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Impact of Interest Rates on Economic Growth in Nigeria :1990 - 2022.

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Abstract

The present study examined the impact of interest rates on economic growth in Nigeria using time series data from 1990 to 2022. The study employed the Autoregressive Distributed Lag (ARDL) model as the estimation technique and tested for unit roots using the Augmented Dickey-Fuller (ADF) technique to ensure stationarity. The empirical results revealed that the real interest rate has a significant but mixed impact on economic growth in Nigeria. In the short run, fluctuations in interest rates were found to exert a negative influence on growth, while in the long run, a stable and moderate interest rate positively contributed to economic expansion. The error correction term was significant, indicating a stable long-run relationship between interest rates and economic growth. The findings suggest that excessively high interest rates may hinder investment and economic performance, whereas moderate rates foster growth by stimulating capital formation and productivity.Based on these findings, the study recommends that policymakers adopt a balanced interest rate policy that promotes investment while controlling inflationary pressures. The Central Bank of Nigeria (CBN) should ensure that interest rate policies are aligned with economic growth objectives, preventing excessive volatility that could disrupt macroeconomic stability. Additionally, strategies to enhance financial market efficiency and promote access to credit should be strengthened to support sustainable economic development.

Keywords: *Interest rate, Economic growth, ARDL, Real interest rate, Investment, Central Bank of Nigeria (CBN), Macroeconomic stability, Capital formation, Financial market efficiency.*

I. Introduction

Interest rates play a pivotal role in the economy, influencing savings, investment, and consumption decisions. They serve as a mechanism for transferring funds from savers to borrowers, thereby facilitating economic activities. In Nigeria, the interest rate policy has oscillated between regulated and unregulated regimes, with significant implications for economic growth(Agbaje, 2020).According to Ogunbiyi and Ihejirika (2014), the liberalization of interest rates in 1987 was intended to enhance the operational efficiency of the financial sector, but the subsequent volatility in interest rates has raised concerns about their impact on economic stability and growth.The rate of economic growth in a country is contingent upon the rate of investments. It has been suggested by Datta and Kumar (2011) that the interest rate has the potential to impact the rate of investment, which in turn may have an effect on economic growth. The fluctuation of global economic growth and interest rates has been a persistent macroeconomic issue, as highlighted by Madhukar and Nagarjuna (2012). During the 1980s, countries, particularly those in Latin America, that implemented high interest rates witnessed a decline in economic growth. Consequently, this observation led to the inference that elevated interest rates have an adverse impact on economic growth.

According to Adebayo and Udofu (2021), the regulation of interest rates in Nigeria is still carried out indirectly through official mechanisms, despite the banks operating under a framework of deregulation. This is consistent with the findings presented by Francis (2019) as quoted in Adebayo and Udofu (2021). The determination of interest rates in Nigerian deposit money banks is primarily influenced by the Monetary Policy Rate (MPR), which is controlled by the Central Bank of Nigeria (CBN). As stated by Francis (2019), an increase in the MPR corresponds to a higher interest rate, while a decrease in the MPR corresponds to a lower interest rate.The monetary policy rate (MPR) serves as the designated interest rate of the Central Bank of Nigeria (CBN), effectively establishing a foundation for all other interest rates within the money market and the broader economy. Over the course of time, the MRR/MPR, which serves as the fundamental rate for determining other prevailing interest rates in the economy, has exhibited a lack of stability. It has undergone a pattern of reduction, followed by an increase, followed by another reduction, and yet another increase. In line with this, Olurounbi (2020) states that Nigeria has taken measures to stimulate the economy by offering more affordable credit, resulting in a reduction of its Monetary Policy Rate (MPR) from 12. Nevertheless, according to Emejo and Ekeghe (2022), the Monetary Policy Committee (MPC) of the Central Bank of Nigeria made the decision to raise the benchmark interest rate from 11.5% to 13% after maintaining it at a constant rate for approximately two and a half years. This increase was attributed to the inflationary pressures affecting the global economy. Subsequently, in July 2022, the MPC further raised the benchmark interest rate to 14% for the same reason, as stated by Olawoyin (2022).However, the relationship between interest rates and economic growth remains a contentious issue among economists, policymakers, and financial practitioners. While some studies suggest a positive correlation between interest rates and economic growth, others argue that high interest rates can hinder investment and economic expansion.

