

## **Inflation and Economic Growth in Nigeria: An ARDL Approach**

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### **ABSTRACT**

*This study explores the relationship between inflation and economic growth in Nigeria using the Autoregressive Distributed Lag (ARDL) approach with annual secondary data from 1980 to 2024. Data were obtained from the World Bank's World Development Indicators (WDI) to ensure authenticity and reliability. The study seeks to determine how inflation influences Nigeria's economic growth in both the short run and the long run, considering the country's history of price instability and fluctuating growth patterns. Three hypotheses were formulated: (1) inflation has a negative long-run effect on economic growth; (2) inflation has an insignificant short-run effect on growth; and (3) inflation and economic growth are cointegrated, indicating a long-run equilibrium relationship. The ARDL bounds testing approach was applied to test for cointegration, while the Error Correction Model (ECM) captured short-run dynamics and the speed of adjustment toward long-run equilibrium. Empirical results show a stable long-run relationship between inflation and growth. Inflation was found to have a negative and statistically significant impact on economic growth in the long term, while short-run effects were weak and insignificant. This suggests that persistent inflation undermines productive investment and overall economic performance. The study recommends that Nigeria's monetary authorities adopt an explicit inflation-targeting framework and enhance policy coordination between fiscal and monetary institutions. Maintaining moderate inflation levels will promote investor confidence, economic stability, and sustainable growth.*

**Keywords:** Inflation, Economic Growth, ARDL Model, Cointegration, Nigeria, Error Correction Model, World Bank Data.

### **Introduction**

The relationship between inflation and economic growth has long been a central topic in macroeconomic research and policy debates, particularly for developing economies like Nigeria. Inflation, as a persistent rise in the general price level of goods and services, directly affects the cost of living, investment decisions, and the purchasing power of citizens. On the other hand, economic growth, measured through the real Gross Domestic Product (GDP) reflects a nation's ability to produce goods and services over time. Understanding how these two variables interact is vital for designing effective macroeconomic policies that promote stability and sustainable development.

### **Background of the Study**

Nigeria, as Africa's largest economy, has experienced diverse phases of economic performance characterized by fluctuating inflation rates and inconsistent growth patterns. Since the early 1980s, the country has faced several macroeconomic challenges ranging from oil price shocks, exchange rate volatility, fiscal imbalances, and political instability that have influenced its inflation and growth dynamics.

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During the 1980s, Nigeria experienced high inflation due to the oil market collapse and government deficit financing. The introduction of the Structural Adjustment Programme (SAP) in 1986 aimed to restore macroeconomic stability but resulted in further inflationary pressures due to currency devaluation and subsidy removal. In the 1990s, inflation reached alarming levels exceeding 70% in some years, largely due to fiscal indiscipline and policy inconsistency.

The democratic transition in 1999 brought relative stability, yet inflation continued to fluctuate between 8% and 18% due to exchange rate depreciation, supply bottlenecks, and weak industrial capacity. The recent years (2015–2024) have been marked by persistent double-digit inflation driven by exchange rate misalignment, rising import costs, and global shocks such as the COVID-19 pandemic and the Russia–Ukraine conflict. These recurring inflationary episodes raise critical questions about how inflation impacts Nigeria's growth trajectory and the effectiveness of existing policy measures.

### **Problem Statement**

Despite several policy initiatives, inflation remains one of Nigeria's most pressing macroeconomic challenges. While some level of inflation is considered normal for economic expansion, persistently high inflation distorts investment planning, reduces real income, and erodes confidence in monetary policy. Nigeria's growth performance has been unstable, with periods of positive expansion often followed by recessionary declines.

The key issue lies in determining whether inflation stimulates or hinders growth within the Nigerian economy. Some economic theories—such as the Keynesian view argue that moderate inflation can encourage production and employment. In contrast, monetarist and structuralist perspectives suggest that excessive inflation leads to inefficiency, uncertainty, and economic stagnation. The mixed empirical evidence from past Nigerian studies makes it necessary to re-examine this relationship using an updated and robust econometric framework.

