Nigeria's Triple Burden: Decoding the Inflation-Poverty- Stunted Growth Trap Using ARDL Cointegration Analysis

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Abstract: *This study examines the dynamic relationship between inflation, poverty, and economic growth in Nigeria from 1980 to 2024 using the Autoregressive Distributed Lag (ARDL) model. The findings reveal that inflation has a significant negative impact on economic growth, while poverty exerts an insignificant negative effect. The Error Correction Mechanism (ECM) indicates a 58.74% speed of adjustment to long-run equilibrium. The study underscores the need for effective monetary policies to curb inflation, poverty alleviation programs, and structural reforms to foster sustainable economic growth. To break Nigeria's "triple burden" trap, the study recommends that the Central Bank of Nigeria should implement a flexible inflation-targeting regime. It also recommends expanding Conditional Cash Transfers (CCTs) by targeting low-income families, investing in agricultural productivity, and combating corruption and improving governance in fiscal policy implementation.*

Keywords: Inflation, Poverty, Economic Growth, ARDL, Nigeria

Introduction

Developing economies, Nigeria included, continue to grapple with persistent macroeconomic instability despite abundant natural resources. Chronic inflation, entrenched poverty, and increasingly anemic growth form a self-reinforcing cycle that undermines sustainable development and welfare (World Bank, 2024; Osadume, 2023). While extensive studies confirm inflation's detrimental impact on the poor (Abdulrahman et al., 2023), the reverse causality where poverty fuels inflationary pressures remain critically underexplored, particularly in developing economies like Nigeria (Ojeyinka & Akinlo, 2024). This nexus has profound societal

consequences, eroding aggregate welfare and life satisfaction (NBS, 2022) while impeding progress toward the UN Sustainable Development Goals.

However, Nigeria epitomizes this development paradox. As Africa's largest economy, it exhibits alarming macroeconomic indicators inflation soared to 33.7% in April 2024 (NBS, 2024), while multidimensional poverty affects 133 million citizens (63% of the population) despite moderate GDP growth averaging 2.9% over 2022--2023 (NBS, 2024; World Bank, 2024). The widening growth-poverty disconnect underscores structural deficiencies in economic transmission mechanisms, exacerbated by fiscal constraints, foreign exchange volatility, and declining oil output (IMF, 2024). Recent studies attribute this to stag-flationary pressures combining low growth with high inflation, partly triggered by subsidy reforms and exchange rate liberalization (World Bank, 2024).

Moreover, inflation defined as a sustained, generalized price surge (Omaru & Zubairu, 2012) manifests uniquely in Nigeria's import-dependent economy. Recent evidence refutes any growth-stimulating effect; instead, double-digit inflation corrodes purchasing power (especially for the 89% of workers in informal sectors), distorts investment, and amplifies food insecurity (UNDP, 2023). The 2022--2024 food inflation crisis (40.5% in April 2024) has disproportionately affected the poor, creating a vicious cycle where inflation deepens poverty, and poverty constrains productive capacity (Ojeyinka & Akinlo, 2024).

Concurrently, Nigeria's poverty crisis now worsened by post-pandemic shocks and policy transitions reflects multidimensional developmental failures spanning health, education, and social inclusion (World Bank, 2024). This generates a policy trilemma as price stability requires tight monetary policy, yet interest rate hikes (CBN policy rate 26.25% in May 2024) risk stifling growth and exacerbating poverty in the short term (IMF, 2024; Abdulrahman et al., 2023). The coexistence of stagnation, inflation, and rising poverty necessitates urgent re-examination of the inflation-poverty-growth nexus, particularly the transmission channels between welfare deficits and macroeconomic instability in reforming economies.

Statement of the Problem

Nigeria, despite being Africa's largest economy and endowed with abundant natural and human resources, remains trapped in a persistent and debilitating cycle characterised by high inflation, widespread poverty, and sluggish economic growth. These three macroeconomic challenges—each damaging in isolation—become particularly destructive due to their reinforcing interactions, forming what can be described as a "triple burden." Although scholars and policymakers recognise the severity of these issues individually, the complex and interdependent nature of their relationship remains inadequately explored, thereby limiting the formulation of effective and coherent policies to address them.