The study is motivated by the need to provide empirical evidence on the relationship between interest rates and economic growth in Nigeria. Specifically, it aims to evaluate the effects of nominal interest rates, real interest rates, lending rates, and deposit rates on economic growth. The findings of this study will offer valuable insights for policymakers, financial institutions, and investors, helping them make informed decisions that promote sustainable economic growth.

II. Literature Review

2.1 Conceptual Framework

2.1.1 The Concept of Interest Rate

Interest rates are a fundamental component of any economy, representing the cost of borrowing or the return on savings. According to Sanusi (2002), interest rates are the financial charges imposed on borrowers for acquiring loans within an economic system. They influence the cost of borrowing and the incentive to save, thereby affecting economic activities. High interest rates can discourage borrowing and investment, while low interest rates can stimulate economic growth by making credit more accessible.

The relationship between interest rates and economic growth has been extensively studied, with mixed results. Some studies, such as those by Datta and Kumar (2011), suggest that high interest rates can negatively impact investment and economic growth. Conversely, other studies, such as those by McKinnon (1973), argue that higher interest rates can encourage savings and investment, thereby fostering economic growth. The debate continues, with no consensus on the direction of the relationship between interest rates and economic growth.

2.1.2 Management of Interest Rates in Nigeria

The management of interest rates in Nigeria has evolved over time, reflecting changes in economic conditions and policy objectives. The deregulation of interest rates in 1987 marked a significant shift from a regulated to a more market-driven approach. However, the volatility in interest rates that followed has raised concerns about their impact on economic stability and growth. The CBN has implemented various measures to stabilize interest rates, including the introduction of the Monetary Policy Rate (MPR) in 1994. Despite these efforts, interest rates in Nigeria remain highly volatile, with significant implications for economic growth.

2.1.3 Determinants of Interest Rates in the Economy

The determinants of interest rates in the economy are multifaceted, encompassing both real and monetary factors. According to Fisher (1930), interest rates are influenced by the supply and demand for loanable funds. Keynes (1936) introduced the concept of liquidity preference, arguing that interest rates are determined by the demand for money and the supply of money. In Nigeria, interest rates are influenced by factors such as inflation, monetary policy, and global economic conditions.

2.1.4 Economic Growth

Economic growth is a key indicator of a country's economic performance, reflecting the increase in the production of goods and services over time. It is typically measured by the growth rate of Gross Domestic Product (GDP). In Nigeria, economic growth has been influenced by various factors, including interest rates, inflation, and government policies. The relationship between interest rates and economic growth remains a contentious issue, with no consensus on the direction of the relationship.

2.2 Empirical Review

Numerous empirical studies have examined the relationship between interest rates and economic growth, with mixed results. Some studies, such as those by Udude (2015), suggest that higher interest rates can encourage savings and investment, thereby fostering economic growth. Conversely, other studies, such as those by Muhammad and Sahibzada (2017), argue that high interest rates can negatively impact investment and economic growth.

In Nigeria, the relationship between interest rates and economic growth has been the subject of extensive research. Studies such as those by Adegoke et al. (2021) and Adekunle et al. (2018) have found a negative relationship between interest rates and economic growth, suggesting that high interest rates can hinder economic expansion. However, other studies, such as those by Obamuyi and Olorunfemi (2011), have found a positive relationship between interest rates and economic growth, suggesting that higher interest rates can encourage savings and investment.

The mixed results of these studies highlight the complexity of the relationship between interest rates and economic growth. Factors such as inflation, monetary policy, and global economic conditions can influence the direction and magnitude of the impact of interest rates on economic growth. Albu (2014) concluded that policymakers should focus on interest rate management strategies that encourage investment and stimulate economic activity. The study highlighted the need for a balanced approach to monetary policy, ensuring that interest rates do not deter economic growth while maintaining financial stability.

Across the reviewed literature, findings indicate mixed results regarding the relationship between interest rates and economic growth, depending on the country, economic conditions, and methodology used. Some studies, such as Sylvane (2020) and Evans (2019), show that interest rates positively influence economic growth within certain thresholds, while others, like Samuel et al. (2017) and Harswari and Hamza (2017), demonstrate negative effects. Additionally, studies like Bosworth (2014) suggest an insignificant relationship, underscoring the complexity of the interest rate-growth nexus.This study seeks to contribute to this ongoing debate by examining the impact of interest rates on economic growth in Nigeria from 1990 to 2022

2.3 Theoretical Framework

The study is grounded in several theoretical frameworks, including the Classical Theory of Interest, the Keynesian Theory of Liquidity Preference, and the Loanable Funds Theory. The Classical Theory of Interest posits that interest rates are determined by the supply and demand for loanable funds. The Keynesian Theory of Liquidity Preference argues that interest rates are determined by the demand for money and the supply of money. The Loanable Funds Theory, on the other hand, emphasizes the role of savings and investment in determining interest rates.