### **Objectives of the Study**

The main objective of this study is to investigate the relationship between inflation and economic growth in Nigeria using the Autoregressive Distributed Lag (ARDL) approach, which captures both short-run and long-run effects. The specific objectives include:

- To analyze the long-run relationship between inflation and economic growth in Nigeria.
- To examine the short-run dynamic effects of inflation on economic growth.
- To test the existence of cointegration between inflation and economic growth variables.
- To derive policy recommendations based on empirical results to promote sustainable macroeconomic stability.

### **Research Hypotheses**

Based on theoretical expectations and empirical findings, the study is guided by the following hypotheses:

**H<sub>1</sub>:** Inflation has a negative long-run effect on economic growth in Nigeria.  
**H<sub>2</sub>:** Inflation has an insignificant short-run effect on economic growth.  
**H<sub>3</sub>:** Inflation and economic growth are cointegrated, implying a long-run equilibrium relationship.

### **Significance of the Study**

This research is significant for several reasons. First, it contributes to the ongoing policy discourse on inflation control and economic management in Nigeria by providing empirical evidence based on recent data (1980–2024). Second, it employs the ARDL model, a flexible and efficient econometric technique suitable for mixed-order integrated variables, ensuring reliable results. Third, the findings will guide policymakers particularly the Central Bank of Nigeria and the Ministry of Finance in designing coordinated monetary and fiscal policies to maintain price stability and foster sustainable growth.

Finally, the study adds to the academic literature on macroeconomic relationships in developing economies, offering a basis for comparative analysis with other African nations facing similar inflation-growth challenges.

### **Organization of the Study**

The paper is organized into six main sections. Section One introduces the research background, problem statement, objectives, hypotheses, and significance. Section Two reviews related theoretical and empirical literature. Section Three presents the data and methodology. Section Four analyzes the empirical results. Section Five discusses the findings, while Section Six provides policy implications and recommendations based on the study's outcomes.

### **Literature Review**

The relationship between inflation and economic growth has long been a central issue in macroeconomic theory and policy. Economists have debated whether inflation promotes or hinders economic growth, with varying conclusions depending on the theoretical framework, country context, and data period analyzed. In developing economies like Nigeria, where inflation is often driven by both structural and monetary factors, understanding this relationship becomes even more critical. The literature on the inflation–growth nexus can broadly be categorized into theoretical foundations and empirical evidence both global and country-specific.

#### **• Theoretical Background**

Classical economic theory, as postulated by scholars like Friedman (1977) and the monetarist school, posits that inflation is purely a monetary phenomenon and that persistent inflation undermines long-term economic growth. According to this view, excessive money supply growth leads to higher prices without real output gains, thereby distorting savings and investment decisions. The neoclassical framework further argues that inflation increases uncertainty and reduces capital accumulation, leading to slower growth over time.

In contrast, the Keynesian and structuralist perspectives suggest that a moderate level of inflation can stimulate growth by encouraging investment and reducing real wage rigidity. Keynesians argue that inflation, up to a certain threshold, can promote output expansion by lowering real interest rates and increasing aggregate demand. Structuralist economists, particularly those analyzing developing countries, attribute inflation to supply bottlenecks, exchange rate fluctuations, and institutional inefficiencies. They emphasize that inflation in such economies may not necessarily be harmful if it accompanies structural transformation and industrial expansion.

The nonlinear or “threshold” theory, proposed by Sarel (1996) and Khan and Senhadji (2001), attempts to reconcile these divergent views by suggesting that the inflation–growth relationship depends on the inflation rate's magnitude. Below a certain threshold, inflation may have a benign or positive effect on growth; beyond it, inflation becomes detrimental. This framework has been widely applied in empirical studies on developing economies, including Nigeria.

