. In contrast, exchange rates (EXR) showed negative correlations with all other variables, especially with GDP (-0.553) and cocoa value (-0.498), suggesting that exchange rate volatility adversely affected both economic growth and export performance. This pattern suggests that while cocoa exports and prices promote growth, unstable exchange rates hinder their overall contribution to Nigeria's economy. These findings align with empirical studies such as Ibrahim and Shaibu (2024), which observed a similar positive relationship between exports and GDP in Ghana and Nigeria. Moreover, Ogunya (2024) found that agricultural exports, including cocoa, were positively influenced by socio-economic factors, further supporting the critical role of exports in fostering economic stability. Similarly, Babagana (2023) highlighted the detrimental effect of exchange rate regimes on export competitiveness, corroborating the negative influence of exchange rate volatility observed in Nigeria's cocoa sector. These studies emphasize the need for a stable economic environment, particularly in terms of exchange rate management, to ensure the long-term sustainability of Nigeria's cocoa exports and overall economic growth.

Table 3: Correlation Matrix of Variables in Nigeria (1970–2023)

	GDP	CocoaExp	CocoaProd	EXR	CocoaPrice	CocoaValue
GDP	1.000					
CocoaExp	0.842	1.000				
CocoaProd	0.678	0.701	1.000			
EXR	-0.553	-0.462	-0.319	1.000		
CocoaPrice	0.605	0.562	0.488	-0.351	1.000	
CocoaValue	0.873	0.910	0.735	-0.498	0.640	1.000

Unit Root Test (ADF) Results

Table 4 presents the ADF unit root results in Nigeria over the period 1970–2023. The results show that GDP (t = –2.173; p = 0.226), COCOA_EXP (t = –2.008; p = 0.281), COCOA_PROD (t = –1.894; p = 0.332), and EXCHR (t = –2.247; p = 0.196) are non-stationary at level since their probability values exceed 0.05. This implies the presence of unit roots and suggests that these macroeconomic variables follow stochastic trends over time. However, after first differencing, all four variables become highly significant (p = 0.000), indicating they are integrated of order one, I(1). In contrast, COCOA_PRICE is stationary at level (t = –3.412; p = 0.021), meaning it is integrated of order zero, I(0). Economically, this indicates that while domestic output, cocoa export earnings, cocoa production, and exchange rate exhibit persistent long-run movements, global cocoa prices tend to revert to a long-run mean. The mixture of I(0) and I(1) variables justifies the use of ARDL bounds testing for the Nigerian model.

Table 4: Unit Root Test (ADF)

Variable	Level t-Statistic	Prob.	First Difference t-Statistic	Prob.	Order of Integration
GDP	-2.173	0.226	-6.145	0.000	I(1)
COCOA_EXP	-2.008	0.281	-5.912	0.000	I(1)
COCOA_PROD	-1.894	0.332	-5.674	0.000	I(1)
EXCHR	-2.247	0.196	-5.483	0.000	I(1)
COCOA_PRICE	-3.412	0.021	—	—	I(0)

ARDL Lag Selection

Table 5 presents the VAR lag length selection criteria for Nigeria. The Akaike Information Criterion (AIC), Final Prediction Error (FPE), and Hannan–Quinn (HQ) criteria all select lag 1 as the optimal lag structure, as it records the minimum AIC value (6.451) and the lowest FPE (0.019). This indicates that a one-period lag provides the most efficient and parsimonious specification for capturing the dynamic interactions among Gross Domestic Product, Cocoa Export Earnings, Cocoa Production, Exchange Rate, and Global Cocoa Price. Selecting lag 1 ensures that the model adequately captures short-run dynamics without over-parameterization, thereby enhancing estimation efficiency and reliability.

Table 5: VAR Lag Length Selection Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-301.284	NA	0.241	8.795	8.987	8.869
1	-217.631	156.910	0.019*	6.451*	7.024*	6.660*
2	-205.114	21.384	0.021	6.604	7.558	6.948
3	-196.782	13.005	0.023	6.698	8.033	7.177

ARDL Bounds Test

The Bounds test as shown in Table 6 was conducted to determine whether a long-run relationship exists between cocoa exports and GDP. Since the F-statistic (6.218) exceeds the upper bound critical value at the 1% level, the null hypothesis of no cointegration is rejected. Therefore, a long-run relationship exists between cocoa exports and economic growth in Nigeria.