The first dimension of this problem is empirical ambiguity. Existing studies have examined the bilateral relationships among inflation, poverty, and growth, but very few have analysed them within a unified and dynamic framework. For instance, studies by Tijani and Adetunji (2023) and Onwubuariri et al. (2021) confirm the detrimental effects of inflation on economic performance, while Omoniyi (2018) and similar works underscore the relationship between inflation and poverty. However, the question of causality remains unresolved. Does inflation directly induce poverty and impede growth, or does widespread poverty create structural vulnerabilities—such

as low productivity, weak institutions, and labour informality—that perpetuate inflationary pressures and stifle growth? This "chicken-and-egg" dilemma creates uncertainty in identifying the dominant driver of the cycle, thereby complicating both theoretical explanations and empirical modelling.

Second, the ambiguity in causality generates a policy trilemma. Policymakers in Nigeria often face conflicting objectives when attempting to stabilise prices, stimulate growth, and reduce poverty simultaneously. For example, the Central Bank of Nigeria (CBN) has frequently tightened monetary policy—raising interest rates to as high as 26.25% in May 2024 (IMF, 2024)—to control inflation. While such contractionary measures may reduce price instability, they also increase borrowing costs, dampen investment, and suppress aggregate demand, potentially worsening unemployment and poverty in the short term. Conversely, expansionary fiscal or monetary policies designed to stimulate growth and reduce poverty risk fuelling inflation, particularly in an economy with supply-side rigidities and weak productive structures. In the absence of a clear understanding of the primary transmission mechanisms among inflation, poverty, and growth, policy interventions often appear fragmented, reactive, and unable to break the cycle.

Third, the growing disconnect between economic growth and poverty reduction in Nigeria exposes a significant structural and theoretical gap. Although Nigeria recorded an average GDP growth rate of 2.9% between 2022 and 2023, this recovery has not translated into improved living conditions for the majority of citizens. According to the National Bureau of Statistics (2024), 63% of the population still lives in multidimensional poverty. This reveals that economic growth in Nigeria is neither inclusive nor transformative. Structural bottlenecks, such as unemployment, weak governance, low productivity in key sectors, and inadequate social protection systems, hinder the transmission of growth benefits to the broader population. Consequently, poverty does not feed back into macroeconomic models in a statistically identifiable manner, making it difficult to measure its true effect on inflation and growth within conventional analytical frameworks.

In light of these pressing concerns, this study is driven by the urgent need to empirically investigate and disentangle the complex interactions within this vicious cycle. The significance of the problem lies not merely in the simultaneous presence of inflation, poverty, and low economic growth, but in their self-reinforcing nature, which perpetuates macroeconomic instability and undermines sustainable development. Therefore, this research seeks to provide answers to a fundamental question: What is the dynamic, long-run relationship between inflation, poverty, and economic growth in Nigeria, and which of these variables exerts the most significant influence in sustaining this "triple burden" trap? By addressing this question, the study aims to contribute to the development of more coherent, evidence-based, and effective macroeconomic policies.

Review Literature

Conceptual Literature

Concept of Inflation

Inflation is a complex and multifaceted phenomenon that can be defined as a sustained and continuous rise in the general price level of goods and services (Jhingan, 2002; Aluko, 1975). It is a persistent and appreciable rise in prices that affects almost every commodity and is not

temporary (Balami, 2006). Inflation can be measured using indexes like the Consumer Price Index (CPI) or the Gross National Product (GNP) deflator. There are different theories about the causes of inflation, including the monetary phenomenon theory, which suggests that inflation is caused by an increase in the money supply (Friedman), and the demand-pull theory, which suggests that inflation is caused by an increase in aggregate demand (Keynes). Inflation is frequently described as a state where "too much money is chasing too few goods". When there is inflation, the currency losses purchasing power. The purchasing power of a given number of naira will be smaller over time when there is inflation in the economy. For instance, assuming that N10.00 can purchase 10 shirts in the current period, if the price of shirts double in the next period, the some N10.00 can afford 5 shirts. In the definition of inflation, two must be borne in mind. First, is aggregate, which implies that the rise that constitutes inflation must cover the entire basket of goods in the economy as distinct from an isolated rise in the prices of a single commodity or group of commodities.