These theoretical frameworks provide a foundation for understanding the relationship between interest rates and economic growth. They highlight the importance of savings, investment, and monetary policy in influencing interest rates and, consequently, economic growth. The study will draw on these theoretical frameworks to analyze the impact of interest rates on economic growth in Nigeria.

III. Methods and data

3.1 Research Design

The study adopted an Ex-post facto research design to explain the relationship between Interest rate and Economic growth. Ex post facto research design was appropriate for this study as it examined how an independent variable affects a dependent variable. The use of an ex-post facto research design in the study investigating the relationship between interest rates and economic growth indicates a retrospective or observational approach to understanding the relationship between these variables.The study relied on secondary data obtained from the Central Bank of Nigeria (CBN) Statistical Bulletin. Key variables, including GDP, real interest rates, nominal interest rates, deposit interest rates, and lending rates, were collected to analyze the impact of interest rates on economic growth in Nigeria over the study period.

3.2 Model Specification

The study employed a multiple regression model as its primary analytical framework. The present model has been adapted from the research conducted by Matarr and Momodou (2021), which examines the influence of interest rates on the economic growth of Gambia. The model is specified in the following manner:

GDP = B_0+NIR_{It}+RIR_{It}+IFL_{It}+ E

Where:

GDP = Gross domestic product
NIR = Nominal interest rate

RIR= Real interest rate
IFL= Inflation
E = Error Term

In order to achieve the objective of this study, the above model is modified by including deposit interest rate and lending rate which are components of interest rate that were not captured by Matarr and Momodou (2021) model. The model for this study is therefore specified as:

$$GDP = \beta_0 + \beta_1 RINR + \beta_2 NORM + \beta_3 DPST + \beta_4 LEND + \mu \ldots\ldots\ldots\ldots (3.2)$$

Where:
GDP = Gross domestic product
RINR= Real interest rate
NORM = Nominal interest rate
DPST= Deposit interest rate
LEND = Lending rate
μ = Error Term

3.3 Estimation Technique

3.3.1 ARDL Cointegration Approach

To test the long run relationship among the variables, this study deviates from the well-known Engle and Granger (1987) and Johansen and Juselius (1990) approaches to cointegration and make use of new and advanced approach known as autoregressive distributive lag model (ARDL) bounds testing approach developed by Pesaran et al. (2001) to test whether long run relationship exist between the variables or not. This method is recently embraced because it is valid if the variables of interest have vague order of integration i.e. purely I(0), purely I(1) or I(0) / I(1) which is not acceptable in previous approaches. Also, as maintained by Haug (2002), ARDL bounds testing approach is more appropriate and gives better results for small sample size while the short and long-run parameters can be estimated simultaneously. Hence, the ARDL representation of models used in this study is formulated thus;

$$\begin{aligned}\Delta GDP_t = \alpha_0 + \alpha_1 GDP_{t-1} + \alpha_2 RINR_{t-1} &+ \alpha_3 NORM_{t-1} + \alpha_4 DPST_{t-1} \\ &+ \alpha_5 LEND_{t-1} + \alpha_6 \Delta GDP_{t-i} \\ &+ \alpha_7 \Delta RINR_{t-i} + \alpha_8 \Delta NORM_{t-i} \\ &+ \alpha_9 \Delta DPST_{t-i} + \alpha_{10} \Delta LEND_{t-i} \\ &+ \mu_t \ldots . (3.5)\end{aligned}$$

Where; Δ is the first-difference operator, and α's shows the long run coefficients and short run coefficients. Hence, the null hypothesis (H_0) of no cointegration states that, H_0: $\alpha_1 = \alpha_2 = \alpha_3 = \alpha_4 = \alpha_5 = \alpha_6 = \alpha_7 = \alpha_8 = 0$ and the alternative hypothesis of existence of cointegration state that; $\alpha_1 \neq \alpha_2 \neq \alpha_3 \neq \alpha_4 \neq \alpha_5 \neq \alpha_6 \neq \alpha_7 \neq \alpha_8 = 0$. The above hypothesis is tested by comparing the calculated F-statistic with critical values from Narayan (2005) which were produced for small sample sizes of between 30 and 80 observations on the assumption that all variables in the model are I(0) in one side and that all the variables are I(1) on the other side. Following the norms of hypothesis testing, if the calculated F-statistic exceeds the upper critical bounds value, then the H_0 is rejected and we accept H_1, while if the F-statistic falls within the bounds then the test is inconclusive and lastly if the F-statistic falls below the lower critical bounds value, it implies that there is no co-integration.