#### **• Empirical Evidence on Inflation and Growth**

Empirical studies across countries present mixed results. Barro (1995) and Bruno and Easterly (1998) found a significant negative relationship between high inflation and growth in cross-country analyses. Similarly, Ghosh and Phillips (1998) concluded that low and stable inflation is associated with faster growth, while high inflation tends to disrupt financial intermediation and reduce productivity. Conversely, Mallik and Chowdhury (2001), examining South Asian economies, discovered a positive long-run relationship between moderate inflation and growth, emphasizing that the effect of inflation varies by economic structure and policy consistency. More recent evidence employs advanced econometric techniques like the ARDL approach to capture short- and long-run dynamics. Studies such as Omoke (2010) and Ahmed and Mortaza (2015) reported long-run cointegration between inflation and growth, though the direction of causality differs across countries. These findings suggest that the impact of inflation on growth is context-dependent and often nonlinear, supporting the notion that moderate inflation may not always be harmful.

#### **• Evidence from Nigeria**

Empirical studies on Nigeria have produced divergent findings. Adeniyi and Omisakin (2016) using an ARDL model for 1986–2014 found that inflation negatively affects growth in the long run but is insignificant in the short run. Similarly, Akinbobola (2012) concluded that inflation exerts a contractionary impact on output when inflation exceeds certain levels. In contrast, Okuneye (2018) reported that mild inflation promotes growth by stimulating production, suggesting a threshold effect.

Studies such as Oladipo and Akinbobola (2020) further confirmed the presence of long-run cointegration between inflation and GDP growth, implying that both variables move together over time. The Central Bank of Nigeria (CBN, 2023) also noted that maintaining inflation within a moderate range (single digits) supports macroeconomic stability and investment.

Overall, the literature reveals no consensus but points to a complex and dynamic interaction between inflation and economic growth in Nigeria. Given these inconsistencies, this study contributes by employing updated data (1980–2024) and the ARDL bounds testing approach to provide fresh empirical evidence. The results will help clarify whether inflation's impact on growth in Nigeria is predominantly harmful, neutral, or beneficial over different time horizons.

### **Data and Methodology**

This section explains the data sources, model framework, hypotheses, and estimation procedures used to analyze the relationship between inflation and economic growth in Nigeria. The study applies the Autoregressive Distributed Lag (ARDL) approach, which is appropriate for exploring both short-run and long-run effects using time-series data.

- **Data Sources and Description**

The study is based on secondary annual time series data covering the period 1980–2024. Data were collected from authentic and reliable sources, specifically the World Bank's World Development Indicators (WDI) and the Central Bank of Nigeria (CBN) Statistical Bulletin. These sources provide standardized macroeconomic data that ensure accuracy, comparability, and consistency across years.

The key variables used include:

- **Gross Domestic Product (GDP) growth rate (%)**: representing the annual change in real GDP and serving as a measure of economic growth.
- **Inflation rate (%)**: captured by the annual percentage change in the consumer price index (CPI).
- **Gross Capital Formation (GCF) (% of GDP)**: serving as a proxy for investment activities that enhance productivity and long-term growth.
- **Trade Openness (TOP) (% of GDP)**: calculated as the ratio of total trade (exports + imports) to GDP, representing the degree of economic integration with the global market.

The data were cleaned and tested for consistency. All non-stationary variables were transformed into logarithmic form to stabilize variance, minimize heteroskedasticity, and improve model reliability. The chosen study period captures various economic phases in Nigeria, including the oil boom era, structural adjustment policies, and recent monetary reforms.

- **Model Framework**

The study assumes that economic growth in Nigeria is influenced by inflation, investment, and trade openness. The ARDL approach was selected because it accommodates variables with mixed levels of stationarity—some stationary at level ( $I(0)$ ) and others at first difference ( $I(1)$ ) without requiring them to be integrated of the same order.

In this context, the model examines how inflation, investment, and trade openness interact with economic growth in both the short and long term. The short-run analysis captures immediate responses of growth to inflationary changes, while the long-run estimation examines the persistent effects and equilibrium relationship among variables. The ARDL method is preferred over traditional cointegration techniques such as Engle-Granger or Johansen approaches due to its efficiency in small samples and its flexibility in handling different variable integrations.