Inflation is a dynamic and self-reinforcing process of escalating prices and diminishing purchasing power, fueled by an intricate interplay of monetary, fiscal, and socio-economic factors, which erodes the real value of wealth and disrupts the efficient allocation of resources in an economy.

Many factors drive the inflation rate and the level of output in the short-run. These includes changes in expectations, labor force, prices of other factors of production, fiscal and /or monetary policy (Dornbusch, et al, 1991). In moving from the short-run to the hypothetical long-run, the above-mentioned factors and its shock on the steady state of the economy are assumed to balance out. In this steady state situation, nothing is changing, as the name suggests. The dynamic adjustment of the short-run AD and AS curve yields an adjustment path which exhibits an initial positive relationship between inflation and growth, however, turns negative towards the later part of the adjustment path. Therefore, even if the prices of goods in the economy have increase, output would not decline, as the producer has to fulfill the demand of the consumer with whom the agreement was made. The aggregate supply-aggregate demand (AS-AD) framework also postulated a positive relationship between inflation growth whereas growth increased, so did inflation. In the 1970's however, the concept of stag inflation gained permanence, and the validity of the positive relationship was questioned. Widely accepted at that time, the Philips curve relationship had appeared to not hold. This was evidenced by periods of low or negative output growth, and inflation rates that were historically high. During this period, prices rose sharply, while the economics around the world experienced massive unemployment (Dornbusch, et al, 1991).

Concept of Poverty

Poverty is a state of being that extends far beyond just a lack of income, but also encompasses limited access to essential services like education, healthcare, and social opportunities. As the World Bank (2020) so aptly puts it, "poverty is a multidimensional concept that goes beyond income deprivation." The United Nations Development Programme (2020) echoes this sentiment, defining poverty as "a denial of choices and opportunities, a violation of human dignity, and a lack of access to basic human rights." Researchers like Alkire (2007) have also highlighted the importance of considering multiple dimensions of poverty, including health, education, living standards, security, and empowerment. The Sustainable Development Goals (SDGs) adopted by the United Nations in 2015 also recognize poverty as a major obstacle to sustainable development, defining it as "the lack of resources, capabilities, and opportunities to enjoy a decent standard of

living" (UN, 2015). Considering these perspectives collectively, a definition of poverty that encompasses its complexity can be defined as: Poverty is a complex and multifaceted phenomenon characterized by a lack of sufficient income, resources, and access to basic needs, including physical and non-physical requirements, resulting in social, economic, and political exclusion.

However, it is multifaceted to define poverty. Because it depends on complex and multidimensional elements like region, era, geographical condition, circumstances and many more. On the basis of social, economic and political aspects, there are different ways to identify the types of poverty. Absolute poverty: also known as extreme poverty which includes lack of basic food, clean water, health, housing, education and information. Most people in absolute poverty have a hard time surviving, and many children die from serious diseases such as malaria, cholera, and diseases caused by water pollution (Rehman, 2017).

i. Relative poverty: from the social perspective, the standard of living is defined relative to economic level of the population living in the surrounding area. For example, a family may be considered poor if they cannot afford holidays, buy gifts to their children at salah or Christmas, or send them to college when they are young

ii. Situational poverty: temporary poverty caused by adverse events such as environmental disasters, unemployment, or severe health problems. Poverty is caused by unfortunate events, so people can help themselves with little help.

iii. Intergenerational poverty: passed down from generation to generation of individuals and families. This further complicated by the fact that people are trapped and do not have access to the tools they need to get out of it, so there is no escape.

iv. Rural poverty: occurs in rural areas with a population of less than 50,000. Employment opportunities are scarce in the region. With less access to services, less supports for person with disabilities for quality education, people tend to learn their livelihoods primarily in agriculture and other simple jobs available in the area.

v. Urban poverty: it occurs in the metropolitan area of over 50,000 people and some of the major challenges facing urban poverty. Such as inadequate housing and services, unhealthy conditions due to overcrowding, limited access to health care and education, and few or no social protection mechanisms.

