

EFFECT OF SELECTED MACROECONOMIC VARIABLES ON ECONOMIC GROWTH IN NIGERIA

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ABSTRACT

Nigeria's economic growth has remained persistently weak despite policy reforms, raising concerns about the financial system's capacity to support sustainable development. This study examined the effect of financial stability indicators on economic growth in Nigeria using annual time-series data spanning 1986–2024. The data were sourced from the Statistical Bulletin of the Central Bank of Nigeria, covering a sample size of 39 observations. Real Gross Domestic Product (RGDP) was used as a proxy for economic growth, while inflation rate, interest rate, and gross capital formation were employed as financial stability indicators. The study adopted the Autoregressive Distributed Lag (ARDL) bounds testing approach to examine both long-run and short-run relationships. The results confirm the existence of a long-run equilibrium relationship among the variables. Inflation and interest rate exert negative and statistically significant effects on economic growth, indicating that macroeconomic instability and high borrowing costs constrain productive activities. Gross capital formation shows a positive and significant impact, underscoring the importance of investment in driving output expansion. The findings highlight the need for coordinated monetary and fiscal policies aimed at price stability, balanced interest rate management, and sustained investment promotion to achieve stable and sustainable economic growth in Nigeria.

Keywords: Economic Growth, Financial Stability, Gross Capital Formation, Inflation Rate Interest Rate

Introduction

Governments worldwide are tasked with improving citizens' welfare through effective economic policies that ensure the provision of essential public goods such as education, healthcare, infrastructure, and security. The availability of these services enhances productivity, stimulates investment, and promotes income generation, thereby supporting economic growth (Acharya & Yorulmazer, 2021). Experiences from countries such as South Africa demonstrate that sustained public investment in infrastructure, education, and financial sector reforms can support steady economic performance. Economic growth, generally defined as the sustained expansion of a country's productive capacity and output, depends largely on stable macroeconomic conditions and well-functioning financial systems capable of mobilizing savings and channeling them into productive investment.

Nigeria's growth performance has been characterized by significant volatility due to fluctuating oil prices, policy inconsistencies, and external shocks (NBS, 2023). Although the economy recorded growth of 3.52 % in the fourth quarter of 2022 and 3.10 % for the full year, overall growth declined to 2.74 % in 2023, with a modest recovery to 2.98 % in the first quarter of 2024 (NBS, 2024). These fluctuations highlight structural weaknesses and the importance of maintaining financial stability for sustained economic expansion. Financial stability ensures the resilience of financial institutions, facilitates efficient resource allocation, and promotes investment and employment (CBN, 2020; World Bank, 2016). Classical financial development theories emphasize the role of financial systems in mobilizing savings for productive investment (Schumpeter, 1912; Goldsmith, 1969; McKinnon, 1973), while the global financial crisis of 2007-2009 further demonstrated the consequences of systemic financial instability (Adaramola & Dada, 2020).

Key macro-financial indicators commonly used to assess financial stability include inflation rate, interest rate and gross capital formation. Inflation remains a persistent challenge in Nigeria, averaging approximately 14.07 % between 1996 and 2025 and reaching 18.02 % in September 2025 (NBS, 2025). Evidence suggests that inflation levels above 13 % significantly reduce economic growth by raising production costs and discouraging long-term investment (NBS, 2025). Similarly, high interest rates, which stood at about 27.50 % in 2025, increase borrowing costs and limit private sector investment, although they are often used to control inflation (Adediran & Olufemi, 2025; Adediran & Olufemi, 2023). Gross capital formation, averaging USD 19.94 billion between 2010 and 2024, represents investment in productive infrastructure and capacity but remains constrained by governance challenges, insecurity, and infrastructural deficits (CEIC, 2024; Adegbite, 2022).

