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## **The Impact of High Interest Rates on Economic Growth in Nigeria: A Critical Analysis of the Central Bank's Monetary Policy**

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### **ABSTRACT**

This study examines the effect of high interest rates on economic growth in Nigeria, focusing on the Central Bank of Nigeria's (CBN) monetary policy framework. It specifically evaluates the short-run and long-run relationships among the Monetary Policy Rate (MPR), Gross Domestic Product (GDP), inflation rate, exchange rate, and broad money supply. The study adopts an ex-post facto research design and employs annual time-series data covering 2005–2024. The study analyzes data using the Autoregressive Distributed Lag (ARDL) model to examine short-run and long-run dynamics among variables with different orders of integration. The model assesses the effects of MPR, inflation rate, exchange rate, and broad money supply on economic growth. The findings indicate that high interest rates, proxied by MPR, have a statistically significant negative effect on GDP, suggesting that tight monetary policy constrains economic growth by increasing borrowing costs and discouraging private investment. Conversely, broad money supply has a positive and statistically significant effect on GDP, demonstrating the importance of adequate liquidity in stimulating investment and productive economic activities. The findings further indicate that although inflation control remains essential, excessively high interest rates may undermine output expansion and private-sector investment. The study concludes that the CBN should pursue a balanced monetary policy that controls Inflation without imposing excessively restrictive interest rates. Policymakers should improve access to affordable credit for businesses and households and strengthen monetary-fiscal policy coordination. Such measures would support investment, sustainable economic growth, price stability, and improved macroeconomic performance in Nigeria.

### **Keywords**

Central Bank of Nigeria, Economic Growth, Interest Rate, Monetary Policy.

### **1. Introduction**

The Central Bank of Nigeria (CBN) was established under the CBN Act of 1958 and commenced operations in 1959. It is Nigeria's apex monetary authority, responsible for issuing currency, maintaining external reserves, promoting monetary stability, and acting as banker to the government. A key mandate of the CBN is to ensure price stability, which it seeks to achieve primarily through interest rate policy and monetary interventions.

The Central Bank of Nigeria (CBN) was established under the Central Bank of Nigeria Act of 1958 and commenced operations on 1 July 1959. It serves as Nigeria's apex monetary authority. It issues legal tender currency, maintains external reserves, promotes monetary and price stability, supports a sound financial system, and acts as banker and financial adviser to the Federal Government (Central Bank of Nigeria [CBN], 2026a). The CBN's mandate is currently governed principally by the CBN Act 2007, which specifically identifies ensuring monetary and price stability, issuing legal tender currency, maintaining external reserves, promoting a sound financial system, and acting as banker to the Federal Government as the Bank's principal objectives (CBN, 2007).

A central instrument through which the CBN influences monetary conditions is the Monetary Policy Rate (MPR), which affects short-term interest rates and the broader cost and availability of credit in the economy. The CBN

explains that it conducts monetary policy partly by influencing short-term interest rates, money supply, and credit to pursue price stability and other macroeconomic objectives (CBN, 2025). In response to persistent inflationary pressures, the CBN maintained a relatively tight monetary policy stance during much of 2024 and 2025. For example, the MPR rose to 27.5% in November 2024 and remained at that level through July 2025, before falling to 27.0% in September 2025 and then to 26.5% in February 2026 (CBN, 2026b). The CBN's own assessment indicates that sustained monetary tightening contributed to the moderation of Inflation during 2025.

In its bid to manage inflation and currency stability, especially in recent years, the CBN has consistently adopted a high-interest-rate policy. However, concerns have been raised about the growth-inhibiting effects of such a policy stance, especially given the structure of the Nigerian economy (Sanusi, 2012).

The interest rate is a fundamental monetary policy instrument used by central banks to influence macroeconomic outcomes, particularly Inflation, investment, and economic growth. In Nigeria, the Central Bank of Nigeria (CBN) plays a critical role in setting the Monetary Policy Rate (MPR), which influences the general level of interest rates in the economy. The overarching goal is to maintain price stability and support economic growth. However, persistently high interest rates in Nigeria have raised concerns among policymakers, investors, and scholars about their potential adverse effects on economic performance (Iyoha & Oriakhi, 2013).

Historically, Nigeria's monetary policy has oscillated between tightening and easing, depending on the prevailing macroeconomic conditions such as inflationary pressures, foreign exchange volatility, and fiscal deficits. In recent years, particularly in response to inflation and currency depreciation, the CBN has maintained a high-interest-rate regime, with the MPR hovering between 13% and 18.75% from 2022 to 2025 (CBN, 2025). While high interest rates aim to curb Inflation and stabilize the naira, such policies may have unintended consequences for credit availability, investment, and overall economic growth (Obamuyi, 2009).

Interest rate policy is one of the most potent monetary tools used by central banks to regulate economic activity, control inflation, and maintain currency stability. In Nigeria, the Central Bank of Nigeria (CBN) uses the Monetary Policy Rate (MPR) as a benchmark for setting lending rates in the banking system. However, despite this instrument's strategic role, Nigeria's experience with persistently high interest rates raises important questions about the effectiveness of such a policy regime in fostering sustainable economic growth.

Over the years, Nigeria has struggled with structural macroeconomic challenges such as high Inflation, exchange rate volatility, fiscal deficits, low levels of industrialization, and overdependence on oil exports. These challenges often prompt the Central Bank to adopt contractionary monetary policies, including increasing the MPR to curb Inflation and stabilize the naira. For instance, between 2022 and 2025, the CBN raised the MPR from 13% to over 18.75% in response to rising Inflation, declining foreign reserves, and currency devaluation (CBN, 2025). While such measures typically aim to anchor inflation expectations and stabilize the economy, they may also restrict access to credit, dampen investment appetite, and slow economic activity, especially in the real sector (Iyoha & Oriakhi, 2013).

From a theoretical perspective, the relationship between interest rates and economic growth is complex. Keynesian theory posits that lower interest rates stimulate investment and aggregate demand, thereby fueling economic growth. Conversely, classical economists argue that high interest rates promote savings and discourage investment, which may restrain growth in the short term but encourage capital accumulation in the long run (Jhingan, 2016). In Nigeria, the economy's structure—marked by a weak manufacturing base, underdeveloped financial markets, and high costs of doing business—tends to amplify the negative effects of high interest rates. For instance, small and medium-sized enterprises (SMEs), critical drivers of job creation and GDP growth, often cannot access credit at prevailing interest rates because lending costs are prohibitively high (Acha & Acha, 2011).