Table 6: ARDL Bounds Test Result

Test Statistic	**Value**	
F-statistic	6.218	
Number of regressors (k)	4	
Critical Value Bounds		
Significance Level	**I(0)**	**I(1)**
10%	2.450	3.520
5%	2.860	4.010
1%	3.740	5.060

Long-Run ARDL Estimates

The long-run ARDL estimates for Nigeria, presented in Table 7, provide compelling evidence of the significant role that cocoa export earnings play in driving economic growth. The results show that cocoa export earnings have a positive and statistically significant impact on GDP, with a coefficient of 0.294 ($p = 0.036$). This suggests that a 1% increase in cocoa export earnings is associated with approximately a 0.294% increase in economic growth, supporting the export-led growth hypothesis. These findings align with Ibrahim and Shaibu (2024), who demonstrated that the Ghana-Nigeria export trade significantly impacts the economies of both countries, highlighting the essential role of export growth in economic expansion. Similarly, Busari et al. (2020) found that cocoa output and export performance are crucial drivers of macroeconomic growth in Nigeria, further reinforcing the idea that exports are key contributors to economic development. Additionally, global cocoa prices exhibit a positive and statistically significant effect (0.268; $p = 0.032$), indicating that higher international cocoa prices enhance export revenues, which subsequently stimulate long-term economic growth. This is in line with Verter and Bečvářová (2014), who identified world cocoa prices as a significant determinant of export performance and foreign earnings, stressing the impact of global commodity prices on Nigeria's economic performance.

However, cocoa production has a positive coefficient of 0.182, which is statistically insignificant at the 5% level ($p = 0.111$), suggesting that increases in cocoa production alone may not directly influence GDP unless they are linked to export markets and value-added activities. This result aligns with Harya et al. (2024), who emphasized that production efficiency plays a critical role in export performance and economic growth. Similarly, the exchange rate exhibits a

negative and statistically insignificant coefficient (–0.151; p = 0.153), suggesting that exchange rate depreciation does not significantly enhance long-run economic growth, possibly due to exchange rate volatility or structural constraints within the export sector. This finding mirrors Babagana's (2023) research, which found that flexible exchange rate regimes reduce export competitiveness in Nigeria, highlighting the negative impact of exchange rate instability. Additionally, Ali et al. (2023) found that exchange rate volatility can hinder the performance of export sectors by creating uncertainty, further supporting the observation that Nigeria's exchange rate issues negatively impact cocoa exports and economic growth. The overall model shows strong explanatory power, with an R-squared of 0.836 and an adjusted R-squared of 0.812, while the F-statistic (35.406; p = 0.000) confirms the joint significance of the variables. The Durbin-Watson statistic of 1.993 suggests no serial correlation, further validating the robustness of the model.

Table 7: Long-Run Coefficients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
COCOA_EXP	0.294	0.136	2.162	0.036
COCOA_PROD	0.182	0.112	1.625	0.111
EXCHR	-0.151	0.104	-1.452	0.153
COCOA_PRICE	0.268	0.121	2.215	0.032
C	1.102	0.541	2.037	0.047
Model Summary				
R-squared	0.836			
Adjusted R-squared	0.812			
F-statistic	35.406			
Prob(F-statistic)	0.000			
Durbin-Watson stat	1.993			

Short-Run ARDL ECM

In the short run, the ARDL error correction model (ECM) estimates, presented in Table 8, show that cocoa export earnings have a positive but marginally significant effect on GDP (0.158; p = 0.058). This result indicates that while increases in cocoa export earnings contribute to short-term economic growth, the effect is weaker compared to the long-run relationship. This finding aligns with the research of Siaw et al. (2018), who found that cocoa exports have positive short-run growth effects, although the magnitude is smaller than in the long run. Similarly, Babagana (2023) highlighted that the immediate effects of export growth on GDP are often less pronounced compared to the longer-term impacts, as other macroeconomic factors may influence the short-run performance. Global cocoa prices also exhibit a positive but marginally significant short-run effect (0.142; p = 0.059), suggesting that international price shocks are rapidly transmitted to domestic economic performance. This result supports the findings of Mukaila (2023), who emphasized the importance of stable exchange rates in enhancing cocoa exports. In contrast, short-run changes in cocoa production (p = 0.109) and exchange rates (p = 0.214) are statistically insignificant, suggesting that their immediate effects on economic growth are limited. This outcome is similar to the findings of Akande et al. (2023), who suggested that while production practices influence the efficiency of the cocoa sector, short-term changes in output may not immediately translate into economic growth unless effectively integrated into export markets. Furthermore, Adejuwon et al. (2023) found that climatic factors play a significant role in cocoa yield but noted that these effects are often more noticeable in the long term, further reinforcing the limited short-run influence of cocoa production alone on GDP growth.

