Journal of Emerging Markets and Management
https://journals.niepublish.com/jemm

ARTICLE

Public Debt, Fiscal Policy and Economic Growth in Nigeria

Hezekiah Amamizo Ogunnubi

Department of Economics, Ajayi Crowther University, Oyo P.M.B. 1066, Nigeria

ABSTRACT

This paper examined the impact of public debt and fiscal policy on Nigeria's economic growth using the Autoregressive Distributed Lag (ARDL) model. The annual time-series data from 1981 to 2023 were obtained from the Central Bank of Nigeria Statistical Bulletin and the World Bank archives. The study analyzed the long-run and short-run interactions between the real GDP and the variables of domestic and public debt. The findings revealed that external debt exhibits a negative long-run and positive short-run implication effect on economic growth. Debt servicing was positive in the long run and negative in the short run. Public debt is a unique determinant of economic instability as it comes with its inflationary effects. The long-run estimates give fiscal balances, with costs of high debt servicing, which encourage a favorable public investment, as it favors economic development in the long run. The error correction mechanism confirms a stable adjustment process towards long-run equilibrium; the research still maintains its stance on fiscal discipline, efficient debt management, and strategic capital investment to enhance macroeconomic stability in Nigeria. The recommendations are that the government should put in some tax mechanisms that will make them pay off the debt. Industries should source their raw materials locally rather than importing them in order to generate more revenue for themselves and the government. The authorities should also find ways of attracting foreign investors to invest in our economy, which will create jobs for our youths. Facilities for farmers should be subsidized by the government to promote agricultural productivity. This will go a long way in generating revenue for the government and reducing the foreign debt.

Keywords: Fiscal Policy; Public Debt; Economic Growth; Inflation; Nigeria

*CORRESPONDING AUTHOR:
Hezekiah Amamizo Ogunnubi, Department of Economics, Ajayi Crowther University, Oyo P.M.B. 1066, Nigeria; Email: ha.ogunnubi@acu.edu.ng

ARTICLE INFO
Received: 6 May 2026 | Revised: 6 July 2026 | Accepted: 13 July 2026 | Published Online: 20 July 2026
DOI: https://doi.org/10.63385/jemm.v2i3.101122

CITATION
Ogunnubi, H.A., 2026. Public Debt, Fiscal Policy and Economic Growth in Nigeria. Journal of Emerging Markets and Management. 2(3): 15–24.
DOI: https://doi.org/10.63385/jemm.v2i3.101122

COPYRIGHT
Copyright © 2026 by the author(s). Published by Nature and Information Engineering Publishing Sdn. Bhd. This is an open access article under the Creative Commons Attribution 4.0 International (CC BY 4.0) License (https://creativecommons.org/licenses/by/4.0/).

1. Introduction

Every nation of the world aspires to achieve a stable economic growth. Economic growth entails equal distribution of income, balance of payment equilibrium, utilization of natural resources, good employment, increase in per capita income, low cost of living, high standard of living and increase in government revenue[1]. However, there are many hindrances preventing global nations from achieving a balanced economic growth, which include political instability, corruption, mismanagement, inflation, devaluation of the naira and unfavorable balance of payments[2]. Nigeria is not exempt, as it has been battling with the evil scourge of public debt and bad implementation of fiscal policy for several years. Nigeria's fiscal policy has been going through some reforms in recent years that are aimed at tackling economic challenges and fostering systemic sustainable growth[3]. These reforms include changes in excise duty, green taxes introduction, and import duties adjustments. These parameters are part of the agenda of the government to diversify sources of revenue to other sectors of the economy in order to reduce our dependency on the proceeds of crude oil[4]. This is because the crude oil market has been going through some price fluctuations due to several countries that have shifted their attention away from crude oil to focus on other energy sources like shale oil and solar and electricity-powered products[5]. This brought up the need for diversification, as diversification is a key to enhancing economic stability and good fiscal policy strength for years to come.

Besides, Nigeria's public debt is a serious concern as the current total national debt stands at around N121.67 trillion from the previous debt of N97.34 trillion in the fourth quarter of 2023[6]. This includes local and foreign debts, which bring up the need for effective tactics in managing the nation's debt in order to ensure fiscal policy growth. Abotsi[7] pointed out the need for data accuracy and honesty in giving some statistical reports. This is to prevent false information about the nation's debt profile. According to Yahya[8], the effects of rising public debt are so disastrous as they have a high negative impact on the economic stability, fiscal space and the financial base of the public service sector[9]. Public debt leads to costs of borrowing, crowding out private investment, and slows down the government's ability to cover up the economic shocks[10, 11].