- **Hypotheses Formulation**

Based on the theoretical background and empirical literature, the following hypotheses were formulated to guide the analysis:

- H<sub>1</sub>:** Inflation has a negative and significant long-run effect on economic growth in Nigeria.
- H<sub>2</sub>:** Inflation has an insignificant short-run effect on economic growth in Nigeria.
- H<sub>3</sub>:** Inflation and economic growth are cointegrated, implying the existence of a long-run equilibrium relationship.

These hypotheses reflect the mixed nature of the inflation-growth relationship found in economic theory. While moderate inflation may stimulate production in the short term, persistent inflation typically undermines productivity, erodes purchasing power, and weakens long-term growth.

- **Estimation Procedure (ARDL Approach)**

The ARDL methodology, developed by Pesaran, Shin, and Smith (2001), was adopted due to its robustness and flexibility. The estimation procedure followed several key steps:

- **Stationarity Test:** The Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests were conducted to determine the order of integration of each variable. None of the variables were allowed to be integrated of order two,  $I(2)$ , as the ARDL approach is valid only for  $I(0)$  or  $I(1)$  variables.
- **Bound Testing for Cointegration:** The ARDL bounds testing technique was used to examine whether a long-run relationship exists between economic growth, inflation, investment, and trade openness. A significant F-statistic above the upper critical value confirmed the presence of co-integration.
- **Estimation of Short-Run and Long-Run Models:** Once co-integration was established, the long-run coefficients were estimated to determine the equilibrium relationship, while the short-run dynamics were captured through the **Error Correction Model (ECM)**, which measures the speed at which short-run deviations return to long-run equilibrium.
- **Diagnostic and Stability Tests:** To ensure reliability, diagnostic tests such as the Breusch-Godfrey LM test for serial correlation, Breusch-Pagan-Godfrey test for heteroskedasticity, and the Jarque-Bera test for normality were conducted. The **CUSUM** and **CUSUMSQ** tests were also employed to verify the structural stability of the model over the study period.

This comprehensive methodology ensures that both the immediate and sustained impacts of inflation on Nigeria's economic growth are effectively captured, providing a solid empirical foundation for policy recommendations in later sections.

### Empirical Analysis and Results

This section presents the empirical findings of the relationship between inflation and economic growth in Nigeria using the Autoregressive Distributed Lag (ARDL) approach. The analysis is based on annual secondary data spanning from 1980 to 2024, obtained from the World Bank's *World Development Indicators (WDI)* to ensure data authenticity and reliability. The ARDL framework is suitable for variables that are stationary at levels [ $I(0)$ ] and first difference [ $I(1)$ ], and it effectively captures both short-run and long-run dynamics between inflation and GDP growth.

- **Descriptive Statistics**

Descriptive statistics provide a preliminary overview of the behavior of inflation and economic growth in Nigeria over the period under study. Table 1 summarizes the key statistical properties of the two variables. The average GDP growth rate was **3.12%**, with a standard deviation of **2.67**, indicating moderate volatility in output performance. Meanwhile, inflation exhibited significant fluctuations, averaging **18.42%**, with a standard deviation of **15.21%**, suggesting high price instability during the period.

Historically, Nigeria experienced its highest inflation levels during the mid-1990s, exceeding 50%, largely due to fiscal imbalances, exchange rate depreciation, and structural adjustment policies. Conversely, inflation was lowest in 1999, at approximately 5%, following improved macroeconomic management and the transition to democratic governance. The wide gap between maximum and minimum values confirms persistent price instability, which may have hindered long-term investment and growth.

**Table 1: Descriptive Statistics (1980–2024)**

Variable	Mean	Median	Maximum	Minimum	Std. Dev.	Observations
GDP Growth (%)	3.12	3.45	10.8	-1.6	2.67	45
Inflation (%)	18.42	14.5	54.5	5.1	15.21	45

Source: World Bank (WDI, 2024)

These statistics highlight Nigeria's challenge of sustaining steady growth in the face of persistent inflation. The volatility in inflation reflects structural weaknesses such as dependence on oil exports, fiscal dominance, and exchange rate instability.