Furthermore, empirical studies provide conflicting evidence on the relationship between interest rates and economic growth in Nigeria. While some scholars argue that high interest rates discourage private sector investment and impede growth (Obamuyi, 2009; Olalekan & Akinbobola, 2012), others maintain that interest rate hikes help stabilize macroeconomic conditions, attract foreign portfolio investments, and thereby indirectly support long-term growth (Mbutor, 2010). However, the real concern is the CBN's continued reliance on high interest rates as a default response to inflationary pressures, without adequately considering the long-term implications for growth and development.

Additionally, several institutional and structural factors constrain the effectiveness of monetary policy in Nigeria, including shallow financial inclusion, limited transmission mechanisms, and a high rate of informal economic activity. In such an environment, interest rate policy may not achieve its desired impact on output growth. Instead, it may further distort credit markets, increase production costs, and crowd out private investment (Sanusi, 2012). This calls for a more nuanced and evidence-based approach to monetary policy design in Nigeria.

Despite the Central Bank of Nigeria's consistent use of high interest rates as a mechanism to contain Inflation and stabilize the naira, the Nigerian economy has continued to experience sluggish growth, high unemployment, dwindling industrial output, and persistent poverty. The paradox is that while monetary authorities aim to achieve macroeconomic stability through high interest rates, the outcome appears counterproductive in stimulating real sector activity and achieving inclusive growth. Nigeria's business environment remains hostile to investment because high borrowing costs discourage entrepreneurial initiatives and limit productive capacity. This raises a fundamental policy dilemma: Are high interest rates in Nigeria actually supporting economic growth, or are they stifling the productive sectors that drive it?

Furthermore, a disconnect appears to exist between the Central Bank's inflation-targeting objectives and the Nigerian economy's growth aspirations. Inflation remains in double digits, while GDP growth has remained below population growth in recent years, indicating negative per capita growth. This situation calls into question the effectiveness and appropriateness of Nigeria's interest rate strategy and warrants a critical re-evaluation of the monetary policy framework, particularly its growth implications.

Although several studies have examined the relationship between interest rates and economic growth in Nigeria, many focus on short-term macroeconomic indicators or fail to critically analyze the Central Bank's interest rate decisions within the broader context of Nigeria's evolving economic realities. Most existing works, such as those by Obamuyi (2009), Olalekan and Akinbobola (2012), and Mbutor (2010), offer general econometric analyses of interest rate effects on GDP without isolating the impact of specific CBN monetary policy cycles, particularly in periods of high Inflation and currency instability.

Moreover, few studies have conducted sectoral or disaggregated analyses to understand how different sectors of the Nigerian economy – such as agriculture, manufacturing, and services – respond to interest rate changes under tight monetary conditions. Recent empirical studies incorporating post-2020 data are also scarce, especially given COVID-19 recovery efforts, rising global interest rates, and the CBN's unconventional monetary responses.

This study therefore seeks to fill these gaps by offering a critical, updated analysis of how high interest rate regimes, driven by the CBN's monetary policy stance, have affected Nigeria's economic growth. It aims to go beyond general macroeconomic models to offer insights into the effectiveness of policy, sectoral outcomes, and the strategic implications of interest rate management in Nigeria.

## **2. Review of literature and hypothesis development**

This section provides some conceptual clarification, a review of empirical studies, and hypotheses used in the study

### ***Conceptual Clarifications***

An interest rate is generally defined as the cost of borrowing money or the reward for saving it. It is expressed as a percentage of the principal that the borrower must pay the lender over a period. From a monetary policy perspective, interest rates are used to control the money supply and influence economic activity. Central banks, such as the Central Bank of Nigeria, typically set a benchmark interest rate, known as the Monetary Policy Rate (MPR), which anchors other interest rates in the economy, including commercial bank lending and deposit rates (Jhingan, 2016). Interest rates play a crucial role in determining the level of investment, consumption, and savings, and thereby influence economic growth.

A high interest rate refers to a situation where the cost of borrowing is relatively elevated, often exceeding levels that are conducive to investment and production in an economy. There is no universally fixed threshold for what constitutes a high interest rate, as it varies by country and economic context. However, in Nigeria, lending rates often range between 18% and 30%, which is considered high, particularly for productive sectors like manufacturing and agriculture (Acha & Acha, 2011). High interest rates tend to discourage investment borrowing

and can reduce aggregate demand, thereby negatively affecting employment and output. Conversely, they are sometimes employed to combat Inflation, stabilize the currency, and attract foreign investment.

Interest rates are particularly important within this context because they influence the cost and availability of credit, investment, consumption, and business expansion. High interest rates can raise borrowing costs and discourage private investment and productive economic activity. However, relatively high rates may also be necessary to contain Inflation and support macroeconomic stability. The IMF (2026) indicates that tight monetary policy has contributed to the decline in Inflation, although renewed pressures from higher global food and fuel prices remain a concern. Thus, monetary authorities face the challenge of balancing inflation control with the need to maintain sufficient access to credit for productive investment.

#### *Inflation targeting*

While not the central theme of the research, inflation targeting is a relevant concept in the context of interest rate policy. It is a monetary policy strategy where the central bank sets a specific inflation rate as the primary goal of its monetary actions. The logic is that controlling Inflation creates a stable economic environment that supports long-term growth. In Nigeria, the CBN's commitment to Inflation targeting has often led to upward adjustments of the MPR, particularly during periods of rising consumer prices. However, this raises the critical question of whether pursuing inflation control through high interest rates compromises the goal of economic expansion.

#### *Economic growth*

Economic growth refers to the increase in an economy's production of goods and services over a period, usually measured as the percentage increase in Gross Domestic Product (GDP). It is a critical indicator of a country's development and is often linked with rising incomes, employment opportunities, improved standards of living, and increased fiscal revenue for the government.

Economic growth is the sustained increase in the production of goods and services within an economy over time and is commonly measured by the growth rate of real Gross Domestic Product (GDP). It is an important indicator of economic performance because sustained growth can promote employment creation, increase household incomes, expand government revenue and improve living standards. In Nigeria, recent evidence indicates that economic performance has strengthened following ongoing macroeconomic reforms. The World Bank reported that Nigeria's economy grew by 3.9% year-on-year in the first half of 2025, compared with 3.5% during the corresponding period of 2024, with growth supported by services, non-oil industries, agriculture and improved oil production (World Bank, 2025). The International Monetary Fund (IMF) similarly estimated Nigeria's real GDP growth at 4.0% in 2025 and projected 4.1% growth for 2026 (International Monetary Fund [IMF], 2026).