A case study by Nwaeze[12] investigated the management of public debts and its implications for accelerating Nigeria's economy. They looked at the differences in fiscal activities among the states, with Lagos coming tops as the largest state with the biggest internally generated revenue (IGR), external debts, and total budgeted expenditure[13]. Also, Ekiti and Taraba states showed lower budgetary allocations and IGR, which led to a decline in the total budgeted expenditure. The study suggested that the authorities focus on policies related to foreign debts and promote productive investments. This will improve IGR through the embracing of agriculture[14]. Agriculture is a source of government revenue that will affect Nigeria's economic growth in a positive way; therefore, the aim of the work is to evaluate the effects of public debt and fiscal policy on the economic growth of Nigeria, with the aim achieved through the methodology and the analysis in the study.

2. Materials and Methods

2.1. Theoretical Framework

This study is based on the Keynesian theory of fiscal policy, which examines the usefulness of government intervention to handle fluctuations in the economy and to stimulate economic growth. Keynesian economics opined that increased government spending can accelerate aggregate demand, create employment, and boost economic performance, especially during recessions. Government spending in Nigeria plays a special role in accelerating economic growth. Government capital expenditure on long-term projects like roads and schools creates employment in the nation and increases other sector demands, while recurrent expenditure on essential services like education and healthcare development fosters higher productivity and long-term growth of the economy. Additionally, counter-cyclical fiscal policies help to stabilize the economy during recessions and unexpected external shocks such as fluctuations in oil prices.

2.2. Sources and Measurement of Data

This study used secondary data obtained from the Central Bank of Nigeria Statistical Bulletin. The variables include Real GDP (*RGDP*), which quantifies the total output for the economy adjusted for inflation; Public debt (*PDS*), which is the total amount of funds borrowed by the govern-

ment to meet its development budget, External debt (*EXD*), which is the part of the public debt borrowed from foreign nations and Domestic Debt Stock (*DMD*), which is the gross scrutinized debt of the government. Debt Servicing Stock (*DBS*) is the repayment of debt with interest, and it is paid in the form of currency, commodities or services. The revenue of the authority's stock term (*TGR*) is the money that enters the coffers of the government. The government expenditure (*TGE*) is the government spending on infrastructure and public services. Inflation (*INF*) is a persistent rise in the general price level and it is measured by the consumer price index.

2.3. Empirical Model

The study looked at the impact of public debt on fiscal policy on the economic growth of Nigeria. The functional empirical model is:

$$RGDP_t = f(PDS_t + EXD_t + DMD_t + DBS_t + TGR_t + TGE_t + INF_t) \quad (1)$$

The model is stated in econometric form as:

$$RGDP_t = \beta_0 + \beta_1 PDS_t + \beta_2 EXD_t + \beta_3 DMD_t + \beta_4 DBS_t + \beta_5 TGR_t + \beta_6 TGE_t + \beta_7 INF_t + \varepsilon_t \quad (2)$$

The variables are logged as follows:

$$\ln(RGDP_t) = \beta_0 + \beta_1 \ln(PDS_t) + \beta_2 \ln(EXD_t) + \beta_3 \ln(DMD_t) + \beta_4 \ln(DBS_t) + \beta_5 \ln(TGR_t) + \beta_6 \ln(TGE_t) + \beta_7 \ln(INF_t) + \varepsilon_t \quad (3)$$

RGDP = Real GDP, *PDS* = Public debt, *EXD* = External Debt, *DMD* = Domestic Debt Stock, *DBS* = Debt Servicing, *TGR* = The government revenue stock term, *TGE* = The Government expenditure, *INF* = Inflation, β_1 to β_7 are the coefficients of the explanatory variables, ε is the error term.

2.4. A Priori Expectations

$\beta_1 > 0, \beta_2 < 0, \beta_3 > 0, \beta_4 < 0, \beta_5 < 0.$

2.5. Techniques of Estimation

2.5.1. Pre-Estimation

The study looks at the stationarity of the time series variables to determine the right approach for estimation. This is done by examining the properties of the unit root of the variables included in the model. The analysis uses the Augmented Dickey–Fuller and the Phillips–Perron tests, which use both the constant and trend components.

$$V_t = \theta + \delta_r + \gamma_i V_{t-1} + \sum^{k} \beta_i \Delta V_{t-1} + \varepsilon_t \quad (4)$$

Following the above equation, V_t denotes the time series variable under investigation, t tells us the trend that is deterministic and δ is the coefficient. The term V_{t-1} is the one period lag of the variable in the times series. γ_i is the coefficient of the lagged level of the time series variable of V_{t-1}. The null hypothesis assumes that γ_i = 1, which shows the presence of a unit root. k is the lag length. The test produced an ADF statistic that is against the 5% critical value. Null hypothesis rejection requires the ADF statistic to be negative and significant. The coefficient β_i captures the lags of the differenced variable while ε_t denotes the error term.

2.5.2. Estimation

The ARDL model, used by Ele et al.[15] to estimate both the short-run dynamics and long-run relationships between variables. This method was effective for variables integrated at different orders. The ARDL model enabled the simultaneous estimation of both the short run and long run dynamics, which allowed a flexible framework for analyzing relationships among variables with different orders of integration.