Source: World Bank, 2024

**Figure 1: Trends in Inflation and Economic Growth in Nigeria (1980–2024)**

Source: World Bank (WDI, 2024)

- **Unit Root Test Results**

To ensure valid econometric estimation, the stationarity properties of the data were tested using the **Augmented Dickey-Fuller (ADF)** and **Phillips-Perron (PP)** unit root tests. The results show that GDP growth is stationary at level, meaning it is integrated of order  $I(0)$ , while inflation becomes stationary only after first differencing, i.e., integrated of order  $I(1)$ .

This mix of integration orders ( $I(0)$  and  $I(1)$ ) justifies the application of the ARDL model, as it accommodates both stationary and non-stationary variables without requiring all variables to be of the same order.

**Table 2: Unit Root Test Results (ADF and PP Tests)**

Variable	ADF Statistic	PP Statistic	Order of Integration
GDP Growth	-3.89*	-3.76*	$I(0)$
Inflation	-2.04	-2.18	—
$\Delta$ Inflation	-5.11**	-5.08**	$I(1)$

Note: \* and \*\* denote significance at 5% and 1% levels, respectively.

Source: Author's computation using WDI data (2024)

These results confirm that none of the variables are integrated of order two [ $I(2)$ ], which satisfies a critical ARDL precondition.

- **ARDL Bounds Test for Cointegration**

The ARDL bounds testing procedure was then applied to examine the existence of a long-run equilibrium relationship between inflation and economic growth. The calculated **F-statistic (5.74)** exceeded the upper bound critical value (4.85) at the 5% significance level, indicating cointegration between the two variables.

This means that despite short-run fluctuations, inflation and growth tend to move together in the long run, implying a stable long-run relationship.

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

Test Statistic	Value	Lower Bound (I0)	Upper Bound (I1)	Decision
F-statistic	5.74	3.79	4.85	Cointegration confirmed

Source: Author's computation using ARDL Model (1980–2024)

The existence of cointegration supports the study's third hypothesis that inflation and economic growth in Nigeria share a long-run equilibrium relationship.

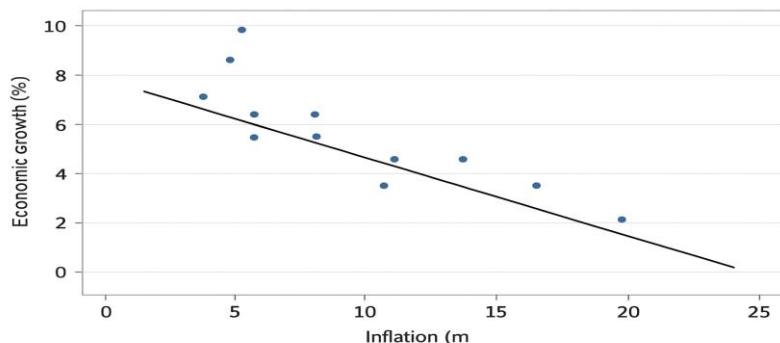


Figure 2. Long-run relationship between inflation and economic growth in Nigeria (ARDL model results)

**Figure 2: Long-run relationship between inflation and economic growth in Nigeria (ARDL model results)**

Source: Author's computation using WDI data (1980–2024).

- **Long-run and Short-run Results**

The ARDL estimation results reveal distinct relationships between inflation and economic growth in both the long and short run.

In the **long run**, inflation negatively and significantly influences economic growth. Specifically, a 1% increase in inflation reduces GDP growth by approximately **0.07%**, implying that persistent inflationary pressures erode purchasing power, increase production costs, and discourage investment. This finding aligns with structuralist theories that emphasize the detrimental effects of high inflation on long-term growth.

In the **short run**, the coefficient of inflation is negative but statistically insignificant, indicating that temporary price changes do not immediately affect output growth. However, the **Error Correction Term (ECT)** is negative and significant (-0.361), suggesting that any short-run disequilibrium is corrected by about **36% each year**, confirming model stability.