Concept of Economic Growth

Economic growth refers to a long-term expansion in the productive potential of the economy to satisfy the wants of individuals in the society. It is also defined as an increase in a country's productive capacity as measured by comparing gross domestic product (GDP) in a year with the GDP in the previous year. Increase in capital stock, advances in technology and improvement in the quality and level of literacy are considered to be the principal causes of economic growth (Faridi, 2012).

It is related to a quantitative sustained increase in a country's per capita output accompanied by expansion in its labour force, consumption, capital and volume of agricultural trade. It is

important to state that no individual(s) or country can export what it did not produce (Ajidani and Eggon, 2020). The sustained economic growth of a country has a positive impact on the national income and level of employment, which further results in higher living standards. Apart from this, it plays a vital role in stimulating government finances by enhancing tax revenues. This enables the government to earn extra income for the further development of an economy. The economic growth of a country is possible if the strengths and weaknesses of the economy are properly analyzed.

It is also defined by Lipsey and Chrystal (2009) as a positive and sustained increase in aggregate goods and services produced in an economy within a given period. Furthermore, it can be defined as a positive change in the level of goods and services produced by a country over a certain period. Economic growth is affected by the availability of natural resources, technological advancement, social and political factors, human resources etc.

Empirical Literature

The relationship between inflation, poverty and economic growth has been extensively examined in the Nigerian context. For instance, Tijani and Adetunji (2023) analyzed this dynamic from 1991 to 2021 using the Autoregressive Distributed Lag (ARDL) model, with GDP as a proxy for economic growth and the consumer price index (CPI), exchange rate, and interest rate representing inflation. Their findings revealed that while CPI had a positive impact on GDP per capita, interest and exchange rates exerted negative effects, highlighting the multifaceted nature of inflation's influence.

Similarly, Tevin-Anyali et al. (2023) explored inflation's impact on Nigeria's economic growth from 1999 to 2022, employing the ARDL model with additional control variables such as manufacturing capacity utilization and unemployment rate. The study demonstrated that manufacturing capacity and exchange rates improved living standards, whereas CPI and unemployment had adverse effects. Specifically, a 1% rise in inflation reduced living standards by 0.24%, underscoring inflation's detrimental welfare implications.

Further supporting this, Ogbonna and Nwosu (2023) utilized a Vector Autoregression (VAR) model for the period 1980--2022, measuring inflation through CPI and GDP growth. Their results confirmed inflation's negative effect on living standards, reinforcing the consensus that price instability undermines economic well-being. This aligns with Anghelache et al. (2022), who identified inflation as a key driver of reduced incomes and economic activity, using CPI as a proxy for standard of living.

In a more targeted study, Olabiyi (2022) applied the ARDL model to assess inflation's impact on well-being in Nigeria (1981--2019), incorporating variables like life expectancy and unemployment. The analysis showed that each percentage increase in inflation diminished well-being by 0.24%, thereby illustrating the socio-economic costs of inflationary pressures.

Expanding the temporal scope, Onwubuariri et al. (2021) investigated inflation's role in Nigeria's GDP growth over four decades (1980--2019). Their findings indicated that inflation eroded purchasing power and competitiveness, stifling long-term economic development. Conversely, Ogu et al. (2021) reported a non-significant positive relationship between inflation and GDP

growth, though interest rates negatively impacted development, suggesting that monetary policy plays a critical mediating role.

The inflation-poverty nexus has also garnered significant attention. For example, Omoniyi (2018) found a strong positive correlation between inflation, poverty, and growth in Nigeria (1980--2013), implying that inflationary pressures exacerbate poverty. This is corroborated by Nazima (2018), who identified a robust link between food inflation and poverty in Pakistan, while Safia (2017) documented how inflation forced low-income families in Somaliland to compromise on food and education.

Moreover, Adegoriola et al. (2017) and Siyan et al. (2017) revealed bidirectional causality between inflation and poverty in Nigeria, indicating a vicious cycle where inflation deepens poverty, and poverty, in turn, fuels inflationary pressures through supply-side constraints. Notably, Rehman (2017) highlighted the sectoral disparities in inflation's effects, with food inflation reducing agricultural poverty but increasing non-agricultural poverty, thereby emphasizing the need for targeted policy interventions.