The dynamic relationships in both the short run and the long run are given as:

$$\begin{aligned}\Delta \ln RGDP = \beta_0 + \sum_{k=1}^{n} \beta_1 \Delta \ln RGDP_{t-k} \\ + \sum_{k=1}^{n} \beta_2 \Delta \ln PDS_{t-k} + \sum_{k=1}^{n} \beta_3 \Delta \ln EXD_{t-k} \\ + \sum_{k=1}^{n} \beta_4 \Delta \ln DMD_{t-k} + \sum_{k=1}^{n} \beta_5 \Delta \ln DBS_{t-k} \\ + \sum_{k=1}^{n} \beta_6 \Delta \ln TGR_{t-k} + \sum_{k=1}^{n} \beta_7 \Delta \ln TGE_{t-k} \\ + \sum_{k=1}^{n} \beta_8 \Delta \ln INF_{t-k} + \varnothing_2 \Delta \ln PDS_{t-1} \\ + \varnothing_3 \Delta \ln EXD_{t-1} + \varnothing_4 \Delta \ln DMD_{t-1} \\ + \varnothing_5 \Delta \ln DBS_{t-1} + \varnothing_6 \Delta \ln TGR_{t-1} \\ + \varnothing_7 \Delta \ln TGE_{t-1} + \varnothing_8 \Delta \ln INF_{t-1} + \varepsilon_t\end{aligned} \quad (5)$$

The above Equation (5) looked at the impact of public debt and fiscal policy on the nation's economic growth in an autoregressive model framework. $\Delta \ln RGDP$ denotes

the first differenced log of the real gross domestic product which denotes economic growth capturing the variations in the short run. The β_1–β_8 parameters stand for the short run elasticities of the independent variables. The summation terms display the lagged effects of the variables in the short run. The coefficients of $\varnothing_1$–$\varnothing_8$ encapsulated the long run equilibrium relationships between the dependent variables. ε_t tells us of the stochastic shocks that were not explained by the aggressors. The model of the ARDL inclusive of the error correction mechanism is formulated in Equation (6) as:

$$\begin{aligned}\Delta \ln RGDP &= \beta_0 + \sum_{k=1}^{n} \beta_1 \Delta \ln RGDP_{t-k} \\ &+ \sum_{k=1}^{n} \beta_2 \Delta \ln PDS_{t-k} + \sum_{k=1}^{n} \beta_3 \Delta \ln EXD_{t-k} \\ &+ \sum_{k=1}^{n} \beta_4 \Delta \ln DMD_{t-k} + \sum_{k=1}^{n} \beta_5 \Delta \ln DBS_{t-k} \\ &+ \sum_{k=1}^{n} \beta_6 \Delta \ln TGR_{t-k} + \sum_{k=1}^{n} \beta_7 \Delta \ln TGE_{t-k} \\ &+ \sum_{k=1}^{n} \beta_8 \Delta \ln INF_{t-k} + \pi ECT_{k-1} + \varepsilon_t\end{aligned} \quad (6)$$

In the above equation, π is the coefficient of the error correction term, which measures the rate at which the deviations from the long run equilibrium are corrected following the disturbances in the short term.

3. Results

3.1. Descriptive Statistics

The descriptive statistics for the period of 1981–2023 are presented in **Table 1**. From the table, the real Gross Domestic Product averaged N73.79 billion with a minimum of N0.71 billion and a maximum value of N326.9 billion, which portrayed a significant growth in the real gross domestic product for that period of study. Public debt accounted for an average of N141.55 billion and ranged from N0.3 billion to N1,624.8 billion, which showed the large amount of public debt that the authorities owe to foreign organizations. This means that a large chunk of the government revenue from other sources is used to pay off the debt. External debt averaged N3,280.124 billion, with the minimum and maximum external debt of N0.1796 billion and maximum of N93,528.4 billion. The gap between the maximum and minimum values is a hindrance to the growth of the economy. The mean of domestic debt is N1,354.783 billion with a minimum and maximum value of N1.5 billion and N12,371.6 billion, which means the burden of the domestic debt is heavy on the poor and rich citizens of the economy, as the government will use the burden of taxation to cover up the debt. Debt servicing averaged N865.01 billion, while the minimum remained at N1.01 billion and the maximum was N8,556.93 billion. The gap in debt servicing means that the government will use the funds meant for citizens' social welfare to service the huge debt. Total government revenue averaged N4,308.201 billion with a minimum of N10.5 billion and a maximum of N19,251.1 billion, which means the government is generating lots of money from public and private utilities in the economy. Government revenue's mean is N4,033.179 billion, with a minimum value of N9.6 billion, while the maximum value was pegged at N24,431.21 billion, which is evidence that the authorities are spending a lot on social amenities and the welfare of the citizens in the economy. The inflation rate averaged N19.0814, while the minimum is 5.4 and the maximum is 72.8, which implies that the nation is experiencing price instability. This will negatively affect the purchasing power of the people.