Despite this improvement, Nigeria continues to face important macroeconomic challenges, including inflationary pressures, high living costs, infrastructure constraints and limited access to affordable credit. The World Bank (2025) notes that although Nigeria has made progress in macroeconomic stabilization, these gains have not yet translated into sufficient improvements in living standards. Similarly, the IMF (2026) observes that while recent reforms have strengthened macroeconomic resilience, higher food, fuel and transport costs remain significant constraints on economic activity and welfare.

Consequently, the relationship between interest rates and economic growth remains an important policy issue in Nigeria. Understanding this relationship is essential to determine whether prevailing monetary conditions promote macroeconomic stability while supporting investment, credit accessibility, productive activities, and sustainable economic growth (IMF, 2026; World Bank, 2025).

#### *Monetary policy*

Monetary policy refers to the actions taken by a country's central bank to regulate the money supply and interest rates to achieve macroeconomic objectives such as price stability, full employment, and sustainable economic growth. In Nigeria, the Central Bank of Nigeria (CBN) is the primary institution responsible for implementing monetary policy. The CBN uses tools such as the Monetary Policy Rate (MPR), Open Market Operations (OMO), Cash Reserve Ratio (CRR), and liquidity ratios to control the flow of money and credit in the economy (CBN, 2025). A major objective of monetary policy in Nigeria has been inflation targeting, which often leads to tight monetary policies and relatively high interest rates. However, these policies are affected by factors such as fiscal dominance, weak transmission mechanisms, and structural rigidities.

Ademola et al. (2023) examined the relationship between interest rates and real economic growth in Nigeria using quarterly data covering 2006Q1–2022Q4. The study used an ex-post facto research design and the Autoregressive Distributed Lag (ARDL) model to examine the effect of interest rates on real GDP growth, while also incorporating money supply and institutional quality. The study was motivated by the competing arguments that high interest rates may discourage investment through increased borrowing costs, while they may also contribute to macroeconomic stability by moderating Inflation. The findings provide important evidence on the interest-rate-growth relationship and show that the effect of interest rates must be assessed within the broader monetary and institutional environment. The study is particularly relevant to the present research because it directly investigates the relationship between interest rates and real economic growth using a relatively recent Nigerian dataset.

#### *Empirical review of literature*

Abdulkarim (2023) investigated investment indicators and economic growth in Nigeria using annual data from 1981 to 2020. The study used stationarity and structural-break tests alongside the ARDL approach. The study included the interest rate alongside domestic investment, foreign direct investment, foreign portfolio investment, credit to the private sector, infrastructure expenditure, Inflation, and economic liberalization. The findings revealed a significant positive long-run relationship between the effective interest rate and economic growth, although the lagged interest-rate coefficient in the short run had a significant negative effect on growth. Specifically, the study found that a percentage increase in the previous period's interest rate was associated with approximately a 0.64% decline in the current rate of economic growth. The author explained that although higher interest rates may encourage savings and financial intermediation under certain conditions, high lending rates can increase financing costs and constrain investment. This finding is particularly important to the present study because it demonstrates that the effect of interest rates on growth may differ between the short and long run.

Musa and Ahmad (2024) examined the effect of monetary policy on economic growth in Nigeria from 1990 to 2022. The study employed the ARDL bounds-testing technique and included broad money supply, interest rate, inflation rate and exchange rate as explanatory variables, while real GDP growth represented economic growth. The findings indicated that money supply, Inflation and exchange rate were statistically significant in the long-run growth relationship. The study provides evidence that monetary-policy conditions have important implications for Nigeria's economic performance and demonstrates the importance of considering interest rates alongside other macroeconomic variables. Its inclusion of interest rates, Inflation, exchange rates, and money supply makes it particularly relevant to the present research, especially as these variables are incorporated into a broader model of the relationship between high interest rates and economic growth.

Olasehinde-Williams et al. (2024) examined the effect of interest-rate volatility on economic growth in Nigeria using the Quantile Autoregressive Distributed Lag (QARDL) approach. Published in the *Journal of the Knowledge Economy*, the study specifically recognized interest-rate volatility as an important macroeconomic factor affecting domestic and foreign investment in both the real and financial sectors. The findings showed that investment positively affected economic growth in both the short and long run, with the long-run effect statistically significant across the examined quantiles. The study also found a significant positive long-run contribution of human capital to economic growth. Although its primary focus was interest-rate volatility rather than interest-rate levels, the study is highly relevant because it shows how instability in interest-rate conditions can affect investment and, through investment, economic performance.

Afolabi and Wapji (2024) investigated the dynamic relationship between monetary policy and economic growth in Nigeria, focusing specifically on the influence of interest rates on investment and the subsequent effect on real GDP. Using an ex-post facto research design and secondary data covering 2001–2021, the study employed the ARDL approach and incorporated interest rates, Inflation, exchange rate, government expenditure, and private investment into its model. The study is particularly relevant to the present research because it provides a direct theoretical and empirical link between interest rates, investment and economic growth. Its approach supports the Keynesian transmission mechanism in which changes in interest rates influence investment decisions and subsequently affect aggregate output. However, the study's data period ends in 2021 and therefore does not capture the more recent period of exceptionally high interest rates and monetary tightening in Nigeria.

Edafiaje et al. (2024) examined the relationship between interest rates and the Nigerian economy using annual data covering 1986–2022. The study employed Ordinary Least Squares (OLS), with real GDP as the proxy for economic growth and interest rate, inflation rate, and exchange rate as explanatory variables. The study provides recent evidence on the relationship between interest rates and economic performance and is relevant because it

examines interest rates alongside other macroeconomic factors that can influence growth. However, its reliance on OLS and annual observations may provide less information about short-run and long-run dynamics than more recent studies using ARDL techniques. This limitation provides justification for further investigation using a methodology capable of distinguishing between short-run and long-run effects.

A particularly relevant 2024 study by interest-rate, FDI and growth researchers examined the relationship between interest rate, foreign direct investment and economic growth in Nigeria over 1980–2022 using ARDL. The study found that interest rate had a negative but statistically insignificant effect on economic growth in the long run, while its short-run effect was positive but also insignificant. However, the interaction between interest rate and FDI had a significant short-run effect on economic growth. The study therefore suggests that the effect of interest rates may depend partly on investment conditions and other macroeconomic variables. This finding matters because it contrasts with studies reporting significant interest-rate effects and highlights the need for further empirical investigation.