Theoretical Literature

Structural Rigidity Theory: This study will best be understood on the basis of Structural Rigidity Theory, which was developed based on the experience of developing nations. The theory highlighted that; constraint or what they termed as rigidities are the sources of the problems of most developing countries. Problems of rising price level -- inflation, poverty, low development level, debt burden and what have you, arise as a result of inherent constraints or rigidities of developing nations. This theory was initially developed by Myrdal (1968), Streeten (1972) and many Latin American economists. Their contribution to the theory is limited the applicability of the theory to Latin American countries, though, such applicability was later generalized to all developing economies by Kirkpatrick and Nixon (1976) (Dwivedi, 2005).

Methodology

Model Specification

The Autoregressive Distributed Lag (ARDL) model is employed due to the presence of mixed integration orders among the variables, i.e., I(0) and I(1), without any I(2) series. This makes the ARDL bounds testing approach to cointegration appropriate.

The functional form of the model is specified as:

$$GDPG_t = f(INF_t, POV_t, M2_t)$$

The corresponding econometric representation of the ARDL(p, q_1, q_2, q_3) model is expressed as:

$$\Delta GDPG_t = \alpha_0 + \sum_{i=1}^{p} \lambda_i \Delta GDPG_{t-i} + \sum_{j=1}^{q_1} \delta_j \Delta INF_{t-j} + \sum_{k=1}^{q_2} \phi_k \Delta POV_{t-k} + \sum_{m=1}^{q_3} \psi_m \Delta M2_{t-m} + \theta_1 GDPG_{t-1} + \theta_2 INF_{t-1} + \theta_3 POV_{t-1} + \theta_4 M2_{t-1} + \mu_t$$

Where:

- $GDPG_t$= Gross Domestic Product Growth Rate
- INF_t= Inflation Rate (Consumer Price Index)
- POV_t= Poverty Rate
- $M2_t$= Broad Money Supply (Control variable)
- Δ= First difference operator
- α_0= Constant term

- $\lambda_i, \delta_j, \phi_k, \psi_m$= Short-run dynamic coefficients
- $\theta_1, \theta_2, \theta_3, \theta_4$= Long-run coefficients
- μ_t= Error term

Results and Discussion

Stationarity Test

This presents the results of the Augmented Dickey-Fuller (ADF) unit root tests for all variables under consideration; Gross Domestic Product represented by GDP growth rate, Inflation rate, poverty and money supply. The objective of this analysis is to determine the stationarity properties of the variables, which is crucial for avoiding spurious regression results in time series analysis.

Table 1 Results of ADF and PP Unit Root Tests

	ADF		PP		
Variables	Level	First Difference	Level	First Difference	Stationarity Status
GDPG	-2.894258	-12.23349***	-3.838988**	-13.18279***	I(1)
INF	-3.166430**	-6.121969***	-3.026553**	-12.19361***	I(0)
POV	-0.911014	-3.150345**	-0.404413	-4.836461***	I(1)
M2	-2.095254	-9.628372***	-2.229619	-16.60271***	I(1)

Source: Author's compilation using E-views 10.

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

The results from both Philips Peron and ADF tests in Table 1 revealed, that some of the variables are stationary at levels while some stationarity is achieved at first difference, which technically means the variables are integrated of order one and zero. The Implication of such finding is that both restricted and unrestricted VAR approach cannot be use for estimation. Appropriately ARDL model is employed, which is designed for series that are integrated of mixed order.

ARDL Bounds Test for Cointegration

Given the mixed order of integration (I(0) and I(1)) among the variables as established in the unit root tests, the Autoregressive Distributed Lag (ARDL) Bounds Testing approach developed by Pesaran, Shin, and Smith (2001) is adopted to examine the existence of a long-run relationship among the variables.

Table 2 ARDL Bound Test Result

F-Bounds Test		**Null Hypothesis: No levels relationship**		
Test Statistic	Value	Signif.	I(0)	I(1)
		Asymptotic: n=1000		
F-statistic	5.596295	10%	2.37	3.2
K	3	5%	2.79	3.67
		2.5%	3.15	4.08
		1%	3.65	4.66

The ARDL bounds test was conducted to examine the presence of a long-run cointegrating relationship among the variables. The null hypothesis of *no levels relationship* (i.e., no cointegration) is tested using the computed *F-statistic* and compared against the critical values provided by Pesaran et al. (2001).