Table 1. Descriptive statistics.

	RGDP	***PDS***	***EXD***	***DMD***	***DBS***	***TGR***	***TGE***	***INF***
Mean	73.79837	141.5528	3,280.124	1,354.783	865.01	4,308.201	4,033.179	19.0814
Median	37.03	16.4	361.1949	117.2	163.81	2,231.6	1,018.2	13
Maximum	326.9	1,624.8	93,528.4	12,371.6	8,556.93	19,251.1	24,431.21	72.8
Minimum	0.71	0.3	0.1796	1.5	1.01	10.5	9.6	5.4
Std. Dev.	84.59901	356.9378	14,247.1	2,757.894	1,704.542	4,733.113	6,328.524	16.28172
Skewness	1.115959	3.008252	6.118214	2.630403	2.968882	0.953892	1.914532	1.865574
Kurtosis	3.648457	11.05612	39.25087	9.33696	12.15384	3.382479	5.536282	5.465272
Jarque-Bera	11.05033	181.1365	2,622.741	121.5344	213.2975	6.783127	37.79423	35.83159
Probability	0.003985	0	0	0	0	0.033656	0	0
Sum	3,173.33	6,086.77	141,045.4	58,255.65	37,195.43	185,252.6	173,426.7	820.5
Sum Sq. Dev.	300,593.7	5,350,993	8.53×10^9	3.19×10^8	1.22×10^8	9.41×10^8	1.68×10^9	11,133.97
Observations	43	43	43	43	43	43	43	43

Source: Researcher's computation, 2026.

3.2. Unit Root Test

The results of the Augmented Dickey–Fuller (ADF) and the Phillips–Perron unit root tests are presented in **Table 2**, which portray all the variables: real gross domestic product, public debt, external debt, domestic debt, debt servicing, total government revenue, total government expenditure and inflation. It was discovered that the variables of public debt and domestic debt were stationary at levels with their significant probability values, while the other variables, which are external debt, debt servicing, total government revenue, total government expenditure and inflation were all stationary at first difference. Given the mixture of level and first difference variables, it is essential for us to test for the cointegration to determine the presence of a long-run equilibrium connectivity in the model.

Table 2. Unit root test using Augmented Dickey–Fuller (ADF) and Phillips–Perron (PP) tests.

	ADF		PP		
Variable	**Level**	**1st Diff.**	**Level**	**1st Diff.**	**Order of Int.**
ln(*RGDP*)	−1.834	−3.334	−1.464	−3.184	NIL
	(0.670)	(0.075)	(0.826)	(0.102)	
ln(*PDS*)	−6.199	−9.627	−4.485	−15.998	I(0)
	(0.000)***	(0.000)***	(0.000)***	(0.000)***	
ln(*EXD*)	−1.567	−4.714	−2.029	−4.569	I(1)
	(0.789)	(0.000)***	(0.569)	(0.000)***	
ln(*DMD*)	−4.199	−8.140	−4.119	−9.924	I(0)
	(0.000)***	(0.000)***	(0.000)***	(0.000)***	
ln(*DBS*)	−2.662	−8.267	−2.631	−8.938	I(1)
	(0.257)	(0.000)***	(0.269)	(0.000)***	
ln(*TGR*)	−1.010	−5.332	0.996	−6.785	I(1)
	(0.932)	(0.000)***	(0.934)	(0.000)***	
ln(*TGE*)	−0.874	−7.689	−1.241	−7.633	I(1)
	(0.949)	(0.000)***	(0.889)	(0.000)***	
ln(*INF*)	−3.484	−7.144	−3.294	−9.509	I(1)
	(0.054)	(0.000)***	(0.081)	(0.000)***	

Note: *** indicate statistical significance at the 1% level.
Source: Researcher's computation, 2026.

3.3. Test for Cointegration

The evidence of the F-bounds test in **Table 3** gives a picture of a long-run equilibrium correlation among the parameters. The F-statistic of 6.822 is significantly bigger than the upper-bound critical values across all levels of significance. This makes us reject the null hypothesis of no cointegration. It confirms the presence of a long-run relationship between the dependent and independent variables. This justifies the use of Autoregressive Distributed Lag (ARDL) for the modelling of the short-run dynamics and the adjustments to the long-run equilibrium in the model.

Table 3. ARDL bound test.

Test Statistic	**Value**	**Significance**	**I(0)**	**I(1)**
F-statistic	6.822	10%	1.92	2.89
K	7	5%	2.17	3.21
		2.50%	2.43	3.51
		1%	2.73	3.9

Source: Researcher's computation, 2026.