Despite policy reforms, Nigeria continues to experience fragile growth conditions characterized by persistent inflationary pressures, high borrowing costs and weak capital formation, (Adenikinju & Ajayi, 2025; CBN, 2024). These structural challenges contribute to inconsistent economic performance and highlight the need for sustained financial stability. Over the past decade, real GDP growth has remained relatively low, averaging around 2.9 % in 2023 and projected at 3.3 % in 2024, barely exceeding population growth rates (IMF, 2024). Although previous studies have examined financial development and inclusion, fewer studies have focused specifically on the role of financial stability indicators in driving economic growth in Nigeria (Ademola et al., 2023; Adenikinju & Ajayi, 2020). Existing research also often relies on outdated datasets that do not capture recent structural reforms, exchange-rate liberalization, and post-pandemic macroeconomic dynamics (Agbaje et al., 2023).

Consequently, there remains a significant empirical gap regarding how key financial stability indicators namely inflation rate, interest rate and gross capital formation jointly influence Nigeria's economic growth. By analyzing updated data covering the period 1986-2024, this study provides contemporary evidence on the macro-financial determinants of

growth and contributes to policy discussions on strengthening financial stability as a foundation for sustainable economic development.

Objectives of the Study

- i. To examine the effect of inflation rate on economic growth in Nigeria.
- ii. To investigate the effect of interest rate on economic growth in Nigeria.
- iii. To assess the effect of gross capital formation on economic growth in Nigeria.

Literature Review

Economic Growth

Economic growth is commonly defined as a sustained increase in a country's output of goods and services over time, usually measured by changes in real GDP. Ahmed and Olowookere (2021) and Alsamara et al. (2019) associate growth with expanding economic activities and improved living standards, while Altman (2021) emphasizes the long-run expansion of productive capacity. In contrast, Amali et al. (2022) focus more narrowly on the numerical increase in GDP, whether in nominal or real terms. The difference is important. While some scholars view growth as a structural and productivity-driven process, others treat it primarily as a statistical rise in output. The broader perspective highlights sustainability and welfare improvement, whereas the narrower view may overlook distributional and structural dynamics. However, most studies converge on GDP growth as the operational measure. What remains less explored in the Nigerian context is how financial stability indicators jointly influence growth performance over time, particularly under periods of macroeconomic volatility. This study therefore links economic growth directly to measurable financial stability variables rather than treating it as an isolated macroeconomic outcome.

Financial Stability

Financial stability is generally described as a condition in which financial institutions, markets, and payment systems function effectively and absorb shocks without major disruptions. Eze et al. (2021) emphasize system resilience and continuity of intermediation, while Agbaje (2023) stresses investor confidence and asset value preservation as core outcomes of stability. Although both views recognize the importance of a sound financial system, they differ in emphasis: one focuses on institutional robustness, the other on confidence and growth outcomes. This distinction suggests that financial stability is both a structural condition and a behavioral outcome. Yet, much of the literature remains descriptive, outlining its importance without empirically connecting specific stability indicators to economic growth. In Nigeria, episodes of exchange rate volatility, inflationary pressure, and interest rate fluctuations indicate that financial stability cannot be assumed. The existing gap lies in integrating these indicators within a unified framework to assess their combined effect on growth.

Inflation Rate

Inflation has generated considerable debate in the growth literature. Karugu et al. (2018) note that moderate inflation may stimulate economic activities, particularly in developing economies, but persistent inflation distorts investment and consumption decisions. This reflects the structuralist-monetarist divide: some scholars argue that low and predictable inflation supports growth, while others warn that even moderate inflation can erode purchasing power and discourage long-term investment. Empirical findings for developing countries are mixed, suggesting that the growth effect of inflation may depend on threshold levels. Despite this debate, many Nigerian studies treat inflation as uniformly harmful without testing its nonlinear or stability-related implications. This study addresses that limitation by examining inflation within a broader financial stability framework.