The calculated F-statistic of 5.596 exceeds all critical value bounds at the 10%, 5%, 2.5%, and 1% significance levels for both the lower bound *I(0)* and upper bound *I(1)*. Specifically, at the 1%

significance level, the F-statistic (5.596) surpasses the upper bound *I(1)* critical value of 4.66. Similarly, it exceeds the lower bound *I(0)* critical value of 3.65 at the same significance level. However, since the F-statistic lies above the upper bound at all conventional significance levels, we reject the null hypothesis of no cointegration. This confirms the existence of a stable long-run relationship among the variables in the model.

Regression Result

The result of the regression and coefficients of the short run is summarize in the table 3.

Table 3 Estimated Short Run Coefficients of ARDL
Estimated Short Run Coefficients
Dependent variable -- GDPG

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
GDPG(-1)	0.115872	0.138560	0.836257	0.4092
INF	-0.092146	0.035955	-2.562804	0.0153
POV	-0.046206	0.111568	-0.414149	0.6815
M2	-0.438111	0.262601	-1.668352	0.1050
M2(-1)	0.461516	0.377289	1.223242	0.2302
M2(-2)	0.345240	0.318459	1.084094	0.2864
M2(-3)	-0.474509	0.171278	-2.770405	0.0092
CointEq(-1)*	-0.587413	0.104648	-5.610629	0.0000
R-squared				0.612472
Adjusted R-squared				0.569413
F-statistic				7.494690
Prob(F-statistic)				0.000211
Durbin-Watson stat				2.146357

Source: Author's compilation using E-views 10

The result of the short run in Table 3 revealed that, The ECM coefficient of -0.587 is statistically significant at the 1% level, confirming a robust error correction mechanism. This satisfies the critical condition for convergence to long-run equilibrium. The estimated speed of adjustment is 58.7% per period, indicating that approximately 58.7% of short-run disequilibrium is corrected within each time interval, driving the system toward its long-run relationship.

Furthermore, the findings reveal that inflation exerts a significant negative effect on economic growth. Specifically, a 1% increase in inflation reduces growth by 0.092% with a probability value of 0.015. In contrast, while poverty also shows a negative coefficient of -0.046, its impact is statistically insignificant with a probability value of 0.682, suggesting that changes in poverty rates do not strongly influence short-term growth. Additionally, broad money supply negatively affects growth -0.438, though this relationship is insignificant as revealed by a probability value of 0.105. On the other hand, its lagged value has a slight positive but statistically insignificant effect, indicating limited short-term monetary policy influence.

Overall, the model demonstrates strong explanatory power, with an adjusted R^2 of 0.569, meaning the independent variables account for 56.94% of growth variations. Moreover, the significant F-statistic 7.495 and probability value of 0.000 confirms the joint significance of the predictors, while the Durbin-Watson statistic 2.146 rules out autocorrelation concerns. In a nut shell, inflation significantly hinders Nigeria's short-run economic growth, whereas poverty and money supply show negligible effects.

Table 4 Estimated Long Run Coefficients of ARDL

The long run coefficients of the model are also estimated to confirm the study claim of no long run relationship between the variables and the result is summarized in the Table 4.

Estimated Long Run Coefficients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INF	-0.156940	0.065540	-2.394574	0.0227
POV	-0.078696	0.192558	-0.408687	0.6855
M2	-0.180304	0.382315	-0.471612	0.6404
C	12.51244	3.720878	3.362765	0.0020
EC = GDPG - (-0.1569*INF -0.0787*POV -0.1803*M2 + 12.5124)				

Source: Author's compilation using E-views 10

The Table 4 revealed that, inflation exhibits a statistically significant negative impact on economic growth in Nigeria in the long run, with a coefficient of -0.1569 probability value of 0.0227. This implies that a 1% increase in inflation leads to a 0.157% decline in GDP growth, ceteris paribus. This finding is consistent with a body of empirical work on the Nigerian economy. For instance, the results align with Onwubuariri et al. (2021), who also found that inflation erodes purchasing power and competitiveness, thereby stifling long-term economic development in Nigeria. Similarly, Tevin-Anyali et al. (2023) demonstrated a detrimental welfare implication of inflation, with a 1% rise reducing living standards by 0.24%, underscoring the broader negative socio-economic consequences captured by our growth-focused result. However, our finding contrasts with Ogu et al. (2021), who reported a non-significant positive relationship, a divergence that may be attributed to differences in model specification or the studied time period, which included different policy regimes.