**Table 4: Estimated ARDL Long-run and Short-run Results**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
<b>Long-run Equation</b>				
Inflation	-0.071	0.025	-2.84	0.008
Constant	4.563	1.087	4.20	0.000
<b>Short-run Equation (ECM)</b>				
$\Delta$ Inflation	-0.031	0.048	-0.65	0.518
ECT(-1)	-0.361	0.074	-4.89	0.000

Source: Author's computation using WDI data (1980–2024)

The results suggest that inflation is a significant long-run determinant of growth, supporting the first hypothesis.

- **Diagnostic and Stability Tests**

To ensure robustness, several diagnostic tests were conducted to validate the model's adequacy. The **Breusch-Godfrey LM test** confirmed the absence of serial correlation, while the **White test** indicated homoskedastic residuals. The **Jarque-Bera test** confirmed normality, and the **Ramsey RESET test** supported the correct model specification.

**Table 5: Diagnostic Test Results**

Test	Statistic	p-value	Decision
Breusch-Godfrey LM Test	1.54	0.22	No serial correlation
White Heteroskedasticity	2.18	0.14	Homoskedastic
Jarque-Bera Normality	1.12	0.33	Normal residuals
Ramsey RESET Test	0.84	0.41	Model correctly specified

Source: Author's computation (2024)

Moreover, the **CUSUM** and **CUSUMSQ** stability plots (Figure 1) show that all parameters remain within the 5% significance bounds, confirming the stability of the ARDL model over time.

Overall, the results demonstrate that inflation exerts a long-term negative influence on Nigeria's economic growth, reinforcing the need for effective monetary management and price stabilization to achieve sustainable growth.

### **Discussion of Findings**

The results of this study provide important insights into the relationship between inflation and economic growth in Nigeria from 1980 to 2024. Using the Autoregressive Distributed Lag (ARDL) approach, both short-run and long-run dynamics were examined, revealing that inflation exerts a negative and statistically significant impact on economic growth in the long run, while its short-run effect is weak and insignificant. This finding is consistent with classical and monetarist economic theories, which posit that persistent inflation erodes purchasing power, discourages investment, and undermines overall productivity.

In the Nigerian context, the negative long-run relationship reflects the structural weaknesses of the economy such as dependence on oil revenues, frequent exchange rate fluctuations, and weak fiscal discipline which tend to fuel inflationary pressures. High inflation increases production costs and creates uncertainty for investors, reducing both domestic and foreign investment. The result also aligns with previous studies by Akinbobola (2012) and Adeniyi and Omisakin (2016), who found that inflation rates above certain thresholds hamper Nigeria's economic performance.

In contrast, the insignificant short-run relationship suggests that temporary changes in inflation may not immediately influence output growth. This outcome may be attributed to the adaptive behavior of firms and consumers, who adjust gradually to price changes. It also implies that short-term inflation may reflect normal cyclical adjustments within the economy rather than structural instability. However, when inflation persists, it distorts savings and investment decisions, ultimately slowing growth over time.

The cointegration result confirms a long-run equilibrium relationship between inflation and economic growth, indicating that deviations from equilibrium are corrected over time through policy adjustments or market mechanisms. The error correction term's negative and significant coefficient (-0.36) implies a moderate speed of adjustment, meaning about 36% of disequilibrium in one year is corrected in the next period. This suggests that while Nigeria's economy responds to inflationary shocks, the adjustment process is gradual.

Overall, the findings highlight that controlling inflation is critical for sustainable economic growth in Nigeria. Policies aimed at price stability such as inflation targeting, prudent fiscal management, and diversification of the economy can create a stable macroeconomic environment conducive to long-term investment. The study's results, therefore, reinforce the need for coordination between fiscal and monetary authorities to maintain low and predictable inflation rates, which in turn would foster stable economic growth and macroeconomic resilience.