Interest Rate

Interest rate is defined by the Central Bank of Nigeria as the Minimum Rediscount Rate, which serves as a benchmark for other rates in the economy. Okereke et al. (2023) describe it as the cost of borrowing or the return on savings, varying by maturity and liquidity. While

classical theory views higher interest rates as encouraging savings and efficient capital allocation, Keynesian perspectives argue that high rates may suppress investment and output. The disagreement centers on whether interest rate primarily equilibrates savings and investment or constrains aggregate demand. In Nigeria, fluctuating policy rates have often been linked to credit constraints and private sector performance. However, prior studies rarely integrate interest rate dynamics with other financial stability variables when assessing growth effects, leaving a gap this study intends to fill.

Gross Capital Formation

Gross capital formation is widely recognized as a driver of productive capacity. Olasehinde-Williams et al. (2024) and Oluwaseun and Kolawole (2021) agree that higher capital accumulation enhances output and technological advancement. Yet, while these scholars emphasize quantity of investment, fewer studies examine the efficiency and stability context within which capital formation occurs. Capital accumulation may not translate into growth if macroeconomic instability discourages long-term planning. Thus, the analytical gap lies in understanding how gross capital formation interacts with inflation, interest rate, and exchange rate conditions to influence economic growth. By synthesizing these perspectives, the present study moves beyond repetitive definitions and establishes a clearer linkage between financial stability indicators and Nigeria's growth.

Empirical Review

Ifeacho et al. (2025) investigated the relationship between inflation and economic growth in Nigeria for 1981-2021 using time-series econometric techniques including impulse response and frequency causality analysis. The study found a negative long-run relationship between inflation and growth, while interest rates and physical capital accumulation positively influenced growth. Inflation was shown to Granger-cause growth in the short and medium run, and investment shocks had persistent positive effects on output. The study is insightful for capturing dynamic interactions, but its limitation lies in not incorporating broader financial-sector variables such as exchange rate or credit conditions that could better explain inflation-growth transmission mechanisms.

Chidi and Bright (2025) examined the joint effects of inflation and unemployment on Nigeria's economic growth using annual time-series data, co-integration analysis, and an Error Correction Model. The results showed that both inflation and unemployment exert significant negative effects on growth, with evidence of a stable long-run equilibrium relationship among the variables. The study highlights macroeconomic instability as a key constraint to growth; however, it is limited by the exclusion of additional macro-financial variables such as interest rate and exchange rate dynamics, which could provide a more comprehensive understanding of the structural drivers of Nigeria's growth fluctuations.

Olabisi and Akeju (2025) analyzed the long-run interactive effects of migrant remittances and gross fixed capital formation on Nigeria's economic growth using ARDL bounds testing and Fully Modified OLS on data from 1990–2023. The findings revealed that both remittances and capital formation positively and significantly contributed to growth, suggesting that external inflows and domestic investment jointly stimulate productive capacity. While the study provides useful evidence on investment-growth linkages, it is limited by not examining possible nonlinear or threshold effects, such as diminishing returns to remittances at higher inflow levels, which may affect long-term growth outcomes.

Olasehinde-Williams et al. (2024) examined the effect of interest rate volatility on Nigeria's economic growth using annual data from 1981–2020 and the Quantile Autoregressive Distributed Lag (QARDL) model. The results indicated that interest rate volatility negatively affects economic growth in both the short and long run, with stronger short-run impacts during weak economic conditions. The study emphasizes the importance of interest rate stability for investment planning. However, its analytical scope is limited because it did not incorporate

complementary financial-sector indicators such as credit availability or capital flows, which could enhance understanding of the broader transmission channels.

Anagun and Sokunbi (2024) investigated the disaggregated effects of capital formation on Nigeria's economic growth between 1990 and 2021 using ARDL techniques after multiple unit-root tests. The findings revealed that both physical and human capital formation exert significant positive long-run effects on growth, while education spending, foreign direct investment, and private-sector credit significantly influenced growth in the short run. The study contributes to understanding sector-specific investment impacts; however, it is limited by insufficient consideration of institutional quality and governance constraints, which may determine how effectively capital investments translate into sustained economic growth.