In contrast, the poverty rate demonstrates a negative but statistically insignificant relationship with economic growth with a coefficient of -0.0787 and p- value of 0.6855. Although the direction of the coefficient aligns with theoretical expectations suggesting that higher poverty correlates with lower growth, the lack of statistical significance indicates that poverty does not robustly explain variations in long-run GDP growth within this model. This finding challenges the direct linkage often assumed in the literature. For example, while Omoniyi (2018) found a strong positive correlation between inflation, poverty, and growth, our results suggest that the direct, standalone effect of poverty on growth may be weak or mediated through other channels. This insignificance may reflect the multifaceted nature of poverty, where its effect on growth is indirect, operating through weakened human capital, low aggregate demand, or high informality—factors not fully captured in a single variable.

Similarly, broad money supply (M2) also shows a negative but insignificant coefficient (-0.1803, P-value of 0.6404. This suggests that, in the long-run, expansions in money supply do not exert a statistically meaningful influence on economic growth. This finding partially aligns with Tijani and Adetunji (2023), who highlighted the multifaceted nature of inflation's influence and found negative effects from other monetary variables like interest and exchange rates. The negative sign of M2 in our model, though insignificant, warrants further investigation, as it may reflect structural inefficiencies in monetary policy transmission or the phenomenon of "financial decoupling" where money supply growth fails to stimulate the real sector, potentially channeling into inflationary pressures or speculative activities instead.

However, turning to the constant term (C), it is positive and highly significant with a coefficient of 12.5124, and p- value of 0.0020, which implies that there exists a baseline growth rate even when all explanatory variables are zero. This could be attributed to omitted factors such as technological progress, institutional quality, or the autonomous growth driven by population dynamics, which are not explicitly modeled but contribute to long-run growth, a factor often implied in the baseline projections of reports from institutions like the IMF (2024) and World Bank (2024).

Diagnostics Test Result

The adequacy of the ARDL model is verified by employing post-estimation diagnostics test such as the Normality test, Serial Correlation LM Test, Heteroskedasticity test and Stability test. The results of the tests are presented as follows.

Table 5 Normality Test

Statistic	
Skewness	0.5739
Kurtosis	3.5386
Jarque-Bera	2.7461
Probability	0.2533

Source: Author's compilation using E-views 10

The results of the normality test in Table 5 show that the Skewness is positively skewed and less than one with a value of 0.5739, kurtosis is 3.5386 and the Jarque-bera of 2.7461 is not significant at any significance level with a probability value of 0.2533. Therefore, the study assumes that the data is normally distributed.

Table 6 Other Diagnostic Tests

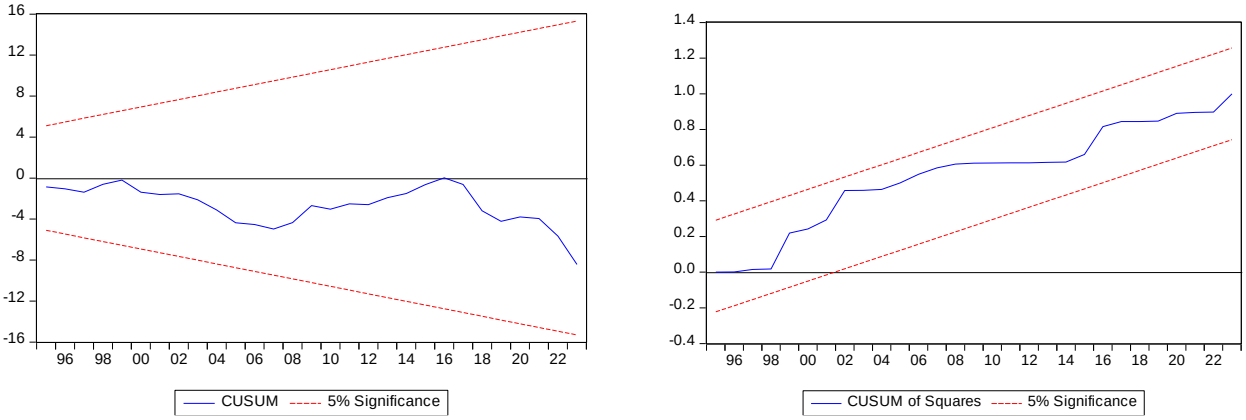
Breusch-Godfrey Serial Correlation LM Test			
F- Statisitc	0.236642	Prob. F (2, 17)	0.7907
Heteroskedaticity Test: Breusch-Pagan-Godfrey			
F-statistic	0.538009	Prob. F(10,19)	0.8190