3.4. Short Run and Long Run

Tables 4 and **5** unravel the short run and long-run effects of public debt and fiscal policy on economic advancement alongside the other control variables. The findings showed a positive relationship between the first lagged real GDP and economic growth in the short run as a 1% surge in *RGDP*(−1) led to a 0.173% advancement in the growth of

the economy, with the result being statistically significant at 10%. This is similar to the findings of Hassan[16]. It obeys the a priori expectation as it shows that the economic performance in the previous years was more sustainable than the economy of the present year due to policy changes like the fuel subsidy removal. This led to the upsurge in prices and increased the hardship of citizens in the Nigerian economy.

Table 4. Short-run result.

Variable	Coefficient	Std. Error	*t*-Statistic	Prob.
D(L*RGDP*(−1))	0.173	0.085	2.047	0.051
D(L*EXD*)	0.024	0.018	1.382	0.178
D(L*EXD*(−1))	0.086	0.031	2.744	0.011
D(L*DBS*)	−0.075	0.028	−2.723	0.011
D(L*DBS*(−1))	−0.076	0.021	−3.555	0.001
CointEq(−1)*	−0.170	0.019	−8.922	0.000

Note: * means the symbol for cointegration.
Source: Researcher's computation, 2026.

Table 5. Long-run result.

Variable	Coefficient	Std. Error	*t*-Statistic	Prob.
ln(*PDS*)	0.003	0.066	0.049	0.096
ln(*EXD*)	−0.003	0.239	−0.014	0.098
ln(*DMD*)	−0.074	0.107	−0.690	0.496
ln(*DBS*)	0.175	0.239	0.732	0.004
ln(*TGR*)	0.458	0.178	2.578	0.016
ln(*TGE*)	0.224	0.293	0.763	0.452
ln(*INF*)	0.562	0.273	2.055	0.050
C	−1.216	0.332	−3.662	0.001

Source: Researcher's computation, 2026.

Besides, a 1% acceleration in the external debt led to an advancement in the economic growth by 0.024% at the non-significant level in the short run. This is similar to Ofurum and Fubara[17], who emphasized the same opinion. This disobeys the a priori expectation in the sense that the government uses the borrowed funds to pay workers' salaries and to build new federal expressways in the economy, like the Lagos–Calabar Coastal Highway.

Moreover, the short-run implication of lagged external debt on economic transformation does not obey the a priori expectation, as a 1% rise in the lagged external debt still increased economic growth by 0.086% at a 5% level of significance, as Murngi et al.[18] have done similar research on it. It implies that the government is trying several avenues to absorb the side effects of external debt in the previous years. The avenue is the government trying to diversify the economy into the agricultural sector as it will raise revenue for the government to pay off her debts.

In addition, the debt servicing stock also has an unfavorable effect on the GDP growth of the nation in the short run, as a similar work was done by Ciaffi et al.[19], as a 1% rise in debt servicing stock led to a fall in the economic growth by 0.075% at a 5% level of significance, which is in accordance with the a priori expectation. Debt servicing stock has a negative effect because it attracts a high interest rate, which is in accordance with the debt burden of the government. Funds that could have been used to develop the ailing health and education sectors are used to service external debts.

In the short run, the lagged debt servicing stock is also having a negative effect on the economic growth of the nation, according to Eke and Akujuobi[20], as a 1% surge in the lagged debt servicing stock led to a deceleration in the economic growth by 0.076% at the significance level of 1%. It obeys the a priori expectation and the money that is used in servicing the debt would have gone a long way in improving the living standard of the people in the Nigerian economy.

The coefficient for CointEq(−1) was −0.170 at the 14% level of significance, which follows a statistically significant speed of adjustment. This implies that 17% of any short-run disequilibrium in economic growth is corrected during each

period, thereby gradually guiding the economy back to its long-run equilibrium. The minus sign shows the deviations from the equilibrium, which were gradually reduced over time, which conforms to the notion that the economy of Nigeria shows the ability to stabilize and be in alignment with its path of long-term growth.

In the long run, the results showed that public debt had an encouraging implication on economic growth, which is contrary to the apriori expectations, as a 1% surge in public debt led to a 0.003% fall in economic growth at a 10% level of significance. This means that the government has been making efforts to pay off the debt

Besides, external debt has a negative coefficient but is statistically significant at 10% in the long run, as a 1% increase in external debt will decrease the growth of the GDP by 0.003%. This is in line with the a priori expectation. What it means is the government has to look for a way to diversify the economy so that it can generate enough revenue for the diversification and use it to settle the debt for the subsequent months and years [21].

Moreover, the domestic debt is a hindrance to economic growth at a non-significant level, as a 1% rise in the domestic debt will decrease the GDP by 0.074% in the long run. This is in parallel to the a priori expectation as the government must look for various means for the nation to absorb the shocks of the domestic debt, encouraging innovations among the citizens, supporting entrepreneurship tendencies among the citizens and equipping and motivating the workforce in order to achieve a robust economic growth. Debt servicing stock has a favorable implication on the transformation of the economy in the long run, which is in non-conformity with the a priori expectation, as a 1% rise in the debt servicing stock will accelerate the economic growth by 0.175% at a 1% level of significance. This is good for the economy as the government will look for a way of wooing both private and foreign investors to come and invest in the Nigerian economy [22].