Opadeji et al. (2023) assessed the impact of gross capital formation and infrastructure on Nigeria's economic development using Johansen co-integration and a Vector Error Correction Model for 1991-2021 data. While infrastructure investment showed a significant positive effect on development, gross capital formation was statistically insignificant, suggesting inefficiencies in capital allocation. The study underscores the importance of infrastructure quality for development outcomes; however, it is limited by the omission of institutional and governance indicators, which could better explain why capital formation does not automatically translate into measurable development gains.

Ademola et al. (2023) examined the nexus between interest rate and real GDP growth in Nigeria using quarterly data (2006Q1-2022Q4) and the ARDL model, incorporating money supply and institutional quality as additional variables. The findings revealed a significant long-run cointegrating relationship between interest rates and economic growth, indicating that stable lending rates support growth performance. Although the study highlights the role of monetary policy stability, it is limited by focusing primarily on interest rate channels while giving less attention to exchange rate fluctuations and financial market depth, which also influence macroeconomic growth dynamics.

Gbarawae and Tonye (2023) analyzed the interactive relationship between interest rate, exchange rate, and economic growth in Nigeria from 1980-2022 using ADF unit-root testing and ARDL estimation. The results indicated a significant long-run relationship, with the interaction between real interest rate and exchange rate negatively affecting GDP growth, while deposit interest rate interaction was positive but insignificant. The study provides useful insights into monetary-exchange rate interactions; however, its limitation lies in not incorporating structural factors such as inflation dynamics or capital formation, which could strengthen the explanatory power of the growth model.

Theoretical Framework

Financial Stability Theory was adopted as the theoretical framework for this study. Financial Stability Theory can be traced back to Hyman Minsky's seminal writings in the early 1970s, particularly his Financial Instability Hypothesis, which was developed in the United States during a period of expanding financial markets and increasing leverage across economic sectors. Financial Stability Theory posits that a financial system can only support sustainable economic growth when its institutions, markets, and infrastructure are robust enough to withstand internal and external shocks. Financial Stability Theory is the most appropriate theoretical framework for this study because it directly links macro-financial variables such as inflation, interest rate, exchange rate, and gross capital formation to the overall performance of the real economy.

The core argument of the theory is that sustainable economic growth depends on a stable financial system capable of efficiently mobilizing savings, allocating credit, maintaining confidence, and absorbing shocks. In the Nigerian context, where frequent episodes of high inflation, interest rate volatility, exchange rate fluctuations, and weak capital accumulation repeatedly undermine growth, the theory provides a comprehensive lens to understand how

these variables interact to either support or destabilize the economy. Unlike growth theories that focus mainly on capital accumulation or technological progress, Financial Stability Theory captures the dynamic interplay between financial conditions and economic output, making it particularly suited for examining growth in economies experiencing structural vulnerabilities. It also aligns with empirical evidence showing that countries with unstable financial systems typically struggle to achieve consistent growth. By adopting this theory, the study is able to explain not only the magnitude of the effects of the variables but also the mechanisms through which financial instability constrains investment, productivity, and macroeconomic performance in Nigeria.

Methodology

This study employed an ex post facto research design and utilized annual time-series data spanning the period 1986–2024 to investigate the effect of financial stability indicators on economic growth in Nigeria. The data were obtained from the Statistical Bulletin of the Central Bank of Nigeria. Economic growth was measured using real Gross Domestic Product (RGDP), while the selected financial stability indicators comprised inflation rate, interest rate, gross capital formation, and nominal exchange rate. It is important to state that the data were used in their original form and were not transformed into logarithmic values.

Descriptive statistics were initially applied to assess the distributional characteristics of the variables. To examine the time-series properties of the data, the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) unit root tests were conducted to determine the order of integration of the variables. Subsequently, the Autoregressive Distributed Lag (ARDL) bounds testing technique was employed to ascertain the existence of a long-run relationship among the variables. The Error Correction Model (ECM) was then estimated to capture the short-run dynamics and the speed of adjustment toward long-run equilibrium. Finally, relevant diagnostic and stability tests were performed to confirm the robustness and reliability of the estimated model.