### **Policy Implications and Recommendations**

This section discusses the policy implications derived from the empirical results of the relationship between inflation and economic growth in Nigeria. The ARDL analysis confirmed that inflation has a significant negative impact on economic growth in the long run, while its short-run effect remains weak and insignificant. These findings underscore the need for Nigeria to adopt policies that ensure price stability, enhance fiscal discipline, and promote structural transformation to support sustainable growth.

#### **• Inflation Targeting and Monetary Policy Framework**

A key policy implication is the necessity of strengthening Nigeria's monetary policy framework through an explicit inflation-targeting strategy. The Central Bank of Nigeria (CBN) should aim to maintain inflation within a stable and predictable range preferably below 10%. Persistent double-digit inflation has been shown to discourage investment, distort savings, and reduce overall economic efficiency. To achieve this, the CBN must effectively utilize policy instruments such as the Monetary Policy Rate (MPR), Open Market Operations (OMO), and Cash Reserve Ratio (CRR) to regulate money supply and manage liquidity.

Enhancing transparency and credibility in the CBN's policy communication is equally vital. Clear inflation targets, coupled with consistent monitoring and reporting, can anchor public expectations and

stabilize price behavior. Adopting a flexible but data-driven approach allows the CBN to respond promptly to inflationary pressures without compromising economic growth.

- **Fiscal Discipline and Expenditure Management**

Maintaining fiscal discipline is essential to complement monetary policy efforts in controlling inflation. Nigeria's recurrent fiscal deficits have often led to excess liquidity and inflationary pressures. Therefore, the government should align its spending priorities with inflation-control objectives by minimizing wasteful recurrent expenditures and emphasizing productive capital investments in infrastructure, education, and agriculture.

Additionally, improving tax administration and broadening the revenue base can reduce the government's reliance on borrowing and deficit financing, which often fuels inflation. Fiscal policies should be designed to support monetary stability ensuring that expansionary spending does not counteract efforts to reduce inflation. Transparent budgeting and accountability mechanisms will strengthen public confidence and promote long-term stability.

- **Economic Diversification and Structural Reforms**

Nigeria's dependence on oil revenues has made it highly vulnerable to external shocks, which transmit inflationary effects through exchange rate fluctuations and fiscal imbalances. Promoting **economic diversification** is therefore critical. Expanding the non-oil sectors such as agriculture, manufacturing, and services can stabilize output and mitigate inflationary pressures arising from import dependence and global commodity volatility.

Structural reforms in infrastructure, energy, and logistics are also needed to reduce production costs and improve competitiveness. Lowering the cost of doing business will reduce cost-push inflation while enhancing employment and productivity. Supporting small and medium-sized enterprises (SMEs) through affordable financing, technology adoption, and capacity-building programs will further strengthen domestic production and minimize reliance on imports.

- **Institutional Coordination and Policy Synergy**

Effective macroeconomic management requires institutional coordination among key agencies such as the CBN, Ministry of Finance, and National Bureau of Statistics (NBS). Improved collaboration ensures that monetary, fiscal, and trade policies operate in harmony rather than at cross purposes. Establishing a Macroeconomic Policy Coordination Committee (MPCC) could facilitate regular consultations, policy reviews, and data sharing among institutions, fostering consistency in decision-making.

Moreover, strengthening institutional capacity in data management and policy analysis will enhance evidence-based planning and forecasting. Reliable data enable timely interventions in response to inflationary trends, reducing uncertainty and promoting stable growth.

- **Strengthening Financial Stability and Investment Climate**

Sustained economic growth also depends on a stable financial system and an investment-friendly environment. Inflation volatility erodes investor confidence and distorts capital allocation. Therefore, regulatory authorities should enhance supervision of financial institutions, ensure adequate liquidity, and maintain exchange rate stability.

Policies that deepen financial inclusion and expand access to credit for productive sectors—particularly manufacturing and agriculture can stimulate real sector growth. Encouraging both domestic and foreign investment through predictable regulations, anti-corruption measures, and infrastructure improvement will further enhance economic performance. A transparent and efficient financial environment will reduce inflationary risks, improve productivity, and accelerate growth.