Source: Author's compilation using E-views 10

Table 6 presents diagnostic tests; the result shows no evidence of serial correlation or heteroskedasticity. The Breusch-Godfrey LM test's with a probability value of 0.7907 is insignificant, ruling out autocorrelation. Likewise, the Breusch-Pagan-Godfrey heteroskedasticity test yields an insignificant probability value of 0.8190 confirming the absence of heteroskedasticity.

Recursive Estimates

The research study makes use of the Cumulative Sum of recursive residuals (CUSUM) developed by Brown, Dublin, and Evans (1975) in testing the stability of the parameters of the model within a 5% level of significance. The results of the CUSUM and CUSUM Square are shown in the figures below.



In the figures above, the results of the CUSUM plot for the stability of the model show the CUSUM test and CUSUM of Square test are within a 5% level of significance respectively. From the result, there are no chances of having spurious regression because the blue line remained within the 5% critical bound. The decision rule is that all the coefficients of the error terms in the regression estimates are normally distributed. This also implies the variance stability and reliability of the model as well as parameters used in the study, also, CUSUM and CUSUM squares tests show that the models are stable and can be used for policy formulation.

Conclusion

This study was driven to decode the intricate dynamics of Nigeria's "triple burden"—the debilitating cycle of high inflation, pervasive poverty, and stunted economic growth. The application of ARDL cointegration analysis on data from 1980 to 2024 reveals that these challenges are not isolated but are bound together in a stable, yet detrimental, long-run relationship. The findings establish a clear hierarchy within this trap, identifying inflation as the predominant and statistically significant driver that actively contracts economic growth in both the short and long run. Each surge in inflation directly undermines GDP by eroding purchasing power and stifling investment. In contrast, while poverty exhibits a negative relationship with growth, its statistically insignificant impact suggests it operates more as a critical symptom and a transmission channel of the trap, with its effects amplified by inflationary pressures, rather than being a direct standalone cause.

The confirmation of a robust error correction mechanism, with a 58.7% speed of adjustment, underscores that the economy is intrinsically linked to this suboptimal equilibrium. This means that while the system self-corrects from short-run shocks with considerable speed, it consistently reverts to a state of underperformance in the absence of fundamental policy intervention. Therefore, the study concludes that Nigeria's triple burden is a structural phenomenon, a self-perpetuating trap where inflation systematically cripples growth, and the ensuing stagnation, in turn, deepens poverty. Breaking free from this cycle necessitates a strategic and sequenced policy approach that prioritizes dismantling the engine of inflation above all else, as achieving price stability is the essential foundation upon which sustainable growth and meaningful poverty reduction can be built.

Policy Recommendations

To break Nigeria's "triple burden" trap, the study recommends:

i. The Central Bank of Nigeria should implement a flexible inflation-targeting regime that maintains price stability while supporting economic expansion. This approach would involve establishing a moderate target range (6-9% annually) rather than pursuing an inflexible single-digit goal, providing necessary policy space to accommodate temporary price fluctuations caused by supply-side disruptions such as food shortages or energy crises.

ii. Expand Conditional Cash Transfers (CCTs) by targeting low-income families, with disbursements linked to school attendance and health clinic visits. This evidence-based approach ensures human capital development while providing immediate poverty relief.

iii. Invest in agricultural productivity like irrigation, storage facilities, and mechanization to reduce food price volatility, which disproportionately affects the poor.

iv. Combat corruption and improve governance in fiscal policy implementation to ensure public spending (e.g., subsidies, social programs) is efficient.

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