Model Specification

The model specification was adapted from the framework of Ademola et al. (2023), which linked macroeconomic stability indicators to economic growth. Accordingly, real GDP was modeled as a function of inflation rate, interest rate and gross capital formation to capture the influence of financial stability on growth.

The functional model is stated as follows:

$$GDP = f(INF, INT, GCF)$$

The explicit form of the model is expressed as:

$$GDP_t = \beta_0 + \beta_1 INF_t + \beta_2 INT_t + \beta_3 GCF_t + \varepsilon_t$$

Where:

GDP = Gross Domestic Product (Proxied by RGDP)

INF = Inflation Rate

INT = Interest Rate

GCF = Gross Capital Formation

β_0 = Constant term

ε_t = The error term

β_1 - β_3 = Coefficients of the explanatory variables

The coefficients β_1 , β_2 , and β_3 measure the magnitude and direction of the impact of each independent variable on economic growth.

Table 1 Measurement of Variables

Variable	Type	Measurement/Proxy	Source
Economic Growth (GDP)	Dependent	Real Gross Domestic Product (RGDP) growth rate	Ademola et al. (2023); Gbarawae & Tonye (2023)
Inflation Rate (INF)	Independent	Annual percentage change in Consumer Price Index	Ifeacho et al. (2025); Chidi & Bright (2025)
Interest Rate (INT)	Independent	Monetary Policy Rate (MPR) or average lending rate (%)	Olasehinde-Williams et al. (2024); Ademola et al. (2023)
Gross Capital Formation (GCF)	Independent	Gross Capital Formation as percentage of GDP	Anagun & Sokunbi (2024); Opadeji et al. (2023)

Source: Author's Compilation, 2025

Data Analysis and Results

Table 2: Descriptive Statistics

	GDP	INFLR	INTR	GCF
Mean	4.489744	19.94000	13.97897	24.69051
Median	3.700000	12.88000	13.50000	16.78000
Maximum	15.30000	72.84000	26.00000	54.95000
Minimum	0.100000	5.390000	6.100000	10.69000
Std. Dev.	3.285278	17.04776	3.701682	15.73306
Skewness	1.092922	1.676694	0.731930	0.681594
Kurtosis	4.498461	4.685813	4.609333	1.782680
Observations	39	39	39	39

Source: Author's Compilation, 2025

Table 2 presents the descriptive statistics of the variables used in the study. The average GDP growth rate over the study period stood at 4.49%, with a median value of 3.70%, indicating moderate economic growth but with some upward fluctuations. The maximum growth rate of 15.30% and minimum of 0.10% reflect significant variability in Nigeria's economic performance. The standard deviation of 3.29 further confirms moderate dispersion around the mean, while the positive skewness (1.09) indicates that high-growth episodes occurred occasionally. The kurtosis value of 4.50 suggests a leptokurtic distribution, implying the presence of extreme observations.

Inflation recorded a relatively high mean of 19.94%, with wide variability as shown by the large standard deviation of 17.05 and a maximum value of 72.84%, indicating persistent price instability over the period. Interest rates averaged 13.98%, reflecting relatively high borrowing costs, while gross capital formation recorded a mean of 24.69%, suggesting moderate investment levels. All variables exhibited positive skewness, indicating the dominance of higher-value observations, while kurtosis values above three for most variables suggest distributions characterized by occasional extreme movements.

Table 3: Correlation Analysis of the Variables

	GDP	INFLR	INTR	GCF
GDP	1.000000			
INFLR	-0.246551	1.000000		
INTR	-0.060669	0.398260	1.000000	
GCF	-0.323137	0.423761	0.332379	1.000000

Source: Eview 13 Output, 2026.

The result of the correlation matrix in Table 4.2 shows the relationships between the dependent variable (GDP) and the independent variables inflation rate, interest rate and gross capital formation as well as the correlations among the independent variables themselves. From the table, it can be observed that all the correlation coefficients among the independent variables are below 0.70, indicating no risk of multicollinearity. The table also shows that GDP has a negative correlation with all the explanatory variables, while some independent variables, such as inflation rate and gross capital formation, exhibit positive relationships with each other.