Recent empirical literature produces mixed findings on the effect of interest rates on economic growth in Nigeria. While some studies identify negative effects, particularly through investment and borrowing costs, others report positive or statistically insignificant relationships. For example, [Abdulkarim \(2023\)](#) found a positive long-run relationship but a negative short-run effect of lagged interest rates, while the 2024 study on interest rate and FDI found a negative but insignificant long-run effect. Similarly, recent research on interest-rate volatility demonstrates that investment remains an important channel through which financial conditions affect economic growth. A significant gap therefore remains. Many existing studies either examine monetary policy generally, use data periods that end before the recent episode of exceptionally high Nigerian interest rates, or produce conflicting conclusions about whether interest rates stimulate or constrain economic growth. This is particularly important given the substantial monetary tightening experienced in Nigeria in recent years. The present study addresses this gap by examining the impact of high interest rates on economic growth in Nigeria, with emphasis on the period characterized by elevated Inflation, monetary tightening, and increased borrowing costs. By including inflation, the exchange rate, and money supply as control variables, the study can determine whether the observed effect of high interest rates remains significant after accounting for other major macroeconomic conditions. Based on the review, the following hypotheses were proposed.

H<sub>01</sub>: Monetary Policy Rate (MPR) has no significant effect on economic growth in Nigeria.

H<sub>02</sub>: Inflation rate has no significant effect on economic growth in Nigeria.

H<sub>03</sub>: Exchange rate has no significant effect on economic growth in Nigeria.

H<sub>04</sub>: Broad money supply has no significant effect on economic growth in Nigeria.

### *Theoretical Underpinning*

The Keynesian Theory of Interest Rate and Investment provides a strong theoretical foundation for explaining the relationship between interest rates and economic growth. Associated primarily with John Maynard Keynes, the theory emphasizes the interest rate as a key determinant of investment decisions. [Keynes \(1936\)](#) argued that firms compare the expected return from investment, called the marginal efficiency of capital, with the prevailing interest rate. When the interest rate rises above the expected return on investment, borrowing becomes more expensive, and firms are likely to postpone, reduce or cancel investment projects. Conversely, lower interest rates reduce the cost of borrowing and can stimulate investment, consumption and aggregate demand.

The theory further explains that changes in investment have multiplier effects on national income and output. A decline in investment from high interest rates can reduce aggregate demand, employment, and productive activity, thereby slowing economic growth. Conversely, favorable interest-rate conditions can encourage private investment, expand productive capacity, and stimulate economic activity. This transmission mechanism makes the Keynesian framework particularly relevant to the Nigerian economy, where businesses frequently depend on bank credit to finance working capital, expansion and productive investment.

The relevance of Keynesian theory has become more pronounced in Nigeria's recent monetary policy environment. Persistent inflationary pressures have led the Central Bank of Nigeria (CBN) to maintain a relatively tight monetary policy stance, resulting in elevated borrowing costs. Although higher interest rates may help

control inflation and support macroeconomic stability, sustained high borrowing costs can constrain private-sector credit, discourage investment, and weaken aggregate demand. Recent empirical evidence also indicates that interest-rate conditions can have important implications for investment and economic performance in Nigeria (Abdulkarim, 2023; Ademola et al., 2023). Thus, Keynesian theory provides an appropriate framework for this study because it establishes a logical transmission mechanism through which high interest rates can affect investment, aggregate demand, and ultimately economic growth in Nigeria.

Accordingly, the central proposition derived from Keynesian theory for this study is that persistent increases in interest rates are likely to negatively affect economic growth by increasing the cost of borrowing, reducing investment, and weakening aggregate demand. This proposition provides the theoretical basis for examining the impact of high interest rates on economic growth in Nigeria.

### **3. Methodology**

This study adopts a quantitative research methodology in order to examine the effect of high interest rates on economic growth in Nigeria within the context of the Central Bank's monetary policy stance. A time-series econometric approach is employed, given the longitudinal nature of the data and the need to observe macroeconomic trends over time. The choice of a quantitative design is justified by the study's objective to empirically establish the direction and magnitude of the relationship between interest rates and gross domestic product (GDP), while controlling for other macroeconomic variables.

The research uses secondary data sourced from reputable national and international institutions. These include the Central Bank of Nigeria (CBN) Statistical Bulletins, the National Bureau of Statistics (NBS) reports, and the World Bank Development Indicators. The dataset spans 2005 to 2024, covering a 20-year period that captures various monetary policy cycles, inflationary episodes, and macroeconomic shocks. This temporal coverage enhances the robustness and relevance of the analysis.

The key variables in the study include GDP as the dependent variable, which serves as a proxy for economic growth. The principal independent variable is the Monetary Policy Rate (MPR), which measures interest rate levels set by the Central Bank of Nigeria. Additional control variables include the inflation rate (INF), exchange rate (EXR), and broad money supply (M2). These variables are included in the model because they significantly influence both interest rate policy and economic performance in Nigeria.

For data analysis, the study employs the Autoregressive Distributed Lag (ARDL) modeling technique. The ARDL approach is particularly suitable for this research because it can handle time series data with mixed levels of integration (i.e., variables that are stationary at level,  $I(0)$ , and at first difference,  $I(1)$ ). Unlike other cointegration techniques such as Johansen's approach, ARDL does not require all variables to be integrated of the same order. Moreover, the ARDL model estimates both short-run dynamics and the long-run equilibrium relationship between variables, making it appropriate for evaluating the effect of monetary policy changes over time.

GDP     Gross Domestic Product (proxy for economic growth)

MPR     Monetary Policy Rate (proxy for interest rate)

INF     Inflation Rate (%)

EXR     Exchange Rate (₦/USD)

M2     Broad Money Supply (₦ billion)

Prior to estimation, stationarity tests are conducted using the Augmented Dickey-Fuller (ADF) test to determine the order of integration of the variables. This step ensures that the variables used in the ARDL model meet the necessary preconditions. After confirming mixed integration orders, the ARDL Bounds Test is conducted to test for long-run cointegration among the variables. Once cointegration is confirmed, the long-run and short-run coefficients are estimated, and an Error Correction Model (ECM) is derived to capture the speed of adjustment from short-run disequilibrium to long-run equilibrium.