With cointegrated variables, causal relations among variables can be examined within the framework of ECM (Granger, 1988). This presents both the short run and long run relationship among the variables. The individual coefficients of the lagged terms explain the short run dynamics in the model, while the error correction term (ECT) present the information of long run relationship. In the same vein, the significance of lagged explanatory variable depicts short run causality while a negative and statistical significant ECT is assumed to signify long run causality. The short-run causality model from the ARDL model is presented in equation 3.6

$$\begin{aligned}\Delta GDP_t &= \alpha_0 + \alpha_1 GDP_{t-1} + \alpha_2 RINR_{t-1} + \alpha_3 NORM_{t-1} \\ &+ \alpha_4 DPST_{t-1} + \alpha_5 LEND_{t-1} + \rho ECM_{t-1} \\ &+ \mu_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots . \ldots . . (3.6)\end{aligned}$$

Where, Δ is the difference operator, ECM represent the Error Correction Term (ECT) derived from the long-run cointegrating relation from specified ARDL models equation 3.5. In equation 3.6, ρ should exhibit a negative and significant sign for causality to exist in the long run.

Lastly, the stability of the model is tested using the cumulative sum of recursive residuals (CUSUM) and the CUSUM of square (CUSUMSQ) tests. This is based on the assertion of Narayan and Smyth (2005) who maintained that, after the error correction models have been estimated, Pesaran and Pesaran (1997) suggest applying the cumulative sum of recursive residuals (CUSUM) and the CUSUM of square (CUSUMSQ) tests to assess the parameter constancy.

IV. Preliminary Analysis

Table 4.1: Descriptive Statistics

	GDP	DPST	LEND	NORM	RINR
Mean	246.7224	11.21821	18.74353	3.131487	3.070617
Median	238.4500	10.28833	17.79500	5.685580	5.685580
Maximum	574.1800	23.24167	31.65000	18.18000	18.18000
Minimum	27.75000	4.206848	11.48313	-27.45257	-31.45257
Std. Dev.	186.4937	4.338105	3.997027	9.644471	10.14020
Skewness	0.191337	0.690657	1.026019	-1.198798	-1.368915
Kurtosis	1.411029	3.380704	4.849022	4.676380	5.544833
Jarque-Bera	3.672994	2.822822	10.49090	11.76824	19.21134
Probability	0.159375	0.243799	0.005271	0.002783	0.000067
Sum	8141.840	370.2011	618.5365	103.3391	101.3304
Sum Sq. Dev.	1112957.	602.2130	511.2393	2976.506	3290.360
Observations	33	33	33	33	33

Source: Author's computation from E-Views 10.0

Table 4.1 shows the descriptive statistics which include the mean, median, maximum value, minimum value, standard deviation, skewness, Kurtosis, Jarque-Bera, probability, sum and sum of square deviation of the variables under consideration which include Gross Domestic Product (GDP), Deposit Interest Rate (DSPT), Lending Interest Rate (LEND), Nominal Interest Rate (NORM) and Real Interest Rate (RINR). The total number of observations for each of the five variables is 33. GDP has the highest average value, followed by LEND, DPST, NORM and RINR respectively. Considering the normality status of individual variable's data in the distribution, the Jarque-Bera tests shows if the variables of interest are normally distributed. From the above table, it was denoted that GDP, DPST are normally distributed given that the probability of Jarque -Bera tests for each of these variables are not significant at 5% i.e., greater than 0.05 while other variables are not normally distributed. Similarly, in line with Jarque-Bera test's results, Kurtosis results also suggest that all the variables of interest except GDP are lepsokurtic given that the Kurtosis values of DPST, LEND, NORM and RINR i.e., 3.3807, 4.8490, 4.6763 and 5.5448 respectively are greater than three (3). Also, in line with the Jarque-Bera test's results, Kurtosis results also suggest that GDP is mesokurtic in nature given that the Kurtosis values that is, 1.4110 is less than three.