Table 4: Augmented Dickey-Fuller (ADF) Unit Root Test

Variables	Test	T-statistic at Intercept	Critical value at 5%	Probability	Results
GDP	ADF	-4.513272	-2.941145	0.0009	I(0)
INFLR	ADF	-3.566968	-2.943427	0.0115	I(0)
INTR	ADF	-3.607361	-2.976263	0.0124	I(1)
GCF	ADF	-5.751809	-2.943427	0.0000	I(1)

Source: Eview 13 Output, 2026.

The Augmented Dickey-Fuller (ADF) test results in the table assess the stationarity of the variables used in the study. GDP and inflation rate (INFLR) are stationary at level, as indicated by their test statistics of -4.513 and -3.567, which are more negative than their respective 5% critical values, and their p-values are below 0.05. This implies that both GDP and inflation do not contain a unit root and are integrated of order zero, I(0).

Interest rate (INTR), and gross capital formation (GCF) are stationary after first differencing, with test statistics exceeding the critical values and p-values below 0.05. This indicates that these variables are integrated of order one, I(1), and contain a unit root in levels. the mix of I(0) and I(1) variables suggests that an econometric model such as ARDL (Autoregressive Distributed Lag) would be appropriate for examining both short-run and long-run relationships between financial stability indicators and economic growth in Nigeria.

Table 5: ARDL Co-integration Test Result

Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	4.638753	10%	2.2	3.09
K	5	5%	2.39	3.49
		1%	3.06	4.15

Source: E-view Output, 2026.

Table 4.4 above presents the result of the ARDL bound test approach to Co-integration. The result revealed that there is presence of co-integration among the variables. The f-statistics value of 4.638753 is greater than the lower bound value of 2.56 and upper bound values of 3.49 at a 5% level of significance. Hence, there is sufficient proof of the presence of a long-run

equilibrium relationship between financial stability and economic growth in Nigeria between 1986 and 2024. The result thus shows that the inflation rate, interest rate, and gross capital formation have a long-run relationship with foreign direct investment in Nigeria within the period under study.

Table 6: Long Run Form Relationship
Dependent Variable: GDP

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.945607	2.777527	-0.340449	0.7382
INFLR	-0.876736	0.320904	-2.732084	0.0154
INTR	-1.748430	0.793872	-2.202408	0.0437
GCF	3.023000	1.061447	2.847997	0.0122
R-squared	0.701680			
Adjusted R-squared	0.677141			
F-statistic	7.240160			
Prob(F-statistic)	0.000162			

Source: E-view Output, 2026.

The long run results indicate that the model provides a good explanation of economic growth in Nigeria over the period studied. The R-squared value of about 0.70 shows that approximately 70 percent of the variations in economic growth are explained by inflation rate, interest rate and gross capital formation. The adjusted R-squared of roughly 0.68 further confirms the robustness of the model after adjusting for the number of explanatory variables. In addition, the F-statistic is statistically significant at the 5 percent level, implying that the explanatory variables are jointly significant and that the model is well specified.

Inflation rate has a negative and statistically significant effect on economic growth, as indicated by its coefficient of -0.8767 and a probability value below 0.05. This suggests that rising inflation undermines economic growth in Nigeria in the long run, likely by increasing uncertainty, reducing purchasing power, and discouraging investment. The result aligns with the view that macroeconomic instability, particularly persistent inflation, has negative effect on sustainable growth. Interest rate also exhibits a negative and statistically significant relationship with economic growth. The coefficient of -1.7484 implies that higher interest rates constrain growth by increasing the cost of borrowing and discouraging private sector investment. This finding highlights the importance of an accommodative interest rate environment for stimulating productive economic activities in Nigeria. Gross capital formation shows a positive and statistically significant impact on economic growth. With a coefficient of 3.0230, the result indicates that increased investment in physical capital strongly promotes economic growth by expanding productive capacity, improving infrastructure, and enhancing overall economic efficiency. This reinforces the role of investment as a key driver of long-run growth.