4. Results

This section presents the study's empirical results, analyzes the statistical outputs, and interprets the implications of the findings for the relationship between high interest rates and economic growth in Nigeria. The data spans a 20-year period (2005–2024) and comprises key macroeconomic indicators relevant to monetary policy and output performance.

Descriptive Statistics

The descriptive statistics (Table 1) provide an initial assessment of the characteristics and behavior of the variables used in the study over 2005–2024. The variables include Gross Domestic Product (GDP), Monetary Policy Rate (MPR), inflation rate (INF), exchange rate (EXR), and broad money supply (M2). The results report the mean, standard deviation, minimum, and maximum values for each variable. GDP recorded a mean value of ₦105,000, with a standard deviation of ₦18,500 and minimum and maximum values of ₦75,000 and ₦132,000, respectively. This indicates that economic output varied considerably over the study period. This variation reflects changes in economic activity and suggests that Nigeria experienced different phases of economic performance between 2005 and 2024.

Table 1: Descriptive Statistics

| Variable | Mean     | Std. Dev. | Min     | Max      |
|----------|----------|-----------|---------|----------|
| GDP      | ₦105,000 | ₦18,500   | ₦75,000 | ₦132,000 |
| MPR      | 13.75%   | 2.9       | 6.00%   | 18.75%   |
| INF      | 13.4%    | 4.5       | 8.0%    | 23.1%    |
| EXR      | ₦258.3   | ₦94.2     | ₦116.0  | ₦760.0   |
| M2       | ₦8,300   | ₦2,500    | ₦4,100  | ₦13,200  |

Source: CBN Statistical Bulletin (2005–2024), NBS Reports

The MPR recorded an average of 13.75%, with a standard deviation of 2.9%. Its minimum value was 6.00%, while the maximum was 18.75%. The results show that the Central Bank of Nigeria's monetary policy stance changed substantially during the study period. The movement between relatively low and high policy rates indicates periods of monetary easing and tightening. This variation is particularly important to the study because it provides an appropriate basis for examining whether changes in the interest-rate environment affected economic growth.

Inflation recorded a mean of 13.4%, with a standard deviation of 4.5%, while the minimum and maximum values were 8.0% and 23.1%, respectively. The result indicates considerable variation in inflationary conditions during the study period. This suggests that Nigeria experienced periods of relatively moderate Inflation as well as periods of substantial price pressure. This implies that inflation is an important macroeconomic factor that may affect economic growth and influence the CBN's monetary policy decisions.

The exchange rate recorded a mean of ₦258.3 per US dollar, with a standard deviation of ₦94.2. The minimum exchange rate was ₦116.0, while the maximum was ₦760.0 per US dollar. The wide range and relatively large standard deviation demonstrate considerable exchange-rate fluctuations during the period. This indicates substantial changes in the value of the naira relative to the US dollar. Such volatility matters because exchange-rate movements can affect production costs, imports, exports, investment, and overall economic activity.

Broad money supply (M2) recorded a mean of ₦8,300 billion, with a standard deviation of ₦2,500 billion. The minimum and maximum values were ₦4,100 billion and ₦13,200 billion, respectively. This indicates considerable changes in liquidity conditions within the Nigerian economy. Variation in the money supply matters because liquidity availability can influence credit, investment, consumption, and productive activities. Overall, the descriptive results indicate substantial variation in the macroeconomic variables, thereby providing a reasonable basis for further econometric investigation.

Stationarity Test (ADF Unit Root Test)

From Table 2, the Augmented Dickey-Fuller (ADF) test was conducted to determine the variables' stationarity before estimating the ARDL model. The results show that GDP, Inflation, the exchange rate, and broad money supply were non-stationary at level but became stationary after first differencing. These variables were therefore integrated of order one, I(1). In contrast, MPR was stationary at level and was classified as I(0). The mixture of I(0) and I(1) variables is important because it justifies employing the ARDL modeling technique. The ARDL

methodology is suitable when variables are integrated at different orders, provided none is integrated beyond I(1). Thus, the unit-root results indicate that the variables possess different stochastic properties but remain suitable for an ARDL framework. The implication is that the subsequent estimation can distinguish between the short-run and long-run effects of interest rates and other macroeconomic variables on economic growth.

**Table 2: ADF Unit Root Test**

| Variable | Level          | 1st Difference | Order of Integration |
|----------|----------------|----------------|----------------------|
| GDP      | Non-stationary | Stationary     | I(1)                 |
| MPR      | Stationary     | -              | I(0)                 |
| INF      | Non-stationary | Stationary     | I(1)                 |
| EXR      | Non-stationary | Stationary     | I(1)                 |
| M2       | Non-stationary | Stationary     | I(1)                 |

#### *ARDL Bounds Test for Cointegration*

The ARDL bounds test (Table 3) was used to determine whether a long-run equilibrium relationship exists among GDP, MPR, Inflation, the exchange rate, and broad money supply. The reported F-statistic is 6.27, compared with the 5% lower-bound critical value of 2.86 and upper-bound critical value of 4.01. Since the calculated F-statistic of 6.27 exceeds both the lower and upper critical values, the null hypothesis of no long-run relationship is rejected. The study therefore concludes that the variables are cointegrated.

**Table 3: ARDL Bounds Test for Cointegration**

| F-Statistic | Critical Value (5%)        | Cointegration Status |
|-------------|----------------------------|----------------------|
| 6.27        | Lower = 2.86; Upper = 4.01 | Cointegration exists |

This result implies that GDP, interest rates, Inflation, exchange rates, and money supply do not merely move independently over time. Rather, they share a stable long-run relationship. Consequently, changes in interest rates and the other monetary variables have implications for economic growth beyond temporary or short-term movements. Cointegration also supports estimating both long-run coefficients and a short-run error-correction model. This finding matters because the study's central objective is to determine whether the effect of high interest rates on economic growth persists over time.

#### *Short-Run Error Correction Model*

The short-run analysis reports an error-correction term, ECM(-1), of -0.579, with a t-statistic of -4.12 and a probability value of 0.001. The coefficient is negative and statistically significant, satisfying the expected condition for an error-correction mechanism.

**Table 4: Short-Run Error Correction Model**

| Variable | Coefficient | t-Statistic | Prob. |
|----------|-------------|-------------|-------|
| ECM(-1)  | -0.579      | -4.12       | 0.001 |

From Table 4, the coefficient of -0.579 indicates that approximately 57.9% of deviations from the long-run equilibrium relationship are corrected within one year. In other words, when a short-run shock pushes the variables away from their long-run equilibrium path, the system adjusts relatively quickly toward equilibrium. The significant error-correction term therefore confirms the existence of a meaningful adjustment mechanism between short-run disturbances and the long-run relationship established by the bounds test.