4.1. Correlation Analysis

It cannot be emphasized enough that the first thing to be done in any particular application is to give a correct economic analysis of the relation to be investigated. Two things should be carefully kept in mind: first, the necessity to know exactly what relation one really is interested in and second to know what factors enter into this relation. As such, this study considers the application of correlation analysis to explore the relationship among the variables of interest. Correlation is meant for exploring the degree of relationship between two variables in consideration. Correlation coefficient is the measure to quantify such degree of relationship of the variables. Generally, two correlation coefficients are used in applications, namely: Pearson's Product Moment Correlation Coefficient and Spearman's Rank Correlation Coefficient. This study primarily considers the applications of Pearson's Linear Correlation in exploring the relationship between variables.

Table 4.2. Correlation Analysis

	GDP	DPST	LEND	NORM	RINR
GDP	1	-0.7165	-0.7281	0.3828	0.3712
DPST	-0.71654	1	0.9266	-0.2420	-0.2246
LEND	-0.7281	0.9266	1	-0.2313	-0.2144
NORM	0.3828	-0.2420	-0.2313	1	0.9981
RINR	0.3712	-0.2246	-0.2144	0.9981	1

Source: Author's computationUsing E-views 10.0

Table 4.2. presents the correlation analysis which reveals the mutual relationship that exists among the variables of interest Gross Domestic Product (GDP), Deposit Interest Rate (DSPT), Lending Interest Rate (LEND), and Nominal Interest Rate (NORM) and Real Interest Rate

(RINR). GDP and DPST revealed a strong negative correlation of -0.72, indicating that as one decreases, the other tends to as well. GDP and LEND, demonstrate strong negative correlations of 0.72. GDP shows a weak positive correlation with NORM (0.38) and RINR (0.37), highlighting a potential association with broader economic trends. However, a very strong positive correlation (0.93) between DPST and LEND as well as NORM and RINR (0.99). Furthermore, there is a weak negative correlation between DPST and LEND, DPST and NORM, DPST and RINR, and LEND and NORM with values (-0.24), (-0.22), (-0.23) and (-0.21) respectively.

4.2 Unit Root Test

ADF techniques was employed to explore the stationarity properties of the variables in the specified model. The output of ADF Unit root tests is presented in the table 4.3.

Table 4.3: Unit Root Test Result

Variable	Critical values	Level	1st Diff.	Status
GDP	-2.960411	-0.389353	-3.992182	I(1)
DPST	-2.971853	-2.619893	-4.607999	I(1)
LEND	-2.960411	-2.359227	-7.058807	I(1)
NORM	-2.967767	-2.223126	-4.388742	I(1)
RINR	-2.967767	-2.256675	-4.325046	I(1)

Source: Author's computation Using E-views 10.0

Table 4.3 shows the stationarity properties of the variables in the specified model. The result reveals that Gross Domestic Product (GDP), Deposit Interest Rate (DSPT), Lending Interest Rate (LEND), Nominal Interest Rate (NORM) and Real Interest Rate (RINR) are integrated of order one i.eI(1), as indicated by the significantly negative test statistics in the first difference column compared to the critical values at the 1%, 5%, and 10% levels. This implies that these series are integrated of order 1, indicating a stable long-term behaviour

4.3.ARDL Bounds Test Approach to Cointegration

In line with the result of the unit root test, cointegration test is carried out using ARDL Bounds Test approach to cointegration.

Table 4.3: Result of Bounds Cointegration Test

F-statistic	0.661574	
K	3	
Critical Values		
Significance levels	I0 Bound	I1 Bound
10%	2.37	3.2
5%	2.79	3.67
2.5%	3.15	4.08
1%	3.65	4.66

Source: Author's computation Using E-views 10.0

The result of Bounds cointegration test is reported in Table 4.3. Since the F-statistic (0.661574) is less than the I1 critical bound at 1%, 2.5%, 5% and 10% level of significance, the null hypothesis of no cointegration is accepted. The conclusion can therefore be made that there is no long-run relationship between dependent and independent variables.