Table 7: ARDL Short-run Relationship
Dependent Variable: D(GDP)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(INFLR)	-0.191832	0.028327	-6.771983	0.0000
D(INTR)	-0.391617	0.115623	-3.387010	0.0041
D(GCF)	-0.067441	0.052669	-1.280470	0.2198
ECM(-1)*	0.016666	0.002923	5.701761	0.0000
R-squared	0.701680			
Adjusted R-squared	0.677141			
F-statistic	7.240160			
Prob(F-statistic)	0.000162			

Source: E-view Output, 2026.

The ARDL short-run error correction results reveal important dynamics in the relationship between financial stability indicators and economic growth in Nigeria. The model exhibits strong explanatory power, as indicated by an R-squared value of approximately 0.70, suggesting that about 70 percent of short-run variations in economic growth are explained by changes in inflation rate, interest rate, and gross capital formation,. The adjusted R-squared further confirms the robustness of the model, while the statistically significant F-statistic indicates that the explanatory variables are jointly significant in explaining short-run movements in economic growth.

In the short run, changes in inflation rate exert a negative and highly significant effect on economic growth. The coefficient of D(INFLR) indicates that rising inflation immediately constrains growth, reflecting the destabilizing effects of price volatility on consumption, investment decisions, and overall economic confidence. Similarly, changes in interest rate also have a negative and statistically significant impact on economic growth in the short run. This implies that increases in interest rates raise borrowing costs, discourage private sector investment, and slow down productive economic activities. Changes in gross capital formation, although negative, are statistically insignificant in the short run. This suggests that investment does not translate instantly into economic growth, possibly due to gestation lags associated with capital projects and structural inefficiencies within the Nigerian economy.

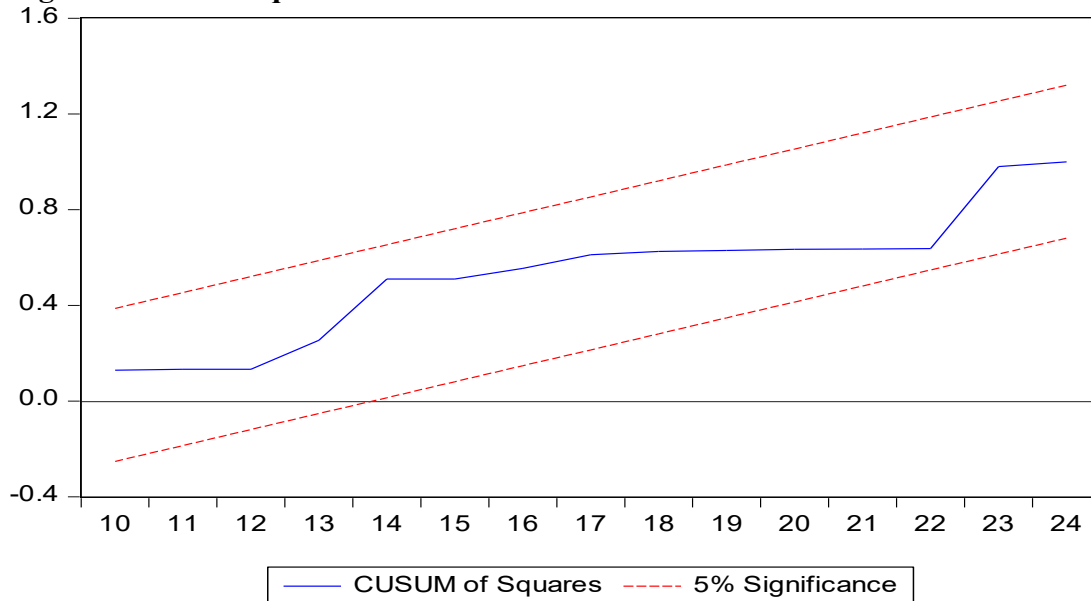
The error correction term is positive and statistically significant, confirming the existence of a short-run adjustment process. This indicates that deviations from long-run equilibrium are corrected over time, with the economy gradually adjusting toward its long-run growth path.