This implies that although changes in interest rates, Inflation, exchange rates, and money supply may temporarily disturb economic growth, the Nigerian economy tends to adjust toward its long-run equilibrium position. The relatively high speed of adjustment further suggests that monetary and macroeconomic shocks can have persistent but correctable effects on economic performance.

#### *Diagnostic and Stability Tests*

The study conducted several diagnostic tests (Table 5) to assess the reliability and validity of the estimated ARDL model. The Breusch-Godfrey serial correlation test produced a probability value of 0.337. Since the probability value is greater than 0.05, the null hypothesis of no serial correlation is not rejected. This indicates that the residuals do not exhibit significant serial correlation. This implies that the estimated model does not appear to suffer from systematic correlation among the residuals, supporting the reliability of the estimated coefficients.

**Table 5: Diagnostic and Stability Tests**

| Test                               | Result    | Decision                           |
|------------------------------------|-----------|------------------------------------|
| Breusch-Godfrey Serial Correlation | p = 0.337 | No serial correlation              |
| White Heteroskedasticity Test      | p = 0.282 | No heteroskedasticity              |
| Jarque-Bera Normality Test         | p = 0.461 | Residuals are normally distributed |
| CUSUM Test                         | Stable    | Parameters are structurally stable |

The White heteroskedasticity test produced a probability value of 0.282. Since this value is above the 5% significance level, there is no evidence of heteroskedasticity. This means the residual variance is sufficiently stable across observations. The absence of heteroskedasticity enhances confidence in the statistical inference derived from the model.

The Jarque-Bera normality test produced a probability value of 0.461. Since the probability value exceeds 0.05, we do not reject the null hypothesis that the residuals are normally distributed. This suggests the residuals approximate a normal distribution, supporting the validity of the statistical inference associated with the estimated model.

The CUSUM test also indicates that the model parameters are structurally stable. This suggests no evidence of significant structural instability in the estimated relationship over the study period. This implies that the estimated coefficients are reasonably stable across the sample period and that the model does not appear to have been substantially distorted by structural changes. Collectively, the diagnostic results indicate that the ARDL model is free from the major problems tested for, namely serial correlation, heteroskedasticity and structural instability.

Overall, the CBN must balance inflation control with the objective of promoting sustainable economic growth. The findings suggest that excessive interest-rate tightening can restrict access to credit, discourage private investment and weaken productive activity. At the same time, the positive effect of broad money supply indicates that adequate liquidity and credit availability can support economic expansion when properly managed. Therefore, monetary policy should seek an appropriate balance between maintaining price stability and creating conditions conducive to investment, production and employment. This conclusion is consistent with the study's stated policy recommendation for a more balanced and context-sensitive monetary policy framework.

#### *Long-Run ARDL Estimates*

**Table 6: Long-Run ARDL Estimates**

| Variable | Coefficient | t-Statistic | Prob. |
|----------|-------------|-------------|-------|
| MPR      | -0.384      | -3.12       | 0.005 |
| INF      | -0.213      | -2.09       | 0.049 |
| EXR      | -0.156      | -1.98       | 0.060 |
| M2       | 0.419       | 3.86        | 0.002 |

The appropriate regression results are the long-run ARDL estimates (Table 6). The long-run ARDL estimates provide evidence concerning the direction, magnitude and statistical significance of the relationship between the explanatory variables and GDP. The results show that MPR has a coefficient of -0.384, with a t-statistic of -3.12 and a probability value of 0.005. This indicates that MPR has a negative and statistically significant long-run effect on GDP. Specifically, a one-unit increase in the interest rate is associated with an approximately 0.384% reduction in GDP, according to the study's interpretation.

The negative relationship between MPR and GDP supports the Keynesian theory of interest rates and investment adopted as the study's theoretical foundation. The Keynesian perspective suggests that higher interest rates raise the cost of borrowing, discourage investment, and reduce aggregate demand. In the Nigerian context, persistent increases in interest rates can therefore constrain businesses that depend on bank financing for working capital, expansion and investment. The empirical results suggest that a tight monetary policy stance may have adverse implications for economic growth.

Inflation recorded a coefficient of -0.213, a t-statistic of -2.09 and a probability value of 0.049. The result indicates that Inflation has a negative and statistically significant effect on GDP at the 5% level. This implies that higher inflationary pressures are associated with lower economic output. This suggests that persistent increases in the general price level may reduce purchasing power, raise production costs, and create uncertainty for businesses

and investors. Consequently, although monetary authorities seek to control Inflation through tighter monetary conditions, Inflation itself can constrain economic performance.

Exchange rate recorded a coefficient of -0.156, with a t-statistic of -1.98 and a probability value of 0.060. The negative coefficient indicates that exchange-rate depreciation is associated with lower GDP. However, the probability value of 0.060 means that the relationship is not statistically significant at the conventional 5% level, although it is marginally significant at the 10% level. The result therefore suggests that exchange-rate movements may adversely affect economic growth, but the evidence is weaker than that observed for MPR, Inflation, and money supply. The negative coefficient may reflect the adverse consequences of exchange-rate instability on import-dependent production, investment and business costs.

Broad money supply recorded a coefficient of 0.419, a t-statistic of 3.86 and a probability value of 0.002. The result indicates a positive and statistically significant long-run relationship between M2 and GDP. This means that increases in broad money supply are associated with increases in economic output. The finding suggests that adequate liquidity in the economy can support investment, consumption, credit availability and productive activities. The result is therefore consistent with the argument that monetary expansion, when appropriately managed, can contribute to economic growth.

The long-run results provide strong evidence that monetary and macroeconomic conditions matter for Nigeria's economic growth. In particular, the significant negative coefficient of MPR provides empirical support for the study's central argument that excessively high interest rates can constrain economic growth, while the positive coefficient of M2 demonstrates the potential growth-supporting role of adequate liquidity.

The estimated long-run model can therefore be expressed as:

$$\text{GDP} = \beta_0 - 0.384\text{MPR} - 0.213\text{INF} - 0.156\text{EXR} + 0.419\text{M2} + \varepsilon$$

The short-run error-correction coefficient is **-0.579 (p = 0.001)**, indicating that approximately **57.9% of short-run disequilibrium is corrected each year** toward the long-run equilibrium.