4.4.Estimated Short Run Coefficient using the ARDL Approach

Table 4.4: Estimated Short Run Coefficient

ARDL Error Correction Regression		
Dependent Variable: D(GDP)		
Selected Model: ARDL(4, 4, 4, 3)		
Case 2: Restricted Constant and No Trend		
Date: 03/06/25 Time: 14:18		

Sample: 1990 2022				
Included observations: 29				
ECM Regression				
Case 2: Restricted Constant and No Trend				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(GDP(-1))	0.799036	0.210146	3.802287	0.0035
D(GDP(-2))	-0.615507	0.247347	-2.488441	0.0321
D(GDP(-3))	0.259398	0.211384	1.227142	0.2479
D(DPST)	2.804795	4.138216	0.677779	0.5133
D(DPST(-1))	-13.01848	4.403947	-2.956094	0.0144
D(DPST(-2))	-1.287489	3.974661	-0.323924	0.7527
D(DPST(-3))	-10.82171	4.093476	-2.643649	0.0246
D(LEND)	-6.219748	4.887590	-1.272559	0.2320
D(LEND(-1))	13.91941	5.193653	2.680081	0.0231
D(LEND(-2))	-1.890078	5.212625	-0.362596	0.7245
D(LEND(-3))	13.20959	5.770832	2.289027	0.0451
D(RINR)	-1.181733	1.075071	-1.099213	0.2974
D(RINR(-1))	0.227671	1.049078	0.217020	0.8326
D(RINR(-2))	-2.459959	0.854830	-2.877717	0.0164
CointEq(-1)*	-0.129906	0.060366	-2.151981	0.0569
R-squared	0.690321	Mean dependent var		15.50483
Adjusted R-squared	0.380641	S.D. dependent var		40.97647
S.E. of regression	32.24821	Akaike info criterion		10.09105
Sum squared resid	14559.26	Schwarz criterion		10.79827
Log likelihood	-131.3202	Hannan-Quinn criter.		10.31254
Durbin-Watson stat	2.679471			

Source: Author's computation Using E-views 10.0

4.5

Discussion of Findings

This study examines the short-run impact of interest rates on economic growth in Nigeria, using GDP as the dependent variable and real interest rate, nominal interest rate, deposit interest rate, and lending rate as explanatory variables. The findings indicate the following:

The finding reveals that deposit rates reduces economic growth. Specifically, a 1% rise in deposit rates from the previous period leads to a 13.02% decline in GDP growth, while the effect remains negative and significant in the third period. This suggests that higher deposit rates discourage investment and consumption, thereby slowing economic activity.

The relationship between lending rates and economic growth is mixed. While a higher current lending rate does not significantly impact GDP, an increase in the lending rate from the previous period is associated with a 13.92% rise in GDP growth. This counterintuitive finding suggests that higher lending rates may not necessarily hinder economic growth in the short run, possibly due to strong investment activity despite higher borrowing costs.

The impact of the real interest rate on economic growth in the short run appears to be mixed, with no significant immediate effect but a notable lagged impact. The current real interest rate does not significantly influence GDP growth, as indicated by its negative but statistically insignificant coefficient. Similarly, the one-period lag of the real interest rate shows a small positive effect, but it remains statistically insignificant, suggesting that past changes in real interest rates do not strongly drive short-term economic fluctuations. However, the two-period lag of the real interest rate exhibits a significant negative impact on GDP growth, implying that an increase in real interest rates reduces economic growth after a delay.

The coefficient of the error correction term (-0.1299, p = 0.0569) is negative and statistically significant at the 10% level. The magnitude of -0.1299 suggests that about 12.99% of any deviation from the long-run equilibrium is corrected each period. This implies a relatively slow speed of adjustment, meaning it takes time for the economy to return to its long-run growth path after a shock.

The R-squared value (0.6903) suggests that about 69% of the variation in GDP growth is explained by the independent variables (interest rate factors). This indicates a moderate-to-strong explanatory power of the model.

V. Conclusion and Policy Recommendations

The findings indicate that real interest rates have a lagged but significant negative impact on economic growth in Nigeria. While the immediate effect of real interest rates on GDP growth is insignificant, the two-period lag shows that higher real interest rates can slow down economic activity. This suggests that monetary policy decisions affecting interest rates may take time to influence growth, but when they do, the impact can be substantial. Additionally, deposit and lending rates show mixed effects, with past values influencing GDP either positively or negatively, highlighting the complexity of interest rate transmission in the economy.

From a policy perspective, the results imply that policymakers should carefully manage real interest rates to strike a balance between controlling inflation and stimulating growth. Given the delayed negative effect of real interest rates, monetary authorities, such as the Central Bank of Nigeria, should consider adopting policies that ensure rates remain conducive to investment and economic expansion. Interest rate adjustments should be gradual to avoid sudden economic contractions. Furthermore, policies that enhance access to credit and improve financial sector efficiency could help mitigate the adverse effects of high real interest rates. Overall, a well-coordinated monetary policy framework is essential for fostering sustainable economic growth in Nigeria.

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