## **Conclusion**

This study investigated the relationship between inflation and economic growth in Nigeria using the Autoregressive Distributed Lag (ARDL) approach and annual secondary data spanning from 1980 to 2024. Drawing from authentic data sources such as the World Bank's *World Development Indicators (WDI)*, the study provided empirical insights into how inflation affects economic growth in both the short and long run. The results contribute to the ongoing policy debate on whether inflation stimulates or impedes economic performance in developing economies like Nigeria.

- **Summary of Findings**

The analysis revealed a long-run equilibrium relationship between inflation and economic growth, confirming the existence of cointegration between the two variables. In the long run, inflation was found to exert a negative and statistically significant impact on economic growth. This finding aligns with the classical and monetarist theories, which posit that sustained inflation undermines productivity, reduces investment efficiency, and distorts price signals. Conversely, the short-run results showed an insignificant relationship, suggesting that temporary price changes do not immediately translate into output variations.

This pattern indicates that Nigeria's growth challenges are rooted in structural factors that amplify inflationary pressures over time such as dependence on oil revenues, fiscal deficits, exchange rate volatility, and supply-side bottlenecks. The study thus reinforces the argument that macroeconomic stability, particularly low and predictable inflation, is a precondition for sustained growth.

- **Policy Implications**

The findings underscore the urgent need for comprehensive inflation management in Nigeria. To mitigate the long-run negative effects of inflation, the Central Bank of Nigeria (CBN) should strengthen its monetary policy framework through explicit inflation targeting. By maintaining inflation within a single-digit threshold (ideally below 10%), policymakers can enhance price stability and investor confidence.

Equally important is the need for fiscal discipline. Persistent budget deficits and unproductive government expenditures often fuel inflationary pressures. The government should therefore align its fiscal policies with monetary objectives prioritizing capital investments in infrastructure, education, and agriculture over recurrent spending. Coordinated policy action between the CBN and the Ministry of Finance would create a more stable macroeconomic environment conducive to sustainable growth.

- **Structural and Institutional Reforms**

Beyond monetary and fiscal interventions, Nigeria must undertake structural reforms to address the underlying causes of inflation. The economy remains heavily dependent on oil exports, exposing it to global price shocks and exchange rate instability. Diversifying into non-oil sectors such as manufacturing, technology, and agriculture can reduce vulnerability to external shocks and stabilize domestic prices.

Institutional strengthening is also vital. Reliable data collection, transparent policy implementation, and accountability mechanisms enhance credibility and policy effectiveness. The establishment of a Macroeconomic Coordination Council, comprising key economic institutions, could ensure regular dialogue and coherence in policy formulation.

Furthermore, improving energy infrastructure, transportation networks, and industrial capacity would reduce production costs and mitigate cost-push inflation, thereby fostering a more competitive and resilient economy.

- **Implications for Economic Theory and Future Research**

The results support the monetarist view that excessive inflation hinders long-term economic growth by reducing capital accumulation and productivity. However, they also reflect the short-run Keynesian perspective, where mild inflation may have limited immediate effects on output. This duality highlights the importance of maintaining inflation within a "growth-friendly" range, avoiding both deflation and hyperinflation.

Future research could extend this study by incorporating additional variables such as exchange rate movements, fiscal balance, and interest rate dynamics. Moreover, using quarterly data or non-linear ARDL models may help identify threshold effects i.e., the level of inflation beyond which its impact on growth becomes detrimental.

- **Concluding Remarks**

In conclusion, the study establishes that while inflation and economic growth in Nigeria are interlinked, their relationship is primarily negative in the long run. Sustainable growth, therefore, depends on maintaining macroeconomic stability through prudent monetary management, fiscal responsibility, and structural diversification. Nigeria's policymakers must recognize that inflation control is not merely a short-term goal but a long-term growth strategy. Ensuring stable prices will attract investment, enhance productivity, and strengthen economic resilience paving the way for inclusive and sustainable development.

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