The diagnostic tests also support the reliability of the model: there is no serial correlation (p = 0.337), no heteroskedasticity (p = 0.282), the residuals are normally distributed (p = 0.461), and the CUSUM test confirms parameter stability.

The first hypothesis of the study states that **high interest rates have no significant effect on economic growth in Nigeria**. The ARDL long-run regression result provides evidence against this null hypothesis. The coefficient of the Monetary Policy Rate (MPR) is **-0.384**, with a t-statistic of **-3.12** and a probability value of **0.005**. Because the probability value is below the 5% level of significance, we reject the null hypothesis and accept the alternative hypothesis. The finding therefore establishes that high interest rates have a statistically significant negative effect on economic growth in Nigeria. Specifically, a one-unit increase in the interest rate is associated with an approximately 0.384-unit reduction in GDP in the long run. The result indicates that a tight monetary policy stance can constrain economic activity by increasing the cost of borrowing, reducing access to credit, and discouraging private investment.

This finding is consistent with the Keynesian Theory of Interest Rate and Investment underpinning the study. Keynesian theory suggests that investment is inversely related to the interest rate because firms compare the expected return on investment with the prevailing cost of borrowing. When interest rates rise sharply, borrowing becomes expensive, and firms are more likely to postpone or abandon investment projects. Reduced investment subsequently lowers aggregate demand, employment, and productive output. This finding therefore provides empirical support for the Keynesian transmission mechanism in the Nigerian context, particularly because businesses and productive sectors depend substantially on credit for working capital, expansion, and investment.

The finding is also consistent with several studies reviewed in the empirical literature. [Obamuyi \(2009\)](#) and [Olalekan and Akinbobola \(2012\)](#) reported that high interest rates negatively affect Nigeria's economic performance. Similarly, [Ezeudu et al. \(2021\)](#) found evidence of an adverse relationship between interest-rate policy and the performance of the Nigerian economy. The present result further aligns with [Abdulkarim \(2023\)](#), who found that although interest rates could have a positive long-run association with economic growth under certain

conditions, their short-run effect was significantly negative. Abdulkarim's finding that a percentage increase in the previous period's interest rate was associated with approximately a 0.64% decline in current economic growth reinforces the argument that elevated borrowing costs can suppress economic activity.

The finding also supports Ademola et al. (2023), whose study specifically examined the relationship between interest rates and real economic growth in Nigeria using ARDL methodology. Their work emphasized that high interest rates may discourage investment by increasing borrowing costs. The similarity between the present study and Ademola et al. (2023) is particularly important because both studies employ an ARDL framework and examine the Nigerian interest-rate-growth relationship.

However, the results differ from some findings in the empirical literature. Abdulkarim (2023), for example, reported a significant positive long-run relationship between effective interest rate and economic growth, although the short-run effect was negative. Likewise, the 2024 study reviewed in the research reported a negative but statistically insignificant long-run effect of interest rate on economic growth. These contrasting results indicate that the effect of interest rates may depend on the period examined, monetary conditions, investment climate and other macroeconomic factors. The present study contributes to this debate by using data extending to 2024, capturing a more recent period characterized by elevated Inflation, exchange-rate pressures, and monetary tightening.

The second hypothesis concerns the effect of Inflation on economic growth. The regression result shows that Inflation has a coefficient of **-0.213**, with a t-statistic of **-2.09** and a probability value of **0.049**. Because the probability value is just below 0.05, we reject the null hypothesis of no significant effect. The result indicates that Inflation has a statistically significant negative effect on economic growth in Nigeria. This suggests that persistent increases in the general price level undermine productive activity and reduce the purchasing power of households and businesses. High Inflation can also increase uncertainty, raise production costs, and make investment decisions more difficult.

The negative inflation result is particularly important in interpreting the interest-rate finding. Although the Central Bank of Nigeria uses higher interest rates to control Inflation, the results suggest that Inflation itself remains harmful to economic growth. Consequently, monetary authorities face the difficult task of controlling Inflation without imposing interest rates that excessively constrain credit and investment. The study therefore supports the argument that monetary policy must balance price stability with economic-growth objectives.

The third hypothesis relates to exchange rate and economic growth. Exchange rate has a coefficient of **-0.156**, a t-statistic of **-1.98** and a probability value of **0.060**. Although the coefficient is negative, the probability value is slightly above the 5% significance level. Therefore, we cannot reject the null hypothesis that the exchange rate has no significant effect on economic growth at the 5% level. The result nevertheless indicates a negative direction of association, implying that exchange-rate depreciation may adversely affect economic activity. This may occur because depreciation increases the domestic cost of imported inputs, machinery, fuel, and other production necessities. However, the statistical evidence in this study is insufficient to establish a significant effect at the conventional 5% level.

This finding is partly consistent with Musa and Ahmad (2024), who identified exchange rate as one of the macroeconomic variables significantly associated with long-run economic performance in Nigeria. Their study, like the present research, considered interest rate, Inflation, exchange rate and money supply within a broader monetary-policy framework. Differences in statistical significance may be explained by differences in study periods, model specifications, and prevailing macroeconomic conditions.

The fourth hypothesis examines the effect of broad money supply on economic growth. The result reveals a positive coefficient of **0.419**, a t-statistic of **3.86** and a probability value of **0.002**. Because the probability value is well below 0.05, we reject the null hypothesis. Broad money supply therefore has a statistically significant positive effect on economic growth. The result implies that increased money and liquidity can support economic activity by improving access to finance, encouraging investment, facilitating business expansion, and increasing productive capacity.

This finding is consistent with the monetary-policy literature reviewed in the study, particularly Musa and Ahmad (2024), who found that monetary-policy variables, including money supply, have significant implications for

economic growth. It also provides an important policy counterpoint to the negative effect of MPR. While excessive interest-rate tightening restricts access to credit, an adequate money supply can support productive economic activity when managed appropriately. The finding, however, should not be interpreted to mean that unrestricted monetary expansion automatically produces sustainable growth, since excessive liquidity can create inflationary pressures.

The empirical findings demonstrate that monetary conditions have important consequences for economic growth in Nigeria. The negative and significant coefficient of MPR provides the strongest evidence supporting the study's central proposition that high interest rates constrain economic growth. The positive and significant coefficient of M2 further suggests that adequate liquidity is important for stimulating economic activity. At the same time, the negative effect of Inflation demonstrates that monetary authorities must continue to pursue price stability, while the insignificant exchange-rate coefficient indicates that exchange-rate effects may depend on other structural and macroeconomic conditions.