The ECM term is highly significant (–0.547; p = 0.000), confirming the existence of a stable long-run equilibrium relationship between cocoa exports and GDP. The magnitude of the error correction term suggests that about 54.7% of any short-run disequilibrium is corrected within a year, indicating a relatively fast adjustment towards the long-run equilibrium. This finding aligns with Ogunya (2024), who found that agricultural exports exhibit strong long-run relationships with economic growth and adjust quickly after short-term shocks. The short-run model also demonstrates strong explanatory power, with an R-squared of 0.772 and an adjusted R-squared of 0.744, while the F-statistic (27.915; p = 0.000) confirms the model's overall significance. The Durbin-Watson statistic of 2.001 suggests no autocorrelation, reinforcing the reliability of the results. These findings emphasize the central role of cocoa export earnings and global cocoa prices in driving Nigeria's economic growth, particularly in the long run, as supported by studies like Babagana (2023), Olofintuyi et al. (2023), and Mukaila (2023), which underscore the significant influence of exports and price movements on the economic performance of cocoa-dependent economies. The study also highlights the importance of maintaining stability in exchange rates and ensuring that cocoa production is effectively linked to export markets to maximize its economic contribution.

Table 8: Error Correction Representation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(COCOA_EXP)	0.158	0.081	1.951	0.058
D(COCOA_PROD)	0.121	0.074	1.635	0.109
D(EXCHR)	-0.087	0.069	-1.261	0.214
D(COCOA_PRICE)	0.142	0.073	1.945	0.059
ECM(-1)	-0.547	0.118	-4.636	0.000
Model Summary				
R-squared	0.772			
Adjusted R-squared	0.744			
F-statistic	27.915			
Prob(F-statistic)	0.000			
Durbin-Watson stat	2.001			

Diagnostic & Stability Tests

Table 9 reports the diagnostic tests for the Nigerian model. The Breusch–Godfrey LM test (Statistic = 1.462; p = 0.232) indicates no evidence of serial correlation, confirming independence of the residuals. The Breusch–Pagan test (Statistic = 1.781; p = 0.187) shows absence of heteroskedasticity, implying constant variance of the error term. The Jarque–Bera statistic (1.129; p = 0.568) confirms that the residuals are normally distributed, satisfying the normality assumption. Furthermore, the Ramsey RESET test (Statistic = 1.396; p = 0.244) indicates that the model is correctly specified, with no functional form misspecification or omitted variable bias. Overall, these results confirm the robustness, stability, and reliability of the estimated Nigerian model.

Table 9: Diagnostic Tests

Test	Statistic	Prob.	Decision
Breusch-Godfrey LM	1.462	0.232	No serial correlation

Breusch-Pagan	1.781	0.187	No heteroskedasticity
Jarque-Bera	1.129	0.568	Residuals normally distributed
Ramsey RESET	1.396	0.244	Model correctly specified

4. Conclusion

This study analyzed the short-run and long-run relationships between cocoa exports and economic growth in Nigeria. Cocoa, being a critical agricultural export, holds significant potential for driving economic growth. The findings of this study underscore the importance of cocoa exports in the short-run, where an increase in export earnings positively impacts economic growth, albeit to a smaller extent. In the long run, cocoa exports have a more pronounced effect on Nigeria's economic growth, suggesting that cocoa plays a vital role in driving sustained economic development. However, structural challenges, such as price volatility, exchange rate instability, and insufficient government support, continue to limit the full potential of cocoa exports as an economic growth driver. Thus, the need for comprehensive policies addressing these challenges is evident for enhancing the long-term benefits of cocoa exports in Nigeria's economy. Based on the findings, the study offers the following recommendations:

i. It is recommended that the Nigerian government focus on stabilising exchange rates and implementing policies to ensure sustainable cocoa production. This includes providing financial support for cocoa farmers, encouraging value-added cocoa processing, and ensuring that government spending is directed towards infrastructure improvements that support the cocoa sector.

ii. Cocoa farmers should be incentivised to adopt better farming practices to improve productivity and meet global market demands. Access to credit and agricultural extension services should be expanded to enable farmers to increase their yield and export potential.

iii. Policies should encourage increased cocoa exports by enhancing market access and fostering relationships with international buyers. Additionally, efforts should be made to stabilise cocoa prices and reduce reliance on fluctuating international markets through better price risk management strategies.

iv. Continuous monitoring of cocoa's role in economic growth is necessary to track the long-term sustainability of cocoa exports. Further studies should explore the impacts of global price volatility on the Nigerian economy, providing a comprehensive understanding of market dynamics.

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