Table 8: Post-Estimation Diagnostics Tests

Test	P-Value
Heteroskedasticity Test	0.7428
Serial Correlation LM Test	0.5184

Source: E-view Output, 2025.

The result as presented in the above table revealed that there was no evidence of heteroskedasticity, serial correlation, and the data are normally distributed in the estimated ARDL-ECM model and have the p-values of 0.7428 and 0.5184 respectively. They were found to be greater than the 0.05 level of significance.

Figure I: Cusum Squared Tests


Source: E-view Output, 2026.

The CUSUM squared tests in Figure I revealed that the model is stable and the regression equation is correctly specified as the plots of the charts lie within the critical bounds at a 5% significant level. The figure above shows that the plot of CUSUM squared for the model under consideration is within the 5 percent critical bound. This by implication suggests that the parameters of the model do not suffer from any structural instability over the period of study. That is, all the coefficients in the error correction model are stable.

Discussion of Findings

The regression results provide important insights into the relationship between financial stability indicators and economic growth in Nigeria and are consistent with recent empirical literature. The finding that inflation rate exerts a negative and statistically significant long-run effect on economic growth supports the argument that persistent price instability undermines economic performance by reducing purchasing power and increasing uncertainty. In the Nigerian context, rising food prices, exchange rate pressures, and structural supply constraints have sustained inflationary trends, making long-term planning difficult for investors and producers. This result aligns with recent Nigerian studies which report that sustained inflation hampers long-term growth and weakens macroeconomic stability (Wadike et al., 2022; Adebayo & Olatunji, 2023).

Similarly, the negative and significant long-run effect of interest rate on economic growth suggests that high borrowing costs discourage private investment and productive activities. In Nigeria, elevated monetary policy rates have translated into high commercial lending rates, limiting access to credit for businesses, especially small and medium-scale enterprises. This credit constraint reduces expansion, employment generation, and output growth. This finding is consistent with recent empirical evidence showing that elevated interest rates constrain credit expansion and slow economic growth in Nigeria (Okorie & Uwaleke, 2022; Lawal et al., 2023).

The positive and statistically significant impact of gross capital formation confirms the critical role of investment in driving economic growth. Increased capital accumulation enhances productive capacity, infrastructure development, and technological advancement. This result aligns with recent Nigerian studies which find that gross capital formation is a key long-run determinant of economic growth (Ogunleye et al., 2021; Yusuf & Abdullahi, 2023), underscoring the importance of policies that stimulate both public and private investment.

Conclusion and Recommendations

The study concludes that financial stability indicators exert significant, though varied, effects on Nigeria's economic growth. Gross capital formation emerged as the strongest long-run driver, highlighting the importance of sustained investment in infrastructure and productive capacity. Conversely, high inflation and interest rates negatively impact growth by creating uncertainty and discouraging private investment. Sustainable economic expansion in Nigeria requires coordinated policies that promote capital accumulation, maintain price and cost stability, and foster a stable macroeconomic environment.

Based on the findings of this study, the following recommendations were made;

- i. Inflation exerts a negative effect on growth, the monetary authority, particularly the Central Bank of Nigeria, should adopt a credible and transparent inflation-targeting approach. This includes strict control of excess liquidity, improved coordination with fiscal authorities to reduce deficit monetization, and clear policy communication to anchor inflation expectations.
- ii. Given the adverse impact of high interest rates on growth, interest rate management should balance price stability with real sector expansion. While tightening may be necessary to curb inflation, targeted credit interventions, concessional lending windows, and risk-sharing mechanisms should be strengthened to ensure productive sectors can access affordable financing.
- iii. Since gross capital formation positively drives growth, government should prioritize policies that stimulate investment through tax incentives, stable regulatory frameworks, and increased capital expenditure in productive sectors such as manufacturing and infrastructure.

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