The government revenue is one of the motivating factors of economic advancement, which tells us various means that authorities makes her money, especially through fines and fees, rates and rents, royalties from crude oil, taxes, etc. [23]. It obeys the a priori expectation at a 5% level of significance, as a 1% rise in the government revenue will lead to a 0.458% increase in economic growth in the long run, which is good for the economy [24].

From the foregoing, a 1% rise in the government expenditure will cause a 0.224 acceleration of economic growth in the long run, which is in accordance with the a priori expectation. It is a non-significant level and what the result means is that the government expenditure is used to build and maintain infrastructure that is of maximum benefit to those who are part of the economy [25].

Furthermore, in the long run, the inflation rate has a favorable implication on the economy, which is not in agreement with the a priori expectation at a 5% level of significance. A 1% rise in inflation will lead to a rise in the economic ascendancy by 0.562%. This shows that the present government is working round the clock to combat the negative scourge of inflation [26].

3.5. Diagnostic Test

The Breusch–Godfrey Serial Correlation LM Test was deployed to expunge the correct state of the functional form of the model, determine the serial correlation and to evaluate the constancy of the error variance, respectively. The F-statistic with respect to the Breusch–Godfrey Serial Correlation LM Test is 0.118, with a probability of over the 5% level of significance (**Table 6**). This means that the null hypothesis of no serial correlation cannot be discarded. Besides, the model does not display some errors of specification and autocorrelation and makes sure that the estimated coefficients are efficient, unbiased and qualified for policy formulations. Also, the Obs R-Square value of the Breusch–Pagan–Godfrey heteroskedasticity test is 0.773, which is greater than the significance level of 5% (**Table 7**). This confirms that the null hypothesis of no heteroskedasticity cannot be rejected; therefore, we conclude that the regression model is free from serial correlation and heteroskedasticity.

3.6. Stability Test

The results of the Cumulative Sum of Residuals (CUSUM) and the Cumulative Sum of Squares of Residuals (CUSUMSQ) tests are explained using **Figures 1** and **2** below. From the figures, it was discovered that the plotted CUSUM statistic remains within the critical boundaries, which are denoted by two red lines. This shows that the model that was estimated maintains its structural ability over the examined period. The absence of some substantial devia-

tions that are beyond the bounds of confidence shows that the parameters of the model do not show some instabilities that are significant, which reinforces the regression estimates' reliability for inference and policy formulation.

Table 6. Serial correlation test.

Breusch–Godfrey Serial Correlation LM Test			
Diagnostic Test	**F-Statistic**	**Prob.**	
F-statistic	0.118	Prob. F(2,25)	0.890
Obs × R-squared	0.382	Prob. Chi-square	0.826
Null hypothesis: No serial correlation up to 2 lags.			

Source: Researcher's computation, 2026.

Table 7. Heteroskedasticity test.

Heteroscedasticity Test: Breusch–Pagan–Godfrey			
Diagnostic Test	**F-Statistic**	**Prob.**	
F-statistic	0.773	Prob. F(12,29)	0.672
Obs × R-squared	10.183	Prob. Chi-Square(12)	0.610
Scaled explained SS	3.377	Prob. Chi-Square(12)	0.992
Null hypothesis: Homoscedasticity.			

Source: Researcher's computation, 2026.

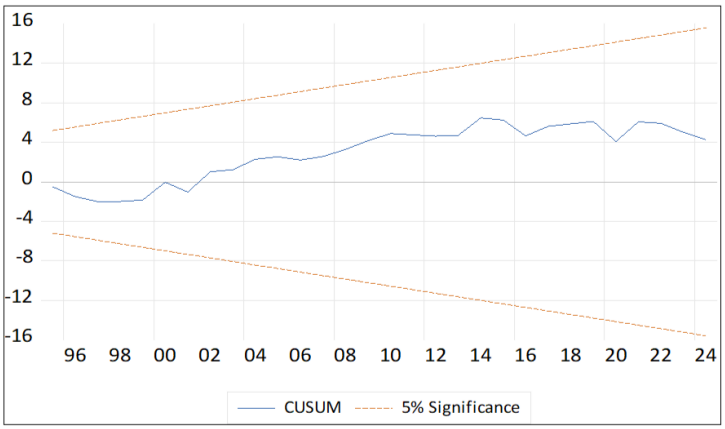


Figure 1. Cumulative sum of residuals.

Source: Researcher's computation, 2026.