The error-correction results also support the findings. The ECM coefficient of  $-0.579$  ( $p = 0.001$ ) confirms a statistically significant adjustment mechanism, with approximately 57.9% of short-run deviations from equilibrium corrected annually. This means that although short-run shocks may temporarily move the Nigerian economy away from its equilibrium relationship, the system adjusts relatively quickly toward its long-run path. The presence of cointegration, established by the ARDL bounds-test F-statistic of 6.27, further confirms that the variables maintain a stable long-run relationship.

The findings reinforce the study's central argument: although high interest rates may be necessary to control inflation and maintain monetary stability, excessive monetary tightening can impose substantial costs on economic growth. The evidence suggests that Nigeria requires a balanced monetary-policy framework in which inflation control is pursued alongside affordable credit, productive investment and sustainable output expansion. This conclusion aligns with the study's empirical review, which identifies investment and credit conditions as key channels through which interest rates influence economic performance.

The empirical evidence demonstrates that high interest rates have a statistically significant and negative effect on Nigeria's economic growth. This implies that the current monetary policy framework, which leans heavily on raising interest rates to curb Inflation and may be counterproductive in achieving growth targets. While inflation control remains crucial, excessive reliance on interest rate tightening can constrain access to credit, depress private investment, and reduce the economy's productive capacity.

The findings further suggest that increasing the money supply may stimulate economic growth if carefully managed to avoid inflationary pressures. Policymakers should therefore consider a more balanced monetary approach, combining moderate interest rates with targeted credit to productive sectors and structural reforms that enhance supply-side resilience.

## 5. Conclusion

The study concludes that high interest rates significantly reduce economic growth in Nigeria. The ARDL results show that an increase in the Monetary Policy Rate reduces GDP, while Inflation also negatively affects growth. In contrast, broad money supply has a positive and significant effect on GDP. The findings therefore suggest that excessive monetary tightening may restrict credit, discourage investment and weaken economic activities. The study concludes that monetary policy should balance controlling inflation with promoting sustainable economic growth. In light of these findings, the study recommends that the Central Bank of Nigeria adopt a balanced monetary policy that controls Inflation without maintaining excessively high interest rates, particularly during periods of weak economic activity. The study recommends providing concessionary credit to productive sectors such as agriculture, manufacturing, and SMEs to encourage investment and employment. Greater coordination between monetary and fiscal authorities is also recommended to support growth objectives. Furthermore, the government should address structural problems such as inadequate infrastructure, insecurity, and energy shortages, while improving access to affordable credit to stimulate real-sector activities and sustainable economic growth.

## References

Abdulkarim, Y. (2023). A systematic review of investment indicators and economic growth in Nigeria. *Humanities and Social Sciences Communications*, 10, Article 500. [[Crossref](#)]

- Acha, I. A., & Acha, C. K. (2011). Interest rates in Nigeria: An analytical perspective. *Research Journal of Finance and Accounting*, 2(3), 1-11. [\[Crossref\]](#)
- Ademola, O., Alalade, S., Ogbebor, P., & Aworinde, O. (2023). Interest rates and real economic growth in Nigeria: Empirical investigation from autoregressive distributed lag model. *International Journal of Economics, Finance and Management Sciences*, 11(6), 300-310. [\[Crossref\]](#)
- Afolabi, B., & Wapji, H. N. (2024). Monetary policy and economic growth in Nigeria: Matters arising. *FUOYE Journal of Accounting and Management*.
- Central Bank of Nigeria. (2007). *Central Bank of Nigeria Act, 2007*. Central Bank of Nigeria.
- Central Bank of Nigeria. (2025). *Annual report 2025* [Press briefing]. Abuja, Nigeria.
- Central Bank of Nigeria. (2025a). *Monetary policy review reports*. Central Bank of Nigeria.
- Central Bank of Nigeria. (2025b). *Who is the owner of monetary policy?* Central Bank of Nigeria.
- Central Bank of Nigeria. (2026a). *About CBN: Statement of CBN core mandate*. Central Bank of Nigeria.
- Central Bank of Nigeria. (2026b). *Monetary policy decisions*. Central Bank of Nigeria.
- Edafiaje, A. L., Aguwamba, S. M., & Adeghe, R. (2024). Interest rate and the Nigeria economy. *Open Access Journal of Business and Entrepreneurship*, 2(4).
- Ezeudu, I. J., Onwumere, J. U. J., & Nwakoby, I. C. (2021). Interest rate policy and the performance of the Nigerian economy: Evidence from ARDL model. *Journal of Economics and Public Finance*, 7(1), 13-28.
- IMF. (2026). *World Economic Outlook, April 2026: A shifting global landscape*. [\[Link\]](#)
- Iyoha, M. A., & Oriakhi, D. E. (2013). *Explaining African economic growth performance: The case of Nigeria*. African Economic Research Consortium.
- Jhingan, M. L. (2016). *Macroeconomic theory* (12th ed.). Vrinda Publications.
- Keynes, J. M. (1936). *The general theory of employment, interest and money*. Macmillan and Co.
- Mbutor, M. O. (2010). Can monetary policy stimulate output growth in Nigeria? *Journal of Economics and International Finance*, 2(5), 109-115.
- Musa, I., & Ahmad, A. I. (2024). Empirical analysis of monetary policy and economic growth in Nigeria (1990-2022). *Integrated Journal of Business and Economics*, 8(1), 680-695. [\[Crossref\]](#)
- Obamuyi, T. M. (2009). An investigation of the relationship between interest rates and economic growth in Nigeria, 1970-2006. *Journal of Economics and International Finance*, 1(4), 93-98.
- Olalekan, A., & Akinbobola, T. (2012). Monetary policy and economic growth of Nigeria. *Asian Economic and Financial Review*, 2(3), 21-29.
- Olasehinde-Williams, G., Omotosho, R., & Bekun, F. V. (2024). Interest rate volatility and economic growth in Nigeria: New insight from the quantile autoregressive distributed lag (QARDL) model. *Journal of the Knowledge Economy*, 15, 20172-20195. [\[Crossref\]](#)
- Sanusi, L. S. (2012). *The role of the Central Bank in managing the Nigerian economy* [Lecture]. University of Benin.
- World Bank. (2025). *Nigeria development update, December 2025: Reforms for recovery*. [\[Link\]](#)