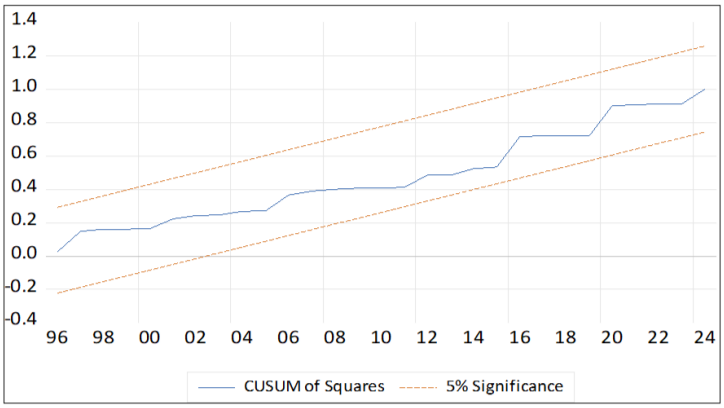


Figure 2. Cumulative sum of squares of residuals.

Source: Researcher's computation, 2026.

4. Discussion

The Autoregressive Distributed Lag (ARDL) estimation technique was deployed to evaluate the dynamics of the short run and long run. Evidence showed that external debt has a negative long-run relationship and a positive short-run relationship with economic growth. Domestic debt had a negative long-run relationship with economic growth. Debt servicing was positive in the long run and negative in the short run. This means that the government should look inwards to improve its domestic economy in order to have a stable economy that will be able to pay off its external and domestic debts within a stipulated period of time.

5. Conclusions

The research article examined the connectivity between public debt, fiscal policy and economic growth in Nigeria. The government should put in some mechanisms to pay off the debts so that the issues of debt servicing will not arise in the near future. In order to alleviate the national burdens of public debts, the government should encourage the local sourcing of raw materials for our local industries instead of sourcing from abroad at a high cost. The authorities should also woo investors to invest in our economy. This will generate revenue for the government and provide jobs for our able-bodied youths. They should combat the insecurity that has plagued the nation for several years to attract investors. The government should also subsidize credit facilities for farmers in order to improve agricultural productivity. The revenue from agriculture will pay off a portion of the external debt of the nation. Nigeria should also bring in new technological facilities that will curb corruption and foster economic growth.

Funding

No funding was received for this study.

Institutional Review Board Statement

Ethical approval is not needed because the study used publicly available secondary data and it did not involve human participation.

Informed Consent Statement

Informed content was not applicable because the study relied on publicly available secondary data.

Data Availability Statement

Data was obtained from the Central Bank of Nigeria Statistical Bulletin and the National Bureau of Statistics.

Acknowledgments

The author sincerely appreciates his senior colleagues in the Department of Economics at Ajayi Crowther University for their guidance and encouragement in the course of writing this paper. They are Professor Afolabi Joseph, Dr. Margaret Oke, Dr. Sesan Abere and Dr. Adetunji Sijuwola.

Conflicts of Interest

The author declares no conflict of interest.

AI Use Statement

The author declares that no artificial intelligence (AI) tools were used in the preparation of this manuscript.

References

[1] Aiyedogbon, J.O., Zhuravka, F., Korneyev, M., et al., 2022. Impact of public debt profile on economic growth: Evidence from Nigeria. Public and Municipal Finance. 11(1), 10–19. DOI: https://doi.org/10.21511/pmf.11(1).2022.02

[2] Nuru, N.Y., Gereziher, H.Y., 2022. The effect of fiscal policy on economic growth in South Africa: A nonlinear ARDL model analysis. Journal of Economic and Administrative Sciences. 38(2), 229–245. DOI: https://doi.org/10.1108/JEAS-06-2020-0088

[3] Yusuf, A., Hussaini, A., 2026. The Impact of Public Debt on Fiscal Sustainability in Nigeria. Journal of Emerging Markets and Management. 2(2), 41–61. DOI: https://doi.org/10.63385/jemm.v2i2.406

[4] Ekong, C.N., Orebiyi, P.A., Iriabije, A.O., 2024. Fiscal policy and inclusive growth in Nigeria. World Journal of Advanced Research and Reviews. 22(3), 1715–1732. DOI: https://doi.org/10.30574/wjarr.2024.22.3.1849

[5] Debt Management Office (DMO) Nigeria, 2024. Nige-

ria's Total Public Debt as at December 31, 2024. Debt Management Office (DMO) Nigeria: Abuja, Nigeria. Available from: https://www.dmo.gov.ng/debt-profile/total-public-debt/5215-total-public-debt-as-at-december-31-2024

[6] Adeyemi-Tijani, A., 2025. Fiscal Policy, Public Debt, and Macroeconomic Stability in Nigeria. SSRN. DOI: https://doi.org/10.2139/ssrn.5156445

[7] Abotsi, A.K., 2023. Factors influencing the ability to honour debt repayment obligations by governments in Africa. International Journal of Finance and Economics. 28(1), 876–885. DOI: https://doi.org/10.1002/ijfe.2454

[8] Yahya, O.A., 2026. Impact of public debt on the economic growth in Nigeria: A time-series investigation (1986–2024). International Journal of Finance Economics and Management Studies. 28(2), 148–180.

[9] Ogbole, O.F., Amadi, S.N., Essi, I.D., 2011. Fiscal Policy: Its impact on the economic growth in Nigeria 1970 to 2006. Journal of Economics and International Finance. 3(6), 407–417.

[10] Nwamuo, C., 2020. Impact of Fiscal Policy on the Economic Growth in Nigeria: An Empirical Analysis. European Journal of Business and Management. 12(12), 37–50.

[11] Okon, E.U., Etim, R.S., Jeremiah, M.S., 2020. Public Debt and Economic Development in Nigeria: Impact Assessment. International Journal of Economics and Financial Management. 9(5), 24–43.

[12] Nwaeze, N.C., 2017. External Sector Variables and Macroeconomic Stability in Nigeria: ARDL Error Correction Approach. Greener Journal of Economics and Accountancy. 6(2), 12–25. DOI: https://doi.org/10.15580/GJEA.2017.2.083117116

[13] Barreto, R.A., 2024. The transitional dynamics of debt: Productivity shocks, fiscal policy and economic growth. SSRN. DOI: https://dx.doi.org/10.2139/ssrn.4734909

[14] Alonge, F.B., Afolalu, A.B., Olaniyan, N.O., 2023. Managing public debts and stimulating economic growth: A case study of Nigeria's fiscal landscape. Fuoye Journal of Accounting and Management. 6(2). Available from: https://fjam.fuoye.edu.ng/index.php/fjam/article/view/162

[15] Ele, L.E., Mgbada, F.N., Nwafor, I.N., 2024. Fiscal policy variables and economic growth in Nigeria. World Journal of Finance and Investment Research. 8(4), 117–132. Available from: https://www.iiardjournals.org/get/WJFIR/VOL.%208%20NO.%204%202024/Fiscal%20Policy%20Variables%20and%20117-132.pdf

[16] Hassan, B., 2025. Fiscal Policy Impact on Economic Growth in Nigeria: An Empirical Analysis. Multi Science Journal. 23(2), 95–108.

[17] Ofurum, C.O., Fubara, S.J., 2022. Public Debt and Economic Development: Empirical Evidence from Nigeria. Advances in Social Sciences Research Journal. 9(7), 462–474. DOI: https://doi.org/10.14738/assrj.97.12714

[18] Murngi, S.M., Okiro, K.O., Nyamute, W., et al., 2023. Government Debt, Interest Rates, Fiscal Policy and Economic Growth in East Africa. European Scientific Journal. 17, 281.

[19] Ciaffi, G., Deleidi, M., Di Domenico, L., 2024. Fiscal policy and public debt: Government investment is the most effective to promote sustainability. Journal of Policy Modeling. 46(6), 1186–1209. DOI: https://doi.org/10.1016/j.jpolmod.2024.07.002

[20] Eke, C.K., Akujuobi, N.E., 2021. Public Debt and Economic Growth in Nigeria: An Empirical Investigation. International Journal of Development and Management Review. 16(1), 178–192. Available from: https://ajosdemar.com/wp-content/uploads/2024/04/12.pdf

[21] Obi-Nwosu, V.O., Kasie, E.G., Nneke-Emeka, C.C., et al., 2025. Effect of Public Debt on Nigeria Economic Growth. African Journal of Business and Economic Development. 5(5), 42–58. Available from: https://www.openjournals.ijaar.org/index.php/ajbed/article/view/1399

[22] Onwioduokit, E., Umoh, O., Ekot, E., 2026. Macroeconomic Instability and Economic Development in Nigeria. GPH-International Journal of Business Management. 9(4), 40–66. Available from: https://gphjournal.org/index.php/bm/article/view/2409

[23] Adedeji, A.A., Oyinlola, M.A., Adeniyi, O., 2024. Public debt, tax and economic growth in Sub-Saharan African countries. Journal of Social and Economic Development. 26(3), 992–1058. DOI: https://doi.org/10.1007/s40847-023-00295-4

[24] PricewaterhouseCoopers (PwC) Nigeria, 2023. Highlights of Nigeria's 2023 Fiscal Policy Measures. Available from: https://www.pwc.com/ng/en/assets/pdf/highlight-of-nigeria-2023-fiscal-policy-measures.pdf (cited 1 May 2026).

[25] Nitsi, E.I., 2024. State Budget, Public Debt and Fiscal Figures Perspectives. Greek Economic Outlook. 55, 31.

[26] Udeaja, E.A., Tule, J.M., El-Yakub, Z.A., et al., 2023. Fiscal policy and macroeconomic stability in Nigeria: How effective are the fiscal rules? Central Bank of Nigeria Economic and Financial Review. 60(2), 1–26.